

## ABSTRACT

Title of dissertation: VOCAL TENSION: COMPARATIVE  
PEDAGOGY IN THE SEARCH FOR  
COMMONALITY

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Vocal tension that can adversely affect the freedom of the singing voice is often a recurring issue in the studios of voice teachers. The purpose of this document is to investigate techniques for alleviating different types of tension in the body that hinder the beauty and ease of the vocal sound.

The first half of the paper examines various vocal pedagogies and treatises of the past and present, along with other related literature to see how vocal tension has been addressed. The latter half includes results from interviews that were conducted with eleven college voice professors as a means of comparing and contrasting current studio practices and observations related to vocal tension.

The literature review produced no common method to deal with the issue of unwanted vocal tension in singing, and it was clear from the interviews that there is a

need for a method that would offer multiple solutions to the same problem. The paper suggests that continued research is needed in this area, with a focus on physiological responses to unwanted vocal tension. In addition, the author suggests the creation of sources whose main purpose would be to discuss different types of unwanted vocal tension and multiple approaches to correcting each problem.

VOCAL TENSION: AN EXPLORATORY STUDY IN TEACHING TECHNIQUES  
OF SELECTED SOURCES AND EXPERTS

by

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## **Chapter 1: Presentation of Study**

### **Introduction**

Vocal tension keeps many students from singing in a relaxed manner and producing quality sound. Although it is common for beginning voice students to suffer misplaced tension of one form or another, even experienced singers can have problems with this issue. Tension in the neck, shoulders, and face clearly hinders freedom of sound, while tension in any part of the body can affect the tone. The slightest tension, even in the foot, can affect the singer's vocal freedom. Tight muscles in the foot can cause tension to travel up the leg to the hip or abdominal areas. Tension in those areas can then, in turn, cause changes in posture and tightening of the abdominal muscles. Either of these results can adversely affect the freedom of the vocal sound.

Facial tension can also impede one's performance. The effect that facial tension has on a singer can easily be compared to the effect that it has on an athlete. For example, swim coaches recognize that tension can negatively impact swim strokes and overall performance. At the 2008 Summer Olympics, coaches worked to have swimmers relax their facial muscles as much as possible in order to help draw their focus lower in the body to keep tension from radiating down the athletes' necks and into their shoulders and arms. Might voice coaches employ a similar technique to identify and correct the source of tension that adversely affects vocal performance?

## **Purpose**

Various scholarly pedagogies and literatures discuss the recurring issue of vocal tension. Young singers and professional singers always try to avoid or “fix” it, while voice teachers use all sorts of techniques to address it. Is there a common thread or an overall unifying approach in diverse methods?

This paper addresses that question by examining how various vocal pedagogies address tension, by reviewing related literature, and by discussing the experiences of noted voice teachers through interviews with them. The paper then considers whether it is possible to combine past and present treatises with current vocal studio practices to create a practical technique or techniques to release vocal tension in singing.



## **Chapter 2: Research of Voice Pedagogies of the Past and Present**

### **Background**

Interestingly, the source material for this paper provided no formal definition for vocal tension, so this dissertation defines vocal tension as any tension within the body that adversely affects the freedom and clarity of the vocal tone. *Merriam-Webster* online defines tension as “the act or action of stretching or the condition or degree of being stretched to stiffness.”<sup>1</sup> Cornelius Reid’s *A Dictionary of Vocal Terminology* defines tension as “the act or condition of being stretched, stress resulting from the contraction of an elastic body (e.g., a muscle).”<sup>2</sup> His dictionary also states that:

Muscular tension is essential to vocal tone. It is required both for respiration and for the two basic functional activities that yield vocal tone: registration and resonance. When the vocal function is efficient, a diverse combination of mutually antagonistic muscles coordinate their movement, with the result that there is a balance of tension (or a lack of “tenseness”) throughout the entire vocal tract.<sup>3</sup>

The most interesting aspect of Reid’s definition is his reference to a “balance of tension.” He indicates that all body movements (including singing) require muscular tension, but that it is the equilibrium or “balance” of tension that produces the most efficient result. He believes that a singer’s goal is to find the right balance of tension to allow the voice to move freely.

In *Vocal Wisdom: Maxims of Giovanni Battista Lamperti*, Giovanni Lamperti asserts that “any use of muscle (other than to release energy) vitiates [impairs] the tone

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<sup>1</sup> *Merriam-Webster.com* (15 September 2011), s. v. “tension.” .

<sup>2</sup> Cornelius Reid, *A Dictionary of Vocal Terminology* (New York: Joseph Patelson Music House, Ltd., 1983) 371.

<sup>3</sup> Reid, *A Dictionary of Vocal Terminology*, 371.

by disturbing its overtones (divisional vibrations, called harmonics).”<sup>4</sup> This means that a singer must carefully avoid misuse or overuse of muscles when trying to achieve Reid’s recommended balance. The singer must balance tension with muscle activity in the specific locations in the body that affect voice quality. These locations can be found in Meribeth Bunch’s book, *Dynamics of the Singing Voice*, which identifies the factors that affect vocal quality:

1. Overly active facial muscles
2. The position and lower movement of the jaw
3. Rigidity of the tongue
4. Tension in the neck
5. Tension in the chest
6. Emotional tension<sup>5</sup>

In *The Naked Voice: A Wholistic Approach to Singing*, W. Stephen Smith confirms the necessity of muscular activity to offset tension in those body locations that affect voice quality:

Good singing requires no localized muscular effort, but bad singing uses localized muscular effort in various locales such as the neck, the jaw, the tongue or the abdomen. We do need muscular effort to be efficient and evenly distributed to eliminate tension.<sup>6</sup>

Many voice pedagogies and related scholarly material have addressed aspects of vocal technique and examined sources of vocal tension related to posture, inhalation and support, and articulation. As the understanding of the vocal instrument has improved,

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<sup>4</sup> Giovanni Battista Lamperti, *Vocal Wisdom: Maxims of Giovanni Battista Lamperti*, trans. William Earl Brown (New York: Taplinger Publishing Company, 1931), 13.

<sup>5</sup> Meribeth Bunch, *Dynamics of the Singing Voice*, 4<sup>th</sup> ed. (Wien: Springer-Verlag, 1997), 103.

<sup>6</sup> W. Stephen Smith, *The Naked Voice: A Wholistic Approach to Singing* (New York: Oxford University Press, 2007), 47.

certain aspects of these pedagogies and material have been disproved and technical terms have changed. However, these works contain information that is still of interest regarding the causes of, and corrections for, tension in singing.

The author's focus for this chapter is to search the voice literature for references to tension that affects the singing voice as a means of determining if future research in this area is warranted. For further information on anatomy and physiology beyond the scope of this paper, one could consult the books of Willard Zemlin, Kent Van De Graaf, J. Anthony Seikel, Douglas W. King, and David G. Drumright.

### **Posture**

Voice scholars agree that good body alignment is important to free singing. While older treatises briefly mention posture, newer books are more specific.

Lamperti told his student William Earl Brown that a singer should use posture like that of a "soldier."<sup>7</sup> In contrast, William Vennard comments in *Singing: The Mechanism and the Technic* that "The high chest implies that the shoulders go back, but they should relax and be comfortable. There should be no straining like a soldier."<sup>8</sup> Teachers in the western world generally agree more with Vennard's perspective, but William Leyerle explains in his book, *Vocal Development Through Organic Imagery*, that the posture of the Italian Army is more relaxed than that of the United States Army.<sup>9</sup> Manuel Garcia wanted the singer to "hold the body straight, quiet, upright on the two legs removed from any point of support," as described in Garcia's *A Complete Treatise on the*

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<sup>7</sup> Lamperti, 128.

<sup>8</sup> William Vennard, *Singing: The Mechanism and the Technic* (Ann Arbor, MI: Edwards Brothers, Inc., 1949), 19.

<sup>9</sup> William D. Leyerle, *Vocal Development Through Organic Imagery*, 2<sup>nd</sup> ed. (Geneseo, NY: Leyerly Publications, 1986), 4.

*Art of Singing: Part One*.<sup>10</sup> Moshe Feldenkrais, the founder of the Feldenkrais Method, objected to the use of the word “straight” when referring to body alignment. When researching the skeletal structures developed by Albinus, an eighteenth-century anatomist, Feldenkrais found that only two parts were straight or as he writes, “are [arranged] more or less vertically: the vertebrae of the neck and the vertebrae between the chest and the hips.”<sup>11</sup> In *Awareness Through Movement: Health Exercises for Personal Growth*, Feldenkrais said that holding a straight body position would be impossible without “continuous effort” and most people would not continue to hold that posture unless someone repeatedly told them to do so.<sup>12</sup> It is likely that Feldenkrais would have agreed with the end of Garcia’s statement regarding no specific point of support, because this allows for a balance of support between the muscles of the legs and torso. This equilibrium would “leave muscles free for movement.”<sup>13</sup>

There are many voice scholars who have discussed body alignment and the efficiency of muscles. In *The Functional Unity of the Singing Voice*, Barbara Doscher makes the following statement:

Immobility is an enemy of singing.....Just as the efficiency of a muscle is measured by its speed and mobility of action as well as its balance with other muscles rather than its sheer strength, so body posture is a matter of supple muscle tone and flexible balance.<sup>14</sup>

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<sup>10</sup> Manuel Garcia II, *A Complete Treatise on The Art of Singing: Part One*, ed. and trans. by Donald V. Paschke (New York: Da Capo Press, 1984), 41.

<sup>11</sup> Moshe Feldenkrais, *Awareness Through Movement: Health Exercises for Personal Growth* (New York: Harper & Row, 1972), 67.

<sup>12</sup> Feldenkrais, *Awareness Through Movement*, 66.

<sup>13</sup> Feldenkrais, *Awareness Through Movement*, 68.

<sup>14</sup> Barbara M. Doscher, *The Functional Unity of the Singing Voice*, 2<sup>nd</sup> ed. (Lanham, MD: The Scarecrow Press, Inc., 1994), 79.

Meribeth Bunch further adds that, “A person is posturally well-balanced when he can stand, walk, and sit without a pronounced increase in muscular activity.”<sup>15</sup> James McKinney agreed when he wrote that muscles work by opposing one another and they are most efficient in this process when given “frequent opportunities to relax.”<sup>16</sup>

Many of the treatises examine posture by sections of the body (e.g., feet, legs, torso, neck, and head), providing illustrations of the skeletal and muscular structure. Barbara M. Doscher’s book shows caricatures of correct and incorrect alignment, which are quite humorous.<sup>17</sup> W. S. Smith recommends that students imagine they are hanging from a hook that comes out of the top of their heads.<sup>18</sup>

William Leyerle illustrates correct and incorrect foot stances in his book, *Vocal Development Through Organic Imagery*.<sup>19</sup> The correct stance shows the feet slightly apart with one foot slightly in front of the other. Leyerle directs one to balance on the balls of the feet while Doscher suggests balancing over the arch of the foot. McKinney mentions changing the forward foot occasionally within a long performance to avoid “tension and fatigue.”<sup>20</sup> He further suggests that the knees and legs should never be

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<sup>15</sup> Bunch, 25.

<sup>16</sup> James C. McKinney, *Diagnosis & Correction of Vocal Faults*, rev. ed. (Nashville, TN: Genevox Music Group, 1994), 42.

<sup>17</sup> Doscher, 70, 73, 75, 77, 78, and 82.

<sup>18</sup> W. S. Smith, 37.

<sup>19</sup> Leyerle, 14.

<sup>20</sup> McKinney, 37.

totally relaxed because they have to support the body.<sup>21</sup> “The ideal feeling is that your legs are freely flexible and ready to move at all times.”<sup>22</sup>

The torso, from the buttocks up to the shoulders, is another postural area for which authors have differing opinions, specifically regarding the spine and the position of the buttocks. Leyerle advocates using a wall to guide correct posture. The student backs up to the wall to flatten out the small of the back, and, in the process, tucks under the pelvis.<sup>23</sup> However, Doscher believes that keeping the pelvis “tucked in” causes great tension in the muscles of the buttocks and that tension can move further into the torso and to the knees.<sup>24</sup> While using the image of a puppet string attached to the sternum, she explains that lengthening the spine places the pelvis in the correct position.<sup>25</sup>

Most of the authors agree with McKinney that the lower abdomen should be pulled in slightly because sagging of this area causes a curve in the lower back.<sup>26</sup> McKinney also believes that “pulling in or pushing out the upper abdomen too strongly can cause tension and interfere with the ability to breathe easily and to phonate properly.”<sup>27</sup>

Nearly all of the authors discuss the sternum and shoulder area, and agree that the sternum should remain in a “comfortably” high position while the shoulders are down

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<sup>21</sup> McKinney, 37.

<sup>22</sup> McKinney, 37.

<sup>23</sup> Leyerle, 2.

<sup>24</sup> Doscher, 71.

<sup>25</sup> Doscher, 71.

<sup>26</sup> McKinney, 38.

<sup>27</sup> McKinney, 38.

and relaxed. Bunch notes that “Bracing the shoulders and chest wastes energy and surprisingly, the seemingly relaxed posture of rounded shoulders is also tiring.”<sup>28</sup> McKinney feels that shoulders should be back and down but not in a forceful manner.<sup>29</sup> He further states, “There should be a feeling of released tension, as if you have just let go of a heavy weight.”<sup>30</sup> Doscher believes that “A singer should stand freely and easily and should feel as if the chest were leading, but should not feel constrained or stiff in any part of the ribs or lungs.”<sup>31</sup>

Tension in the arms and hands may also affect posture. McKinney notes that tension in the hands can radiate throughout the upper body and into the vocal mechanism.<sup>32</sup> Thus, when standing, the arms should be relaxed and hanging freely.

The posture of the neck and head may be the most important in its relationship to vocal tension. Bunch states that “When the head is misaligned, other parts of the body move in or out of line to maintain balance and thus energy is expended to counteract the effect of gravity.”<sup>33</sup> Doscher compares the jutting head, which causes tension, to an overachieving personality. She also explains that the opposite type of personality, which displays the head back and down, creates just as much tension. She notes that when the head is back and down, the “extrinsic depressor muscles are overworked, optimum

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<sup>28</sup> Bunch, 27.

<sup>29</sup> McKinney, 39.

<sup>30</sup> McKinney, 39.

<sup>31</sup> Doscher, 73.

<sup>32</sup> McKinney, 39.

<sup>33</sup> Bunch, 27.

laryngeal positioning is at risk and breathing is critically disturbed.”<sup>34</sup> Finally, she indicates that when the head is down and in a forward position, it causes the chest to drop and shoulders become rounded and tense.<sup>35</sup>

To help correct these postural faults of the head and neck, many authors discuss the imagery of a puppet string or plumb line. Leyerle illustrates the image of a puppet string coming out of the back of the top of the skull.<sup>36</sup> In contrast, Doscher describes the puppet string pulling upward from behind each ear and from the sternum.<sup>37</sup>

In *Solution for Singers*, Miller discusses the tension that can occur in the neck when singing in a high tessitura. In contrast to the notion that neck tension can result from incorrect posture, he believes this tension can be a result of “weakness or slackness in the neck musculature.”<sup>38</sup> To strengthen the nuchal muscles (or nape of the neck), Miller says one can turn the head sideways right to left until it can move no further. However, he believes that this should not be done while singing.<sup>39</sup>

Contemporary treatises outline the discussion of posture into the different posture areas, such as torso, head, neck and shoulders. There is other literature outside the vocal realm that discusses techniques that are useful in relieving tension in posture. Two of the best-known techniques that have been introduced to voice students in colleges nationwide are those of Matthias Alexander and Moshe Feldenkrais. These techniques provide quite

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<sup>34</sup> Doscher, 76-77.

<sup>35</sup> Doscher, 77-78.

<sup>36</sup> Leyerle, 4.

<sup>37</sup> Doscher, 70.

<sup>38</sup> Richard Miller, *Solution of Singers: Tools for Performers and Teachers* (New York: Oxford University Press, 2004), 44.

<sup>39</sup> Miller, 44.



similar approaches to addressing tension, as described by Dora Ohrenstein in *Physical Tension, Awareness Techniques, and Singing*:

Alexander recognized that improved posture and movement were elusive unless one stopped 'endgaining'. By that term, he means the goal-directed mindset that, in itself, produced the unwanted tension. Feldenkrais advocated a similar approach, writing in *The Potent Self* that 'At the moment of acting, one must learn to reject the furthering of the action'<sup>40</sup> in order to develop awareness of deep-seated body tension.<sup>41</sup>

The goal of these techniques is not the end result (or singing performance), and Feldenkrais clearly confirms that by saying "Concentration on the aim may cause excessive tension."<sup>42</sup> The goal is to gain awareness regarding one's body and how the parts work independently. Neither technique focuses on the end result, so most of the work to alleviate tension in the body is separate from the act of singing. Ohrenstein mentions that "One must put vocal production aside and attend to the mouth, lips, neck, head and tongue, one at a time, in order to make really significant strides."<sup>43</sup> This separation facilitates the body awareness that both authors discuss in their books.

For both methods, there are private teachers, and workshops that are presented across the United States. McKinney, W. S. Smith, Doscher, and Bunch all advocate the use of the Alexander Technique and it appears to be more widespread, not just in music, but in other areas as well, including sports and medicine.

Good posture prepares the body for singing and quickly eliminates some of the breathing-related tension. Both Feldenkrais and Alexander believe posture and body

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<sup>40</sup> Moshe Feldenkrais, *The Potent Self: A Guide to Spontaneity* (San Francisco: Harper, 1985).

<sup>41</sup> Dora Ohrenstein, "Physical Tension, Awareness Techniques, and Singing," *Journal of Singing* Vol. 56, No. 1 (September/October 1999), 23.

<sup>42</sup> Feldenkrais, *The Potent Self*, 82.

<sup>43</sup> Ohrenstein, 23.

awareness are the first steps to correct breathing. Feldenkrais states, “The human skeleton is so constricted that it is almost impossible to organize breathing properly without also satisfactorily placing the skeleton with respect to gravity.”<sup>44</sup> Alexander believed that “bad breathing is only a symptom and not a primary cause of malcondition.”<sup>45</sup> Both believe that correct posture is crucial to teaching a student how to breathe correctly.

### **Breathing**

Lamperti writes in his book, *Vocal Wisdom*, that “faulty singing is caused by awkward respiration...all bad habits of the throat are merely efforts of the protection against clumsy management of breath.”<sup>46</sup> Many, if not all, of the books examined for this dissertation discuss how important coordinated breathing is to the ease of the sung tone. Lamperti further explains that coordination of the breathing process supplies energy.<sup>47</sup> Doscher adds that “rigidity is the enemy of breathing,” and she uses the phrase “breath energy” instead of “breath support.”<sup>48</sup> She also explains, “if the antagonistic balancing of inspiratory muscles and expiratory musculature can be achieved, a free, steady stream of air is the beneficial result.”<sup>49</sup> Doscher adds that “overcrowding and completely exhausting the supply of air before starting another inspiration causes great tension in the

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<sup>44</sup> Feldenkrais, *Awareness Through Movement*, 38.

<sup>45</sup> Alexander, 41.

<sup>46</sup> Lamperti, 13.

<sup>47</sup> Lamperti, 13.

<sup>48</sup> Doscher, 24-25.

<sup>49</sup> Doscher, 25.

throat.”<sup>50</sup> Reid similarly believes that tension should be evenly distributed between the muscles of inspiration and expiration.<sup>51</sup> It is beneficial to separate these two parts of the breath process (inhalation and exhalation) when exploring how tension is discussed in the vocal literature of the past and present.

Doscher writes, “in untrained singers, inspiration all too often is accompanied by excessive diaphragmatic/abdominal antagonism” and the result is a tone that is “dull and mechanical.” W. S. Smith goes on to say that if the body is in the correct alignment, then all the “action during inhalation occurs only below the diaphragm.....because when the body is aligned, the chest will already be expanded as much as necessary.”<sup>52</sup> Bunch explains that excessive tension occurs in the abdomen, shoulders, chest, neck, and above when one is “holding in the stomach” during inhalation, a common issue among young women.<sup>53</sup>

Bunch indicates that, “inhalation is most efficient when there is no effort involved” and, to assist in this process, the vocal tract must be open and “offering a low resistance to incoming air.”<sup>54</sup> If this occurs, the result is a quiet breath. Lamperti writes in his book,

*Vocal Wisdom:*

Singers who resort to loud breathing (constricting the throat and making asthmatic sound with inhaling) do compel the body to compress the inspired air. This is

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<sup>50</sup> Doscher, 25.

<sup>51</sup> Cornelius Reid, *The Free Voice: A Guide to Singing Naturally* (New York: Coleman-Ross Co., 1965), 168.

<sup>52</sup> W. S. Smith, 37.

<sup>53</sup> Bunch, 53.

<sup>54</sup> Bunch, 54.

fatiguing to the singer and unpleasant to the listener. Moreover, it makes the throat do double duty, watch over both ingress and egress of the air.<sup>55</sup>

Lamperti also adds that quick, loud breaths only fill the upper portions of the lungs with air, and result in the throat controlling the expiration of the air. This type of loud breath is often associated with clavicular breathing. Miller, Doscher, McKinney, Reid, and countless others discuss the tensions associated with this type of breathing. Reid says that tension is held in the shoulder and neck during clavicular breathing.<sup>56</sup> McKinney believes that it is commonly observed in female singers and that the “tension in chest and shoulders is transmitted to the vocal mechanism.”<sup>57</sup> Doscher is in total agreement with McKinney, noting that during clavicular breathing, tension is located in the upper chest and shoulders, as well as in the vocal mechanism. She goes even further, however, to comment that in some cases the vocal folds can be damaged.<sup>58</sup> Miller completes the discussion on clavicular breathing by saying that one must use the muscles of the shoulders up through the neck during inhalation to “reposition” the sternum, ribs, and clavicle during this type of breathing.<sup>59</sup>

In addition to clavicular breathing, McKinney mentions “rib breathing,” “back breathing,” and “belly breathing.” These three types of breathing are named for the places in the body the singer should feel the expansion while inhaling. During “rib breathing,” tensions can occur in the chest, ribs, and shoulders, and might also transfer to

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<sup>55</sup> Lamperti, 106.

<sup>56</sup> Cornelius Reid, *Bel Canto; Principle and Practices* (New York: Coleman-Ross Co., 1950), 147.

<sup>57</sup> McKinney, 57.

<sup>58</sup> Doscher, 18.

<sup>59</sup> Richard Miller, *National Schools of Singing: English, French, German, and Italian Techniques of Singing Revisited*, revised ed. (Lanham, MD: Scarecrow Press, 1997), 19.

the neck and voice.<sup>60</sup> McKinney states that this type of breathing can cause tension in one's posture.<sup>61</sup> He also says the tension associated with "back breathing" occurs in the back and shoulders, and tends to cause the shoulders to pull forward, resulting in weak posture.<sup>62</sup> Finally, he states that "belly breathing" restricts the diaphragm during exhalation and singers that use this type of breathing tend to display a sunken chest.<sup>63</sup>

In the referenced sources, most of the discussion of inhalation-related tension is focused on the loud inspiration heard in clavicular breathing, along with a few references to posture and other types of breathing. The main tension associated with exhalation occurs when controlling or rationing the expulsion of the breath and when supporting the tone. Reid writes:

The teacher who seeks to alleviate the breathless condition of the student whose voice works poorly, by attempting to control the rate of expulsion, is perpetrating the grossest injustice.....Rationing the breath expulsion is always exceedingly dangerous, and there is convincing proof on all sides to support the claim that throatiness is the natural result of controlled expiration.<sup>64</sup>

Both Lamperti and W. S. Smith advocate releasing the breath instead of controlling it. Lamperti says more muscle is used in holding the "breath energy back" than when allowing it to be freely expelled from the body.<sup>65</sup> He also declares that one is not to "push or pull muscularly" to begin the tone.<sup>66</sup> In reference to controlling the breath,

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<sup>60</sup> McKinney, 58.

<sup>61</sup> McKinney, 58.

<sup>62</sup> McKinney, 59.

<sup>63</sup> McKinney, 60.

<sup>64</sup> Cornelius Reid, *Bel Canto; Principle and Practices* (New York: Coleman-Ross Co., 1950), 150-151.

<sup>65</sup> Lamperti, 51.

<sup>66</sup> Lamperti, 46.

Miller notes that the Italian School believes that “controlled singing ought to feel uncontrolled” because tension occurs when trying to regulate the breath at the larynx or abdomen.<sup>67</sup> Miller adds that holding the breath results in “overly firm glottal closure and impedes flow phonation.”<sup>68</sup> Reid believes that one could use a “sigh” to release these tensions in the body during exhalation.<sup>69</sup> Many of the authors made analogies to express the importance of an uncontrolled expulsion of breath. For example, Leyerle says, “Breath is like money. It has to circulate to be useful.”<sup>70</sup>

W. S. Smith notes that one of the deterrents to “releasing” breath is a tightened abdomen.<sup>71</sup> Leyerle comments that “some singers mistake holding or locking the abdominal muscles for support,” which causes these muscles to fatigue and can result in a shortness of breath.<sup>72</sup> W. S. Smith admits that he does not like to use the word support, and says that the “s-word” causes an increase in air pressure.<sup>73</sup> He also refers back to the release of the breath by saying “airflow means support.”<sup>74</sup> Doscher explains that using the word “support” is a problem of semantics for many singers. It evokes the image of having to lift a “physical object,” which normally creates unnecessary tensions.<sup>75</sup> Doscher says the objective of “breath support” is the “proper coordination of expiration

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<sup>67</sup> Miller, *Solution of Singers*, 12.

<sup>68</sup> Miller, *Solution of Singers*, 17.

<sup>69</sup> Reid, *The Free Voice*, 167.

<sup>70</sup> Leyerle, 35.

<sup>71</sup> W. S. Smith, 41.

<sup>72</sup> Leyerle, 35.

<sup>73</sup> W. S. Smith, 39.

<sup>74</sup> W. S. Smith, 40.

<sup>75</sup> Doscher, 24.

and phonation to provide an unwavering sound, and ample supply of breath, and relief from any unnecessary and obstructive tensions in the throat.”<sup>76</sup> In further discussions, she mentions that many teachers use imagery to assist singers in creating a steady flow of air without too much tension, such as “balancing lightly on a trampoline” to create a “cushion of air around the waist.”<sup>77</sup>

Bunch furthers the discussion by referring back to the importance of alignment when explaining the action of supporting the tone:

Support of the tone is dependent upon maintenance of subglottic pressure. This is done by maintaining the balance and position of the rib cage which in turn allows the abdominal muscles and diaphragm to function efficiently.<sup>78</sup>

McKinney would most likely agree with this because he says that “good posture precedes good breathing,” yet he also spoke earlier about how the breath may affect the posture, when he discussed the tension associated with different types of breathing.<sup>79</sup>

### **Articulation**

To understand how tension affects a singer’s voice, one must examine the speaking voice, the student’s native language, and the challenges that that language poses for the singer. American English, for example, has the challenges, of the consonant sounds [r] and [l], which tend to be made in the back of the throat. Also, in the United States, entertainment and other media have influenced speech patterns and qualities in negative ways. Women in the media have a tendency to speak in the lower extremity of the vocal range and/or speak with too little breath flow. This type of speaking tires

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<sup>76</sup> Doscher, 22-23.

<sup>77</sup> Doscher, 24.

<sup>78</sup> Bunch, 54.

<sup>79</sup> McKinney, 55.

voices and produces glottal fry, and, in some cases, may cause vocal damage. This type of speech has influenced the speech patterns of young women and girls for decades.

To support clear enunciation, most speakers stop the column of air when placing consonants. The singer must be ever vigilant to keep the air column moving through the consonants during singing so that the end result is sung and not spoken. This begs the question, “What is the difference between speaking and singing?” Lamperti says, “The difference ... is continuity of vibration and energy. In speaking, momentum is constantly arrested; in singing, never.”<sup>80</sup> Simply put, Lamperti is referring to the amount of breath used. In singing, exhalation of breath is continuous and the singer tries to hinder the breath flow as little as possible when placing the consonants. In *Singing: the Mechanism and the Technic*, William Vennard refers to this as “the singer’s dilemma.” He says that, to sing well, there must be “optimum conditions for the production of musical tone,” but the singer also has to “make a rapid series of symbolic sounds essentially noisy and in continuous flux.”<sup>81</sup> Vennard further writes:

Other instruments have noises, but they are necessary evils. Even though they do help us subconsciously to differentiate their sources, we train our ears to ignore them. In the voice, however, the noises are intentional.<sup>82</sup>

Obviously, these noises are consonants, and without vowels, the listener would not understand the words or language.

Leyerle writes, “the vowel is the voice and the consonant is the interruption of the voice.....consonants are deliberate obstacles thrown in the path of the free-flowing

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<sup>80</sup> Lamperti, 47.

<sup>81</sup> Vennard, 97.

<sup>82</sup> Vennard, 94.



voice.”<sup>83</sup> In order to reduce unnecessary tension that may occur when producing consonants, one should set the vowel position before putting on the consonant, and then, when making the consonant, one should use only the effort necessary to clearly distinguish the word.<sup>84</sup>

Many of the books examined for this dissertation contain a section or chapter on articulation. Authors identify the articulators to be the tongue, jaw, teeth, lips, pharynx, soft palate, and hard palate. Two of these articulators do not pose a tension threat (hard palate and teeth), but all of the remaining articulators can cause tension that adversely affects either the vocal tone or the clarity of the diction.

### **Tongue.**

From the list of articulators, the tongue receives the most attention in the literature examined for this document. In many of his books, Richard Miller discusses the tension found in the tongue. He writes, “many tension problems in the singing voice are related to a malfunctioning tongue.”<sup>85</sup> The tongue consists of multiple parts and he explains that when there is tension in the tongue, it is not isolated to one section, but is throughout the entire “organ.”<sup>86</sup> In Miller’s book, *Training Sopranos*, he discusses how the tongue, hyoid bone, and larynx form an “anatomical unit.”<sup>87</sup> He says “tension in the tongue may affect laryngeal activity as well as linguistic articulation.”<sup>88</sup> Due to this issue, he likes to

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<sup>83</sup> Leyerle, 75.

<sup>84</sup> Leyerle, 77-78.

<sup>85</sup> Miller, *Solution of Singers*, 95.

<sup>86</sup> Miller, *Solution of Singers*, 102.

<sup>87</sup> Richard Miller, *Training Sopranos* (New York: Oxford University Press, 2000), 103.

<sup>88</sup> Miller, *Training Sopranos*, 103.

use different exercises, such as, “vre-vra, fle-fla, vre-fle-vra-fla” during warm-up to improve the tongue’s flexibility.<sup>89</sup> He believes that “allowing the lips, jaw and tongue to follow patterns of spoken enunciation will cure most problems of tongue tension.”<sup>90</sup>

Meribeth Bunch is in agreement with Miller about the movements of the tongue having an effect on the soft palate, hyoid bone, and pharyngeal wall.<sup>91</sup> She mentions the tension caused by a tongue that is pulled back and raised in posterior of the oral cavity. To solve this problem, most singers try to flatten the tongue out in the base of the oral cavity. Both the pulled-back tongue and consciously-depressed tongue tend to have negative effects on the quality of sound.<sup>92</sup> Bunch also discusses the “concavity” and “convexity” of the tongue, which she believes are inherited traits.<sup>93</sup> She writes that the “much-talked about longitudinal ‘grooved tongue’” is something that not all singers can achieve, and that those who do attempt to create this normally end up with a “rigid” tongue.<sup>94</sup>

Barbara Doscher also writes about the effects of the “flattened tongue.” She says that the constriction created by the depressed tongue affects the sound waves.<sup>95</sup> Most importantly, she states that unnecessary tension in the tongue can be traced to the root of

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<sup>89</sup> Miller, *Training Sopranos*, 104.

<sup>90</sup> Miller, *Solution of Singers*, 102.

<sup>91</sup> Bunch, 119.

<sup>92</sup> Bunch, 104

<sup>93</sup> Bunch, 121.

<sup>94</sup> Bunch, 121

<sup>95</sup> Doscher, 115.

the muscle.<sup>96</sup> In addition, W. S Smith writes “part of the challenge in speaking pure vowels is to eliminate tension and tightness in the base of the tongue.”<sup>97</sup> He describes the tense position as down and forward and the free position as up and back.<sup>98</sup> Bunch’s earlier statements are not in agreement with the up and back position being the “free position” and McKinney’s opinion seems to differ as well.

James McKinney writes about four different tongue tension issues that the voice teacher may see in lessons. They are a tongue “too gross and slow,” a pulled back tongue, a forward tongue pushing against teeth, and a tongue “elevated” in the mouth.<sup>99</sup> He gives many suggestions on how to address these issues, such as using a mirror, protruding the tongue, running the tongue around the inner lips, touching the nose or chin with the tip of tongue, and finally picking songs that require fast articulatory movements.<sup>100</sup>

Finally, Scott McCoy sums up the entire discussion of tongue tension in the following statement:

For optimal efficiency in phonation—both speaking and singing—all tongue muscles must be allowed to function with as little tension as possible. The accuracy of a vowel or consonant relies on where the tongue is placed, not how firmly it is held in position.<sup>101</sup>

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<sup>96</sup> Doscher, 114.

<sup>97</sup> W. S. Smith, 63.

<sup>98</sup> W. S. Smith, 63.

<sup>99</sup> McKinney, 163.

<sup>100</sup> McKinney, 163.

<sup>101</sup> Scott McCoy, *Your Voice: An Inside View* (Princeton, NJ: Inside View Press, 2004), 137.

Allowing muscles to function freely, with as little tension as possible, is also important when discussing the jaw.

**Jaw.**

Bunch writes that, “the contractions of muscles around the jaw can cause deficiencies in vocal quality.”<sup>102</sup> In *Your Voice: The Inside View*, Scott McCoy notes that the muscles that close the jaw are stronger than the muscles that open it.<sup>103</sup> He adds that problems occur for “students who attempt to control jaw movement through muscular antagonism.”<sup>104</sup> Antagonism is important for the breathing and phonation mechanisms, but it results in extra tension and loss of freedom in the tone production when applied to the muscles that work the jaw.<sup>105</sup>

Miller comments that tension occurs from “hanging” or “clenching” of the jaw.<sup>106</sup> W. S. Smith says the masseter (chewing or clenching muscle of the jaw) should stay relaxed during singing, and the “goal is to use the lips and tongue to channel the air along the sigh path without tension in the jaw.”<sup>107</sup> The sigh path is the space in the mouth and throat one naturally creates when releasing a sigh. In most cases, when one sighs there is very little if any unwanted tension present in the sound. Miller believes that when the jaw is dropped as far as possible, the pharynx decreases in size and the larynx tends to

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<sup>102</sup> Bunch, 117.

<sup>103</sup> McCoy, 141.

<sup>104</sup> McCoy, 141.

<sup>105</sup> McCoy, 141.

<sup>106</sup> Miller, *Solution of Singers*, 88.

<sup>107</sup> W. S. Smith, 110.

become pressed and restricted.<sup>108</sup> He also says that the jaw should drop from the back, not the chin.<sup>109</sup> McCoy adds that, to avoid elevating the larynx, the jaw should be dropped to its “maximal” opening for high notes and loud notes with little tension.<sup>110</sup> Finally, Doscher believes that “particularly at high frequencies, the jaw must be very flexible and relaxed so the mouth can open sufficiently and consonants can be pronounced very quickly with the tip of the tongue.”<sup>111</sup>

Doscher also believes that freedom at the jaw hinge point is more important than the size of the opening.<sup>112</sup> Jaw tension can occur at attack of tone or when the singer wants to control the tone.<sup>113</sup> She notes that clavicular tension (resulting in a high larynx) plus tension in the base of the tongue can result in jaw tension.<sup>114</sup>

Other than obvious clenching or holding of the jaw, there are other visible signs of tension. Bunch mentions that tension can be seen in side movements of the jaw during high notes.<sup>115</sup> McKinney observes tension problems with the jutting, the forcing down, and the back position of the jaw.<sup>116</sup> Miller notes that trembling of the jaw, more prevalent in females, is another indication of excess tension.<sup>117</sup>

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<sup>108</sup> Miller, *National Schools of Singing*, 53.

<sup>109</sup> Miller, *National Schools of Singing*, 53.

<sup>110</sup> McCoy, 144.

<sup>111</sup> Doscher, 121.

<sup>112</sup> Doscher, 121.

<sup>113</sup> Doscher, 123.

<sup>114</sup> Doscher, 122.

<sup>115</sup> Bunch, 117.

<sup>116</sup> McKinney, 162.

<sup>117</sup> Miller, *Solution of Singer*, 99-101.

Finally, McKinney offers some ideas on how to address the problem of jaw tension with students. He advocates using a mirror and using relaxation exercises for the head, neck, shoulders, and jaw.<sup>118</sup> He also thinks the yawn is a good tool for helping to relieve tension in the jaw.<sup>119</sup> In regards to the jaw, “too much tension or putting it in the wrong position robs it of its ability.”<sup>120</sup>

### **Lips.**

Many authors address tension in the lips, though not in great detail. Doscher writes, “the lips and the large muscles encircling them must be relaxed and mobile.”<sup>121</sup> Bunch explains that for proper articulation, it is crucial for one to learn how to release the lips.<sup>122</sup> She adds that a contorted face can affect the dexterity of the lips, which is needed for good articulation.<sup>123</sup>

William Leyerle discusses the “sign of strain” that can be seen on the students with too much tension. He says this is caused by the lips being directly controlled, causing the lips to “take on a muscular look.”<sup>124</sup> In addition, he writes the following:

Lips should be an effect. If lip positions are conceived as cause, there will be an inevitable faulty adjustment of more important parts of the vocal mechanism.<sup>125</sup>

Reid makes a similar statement, but he speaks of the tongue and jaw. He says,

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<sup>118</sup> McKinney, 162.

<sup>119</sup> McKinney, 162.

<sup>120</sup> McKinney, 163.

<sup>121</sup> Doscher, 124.

<sup>122</sup> Bunch, 119.

<sup>123</sup> Bunch, 104.

<sup>124</sup> Leyerle, 108.

<sup>125</sup> Leyerle, 107.

“unnatural movements of the tongue and the jaw” are clues to “deeper rooted tension” in the laryngeal mechanism.<sup>126</sup>

Once again, McKinney offers some ideas on how to address tension of the lips during singing. Repeatedly, he uses a mirror as an awareness tool for the student. He asks students to observe how the throat, jaw, and lips relax at the beginning of a yawn.<sup>127</sup>

### **Pharynx.**

While a mirror might well address the tongue or jaw, it does not address the pharynx. There is little written about tension in the pharynx or throat in comparison to the other articulators. McCoy states that to open the throat, one must relax the constrictor muscles.<sup>128</sup> He adds that “almost no muscles exist that can actively open or dilate the pharynx.”<sup>129</sup> The following statement from Reid is consistent with McCoy’s writings:

To change the conditions causing ‘throaty tension’ to activate, however, it would be futile to direct the student to ‘open the throat’, or to ‘release the tension on the throat’, or even to ‘relax the throat’. Any direction that encourages the student to think about muscular actions in the region of the throat or, indeed, anywhere else, only leads to an increase in the constrictor tensions already present, and makes the performer more acutely aware of a phase of singing to which he should be oblivious. When muscles are forgotten and attention concentrated on vowel quality, then the voice will immediately show an improvement. The natural tone quality will be revealed and the tone production will steadily become freer and easier.<sup>130</sup>

Reid also discusses relaxing the constrictor muscles of the throat to achieve the openness needed for free singing. He says that students should be given directions that do not

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<sup>126</sup> Reid, *The Free Voice*, 120.

<sup>127</sup> McKinney, 161-162.

<sup>128</sup> McCoy, 138.

<sup>129</sup> McCoy, 138.

<sup>130</sup> Reid, *The Free Voice*, 51-52.

cause them to think about the “muscular action.” He finds that having students focus on the “muscular action” can result in more tension.

### **Soft Palate.**

The last articulator discussed is the soft palate. W. S. Smith writes, “The soft palate lifts on its own under the right conditions.”<sup>131</sup> Miller discusses how many “accomplished” singers have the ability to mimic other singer’s quality or tone by making changes to the different articulators.<sup>132</sup> He specifically calls this parroting, and says that it can cause the soft palate to stiffen.<sup>133</sup> This happens because the person copying the sounds of another singer may not naturally have a similar vocal structure and it can be a detriment to their natural voice production. Finally, Doscher explains in some detail that muscles are responsible for depressing and lifting the soft palate. She writes about the glosso-palatine (anterior palatine arches) and the pharyngo-palatine (posterior palatine arches).<sup>134</sup> Both are “palatal depressors” and if there is excessive pulling up or down on either, then this “creates undue tension in an area where flexibility is of prime importance.”<sup>135</sup>

In the end, there is the question of independence or interdependence of the articulators. Doscher believes in the interdependence of the articulators. McCoy writes that “the optimal effects are achieved when tension is ‘just right’ and adjacent structures

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<sup>131</sup> W. S. Smith, 110.

<sup>132</sup> Miller, *Solution for Singers*, 188.

<sup>133</sup> Miller, *Solution for Singers*, 188

<sup>134</sup> Doscher, 118.

<sup>135</sup> Doscher, 189.



are allowed full independence.”<sup>136</sup> This statement is in reference to the “over expressive face” and how it may cause extra tension in the neck, jaw, tongue, and voice. Based on his previous statement, McCoy may be an advocate for independence among articulators, but W. S. Smith clearly states that he works to coax the articulators to be independent of one another.<sup>137</sup>

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<sup>136</sup> McCoy, 146.

<sup>137</sup> W. S. Smith, 57.

## Chapter 3: Methodology

### Restatement of Purpose

Tension can be a recurring problem for young singers, and professional singers continuously try to avoid or “fix” it. Voice teachers address this tension using a variety of approaches, but is there “one” common approach that can be used to incorporate the diverse points of view of voice teachers on this issue?

Previous chapters of this paper have explored vocal pedagogies and related literature that address unwanted tension in singing. This chapter documents interviews with noted voice teachers and their experiences addressing such tension. It also considers whether the treatises of the past and present can be combined with current practices in the vocal studio to define a practical technique (or techniques) to release vocal tension in singing.

### Interview Process

Interviews with noted voice teachers were conducted between February and April of 2008 in the offices or studios of the eleven participants, 8 women and 3 men. The interviews were taped and each lasted approximately one hour. The participants were either teachers at the universities the author had attended or teachers and/or voice specialists recommended by teachers and other colleagues. The interviewee names, voice parts, school affiliations, and other notable accomplishments are as follows:

1. **Carmen Balthrop**, soprano, is a member of the voice faculty at the University of Maryland. She has performed opera, oratorio, and art song throughout the United States and abroad.

2. **Margaret Baroody**, mezzo-soprano, works as a voice specialist at Dr. Robert T. Sataloff's Ear, Nose and Throat Associates in Philadelphia, PA. In addition to that work, she maintains her own voice studio, and is well known for working with students and patients who have injured their voices. She has also published many articles that deal with voice health and vocal injuries.
3. **Dominic Cossa**, baritone, is a member of the voice faculty at the University of Maryland. He is best known for singing lead baritone roles with the Metropolitan Opera. In addition, he has performed and recorded with such greats as Joan Sutherland, Beverly Sills, and Luciano Pavarotti.
4. **Elizabeth Daniels**, soprano, is a member of the adjunct faculties at The Curtis Institute of Music and Catholic University. She also manages her own large private studio in Silver Spring, MD.
5. **Linda Mabbs**, soprano, is a member of the voice faculty at the University of Maryland. In 2000, she was recognized as a Distinguished Scholar/Teacher by the University of Maryland. She is internationally acclaimed for her performances of Mahler and Strauss, and has premiered many English and American works.
6. **Dr. Meg Olson**, soprano, was formerly the Coordinator of Vocal Studies at Morgan State University in Baltimore, MD. She has published articles in the *Journal of Singing* and the *Choral Journal*. In addition, she recently published her first book, *The Solo Singer in the Choral Setting: A Handbook for Achieving Vocal Health*.

7. **Martha Randall**, soprano, is a member of the faculty and is the vocal pedagogy specialist at the University of Maryland. She is the former National President of the National Association of Teachers of Singing (NATS) and a Fulbright Scholar.
8. **Dr. Perry Smith**, tenor, is head of the vocal pedagogy program at East Carolina University. He has sung professionally throughout the United States and parts of Europe, and he was a student of Richard Miller while studying at Oberlin Conservatory.
9. **Dr. Louise Toppin**, soprano, is currently the Area Head of Voice at the University of North Carolina, Chapel Hill. She has performed internationally and worked with many well-known teachers and performers, including George Shirley, Joan Sutherland, and Elly Ameling.
10. **Gran Wilson**, tenor, is on the voice faculties at the University of Maryland and Towson University. Best known for his interpretation of the bel canto repertoire, he has performed throughout the United States and abroad, and is highly recognized in France for his interpretation of French opera.
11. **Delores Ziegler**, mezzo-soprano, is currently the Chair of the Voice/Opera Division at the University of Maryland. She has performed in most of the major opera houses around the world. She has a substantial discography, including the most recorded performances of Dorabella from Mozart's *Così fan tutte*.

For each of the eleven participants, the interview consisted of eleven, often multipart, questions focused primarily on the young female voice (ages 16-20). The following is the list of questions asked:

1. A. What types of tension, such as, tension in the shoulders, breathing, neck, and face have you observed during lessons with your young female voice students?  
B. Which ones seem more common or prevalent?
2. A. Have you observed similar types of tension in your male students?  
B. What are some of the differences?
3. A. Obviously each student has a different set of tension issues, but which one do you tend to address first when working with a new female student?  
B. Is it different for the male student?
4. A. Have you struggled with tension in your own singing?  
B. Do you find the same type of tension in your students more quickly because you are so aware of it in your own singing?
5. A. When you choose repertoire, do you ever choose songs to address specific tension problems?  
B. Can you give an example?
6. What vocalises might you suggest for the following tension problems for your young female students (freshman or sophomore)?
  - A. Tension in the breath
  - B. Issues with pushing that result in the student to go sharp
  - C. Issues with holding or pressing down on the larynx
  - D. Issues with singing legato

- E. Tension when singing in a high tessitura
  - F. Tension when singing in different languages
7. A. Do you believe that vocal tension is misguided energy?
- B. If so, what are some of the techniques you use to guide this energy for freer vocal production?
- C. Is there a difference in your approach for the male voices?
8. A. Many teachers believe that some tension is needed for singing. I'm going to move to the other end of the spectrum for a moment. Have you had experiences with young female students that displayed a lack of proper tension or energy in their singing?
- B. Can you share some of these experiences and explain what you did to improve upon this problem?
9. A. Have you observed common technical issues related to tension in professional singers?
- B. Is there a specific tension issue that is more prevalent, such as, pushing or over-singing in opera in order to fill a hall?
10. Do you know of any scholarly literature that specifically addresses vocal tension in reference to singing or speaking?
11. Do you believe there is a need or interest in a text that would outline a practical approach to addressing vocal tension in singing? I envision a user-friendly text, with minimal medical terms or jargon.

## Chapter 4: Results from Interview

This chapter compares and contrasts the interview responses. Following the restatement of each question are teacher responses and applicable comparisons. It is important to remember that participants were asked to focus on the young female voice (ages 16-20) in their replies.

**Question 1: What types of tension, such as tension in the shoulders, breathing, neck, and face have you observed during lessons with your young female voice students? Which ones seem more common or prevalent?**

Each part of this question received similar responses. Tension was most commonly seen in the tongue, jaw, and shoulders. The most common or prevalent tension observed in lessons with young female students was tension of the tongue. Everyone, except Toppin, said that they had observed tension in the tongue. Barody, Balthrop, Randall, Ziegler, Olson, Daniels, and P. Smith indicated that such tension was common in young female voice students. Barody and Daniels both emphasized that the tension was often focused in the root or base of the tongue. Balthrop said that she found the tongue and jaw to be common areas of tension among her young students. Depending on the students' past activity, this may have several different sources--an over abundance of musical theater or choral singing in high school, for example.<sup>138</sup>

Mabbs said that she could not "see" tongue tension, but she could "hear" it.<sup>139</sup> Olson, Ziegler, and Daniels agreed that tension in the tongue was not seen as much as it was heard in the sound. Daniels added that often the tip of the tongue appears loose, but

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<sup>138</sup> Carmen Balthrop. Interview by author, 6 February 2008.

<sup>139</sup> Linda Mabbs. Interview by author, 2 March 2008.

it is the back and sides of the tongue which are depressed and tight.<sup>140</sup> Olson said more specifically that it was sometimes hard for her to visually and definitively diagnose the tongue as a problem because everyone's tongue has a different shape and size.<sup>141</sup>

The jaw was also a very popular answer to both parts of the question. Everyone, except Olson and P. Smith observed jaw tension in lessons. Baroody, Balthrop, Daniels, Toppin, and P. Smith said that it was one of the more common types of tension. Randall talked about the jaw jutting, pulling back or in, and refusing to budge altogether.<sup>142</sup> Toppin blamed jaw tension on the stresses of life because she was seeing an increasing number of students with temporomandibular joint (TMJ) problems.<sup>143</sup>

Posture was mentioned by many of the participants. Balthrop simply said that young female students commonly exhibited postural tensions. Other interviewees were more specific about the physical areas of the posture that displayed tension, including the shoulders, legs, sternum, neck, and head.

Ziegler, Olson, Mabbs, Toppin, P. Smith, Cossa, and Wilson agreed that they had seen tension in the shoulders of their young students. All interviewees, with the exception of Daniels and P. Smith, said that it was one of the more commonly observed types of tension.

Daniels said that she had observed postural tension in the sternum area, along the breadth of the trapezius muscle, and in the legs. She said that many young females sing with a sunken chest, and that leg tension was caused by shoes with too high of a heel.

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<sup>140</sup> Elizabeth Daniels. Interview by author, 19 February 2008.

<sup>141</sup> Meg Olson. Interview by author, 12 February 2008.

<sup>142</sup> Martha Randall. Interview by author, 6 February 2008.

<sup>143</sup> Louise Toppin. Interview by author, 13 April 2008.



She had her female students bring their shoes to the last couple of lessons before a performance to see how the shoes affected the posture and singing.<sup>144</sup>

Baroody, Randall, Olson, Mabbs, Toppin, Cossa, and P. Smith agreed that they had observed tension due to the head or neck being held in an awkward position. Cossa and Ziegler said that it was one of the most common tensions that their young female students display. P. Smith said that he had most commonly observed tense sternocleidomastoid muscles, which run the length of the neck. He also added that some of this type of tension could be eliminated by helping the student to find the right position for the head.<sup>145</sup>

Baroody stated that most of the tension she had observed was in the back of the neck.<sup>146</sup> Mabbs responded that neck tension was a little more difficult to see sometimes, but explained that if the shoulders were tense then most likely there was tension in the neck.<sup>147</sup> Toppin answered that tension in the neck was mainly due to postural positions of the head.<sup>148</sup> Similar to Toppin's response, Olson stated that she had observed heads tilted forward, backward, and jugged forward, all of which would cause stress in the neck and shoulders.<sup>149</sup>

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<sup>144</sup> Daniels.

<sup>145</sup> Perry Smith. Interview by author, 20 February 2008.

<sup>146</sup> Margaret Baroody. Interview by author, 5 February 2008.

<sup>147</sup> Mabbs.

<sup>148</sup> Toppin.

<sup>149</sup> Olson.

The participants discussed observing tension in the face, throat, and/or abdominal muscles, but only throat tension was indicated to be a common type of observed tension by *all* of the interviewees.

Mabbs said that she had most commonly observed students holding tension in the throat (laryngeal and pharyngeal). She thought this may have come about more recently due to the fact that young girls tend to imitate what they hear in the media, lowering the pitch of the voice and speaking with glottal fry.<sup>150</sup> Baroody, Olson, and P. Smith had seen pharyngeal or laryngeal tension while teaching their young female students, but none said that it was prevalent. In addition, Olson discussed the modification of vowels through the second passaggio to avoid throaty sound production.<sup>151</sup>

Mabbs also said that facial tension along with jaw tension was more prevalent in lessons with her younger students and thought that this could be due to the desire to be expressive and over articulate the diction. She explained that visual media may be a contributing reason for some of this. She noted that a lot of television programs show the performer/actor in close-up, so shoulders and the face are used for expression. Students think of themselves in “close-up” and forget about the body that is below their shoulders. She said that this extra energy in the face has to be reduced or it can become a major area of tension.<sup>152</sup>

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<sup>150</sup> Mabbs.

<sup>151</sup> Olson.

<sup>152</sup> Mabbs.

Cossa and Randall had also observed facial tension in their studios. Randall specifically mentioned that she had observed the furrowed brow.<sup>153</sup>

Baroody, Randall, and Toppin agreed that they had seen tension in the abdominal area. Baroody referred to the upper abdominals and diaphragm area as the area that held tension.<sup>154</sup> Toppin similarly responded that she had noticed that females who had been dancers, gymnasts, or cheerleaders had a difficult time releasing the upper abdominals for inhalation.<sup>155</sup>

Tension was also seen in the trapezius area and in the clavicular breath. Daniels found it prevalent for her young female students to hold tension in their trapezius muscle.<sup>156</sup> Olson thought that the tension expressed in the clavicular breath was one of the most common tensions displayed by the beginning or untrained students new to her studio.<sup>157</sup>

Some extra comments from the interviewees are important to note before moving on to Question Two. Randall discussed briefly how tension seemed to be migratory and that it tended to increase over time. She gave the example of a student who is told to place tension in a toe by digging it into the floor. She said there is a good chance that eventually that tension will travel up the body to the shoulders.<sup>158</sup> Ziegler said she had observed tension in the whole body. She spoke of how some students think that singing

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<sup>153</sup> Randall.

<sup>154</sup> Baroody.

<sup>155</sup> Toppin.

<sup>156</sup> Daniels.

<sup>157</sup> Olson.

<sup>158</sup> Randall.

is “extra-normal”, and would place themselves in awkward postures they thought were needed for breathing and singing.<sup>159</sup> P. Smith expressed that many types of tension are created by a lack of “muscular innovation and coordination.”<sup>160</sup> Cossa struggled with the idea of tension being bad or wrong. He talked about how a singer cannot completely relax. He said specifically, “The tongue has to do its job.....it has to tense and relax.”<sup>161</sup> He also stated that he did not think the question could be addressed based on gender.

**Question 2: Have you observed similar types of tension in your male students?  
What are some of the differences?**

All of the participants in the interview, except Olson, agreed that they had observed similar types of tension in their male students. Both Toppin and P. Smith said they had seen many of the same types of tension in their male students, but not to the same degree. Baroody specifically mentioned the tension in the jaw and base of the tongue as being common in both genders.<sup>162</sup> Balthrop and Cossa agreed with the statement, but neither thought one could really address tension or the cause of tension on the basis of gender.

Toppin found that most men were freer in the lower abdomen, and she further stated, “Guys are freer in general.”<sup>163</sup> Daniels agreed that women tend to hold their lower

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<sup>159</sup> Delores Ziegler. Interview by author, 7 February 2008.

<sup>160</sup> P. Smith.

<sup>161</sup> Dominic Cossa. Interview by author, 13 February 2008

<sup>162</sup> Baroody.

<sup>163</sup> Toppin.

abdominal muscles, while men seemed to be freer in that area unless they had done a lot of weight lifting.<sup>164</sup>

Toppin referred to the degree of tension being lesser in the males, which is in contrast to P. Smith's belief that it was greater. He did not talk about the tension in the abdomen as she did. Instead, he used the example of the tension that tenors display when negotiating on either side of the passaggio. He also added that he found that the male posture showed more rigidity when moving into the upper range.<sup>165</sup>

Wilson's example of the differences was similar to P. Smith's response. Wilson had also observed more tension in men when ascending between registers. He talked about how the mechanism was heavier in general and how men had to "endure greater pressures."<sup>166</sup> By "pressures," he explained that he meant subglottal pressure. Due to these issues, he found men showed greater tension in holding the jaw and tongue, and in the articulators.<sup>167</sup>

Mabbs had an alternate view of how tension is different from male to female when discussing the "pull through the passaggio." She said that males needed "extra energy" through this area and could not afford to "wimp out." She referred to "extra energy" as a positive form of tension that is needed for the male voice.<sup>168</sup>

Both Baroody and Wilson agreed that they had frequently seen tension in the tongues of baritones. Baroody specifically discussed how baritones tend to depress their

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<sup>164</sup> Daniels.

<sup>165</sup> P. Smith.

<sup>166</sup> Gran Wilson. Interview by author, 11 March 2008.

<sup>167</sup> Wilson.

<sup>168</sup> Mabbs.

tongues and how that tension must be released on the inhalation or it could cause vocal problems.<sup>169</sup>

Daniels, just like Wilson, also observed greater tension in the jaw area of her tenor students. She said men often tend to muscle the sound. If the sound is sustained by tensing the wrong muscles, or over-using the muscles, the sound will either be very tight or, eventually, breathy, because the vocal cords have lost their ability to come together easily.<sup>170</sup>

Randall said that there were some body differences between genders that caused different tension problems. She explained that men carry more weight in their upper body and shoulders. She had seen men singers experience tension in the shoulders because they mimicked a football player's posture/stance with pads.<sup>171</sup> Ziegler agreed with this and said that due to this bulkiness in the torso, many young males struggle with tension by trying to force or muscle the breath. This is somewhat similar to what Daniels said earlier in reference to muscling the breath, but she did not link it to differences between body structures. Ziegler also added that females do not normally "muscle the breath" unless that is what they have been taught.<sup>172</sup>

Randall discussed body balance due to the size of the bosom. She talked about how females sometimes display a "heaving bosom." She would tell them to find a

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<sup>169</sup> Barody.

<sup>170</sup> Daniels.

<sup>171</sup> Randall.

<sup>172</sup> Ziegler.

balance that was comfortable and relaxed for breathing as freely as possible. She said that she would specifically tell them “Don’t fight it.”<sup>173</sup>

Olson was the only interviewee who said that she had not “usually observed the exact same type of tension in male students.” She said that because men utilize their chest register with a heavier mechanism, tension is often evident in the neck and chest.<sup>174</sup>

**Question 3: Obviously each student has a different set of tension issues, but which one do you tend to address first when working with a new female student? Is it different for the male student?**

Various responses were seen for the first part of the question, and all but one participant saw no difference in how they address tension while teaching their male students. Baroody said that she tended to first address jaw and general facial tension along with support in lessons with new female students.<sup>175</sup>

Balthrop responded that she would first work on breathiness in languages and vowel modification with new females in her studio. She further discussed how there were “helper vowels” that assist in improving the clarity of the vocal tone. She thought that there was no difference in her approach with new male students. She finally talked about how her goal in teaching was to “search for clarity.”<sup>176</sup>

Similar to Balthrop’s approach, Olson also first worked on tension that was in vowel production. She specifically said that she did not always talk about posture and breathing because it is important for students to sing in the lesson instead of just listen to the teacher talking. She stressed that she addressed specific issues with posture and

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<sup>173</sup> Randall.

<sup>174</sup> Olson.

<sup>175</sup> Baroody.

<sup>176</sup> Balthrop.

breathing when needed. She concluded by saying that she relied on visual and audio clues from the student to detect tension, among other techniques.<sup>177</sup>

Ziegler's approach to tension with new students is to address whole body posture, a major contrast to Olson's approach. This was something she did with both male and female students. She briefly said that she also tries to get her students to relax mentally. Finally, she added that the second area of tension that she normally addresses is tension in the tongue.<sup>178</sup>

Daniels addresses tension in the head and neck first. She gave the example of helping her students relieve tension in the neck area by having them try to align the top of their ear with the mid-point of the side of their shoulder, their hip, the side of their knee and the side of their foot. She also suggests looking into the concept of "body mapping", a concept first put forth by Barbara and William Conable.<sup>179</sup>

Randall explained that she first addresses the tension in the bigger muscle groups and then progressed to the smaller ones. She called muscles "party animals" and said that they like to travel in groups. She said that little muscles were harder to get to, and if one could get the big muscles in balance, then the smaller ones would sometimes follow suit. Like Daniels, Randall is a major advocate of gaining knowledge about the body and posture. She specifically mentioned the Alexander Technique and Feldenkrais.<sup>180</sup>

Mabbs said she would first figure out the student's learning style: visual or aural. Based on her previous experiences, she would first address eliminating tension in the

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<sup>177</sup> Olson.

<sup>178</sup> Ziegler.

<sup>179</sup> Daniels.

<sup>180</sup> Randall.



throat. She talked about how younger or inexperienced singers tend to place the sound in the throat because they could hear it better, feel it in the jawbone, and/or because it is more like speaking.<sup>181</sup>

Toppin wanted to address the tension that she thought the new student could get to the quickest. Her goal in this is more psychological than physical. She wants the student to feel successful, and this would allow her to further gain his/her trust. She explained that her next goal would then be to address any tensions present in the breath.<sup>182</sup>

Cossa thought that the most important thing to do with new students was to address the most predominant tension. He said that he tends to “chip away at tensions one at a time.” He explained that the only time he does not follow this procedure is if he finds that a student is overly sensitive. If this is the case, then he will be more subtle in his approach.<sup>183</sup>

P. Smith concisely responded that he went for the root of the tension problem. He gave no further explanation, but he too found no difference in his approach between female and male students.<sup>184</sup>

Wilson stated that the first areas of tension that he approaches with his new female students are in the shoulders and the mouth. When talking about the mouth, he said his focus is on the opening.<sup>185</sup>

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<sup>181</sup> Mabbs.

<sup>182</sup> Toppin.

<sup>183</sup> Cossa.

<sup>184</sup> P. Smith.

<sup>185</sup> Wilson.

So, overall, most participants had a different answer to the types of tension they tend to address first with a new student, and they agreed that their answer would not change based on the student's gender. The one specific tension that was mentioned by two of the females was tension found in vowel production.

**Question 4: Have you struggled with tension in your own singing? Do you find the same type of tension in your own students more quickly because you are so aware of it in your own singing?**

Everyone, except Toppin and Cossa, agreed that they had struggled with tension in their own singing. Toppin added that because she had struggled to release tension as a piano student, she had no major tension problems as she began studying voice.<sup>186</sup> Cossa said that the only tension he had observed in his own singing was not a mechanical issue, but rather an issue of being insecure about a piece of music.<sup>187</sup>

Balthrop said that she had experienced tension in her own singing, but that as soon as a passage felt uncomfortable, she would stop and try to go right to the problem.<sup>188</sup> Daniels talked about how she had gone through treatments for thyroid cancer. Due to the stress of the treatments, she found that she was experiencing some strain in her posture.<sup>189</sup>

Baroody said that she had struggled with acid reflux that caused some pressing when she sang as she got older.<sup>190</sup> Randall also experienced more tension problems as she aged. She said she did not remember struggling with tension as a “youngster”

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<sup>186</sup> Toppin.

<sup>187</sup> Cossa.

<sup>188</sup> Balthrop.

<sup>189</sup> Daniels.

<sup>190</sup> Baroody.

because she was “too stupid to be tense,” or maybe she was looking to the past through “rose-colored glasses.”<sup>191</sup>

Olson too stated that she did not remember tension being a major problem when she was younger, but that now she experienced it more. She explained how this was a more recent problem because of the demands of teaching and using her voice all day. In addition, she expressed that it was challenging to keep up her own vocal exercise routine.<sup>192</sup>

Mabbs and Wilson said they had “absolutely” struggled with tension in their own singing. Mabbs said that she found that her major tension issues were a result of pushing.<sup>193</sup> Wilson said he struggled mostly with tension in jaw and tongue, which is similar to P. Smith’s response that he struggled with tension in the jaw and through the upper passaggio.<sup>194</sup>

As for finding student tension more quickly because of personal experience with tension, the responses from interview participants were varied. Baroody and Olson said that they did not find the same tensions they had struggled with in their own singing more quickly in their students. P. Smith answered no at first, but after a little thought, decided that he did find similar tension problems in his own students more quickly.<sup>195</sup> Mabbs said that as a young teacher she would have answered yes to the question, but that as she

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<sup>191</sup> Randall.

<sup>192</sup> Olson.

<sup>193</sup> Mabbs.

<sup>194</sup> Wilson.

<sup>195</sup> P. Smith.

has matured as a teacher she would answer no. She stated that she approaches each student's tension as a "mystery novel" or "scavenger hunt."<sup>196</sup>

Balthrop is in total agreement that she can more easily find tension in her students if it is something she has experienced in her own singing. Balthrop also feels that if pinpointing the tension is not immediately assessed, it is always helpful to have the students discuss their concept of what actions they think are necessary for good singing. This gives the teacher more insight into the students' thoughts.<sup>197</sup>

Wilson said that he was very quick to find jaw tension in his students because his graduate teacher had focused on that problem in his lessons.<sup>198</sup> Daniels said that because of her cancer, she was more "physiologically aware" of posture-related tension in her students.<sup>199</sup>

Finally, Randall and Zeigler somewhat agreed that they would find certain tensions in their students more quickly if they had also experienced similar tension in their own singing. Zeigler added that the problems she had struggled with were more prominent in her students that were further along in their studies.<sup>200</sup>

**Question 5: When you choose repertoire, do you ever choose songs to address specific tension problems? Can you give an example?**

Baroody, Olson, Cossa, and Wilson agreed that they do not choose music based on a student's tension problem. Wilson specifically said that he did not "deconstruct"

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<sup>196</sup> Mabbs.

<sup>197</sup> Balthrop.

<sup>198</sup> Wilson.

<sup>199</sup> Daniels.

<sup>200</sup> Ziegler.

that much. Instead, he chose music because it would help the student increase his or her range.<sup>201</sup>

Everyone else was in agreement that they chose repertoire to address specific tension problems. Balthrop gave an example for a mezzo-soprano. She would find a piece with a high note “f” and have her student work through the tension that the student was experiencing in the upper range.<sup>202</sup> Ziegler gave a recent example in which she had a high lyric mezzo-soprano singing “Un moto di gioia.” The student had been having trouble tensing up when going through the upper passaggio, and Ziegler gave her this piece because she would have to open up, relax, and support through that area.<sup>203</sup> Ziegler also gave some examples of tongue twister exercises that she gave her students for tongue tension, such as “round the rock the rugged rascal ran.”<sup>204</sup>

Randall said she “probably could do even more of it.” She said that she chose songs that would ease students into their problem areas. She talked about how, for the student that struggled with singing in the higher range of his or her voice, she might pick a song that “noodled” through the upper notes.<sup>205</sup>

Daniels responded that she chose repertoire to address vocal problems caused by tension. She talked about suggesting yoga for enhanced awareness of the breathing muscles and also thought that Pilates was very helpful in strengthening the muscles necessary for good breath support. She gave two specific song examples she used for

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<sup>201</sup> Wilson.

<sup>202</sup> Balthrop.

<sup>203</sup> Ziegler.

<sup>204</sup> Ziegler.

<sup>205</sup> Randall.

tension; “Secrets of the Old” (rapid diction, needs relaxed tongue and jaw) by Samuel Barber and “My Master Hath a Garden” (relaxing throat for skilled dynamic control) by Richard Hundley.<sup>206</sup>

Mabbs said that, many times, she would choose songs for students to address a specific type of tension. She talked about how she thought songs in the Italian language were good for addressing problems with legato. She was currently picking songs by Donaudy because he wrote music with voluptuous lines that demanded a legato.<sup>207</sup>

Toppin responded that she chose some repertoire to address specific tension in her students, but not always. She explained how one semester she gave a student all slow repertoires with long phrases to address his or her tension in the breath. The student was a little confused at first, but after the semester, had made many strides in eliminating the issue.<sup>208</sup>

P. Smith answered that he probably did choose some repertoire to address specific tensions a student might be experiencing. He gave the example of choosing an Italian or French song with rapid diction to help with tensions of articulation.<sup>209</sup>

**Question 6: What vocalises might you suggest for the following tension problems for your young female students (college freshman or college sophomore)?**

**A. Tension in the breath**

Eight of the participants did not mention vocal exercises when answering this part of question six. Baroody, Randall, Olson, Toppin, and P. Smith discussed how they

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<sup>206</sup> Daniels.

<sup>207</sup> Mabbs.

<sup>208</sup> Toppin.

<sup>209</sup> P. Smith.

would have their students lie on the floor. Barody said that it allowed her students to have a “kinesthetic awareness of the whole.”<sup>210</sup> Toppin thought that lying on the floor was a good exercise to help find the feel of the release in the breath.<sup>211</sup>

Both Randall and P. Smith said that they would have the students experience the breath lying on the floor to feel the natural pull of gravity in the abdomen. Randall said that she would explain to her students how gravity does all the work when lying on the ground, but in standing, the abdominals had to work more. She said she used statements and commands like “invite the air in” and “we are not wearing corsets today.” She acknowledged that she used a lot of imagery with her students.<sup>212</sup> P. Smith explained that lying on the floor was a good way to have students experience the sensation of the breath because of gravitational pull in of the abdomen toward the floor. He also talked about how lying on the floor placed the ribcage in the correct elevated position that was needed when standing. In addition, he said that students need to understand how to relax for the inhalation and work for the exhalation.<sup>213</sup>

Olson agreed that the floor exercises were a good idea, but cautioned that some students do not feel very comfortable doing this. Instead she offered another, similar breathing exercise she found helpful, which she called four by four by four. This exercise can be done sitting or lying down. With released shoulders and abdominal

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<sup>210</sup> Barody.

<sup>211</sup> Toppin.

<sup>212</sup> Randall.

<sup>213</sup> P. Smith.

muscles, breath in over four counts, hold for four counts, and gently release over four counts.<sup>214</sup>

Both Barody and Daniels discussed how they had some students bend at the waist to feel the expansion in the torso during inhalation. Barody had her students sit in a chair and bend at the waist to feel the release of the abdomen in the inhalation. In addition, she said she might have them practice the muscular action of moving the abdominals in and out to build awareness of muscular tension versus release.<sup>215</sup>

Daniels preferred to have her students bend and lean elbows on the piano to feel the sensation during inhalation. She also said she might have students put a hand on their chest if they were raising the chest when they inhaled. She encouraged allowing the back and sides ribs to inflate and, perhaps, actually feeling a slight depression in the upper chest upon inhalation, which turns into a slight lifting as the student sings. The constant slight movement of the upper chest keeps muscles from getting stiff. Finally, she mentioned putting towels under the armpits to aid in the feeling of expansion in the side and back of the ribcage. This approach also seems to free up the abdomen for greater relaxation because of the lifted posture in the ribcage.<sup>216</sup>

Ziegler talked about how she would have a student struggling with breath laugh to expel all the air. This allows for the following breath to be deep and relaxed. She also said she had had students imagine “sucking a thick milkshake through a straw” for the inhalation. She said that she knew there could be tension when using the image of the

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<sup>214</sup> Olson.

<sup>215</sup> Barody.

<sup>216</sup> Daniels.



straw, but she said it gave many singers a good idea of how much air could really be taken in. The last example she gave was to mimic the sound of a “leaky tire,” but the sound had to be very steady.<sup>217</sup>

Toppin was another advocate for the use of the hiss to help students experience the feeling of the breath during exhalation. She also discussed how she worked on breath with her students who were athletes. She said she might actually take them to do something physical like tennis or jogging. She explained that in her own jogging she had to focus on perfecting the breath when beginning to add more distance. She talked about how her legs were still able to run, but that the lack of breath is what held her back until she learned how to control it. She said once she learned how to control the breath; it felt as though she was breathing in slow motion.<sup>218</sup>

Wilson thought it was important for the young student to experience the extreme when learning how to release tension in the breath. He suggested an exercise that had the student blow out all the air. Then, before taking the inhalation, the student had to continue to count on a whisper until they absolutely had to take a breath. Lastly, he talked about the importance of keeping the sternum up during inhalation and exhalation.<sup>219</sup>

Balthrop, Mabbs and Cossa approach the breath by using exercises that involve actual singing. Balthrop said that she deals with tension in the breath by having her students sing an arpeggio three times on one breath. This makes them aware of tension problems they may have in the exhalation at certain pitch points. Also, the length of the

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<sup>217</sup> Ziegler.

<sup>218</sup> Toppin.

<sup>219</sup> Wilson.

exercise allows her to get a good picture of what they do when they take a deep breath, and how their bodies react as they get to the end of the breath. Then she is able to make changes or point out areas where she sees tension.<sup>220</sup>

Mabbs discussed how she had her students blow out air while a phrase in their music was played on the piano to help them feel the constant airflow. Then she would have them sing the phrase on vowels only. Finally, she would have them add in the consonants, and it was at this point that they would normally figure out what was hindering the breath. Another thing she found helpful was to have her students sit in a chair that rolled and then she would push them forward as they sang a phrase. She said they were always amazed by how well this worked. She explained that it helped them to experience the breath moving forward throughout the entire phrase.<sup>221</sup>

Cossa described how he worked to find the student's "loud voice" first. He explained that it was not a forced sound, but a healthy full voice like that of an "educated yeller." He said only after the student becomes confident at this volume level or fullness should they start to work on pianissimos and major dynamic changes. He thought exercises using vowels on legato long tones were helpful for relieving tension in the breath. Finally, he said that he tells his students to take a "full, generous breath."<sup>222</sup>

### **B. Issues with pushing that result in the student to go sharp**

The answers varied for this question, but the most common answers involved the larynx being too high, pushing when singing, and the breath or support. Daniels responded to the question by saying that this was a problem of a high larynx. The first

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<sup>220</sup> Balthrop.

<sup>221</sup> Mabbs.

<sup>222</sup> Cossa.

thing she would do would be to have the young student focus on the correct breathing. “Making sure there is not upward movement between the two suprasternal notches [jugular notches] during inhalation will allow the larynx to hang freely and will almost always solve sharpness.”<sup>223</sup>

Mabbs also explained that, most likely, the problem occurred when the larynx was either going up or the throat was being held, causing the student to go sharp. To help her young female students with this, she normally had them plié when reaching for higher notes in order to keep the support low. Also, she has had some students balance on a stool or sit in a chair, and when they would ascend in pitch, or the notes would start to go sharp, she would press down firmly on their shoulders. Both approaches helped to keep students grounded lower in their support and to release tension in the upper body.<sup>224</sup>

If Ziegler confirmed that there was a problem with support, then her first instinct was to go straight to the breath. She would have the student focus on the low breath to help relax the support. She said that if the pitch tended to go sharp while in a high tessitura, she would tell the student to release support down into the floor.<sup>225</sup>

Wilson also found the breath to be an important part of correcting this issue, but he approached the issue differently from Ziegler. He used the analogy of bowing a stringed instrument to explain how he would work on this tension problem. He said he has his students imagine that “the diaphragmatic movement is up bowing.” There is a

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<sup>223</sup> Daniels.

<sup>224</sup> Mabbs.

<sup>225</sup> Ziegler.

balance of pressure and it is constant. He finally added that he tells them to keep the spin and “don’t rush the bow.”<sup>226</sup>

Toppin believed that breath was a main issue for the student who was going sharp due to pushing. She said that she would have her freshman or sophomore sing more quietly while trying to keep the vowels stable and gradually adding volume. She had noticed that her students who went sharp had a tendency to change the vowels. She finally noted if pushing was going on in the breath, then, most likely, there was some pushing or tension in other areas of the body.<sup>227</sup>

Cossa said there is no “magic pill” for addressing issues with pushing that causes the student to go sharp. He said that he tended to address these issues through conversation. He talked about how he tells his students to have the pitch already in the brain before singing it. If he feels that there is a pushing issue, he would ask the student to back off a little and go for the most beautiful sound.<sup>228</sup>

Balthrop also said that she would have a conversation with the student about this issue. She would explain that it was most likely a stiffening of the tongue and that the jaw may also be involved. She would have them sing the specific phrase again with a “dummy jaw” and would tell them “the tongue has to be specific, not rigid.”<sup>229</sup>

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<sup>226</sup> Wilson.

<sup>227</sup> Toppin.

<sup>228</sup> Cossa.

<sup>229</sup> Balthrop.

Olson said that hyper-production was most likely the cause for students going sharp. She said one way to address this problem is to suggest that students sing in the “middle” of the pitch.<sup>230</sup>

Baroody responded that sometimes she would have her female students approach this problem from a breathy sound. Then, carefully, she would have them add in more voice, forward resonance, or nasal sounds. She also said that if they had a problem with acid reflux, it would sometimes cause them to push and go sharp because they were trying to sing through the extra mucous, swelling, or general irritation caused by reflux.<sup>231</sup>

Randall said that the cause for sharpening was often simply a case of “blowing too much air through the vocal folds, especially in young singers.” She explained how she would demonstrate a tone and then blow more air so that the student could hear the pitch go up. Next, she would have the student try it and sharp intentionally, and then she would tell him or her to aim for the center of the pitch. She further stated that when a student is super-excited or “wired,” there is a tendency to go sharp, and in this case, finding a way to calm down is helpful. Lastly, she said “There is a constant interplay between the breath and vocal fold tension to maintain accurate pitch.”<sup>232</sup>

P. Smith explained that the problem with young females going sharp in the upper range was normally due to laryngeal tuning and too many upper partials. He talked about how women had to modify their vowels so that they are “less lateral” when singing above

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<sup>230</sup> Olson.

<sup>231</sup> Baroody.

<sup>232</sup> Randall.

the staff. He also added that it might be good to use exercises that start high and then descend.<sup>233</sup>

### **C. Issues with holding or pressing down on the larynx**

Each teacher had a different approach to address the problem of pressing down on the larynx. Barody explained that she sometimes used a breathy sound exercise to help correct this issue. She talked about how she sometimes had her students touch their larynx. She said that this makes them aware of major changes in the movement.<sup>234</sup>

Balthrop discussed how this problem could result from the soft palate pressing up while the tongue is pressing down. She said that naturally there is space in the soft palate. She was adamant that she did not mention lifting the soft palate while teaching, because she thought it created more tension problems. She stated that “the tongue does the ballet.”<sup>235</sup>

Randall explained that the issue of pressing down on the larynx normally came from a student who was trying to open the throat. She said that when one takes a breath, the throat is probably already open to about the optimal space for singing. To help with this type of tension, she would have them sigh on “oh well” or any other combination of words that express the same feeling. She ended her answer by saying that “our feeling of open throat may actually be that of a longer throat.”<sup>236</sup>

Ziegler liked to have her female students vocalize with a hum on [n], [m], or [ŋ] to help relieve tension that is holding or pressing down on the larynx. She said she

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<sup>233</sup> P. Smith.

<sup>234</sup> Barody.

<sup>235</sup> Balthrop.

<sup>236</sup> Randall.

would try all of them to find the one that was “the best fit” for the individual singer. She explained that [ŋ] was great because you could open up the vowel.<sup>237</sup>

Olson suggested working on the flow of the breath to relieve tension caused by pressing down or holding the larynx. She said that she would have the student sing the melody of a song on one vowel and focus on feeling a release and free air flow. She said, “If the external musculature of the larynx is tensed, chances are breath is not flowing.” The second exercise she described involved the student singing 1-3-5-8-5-3-1 or do-mi-sol-do-sol-mi-do on a staccato “ho,” alternating with a legato, and encouraging the student to release into both with moving air.<sup>238</sup>

Daniels explained that yawning naturally depresses the larynx. She said that the more that she could enhance her students’ awareness of the neck being in a free position and inhalation expanding the back and sides of the ribs, the less likely it is that the larynx will become depressed. She also added that focusing on opening the zygomatic (cheekbone region) space helps to reduce the tendency to depress the larynx.<sup>239</sup>

Mabbs said that she had young female students who had trouble holding or pressing down on the larynx bend over from the waist, place their elbows on their knees, and drop their head forward, all while seated. This helps to stretch the back of the neck and release tensions from holding or placing the head in an awkward position, which is similar to what Daniels explained. Mabbs said that sometimes she will massage the back of her student’s neck while in this posture if she finds the student is having a hard time

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<sup>237</sup> Ziegler.

<sup>238</sup> Olson.

<sup>239</sup> Daniels.

letting go of the tension. Also, this posture changes the gravitational pull and makes it harder to press down on the larynx.<sup>240</sup>

Toppin explained that she would have her students talk with the larynx too low and with the larynx too high so that they can feel where tension may be placed when in the two extremes. Then she would have them work to find a middle position of the larynx. Finally, she said that she likes to vocalize students in that middle position without pushing. If they are having trouble pushing, then she tells them to stay in that middle voice that they had already practiced when speaking.<sup>241</sup>

Cossa did not identify a particular exercise to deal with the issue of tension caused by pressing down on the larynx. He mentioned that he would most likely make a “wise crack” and then just tell the student to stop pressing down on the larynx.<sup>242</sup>

P. Smith found holding/pressing down the larynx to be more of a problem in young male singers because it was an issue of balancing the flow of the breath and glottal adduction. For both women and men, he suggested using Italian onset exercises. He added that he liked to tell his students to “vowelize, not vocalize.”<sup>243</sup>

Wilson said he had his female students “run everything from the top.” He discussed how the placement or sensation moved up the front of the face to the top of the head as pitches ascended. He said that if you can get the student to imagine the sound

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<sup>240</sup> Mabbs.

<sup>241</sup> Toppin.

<sup>242</sup> Cossa.

<sup>243</sup> P. Smith.



coming out from the top of the head that this normally took away the downward depression on the larynx.<sup>244</sup>

#### **D. Issues with singing legato**

The two main types of exercises that the teachers mentioned to address issues with singing legato involved singing with vowels and using some type of sliding or glissando pitch movement. Ziegler said she would have the student glissando between notes using the progression of 1-3-5-4-2-7-1 or do-mi-sol-fa-re-ti-do. She also added that she might say things she did not really mean, for example, “slide it together.” She said that a lot of the time the result would be exactly the right legato.<sup>245</sup>

Balthrop feels that legato singing is what is naturally produced when the singer allows the “easy flow of energized breath” to sustain the vowels while going through the consonants to the next vowel. The only interruptions to the flow of breath are for replenishing the breath. There is also necessary discussion about the timing of the vowel changes in diphthongs to assist in the development of legato singing.<sup>246</sup>

Olson believed that issues with singing legato could sometimes be related to conserving air and not releasing the air on the sung phrase. One solution she suggested was to ask the student to “move air.” She also said she might tell the student to, “Connect the notes with air.” Similar to Ziegler’s glissando exercise, Olson also liked to use what she called a “ghost slide,” which mimics the sound of a ghost as the voice

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<sup>244</sup> Wilson.

<sup>245</sup> Ziegler.

<sup>246</sup> Balthrop.

shakes or wiggles up and down the scale. She said that once the student could do this, it was important to have her remove the shake from the slide.<sup>247</sup>

Mabbs described a similar approach to the glissando and “ghost slide.” She explained that she first has her young students write out the vowel sounds above the notes in their songs. Then she has them sing on the vowels and allows them to slide between pitches so that the sound does not stop. Just as in her answer dealing with tension in breathing, Mabbs believes that it is an issue of starting on vowels and then adding in the consonants.<sup>248</sup>

Toppin also believes that it is important to take out the consonants and sing on vowels. She gives her students further instruction to transfer the vowels or connect one vowel to the next one.<sup>249</sup>

Daniels recommended the use of long vowels with short consonants to help young students who had a difficult time singing legato. She talked about how the tongue tends to anticipate the consonant, which will shorten the vowel. She also suggested that experimenting with the breath without closing the resonators may be a solution.<sup>250</sup>

Baroody’s solution to this problem was to have the female student sing slow vowel exercises. The progression she used as an example was 3-5-1 or mi-sol-do. She said the focus would be on releasing the air in the phrase.<sup>251</sup>

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<sup>247</sup> Olson.

<sup>248</sup> Mabbs.

<sup>249</sup> Toppin.

<sup>250</sup> Daniels.

<sup>251</sup> Baroody.

Cossa agreed with Mabbs, Toppin, Daniels, and Baroody that working with the vowels was the key to the legato. He suggested singing the five Italian vowels on a sustained note. He would also give examples of legato and a definition for the word legato. In addition to this, he would have the student think of the voiced or pitched consonants as vowels because one can sing them. Finally, he said he tells his students “Don’t make sausages!”<sup>252</sup>

P. Smith asked for a definition of legato and it was defined to him to mean smooth and connected. He explained his own definition of legato as staying in the singer’s formant with vibrancy in each tone. He was very adamant that straight-tone singing was not legato, and that every note should have vibrato along with a balanced tone.<sup>253</sup>

Wilson said that to achieve legato, there has to be an “incessant release of the tone.” Once again, he used the analogy of the bow that he introduced while discussing pushing that causes the student to go sharp. He compared the sung legato to the bowing of a violin. He said that there has to be enough pressure so that the bow does not bounce on the string, but not so much pressure as to result in a harsh sound on the string. Finally, he stated that he internally “subdivided like a maniac” to create legato.<sup>254</sup>

Randall responded that issues with singing legato were due to the independence of the tongue and jaw. She first mentioned that this was something that the student could actually see when singing into the computer with some of the newer technology. She

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<sup>252</sup> Cossa.

<sup>253</sup> P. Smith.

<sup>254</sup> Wilson.

talked about having her students sing French nasals and having them sing on the vowels. Sometimes she might tell a student to “sound Slovakian” by voicing all of the consonants, even the unvoiced ones.<sup>255</sup>

#### **E. Tension when singing in a high tessitura**

There were many different responses regarding how to help a female student who is struggling with tension when singing in a high tessitura. Baroody demonstrated a descending vocal trill on an [a] vowel utilizing an interval of a second or third as an approach to this problem. She added that this action should be accomplished with an almost overly-loose sensation in the larynx, so that a "jiggling" or "shaking" action of the larynx can occur. She said, “If this ‘laryngeal jiggle’ is accomplished in a relaxed fashion, then relative relaxation can then be employed in approaching the upper register.”<sup>256</sup>

Balthrop talked about clarity and comfort being the first goal of singing when she answered this question. She also briefly discussed the soft palate and idea of the open throat. She was adamant that she never has a student focus on lifting the soft palate because she said, “The openness of the throat is relative to the tessitura in which the singer is singing at any given time.”<sup>257</sup>

Randall’s first solution to tension singing in a high tessitura was to get rid of the consonants and sing on vowels. She sometimes had her female students lip trill through the upper tessitura or tell them to “massage” their way through the top. She also wanted to determine if the tension was coming from the support caused by pushing air out or if

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<sup>255</sup> Randall.

<sup>256</sup> Baroody.

<sup>257</sup> Balthrop.

there were some muscles that were gripping. She would explain to the student that the higher pitches come from the stretching or elongating of the vocal folds and not from adding more air pressure. She briefly said that Ingo Titze's trick of singing through the straw was helpful to some students.<sup>258</sup>

The exercise that Ziegler recommended for relieving tension in a high tessitura started on 1 (do) went up to 5 (sol) and then back down the arpeggio, 1-5-3-1 (do-sol-mi-do). She liked to use this with her mezzo-soprano students through the passaggio. She added that octave leaps were useful as well as regular arpeggios, along with sirens on [i]. Ziegler said she had certain students imagine that a string was hanging from their larynx, and that they could gently pull on the string to lower it. She did not advocate using this with all students.<sup>259</sup>

Daniels uses the metaphor of an iceberg to illustrate support: 7/8ths of an iceberg is located below the water with the remaining 1/8th above. She said this to explain that the bulk of the support or energy has to be in the lower body of the singer. She said that when singing the higher notes, the focus should be placed on keeping a loose tongue and energizing the support in the lower body. To help the tongue stay loose, she has her students vocalize while fluttering the tongue.<sup>260</sup>

To address tension seen while singing in a high tessitura, Olson said that she liked to have her female students sing a staccato arpeggio to work through the tension. She added that a lot of the time the problem was due to the mouth position on a particular

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<sup>258</sup> Randall.

<sup>259</sup> Ziegler.

<sup>260</sup> Daniels.

vowel. Most likely a student was not modifying appropriately while ascending.<sup>261</sup>

Mabbs said that tension when singing in a high tessitura was many times due to holding the throat because the young female student tends to “speak” the words on higher pitches rather than sing them. She said she would explain to the student that when one sings above the staff, all of the focus should be on the tone. So, ultimately, diction takes a backseat to a beautiful sound. She explained that once a female gets above the staff, the vowels need to be slimmer. She likes to use the [i] or [I] vowel for this purpose. She encourages the singer to use the narrower vowels and modify toward a “taller” vowel. Mabbs then has her students sing on a vowel that allows them to sing as freely as possible in the upper range. She said that if it becomes a major issue, then she will just change the repertoire.<sup>262</sup>

To address tension singing in a high tessitura, Toppin focuses on scalar exercises that stretch her female students one note higher than where they are comfortable singing. She said she is very mindful not to focus on exercises that “sit” in the passaggio area of the voice. She talked about going back and forth in the upper tessitura, having them try to slowly stretch the vocal folds.<sup>263</sup>

Cossa explained that tension singing in a high tessitura was, in many cases, due to insecurity. He said that he would most likely not get what he wanted in the studio, so he would tell his students to try it out on their own in the practice room. He added that you do not want to have them try it twenty times incorrectly and have the muscle memorize the incorrect approach. So, he said he would have a discussion with his students that the

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<sup>261</sup> Olson.

<sup>262</sup> Mabbs.

<sup>263</sup> Toppin.

voice was delicate and a singer could not practice like a pianist or saxophonist. An instrumentalist could practice a passage fifty times where as the singer most likely could do damage to the voice, especially if he or she was in a higher tessitura. Ultimately, he said, “The singer has to practice with great concentration.” One might have to think it fifty times and then try it out in the practice room a few times.<sup>264</sup>

As a way to address tension singing in a high tessitura, Wilson said that he would suggest space and “locomotion north” or energy/support running up through the top of the head. He thought that a long glissando upwards was good for working through the tension in a high tessitura. He said that it was important that the student not think of the high note as a “destination.”<sup>265</sup>

#### **F. Tension when singing in different languages**

Baroody, Balthrop, Cossa, and Wilson had no exercises to address tension when singing in different languages. Wilson did state that English was the harder language.<sup>266</sup> Balthrop said that she thought it was more important to get into the student’s head and figure out what the end result was that they were trying to achieve. Once she had found the desired end result, then she could ask the question, “How has that been working for you?”<sup>267</sup> Most students responded to that question by saying that it was not working for them. It was at that point that she would have them try something different.<sup>268</sup>

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<sup>264</sup> Cossa.

<sup>265</sup> Wilson.

<sup>266</sup> Wilson.

<sup>267</sup> Balthrop.

<sup>268</sup> Balthrop.

Randall discussed how she would first have the student sing on vowels if they were struggling with tensions within a foreign language. Then she might try to “take the labor out” of the new language and tell them not to be concerned with saying it so perfectly. Ultimately, she said it was important for the student to understand the flow and accent of the language. She said that if the student could become more familiar with this aspect of the new language, then many tensions were alleviated.<sup>269</sup>

Ziegler agreed that singing on the vowels was the obvious first choice to help solve tension when singing in a foreign language. She also believed that it was helpful to have the student speak the text in as legato a manner as possible. She said the important thing when speaking the text was to make sure that the tip of the tongue stayed relaxed.<sup>270</sup>

Olson, in contrast to Randall and Ziegler, mentioned that instead of singing all the vowels, she has her students sing new pieces in another language on one vowel. This gets them singing and learning the notes before adding in extra tensions if they are insecure in a language. She found that the student’s level of preparedness usually affected the tension.<sup>271</sup>

Mabbs stated that she first inquired about whether the student spoke the language he/she was singing. She said that if the student had had experience speaking the language and still presented tension, then it was a case of trying to speak on pitch instead of singing. She then added that singing is more like breathing. If a student struggled with

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<sup>269</sup> Randall.

<sup>270</sup> Ziegler.

<sup>271</sup> Olson.



tension in an unfamiliar language, then she would ask the student to “sing in the vowel sounds of the language and not the words.”<sup>272</sup>

Daniels said that the tension problems that occurred when singing in a foreign language were due to more complicated consonant clusters and unfamiliar vowels. She also mentioned that Russian and French are a little similar in that, in both languages, the consonants are relatively lightly produced.<sup>273</sup>

Toppin described the problems she observed when young female students begin singing in French and/or German. She said that the problem with German is because of the “stops” required before each vowel and it is very hard to get young students to understand how to stop the sound without overusing a glottal stroke. This makes it really hard to balance the language and sing a legato line. Toppin said that she found French to be easier for most of her students because the sounds are so different from other languages and the students tend to “latch” on to the nasals. She also added that French is a more legato language.<sup>274</sup>

P. Smith said that tension when singing in different languages is sometimes due to the consonants. He explained that consonants should not cause the larynx to change position. He said that sometimes he asks his students questions, such as, “Is that normal?” or “What is most efficient?”<sup>275</sup>

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<sup>272</sup> Mabbs.

<sup>273</sup> Daniels.

<sup>274</sup> Toppin.

<sup>275</sup> P. Smith.

**Question 7: Do you believe that vocal tension is misguided energy? If so, what are some of the techniques you use to guide this energy for freer vocal production? Is there a difference in your approach for male voices?**

Balthrop, Ziegler, Olson, Daniels, P. Smith, and Wilson all agreed that vocal tension is misguided energy. Cossa and Mabbs said they somewhat agreed, while Randall said that it is possible that vocal tension is misguided energy.<sup>276</sup> Finally, Toppin and Baroody did not give a clear answer to the question, but offered up some ideas to consider related to the origin of vocal tension.

Each of the teachers that believed that vocal tension is misguided energy discussed his/her approach to redirecting misguided tension. Balthrop explained how she would first try to get “in the student’s head.” She states that the teacher needs to “see how the student sees.” Then it is possible to guide her out of the area of negative tension. She added that “sometimes you, as the teacher, are up against the ‘idea’ of what the student thinks is correct.”<sup>277</sup>

Cossa, Ziegler, P. Smith, and Mabbs all agreed that they would focus on the breathing and/or the abdominal area to redirect misguided tension. Cossa thought that a lot of vocal tension was the result of performance anxiety. He said that the exercises he used involved deep breathing to relax the student and helped to generally free up the breathing process.<sup>278</sup>

Ziegler described that she told her students to think of the abdomen as the “boilerroom.” All of the energy and work should come from this area. She further said

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<sup>276</sup> Randall.

<sup>277</sup> Balthrop.

<sup>278</sup> Cossa.

that the student should be tired in the abdominal area at the end of practice and not in other areas of the body.<sup>279</sup>

By focusing on the core of the body, P. Smith's approach was similar to that of Ziegler. He said that the first thing he would do would be to check the posture to make sure that it was not the cause of tension being placed in the wrong area. Then he would use breathing exercises to redirect the singer to place the energy in the core of the body.<sup>280</sup>

Mabbs described vocal tension as "energy in the wrong spot" and she added that energy was important in singing. She used one exercise where she simply had her students sing while sitting on a stool. She said that the core muscles are engaged more by sitting on a stool because they are actively being used to maintain balance to keep the singer from falling off the stool. She also liked to have her students hold a rope at their waists while she pulls the rope in the opposite direction. If students did not engage the core muscles when she pulled on the rope, they would lose their balance. She said the results she had gotten from this exercise have included a doubling in energy and a supported, rich tone.<sup>281</sup>

Daniels discussed how misguided tension had to do with coordination. She advocated having students practice "selective relaxation," a process by which the student tries to relax a specific muscle or muscles of a specific body part. She also thought that it

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<sup>279</sup> Ziegler.

<sup>280</sup> P. Smith.

<sup>281</sup> Mabbs.

benefitted them to experience the difference between the firmness and looseness of a muscle.<sup>282</sup>

Wilson explained that he liked to use exercises that had both his female and male students buzzing on [m]. He really wanted them to feel the sound or vibration in the “snarl” or mask of the face. He reiterated his idea from earlier in the interview that singing was energy up through the top of the head.<sup>283</sup>

Olson said that she personally struggled with how to get students to guide tension from the wrong place to the correct place. She added that it was probably more of an issue for a singer with a mild tension problem. Then she talked about how even great singers have tension that can be seen, but that it sometimes does not appear to affect the sound.<sup>284</sup>

Randall said that it is possible that vocal tension is misguided energy. She also said that it could be “misguided determination” or that it could be energy that one does not need to expend. In addition, she thought that guiding the energy to a more useful place had to be explained in a way that did not cause more problems. She described how she compared it to a cable and a power source by telling the student to “unplug it from here and plug it in there.”<sup>285</sup>

Baroody did not really agree or disagree with vocal tension being misguided energy. She thought vocal tension was “counterproductive compensatory muscle

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<sup>282</sup> Daniels.

<sup>283</sup> Wilson.

<sup>284</sup> Olson.

<sup>285</sup> Randall.

tension.” She advocated that males and females use body release exercises to rid the body of excess tension.<sup>286</sup>

Toppin said that she thought vocal tension was a “response to a need to be in control.” She added that it was a “natural tendency” these days to have “everything proven.” She also said that sometimes students struggled with tension because they were concentrating hard or they had the idea that “more of a good thing is better.” Lastly, she said that she was not really sure how aware or conscious some students were of tension.<sup>287</sup>

Mabbs was the only interviewee who thought that guiding energy to a more useful area for singing was somewhat different between the sexes--mainly because of the differences in physique. “That energy,” she said, should be thought of as physical support of the tone and women need to feel that type of energy lower in the body. Ultimately, she said that the goal for both sexes was to guide the energy to the area between the hips or at the naval and use the energy to support the sound.<sup>288</sup>

**Question 8: Many teachers believe that some tension is needed for singing. I’m going to move to the other end of the spectrum for a moment. Have you had experiences with young female students that displayed a lack of the proper tension or energy in their singing? Can you share some of these experiences and explain what you did to improve upon this problem?**

All of the teachers agreed that they had worked with young female students who lacked the proper tension needed for singing. The teachers had different approaches to

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<sup>286</sup> Baroody.

<sup>287</sup> Toppin.

<sup>288</sup> Mabbs.

help these students with this problem, but there were some similar approaches too, such as, yelling and hissing.

To have young females feel more energy, both Wilson and Balthrop advocated using a yell, but not a scream. Balthrop said she asks her students if they can feel the energy when yelling and she also inquires where they feel the energy is coming from. She said that if they can feel the differences between the energy from where they talk to the energy from where they yell, then they have all the possibilities in between the two extremes. She also explained that she preferred to use the words “energize breath” because she did not like to use the word “support.” In addition, she talked about how sometimes the physical body was weak and how a student may have to work outside of class to strengthen it.<sup>289</sup>

Both Olson and P. Smith said that they had used hissing exercises in lessons with students who lack proper tension/energy to help engage the abdominals. Olson specifically said that after hissing, she would have them change buzzing on a “z” using a 1-3-5-3-1 or do-mi-sol-mi-do note progression. Finally, she would have them transfer this feeling to a vowel.<sup>290</sup>

P. Smith also thought that it was important for the younger female student to sing all of her repertoire at a forte dynamic level. He explained that it was harder for the younger voices to sing a wide range of dynamics, especially soft, with the energy needed to support the sound. If he could get the student to sing well at a forte that was supported

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<sup>289</sup> Balthrop.

<sup>290</sup> Olson.

from the abdomen and not the throat, then he could work from there to widen the range of dynamics.<sup>291</sup>

Baroody said she would have her students first speak the text and then take speech into singing. She said they should speak with exaggeration over the consonants and vowels.<sup>292</sup>

Randall suggested using exercises that involved a physical movement or action. She said it is important to get the “whole body on the team.” She said that sometimes this was more of a psychological issue for the student. She explained that the teacher should have these types of students try things without putting them at risk for failure. Ultimately, she said she found it harder to work with the student with little energy. She felt she was much better equipped to work with someone with too much tension or energy.<sup>293</sup>

Ziegler talked about how some of her students speak like “valley girls” and then sing with a really breathy tone. Mabbs referred to this earlier as media influence. Ziegler said when this occurs, the first thing she does is have a discussion about the differences and similarities between speaking and singing. She added that there is a certain amount of tension needed in singing and said that she used the analogy of blowing across the top of a bottle. She talked about how the right amount of air plus the right amount of tension was needed when blowing across the opening of the bottle to produce a sound. She further explained that this was not the exact same feeling for singing, but that the idea of

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<sup>291</sup> P. Smith.

<sup>292</sup> Baroody.

<sup>293</sup> Randall.

coordinating the right amount of air and tension was similar. Finally, she said that she preferred to use the word “energy” instead of tension.<sup>294</sup>

Daniels made references to a “blob” or “wet noodle” to describe a student who sang with very little energy in her studio. She said that when she had taught students with this problem in the past, she had tried to “make them excited about one sound.” She would start small and build on that idea, concentrating on the natural “pressure” that occurs when the meeting of the vocal cords is supported by good breath management. In general, her philosophy of teaching is: “As long as you are sincerely trying and practicing nothing you do is ever ‘bad’-- it is simply that some efforts are better than others.”<sup>295</sup>

Mabbs referred back to her example of pulling against a rope (mentioned in reference to guiding energy for freer vocal production). She said that it worked for both the singer with displaced tension and the singer who lacked enough tension. Like Ziegler, she too prefers to call this energy instead of tension.<sup>296</sup>

Toppin answered that she had “absolutely” dealt with the issue of students without proper tension/energy in their singing in her studio. She said that many young female students come in with this problem and she could hear it in the breathiness of their tones. She said that this could be corrected by teaching the student how to resist during the exhalation.<sup>297</sup>

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<sup>294</sup> Ziegler.

<sup>295</sup> Daniels.

<sup>296</sup> Mabbs.

<sup>297</sup> Toppin.



Cossa was in agreement that he had observed a lack of tension in some of his young female students. He said that his tendency when teaching was to call it to the student's attention verbally. He added that the energy had to come from them and that sometimes it had to do with their performance personality. He ended by saying that he found this concept tough to teach.<sup>298</sup>

**Question 9: Have you observed common tension issues in professional singers? Is there a specific tension that is more prevalent, such as, pushing or over-singing in opera, in order to fill a hall?**

All the participants in the interview agreed that they had observed common tension issues in professional singers. Daniels added that she thought this was lessening because people were moving more on stage and taking more time.<sup>299</sup> Cossa and Wilson said that they had seen no specific tension that was more prevalent among professionals, and Cossa added that professionals sing based on feel.<sup>300</sup>

In reference to a specific tension being more prevalent in professional singers, Randall talked about the aging voice. She explained that she had heard some constriction in the mechanism and that she had heard vibratos that were too wide. She added that female voices tended to get "strident" and male voices became "barky."<sup>301</sup>

Balthrop and Toppin had observed tension in the younger professional voices that were trying to sound more mature. Both mentioned how they had heard over-darkening

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<sup>298</sup> Cossa.

<sup>299</sup> Daniels.

<sup>300</sup> Cossa.

<sup>301</sup> Randall.

of the sound to project maturity and pushing or pressing to fill a big hall. Toppin added that she had seen jaw, neck and back tension as a result of pushing.<sup>302</sup>

Olson and Mabbs also agreed with Balthrop and Toppin that they had observed tension issues that were caused by pushing, but they said nothing about it having to do with young voices trying to sound more mature. They did agree that it was because the professional singer was trying to fill a large hall or venue.

Baroody and P. Smith agreed that they had seen tension problems in the tongue and jaw of professional singers. Ziegler said that she too had heard some possible tongue tension, but that facial tension was the most prominent. She specifically mentioned how some professional singers “sing out of the side of their mouth.”<sup>303</sup>

**Question 10: Do you know of any scholarly literature that specifically addresses vocal tension in reference to singing or speaking?**

Randall, Mabbs, Toppin and Cossa answered that they did not know of literature that specifically addressed vocal tension in reference to singing or speaking. Randall said that she had not done a search, but had been to many workshops and that it was a very important area to continue to research.<sup>304</sup> Toppin did mention that the National Association of Teachers of Singing (NATS) had articles in the *Journal of Singing* occasionally that discussed tension. She also added that some people think it is not very important, but that she thought it was important to one’s singing longevity.<sup>305</sup>

All of the other teachers offered at least one author or form of literature that addressed tension in singing and/or speaking. Ziegler said that Richard Miller’s *Solution*

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<sup>302</sup> Toppin.

<sup>303</sup> Ziegler.

<sup>304</sup> Randall.

<sup>305</sup> Toppin.

*for Singers* was a good source that addressed tension and other technical issues.<sup>306</sup>

Wilson listed the teachings of Lamperti and Garcia as helpful sources.<sup>307</sup>

Baroody said that most current vocal pedagogy books have examples of exercises and maneuvers for releasing unwanted tension. In addition, she suggested *The Voice Book*, a book on voice therapy by Kate Devore.<sup>308</sup>

Olson and P. Smith agreed that James McKinney's book, *The Diagnosis and Correction of Vocal Faults*, was an excellent source that addressed vocal tension. P. Smith and Daniels thought that the teachings of Frederick Matthias Alexander were pertinent to addressing tension in singing and speaking. In addition, Daniels discussed Barbara Conable and William Conable's *Body Mapping* as one specific source that taught the Alexander Technique.<sup>309</sup>

Balthrop explained that tension is not always in the physical mechanism and cannot be addressed by the scholarly literature that may be available. She further discussed how tension could be nervousness or "the wrong idea." She found *Power Performance for Singers* by Shirlee Emmons to be helpful because in it there are specific exercises and techniques that address preparation for practice and performance. This book also addresses the issue of the importance of developing mental toughness in career building. She added, "With the short amount of time that we, as teachers, have with our

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<sup>306</sup> Ziegler.

<sup>307</sup> Wilson.

<sup>308</sup> Baroody.

<sup>309</sup> Daniels.

students, there are some teaching aids in the form of books that can assist us.” She concluded with the statement, “The root is in the thinking.”<sup>310</sup>

**Question 11: Do you believe there is a need or interest in a text that would outline a practical approach to addressing vocal tension in singing? I envision a user-friendly text, with minimal medical terms or jargon.**

Baroody, Randall, Ziegler, Olson, Daniels, and Mabbs all thought that there was a need for or interest in a text that would outline a practical approach to address vocal tension in singing. Olson said that it would be something she would use in her own teaching.<sup>311</sup> Daniels thought that a book on Pilates and singing would be useful.<sup>312</sup> Mabbs thought a book that focused on “tension in relation to breath usage” would be beneficial.<sup>313</sup>

Wilson answered that maybe such a book would be of interest and after a little thought said “why not?”<sup>314</sup> Both P. Smith and Cossa said that they would have to see it first, and Cossa added that it would have to be well written.<sup>315</sup>

Balthrop was the only teacher that thought there had already been a lot of books addressing vocal tension in singing. She explained that a text with some type of interactive media was of more interest.<sup>316</sup>

Only Toppin was unsure about the need for this type of text. She said that it would not be a bad idea to have a text on this topic, but that she was uncertain if others

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<sup>310</sup> Balthrop.

<sup>311</sup> Olson.

<sup>312</sup> Daniels.

<sup>313</sup> Mabbs.

<sup>314</sup> Wilson.

<sup>315</sup> Cossa.

<sup>316</sup> Balthrop.

would see it as a major need. She stressed that there are many singers who sing with a lot of tension and that they may not support a book that discusses a way of singing that is free of [unnecessary] tension because it seems to be an impossible feat. She also added that there are not enough models showing “what a person that sings with balance instead of tension should look like.” She concluded by saying that most of the models for young singers are professional singers, many of whom display all types of tension.<sup>317</sup>

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<sup>317</sup> Toppin.

## **Chapter 5: Discussion of Results from Literature Review and Interviews**

To this point, this paper has addressed the findings of a literature review and a series of interviews focused on identifying practical techniques to release vocal tension. It will now examine if ~~the~~ commonalities can be found in the vocal pedagogies, related literature, and the current experiences of noted voice teachers; commonalities that can be incorporated into a series of approaches or methods to help relieve unwanted tension in singing.

### **Literature Review**

The literature review produced disappointing results. No sources addressed all possible areas of vocal tension. Furthermore, the review produced few common ideas and techniques.

Posture problems were the most commonly-discussed cause of vocal tension. This is most likely due to the fact that, from a visual perspective, posture is one of the easiest areas to access and could feasibly be addressed with a common method.

The breath was discussed at length and many common beliefs were found regarding this cause of vocal tension. For example, it is a common belief that during inhalation the breath should be quiet and the abdominal muscles should relax. Gathered together, such beliefs, or “nuggets” of information, might become the basis for a common practical approach to addressing tension in breathing for singing.

Articulation, the final area examined in the literature review, renders the least amount of information to support the development of a common method to address vocal tension. Articulation can result in tension in several areas, including the lips, jaw, pharynx, soft palate, and larynx. Some of these areas are visible, while others can be

accessed only through audio clues, and each requires a different tension-relieving approach. This makes it even more difficult to determine if vocal tension in all of the articulators can be addressed with a common method.

Many of the literary sources discuss the types of unwanted tension that can occur in each of the articulators and the role or roles of each specific articulator during singing. Few discuss how to help a student who struggles with tension in one of the articulators.

In the end, the literature review provided little to support a common teaching technique for addressing vocal tension. It appears more possible to create a common method to address incorrect postural positions and breathing practices, but these areas may still be best approached through the use of multiple techniques. It seems there is little opportunity to create a common approach to address vocal tension in the divergent areas of articulation.

## **Interviews**

While describing many practical and useful approaches to address vocal tension, the interviewees agreed that no pedagogies and/or sources focus solely on vocal tension or articulate a common approach to releasing vocal tension.

The collective response to the first question was that all the interview participants have seen or heard numerous types of tension when working with young female students. Most of the interviewees feel that the jaw and tongue are the most common areas contributing vocal tension. These areas are crucial to articulation, and as mentioned earlier, tension found in the articulators and possible solutions to these types of tension are not discussed thoroughly if at all in vocal literature.

All but one participant agree that their young male students display similar types of vocal tension as compared to their young female students. All but three believe that there also are some differences in vocal tension observed in the two genders.

Interestingly, both P. Smith and Wilson mention that tenors struggle with tension when singing through their upper passaggio. Wilson explains how the subglottic pressure is much greater because the heavy mechanism must be carried into the upper range.

Interestingly, P. Smith and Wilson are both tenors and have experienced this issue in their own singing.

Before this interview I was aware that male voice types have to carry a heavier mechanism into their upper range, while female voice types, especially sopranos, work to get rid of weight in the voice as they ascend into their upper range. However, I had not fully connected the two ideas until discussing this issue further with some female voice teachers and I now realize how detrimental carrying a heavier mechanism into the upper range can be for a female voice type, especially the soprano. Knowing that I still have work to do in this area of my own teaching, I look forward to exploring this issue more thoroughly.

There were some excellent responses given for suggested areas of tension to address first when working with new female students. Many different ideas were expressed and several of the teachers provided practical reasons for why they chose to address certain tensions first. Two of the most interesting responses were given by Randall and Toppin.

Randall prefers to address tension in the larger muscles when working with a new student. Addressing tension from this perspective is very logical because it includes the



muscles involved with posture and the breathing mechanism—two areas that are a common problem in the young student. Toppin said that she focuses on the tension that she believes the student will have the most success conquering because her first goal is to develop a relationship of trust with the new student. Gaining trust and establishing a good relationship with new students will also most likely relieve some of the extra tension they may display as a result of being nervous when starting voice lessons with a new teacher.

It was interesting to learn that all but two of the teachers have struggled with tension in their own singing, and in many cases, their responses differ as to the types of tension each have experienced. Obviously this is one of the reasons there is a need for more sources that deal with vocal tension, specifically, a source that will offer multiple solutions for one specific type of tension. For example, if a voice teacher has struggled with tongue tension, then he or she will most likely have some good ideas on how to help students that are experiencing the same problem. On the other hand, if a voice teacher has not personally experienced tension in the tongue, and that is an area of tension for the student, then a source that gives different approaches to relieving that type of tension may be very useful.

A majority of the interviewees agreed that they choose repertoire for their students in order to address a certain type of tension. Although some teachers may not be aware of the fact that they do this, it is obvious from the literature review and interviews that many teachers choose a song to stretch their students' ranges, and in the process address specific types of tension that they hear in their students' performances.

Many of the interviewees agreed that lying on the floor is one technique that could be used to help a student learn how to release tension in the breath. The most common exercises suggested for students who have a tendency to go sharp from tension due to pushing were directly related to breathing and supporting the sound from lower in the body. The main similarity in response to vocal tension issues when singing legato focused on using a glissando or slide and putting more emphasis on the vowels instead of the consonants. Similarly for tension associated with singing in different languages, the most common response was to focus on the vowels.

There were just as many varying responses to each part of Question Six as there were similar responses. In fact, there were no similar exercises or solutions for alleviating tension due to holding or pressing down on the larynx or tension as a result of singing in a high tessitura. This lack of agreement continues to support the usefulness of compiling a source that offers multiple solutions to specific vocal problems that are a result of unwanted tension.

To further explore this idea, it is useful to collectively see the responses to each part of Question Six that asked the interviewees to describe exercises they use for specific tension problems or vocal issues. These exercises and suggested responses are listed below:

a. Tension in the breath

- Use floor exercises—students lie on the floor on their backs so that they can feel how gravity naturally pulls in the abdomen towards the floor during exhalation.
- Use verbal suggestions such as “Invite the air in.”
- Ask the student to sit or stand with released shoulders and abdominal muscles; have the student breathe in over four counts, hold for four counts, and release the breath over four counts.
- Ask the student bend at the waist so that she can feel expansion in the torso during the inhalation.

- Ask the student practice the muscular action of moving the stomach in and out.
- Use rolled towels under the armpits of the student so that she can feel the expansion in the ribcage during inhalation.
- Ask the student to laugh and expel all her air. This allows the following breath to be deep and relaxed.
- Ask the student mimic the sound of a leaky tire or hiss.

b. Issues with pushing that result in the student singing sharp

- If pushing is a result of a high larynx, help the student focus on correct breathing.
- If pushing is a result of a raised larynx or held throat, have the student plié when singing above the staff.
- If pushing is a result of hyper production, ask the student to sing in the “middle” of the pitch.
- Have a conversation with the student. Explain that sharpening could be due to a stiffening of the tongue or jaw. Ask the student to sing a phrase with a “dummy” jaw and a “specific” tongue, not a “rigid” tongue.

c. Issues with holding or pressing down on the larynx

- If the student is holding or pressing down on the larynx, ask her to hum on [n], [m], or [ŋ] to aid in relieving tension.
- If the student is holding the larynx, ask her to focus on a constant flow of breath.
- Ask the student to gently touch her larynx so that she is aware of its movement.
- Create an awareness of the neck being in a free position and there being space in the back.
- Ask the student to focus on the zygomatic space (space in cheekbone region).
- Ask the student to imagine running all the sound out of the top of her head.

d. Issues with singing legato

- Ask the student to move the air through the phrase or connect each note with air.
- Ask the student to slide the notes of the phrase together, and then try to slowly take out the sliding between notes.
- Ask the student sing only on the vowels and/or initiate the “slide” here if necessary.
- Ask the student to sing with long vowels and short consonants.
- Ask the student to imagine or mimic the bowing of a stringed instrument, telling her that the bow keeps a constant pressure and should not be allowed to bounce off the string.

e. Tension when singing in a high tessitura

- Ask the student to lip trill through the upper range on an exercise and tell her to “massage” her way through the top.
- Ask the student focus on keeping the energy low in the body and keeping the tongue loose.
- Ask the student to sing in the upper range using the vowel that allows her to have the most freedom.
  
- Ask the student to focus on the beauty of the tone and not the clarity of the diction when in a high tessitura.
- Explain to the student that the higher pitches come from stretching the vocal folds, not from adding pressure.
- Tell the student to avoid thinking of the high note as a destination.

f. Tension when singing in different languages

- Ask the student to sing only on the vowels.
- Ask the student to speak the text in a legato manner while making sure she keeps the tip of the tongue relaxed.
- Ask the student to sing on one neutral vowel and to learn pitches first. Then add in the language.
- Ask the student to sing in the vowel sounds of the language and not the words.
- Tell the student, when singing in a new language, not to be so concerned with perfection.

Four or more solutions are listed above for each tension problem or vocal issue discussed in the interviews. In some cases, there were similar types of solutions and if possible they have been combined into one idea.

This compilation of information could be the beginning for a source on vocal tension that would offer multiple solutions for one specific type of tension. Of course, more types of tension or vocal issues could be addressed and there would be thorough explanations of the different approaches, but it is my belief that this kind of source would be useful for voice teachers.

There were also many clever solutions or approaches for dealing with specific types of tension that appear to be geared for specific types of learners. One example is Daniel’s use of the iceberg image to address tension that occurs when singing in a high

tessitura. Most students who struggle with tension when singing in a high tessitura display tension in the neck, jaw, tongue and face. The iceberg image helps students understand that the energy or support needs to be focused lower in the body. The iceberg image, though somewhat different, reminds me of the image of the swan on the water. The swan looks very peaceful gliding across the surface of the water to the observer, but underneath the water its feet are working to swim. Overall, this type of response is very good for visual learners.

Another interesting response, given by Balthrop, was in reference to students who struggle with tension that causes them to go sharp. She explained that the tongue and jaw are most likely the problems in this case. She made the statement that the tongue has to be “specific” and not “rigid”. This was most interesting because she was very careful with her choice of words. This type of approach would possibly work well for the aural learner who would focus on how instructions are worded.

It has been noted how the responses given by Baroody and Balthrop may be better suited to specific types of learners. It would be interesting to coordinate some aspect of learning styles into the type of source that has already been recommended. It may be as simple as labeling what types of learners might best benefit from a specific solution.

Every student learns differently, and what resonates with one student may not with another. The more open a teacher can be with a student, explaining that different solutions work for different students and that there is no “one way” to correct all vocal issues, the easier the relationship may become between student and teacher.

Most interviewees agreed that vocal tension was misguided energy or possibly misguided energy. It seems very feasible that this could be true because the literature

provides a lot of discussion related to balancing tension. As pointed out by Randall, it also seems just as possible that some vocal tension could be unnecessary extra energy.

All teachers agreed that they had taught students who show a lack of tension in their singing. Cossa made a good observation that some students lack tension as a result of their performance personality. That lack of tension may also result from their everyday personality, which may be more “laid back.” Most other teachers addressed this issue based on breathiness in the tone. If a student sings with a breathy tone, there is a good chance that there is a lack of tension. It may also indicate that there is too much tension elsewhere that the teacher has yet to discover. In fact, most likely, there is tension in the throat or tension due to a misaligned posture.

Obviously, all interviewees agreed that they had heard or seen tension in professional singers. The most common issues mentioned were pushing or oversinging as a means of filling a performance space. Cossa mentioned that many professional singers sing based on “feel,” but it does not always seem to be the case. Other teachers mentioned that pressing also seemed to be a problem for younger singers who wanted to sound more mature. This oversinging is not only seen in the classical world, but can easily be compared to children and teenagers that have been seen on television singing popular music.

Many of the interviewees suggested some sources that they thought addressed vocal tension in singing and speaking. Some of the sources mentioned and used for this paper include James McKinney’s book, *The Diagnosis and Correction of Vocal Faults*, and the books about the Alexander Technique and Feldenkrais Method. One book

discussed during the interviews that I was unfamiliar with was *Body Mapping*, by Barbara Conable and William Conable.

There were definitely two notable responses to the final question, which deals with the need for a user-friendly text that outlines a practical approach to address vocal tension in singing. Although Balthrop believes that such a text already exists, this author found it very difficult to find sources that discuss vocal tension in detail. There are bits and pieces that can be taken from each source, but no one approach or source was found to focus on vocal tension. Balthrop does, however, make a good point that a useful source might be interactive or multisensory.

More interesting was the response given by Toppin. She said that she is not sure if there is an interest in such a text. She thinks it could be useful, but she is not sure if others will think it is important or even possible to compile this type of source. This was probably the most surprising response received throughout the entire interview process. I find vocal tension to be the number one issue that I face in my own teaching, and the idea that such a source might be unimportant surprised me.

### **Conclusions and Recommendations**

I do not want readers of this paper to think that I believe all tension is wrong. There must be tension in singing, but tension that affects the freedom of the vocal tone in an adverse manner must be avoided.

Interestingly, the term vocal tension initially baffled the men who were interviewed. Both Cossa and P. Smith were adamant that tension is necessary for singing, and Wilson mentioned the idea of bowing a stringed instrument in reference to support multiple times. After explaining to them that they were to focus on any tension

in the body that negatively influences the freedom of the sound, they seemed to have a better understanding. I have since realized that this is because of their experience of being male singers and having to use more muscular support, especially in their upper range.

A lot of misunderstanding comes from the multiple terms we teachers use to discuss the same topic. It is difficult to describe positive tension, but perhaps this is a good definition. Positive tension is tension that does not cause a sense of rigidity to be seen in the muscles of the body or heard in the vocal sound. Some teachers refer to positive tension by using the word “energy,” which sounds more positive, but too much energy can also be detrimental.

Ultimately, based on the literature review and the interviews, it is obvious that there is a need for at least two new literary sources to address vocal tension. The first book would be more technical and scientifically based, and would discuss different types of tension within the body that could negatively affect the freedom of the voice. It could also include recent findings on the physiology of singing and how the body responds to or compensates for vocal tension. Furthermore, it should explore the use of biofeedback to help improve vocal performance just as this technique has helped improve performance in sports.

The second source would discuss various types of vocal tension or issues and would give a variety of solutions for addressing tension that adversely affect the beauty of the sound. It could also incorporate a discussion on individual learning styles, and each solution would be categorized by the type of learner that might best benefit from a specific exercise. Although some voice teachers may consider this suggestion of such a



resource to be a compilation of “tricks” that have been used for decades or even centuries, the end goal is to assist them in discovering how to address vocal tension in each individual student. As a result, the teachers who use this source might also become innovators and find new ways to successfully help students with unwanted tension in their singing.

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