Voice, the Muscle of the Soul: Finding Yourself Through Finding Your Voice

HONORS CONVOCATION ADDRESS, LAWRENCE UNIVERSITY, MAY 22, 2018

Kenneth Bozeman



Kenneth Bozeman

Journal of Singing, January/February 2019 Volume 75, No. 3, pp. 245–250 Copyright © 2019 National Association of Teachers of Singing HE VOICE IS THE MUSCLE of the soul."¹ From birth you have connected breath to your vocal folds to express yourself—to voice your deepest feelings. From before birth, as you were being formed in the womb, you learned, along with her breath and heartbeat, the sound of your mother's voice. After being born, you first voiced only your immediate discomforts and needs. You used your voice to evoke empathy in your mother, to get the help and comfort you needed, and you learned to respond to both the touch and voice of your mother. You began to read *her* feelings in her playful baby talk, her soothing cooing, the sounds of her love, perhaps the sounds of her sadness, if you were especially fortunate, in the sounds of her singing. Your voice, and hers in response, strengthened the bond between you. [Example of a baby responding to its mother's singing; https://www.youtube.com/watch?v=RWst8Mz2m2E]²

"The voice is the muscle of the soul." This metaphor summarized the core conviction of Alfred Wolfsohn, a German Jew who as a young man served as a stretcher bearer in the trenches of World War I. For several years after the war, he suffered from debilitating, disturbing memories and hallucinations of crying, screaming soldiers. One cry in particular, the call for help of a wounded soldier, to which Wolfsohn out of fear for his own life could not respond, haunted him long afterwards. It so traumatized him that he felt as though he had lost his own soul and with it, his voice. Standard treatments for his condition were ineffective. Remarkably, Wolfsohn's cure began only when he started to voice these remembered sounds through spontaneous improvised singing.³

As mentioned above, voice occurs soon after birth. The first thing a baby does is to take a breath. Often the second thing the baby does is to apply that breath to its vocal folds to express how it feels about what just happened and its new situation. It is a completely primal, visceral response. You *express* feelings through various kinds of movement, but you are hard-wired to *communicate feelings to others* through your voice. It is your primary means of inducing empathy in and inviting compassion from others—at first in your caregivers and siblings, and later in the other people that populate your extended community. You are trying to get the *other* to feel what you are feeling. And in turn they are trying to get you to feel what they are feeling. Inducing empathy

Kenneth Bozeman

in another and feeling empathy for another form is the very basis of a caring community.

Mindfulness in singing expert, Lynn Helding, wrote the following in an article entitled, "Emotion and Empathy: How Voice Can Save the Culture":

Voice—both singing and speaking—has the power to induce emotion. Why should we care about emotion? As neuroscientist Antonio Damasio has stated, "Emotion is not a luxury," in part because emotion assists reason. Yet emotion is also the basis of empathy, and empathy is a cornerstone of a civilized society.⁴

We become very efficient with our voices. Vocal production in speech and singing requires the involvement of more than 100 muscles. Vocal motor activity is routinely performed at a rate faster than any other human behavior, with discrete movements from 50 to 1500 times per second. It requires activity that depends mainly on an intrinsic reflex system.⁵ When your body responds to the visceral impulse to express a feeling, your abdominal muscles and respiratory system activate to increase the breath pressure in your lungs, propelling a stream of air up through your trachea. Your vocal folds close to meet that rising flow, and begin to open and close in an aerodynamic, myoelastic oscillation. This converts that tracheal airstream into a set of harmonic frequencies that form the acoustic raw material from which your voice is made. When the vocal folds close gently yet completely with each vibration, both strong low and high frequency harmonics are present in the signal introduced into your vocal tract.

Ian Howell of the New England Conservatory does research in psychoacoustics, how humans process sound. From his work we are learning that just as our brains perceive light not as frequencies but as colors, we perceive individual sound frequencies as vowellike tone colors.⁶ Most sounds, being made of multiple frequencies, are thus a blend of vowel colors. A simple example of this is an ambulance siren that sweeps a single sine tone back and forth from high to low. We hear, "Wee—oo—wee—oo!"

Before being resonated, the sound made by the harmonics from your vocal folds is nothing more than a pitched buzz. Your vocal tract then selectively filters that input from your vocal folds, converting it into your unique sound. Your vocal tract is an irregularly shaped tube with several resonances, that is, frequency peaks at which it will respond with sympathetic vibration to any harmonics that lie within them. Whichever frequencies the vocal tract resonances favor will be strongly featured in the signal passed through to the outside world. The vowel-like tone colors of those featured frequencies determine the timbre and vowel that we perceive. All of this is guided and tuned by your impulse to express feelings through the sound image your brain forms, prehears, and requests of your body, whether in the form of language or primitive utterance.

As listeners, our ear canals are tuned to boost the resonance of high harmonics that are introduced into them—frequencies between 2300 and 3500 Hz, pitches in the top octave of the piano—making our hearing very sensitive to sounds containing those frequencies. They give both speaking and singing voices carrying power over background noise. If those higher frequencies are too intense, they cross our pain threshold. Over time exposure to sounds that are too loud damage the cilia in our inner ear, causing hearing loss.

Fairly soon in life you learned how to annoy a parent with your voice until you got the relief you sought. You learned that enough intensity with the right high spectral content gets results. Remember the threshold of pain I mentioned earlier. Harmonic singer Wolfgang Saus observed that the innate child utterance, which he called "toddler complaint," a kind of nasal $[\tilde{a}-\tilde{a}]$ was rich in source harmonics.⁷ It is annoying at low pitches, almost painful if loud and high, but invites sympathy if softer at high pitches. Parents and baby sitters know this sound only too well. I now use it with my singers to train laryngeal efficiency.

Voices can make a wide variety of sounds. In case you have not experienced harmonic singing, it involves tuning a vocal tract resonance so sharply to one of the voice's overtones, that it emerges audibly as a separate pitch. [Example: Anna Maria Hefele explains overtone singing; https://www.youtube.com/watch?v=UHTF1-IhuC0]⁸

Your voice is your "sound-face," as unique as a fingerprint, presenting to the world who you are or who you perceive yourself to be. For better or for worse, and whether you want it to or not, your voice conveys personal information, giving impressions to others—often true, yet sometimes false—about what you are like. In this way, voice becomes a crucial factor, either in forming and nurturing relationships and social structures or in damaging and breaking those same connections. Voice scientist Ingo Titze writes:

Voice is our primary means of expression. In combination with our face and hands, it signals who we are, what we want, and how we feel . . . even in solitude, there is vocal expression, some people find pleasure in talking or singing to themselves. Voice is perceived by two out of the five senses. We not only hear voice, but we also feel it . . . It is easy to comfort a child by speaking or singing cheek to cheek.⁹

Author Anne Karpf writes in her book, *The Human Voice*:

Throughout our lives we make decisions, often unwittingly, on the basis of the sound of a person's voice: lovers as well as political candidates get selected for vocal reasons. Our lilt, twang, or tremor are eloquent often beyond words. But the voice isn't just a conduit for language, information, and mood: it's our personal and social glue, helping to create bonds between individuals and groups. In reality . . . the voice lies at the heart of what it is to be human. It plays a crucial role in helping babies establish secure emotional ties, acquire language, develop empathy and social skills. Adults milk it for information in their intimate relationships and professional lives. It bridges our internal and external worlds, travelling from our most private recesses into the public domain, revealing not only our deepest sense of who we are, but also who we wish we weren't. It's a superb guide to fear and power, anxiety and subservience, to another person's vitality and authenticity as well as our own. You can't really know a person until you have heard them speak. At some level we're aware that the voice acts as an exquisite psychic barometer, sensitive to micro-shifts in feelings, registering what words try and conceal. Often without realizing it, expert listeners are attentive to intonation, rhythm, and breath, alert to those moments when there's a "shortfall" of commitment to what's being said. Since communication, to a great extent, consists of an exchange of vocal cues, being able to grasp the meaning of the modulations of another person's voice and respond appropriately with our own is probably our most important interactive task.10

Voice is thus very personal, being so strongly associated with personal identity. British tenor Peter Pears put it this way: "A piano is a piano and a violin is a violin, but a voice is a person." The process of developing your voice's ability to express more fully and completely who you are and what your feelings and convictions are then is very much a process of self-discovery, even of selfformation. In order to speak or sing well, you must in fact have something to say, and know clearly *what* you want to say. Finding and developing that is a crucial step toward finding yourself.

Versions of this understanding of voice have appeared with regularity in our shared history. A rather early example is the definition given by Aristotle: "The voice is a sound caused by the soul by means of the repercussions of the air, made in the throat with the intention of signifying something."11 At first that "something you are signifying" is simply your reaction to your new environment, your immediate physical needs, and your need to feel safe. Eventually finding your voice requires reflecting upon what you have experienced of life and results in the need to respond. The effectiveness of your response requires drinking deeply of its meaning. You see, expression of meaning determines everything about voice: its pitch, its inflective melodic path, its intensity, and its emotional color. If you attend fully to its meaning, your prosody will respond with expressive timing, emphasis, and inflection. British actor, sir Ian McKellen put it this way: "If you look after the sense, the sounds will look after themselves."

Your voice can be explored silently in writing, yet still be "heard" mentally. So we speak of an author finding her voice. A writing student confessed:

It wasn't until my favorite English professor in university made me see how unique my insights could be, that I became more excited about sharing my ideas with others. So I had more "to say" at that point, but it was still just coming out in essays and assignments on the page. I hardly said much in those classes . . . So, to say that the first place I really found "my voice" was in writing, would definitely be an understatement. Consequently, my written voice continued to develop, but my speaking voice stayed hiding behind it. And guess where I learned to improve my speaking voice? Vocal lessons.¹²

Singing is a special form of voice, a heightened, even more soulful form of expression. It can serve to give fuller vent to your convictions. Singing can be done alone, in communal celebration, in worship, or to invite solidarity for social action as in the song, "We shall over-

Kenneth Bozeman

come." Acoustic singing—that is, singing in large venues without artificial amplification—is an aesthetic, athletic activity that calls for the coordination and integration of all of our resources. It is both a highly skilled physical as well as soulful activity. We sing to entertain ourselves, as an exuberant expression of joy, as a commentary on life, in hard times as an expression of hope for better times, and in times of sorrow to console ourselves. Profound text successfully married to effective melody, when well performed, can be deeply moving, regardless of the musical genre.

Since voice communicates feeling in order to connect—with oneself, with another person, or with God—songs are most often either about establishing that connection (songs of love) or about losing that connection (songs of loss). I offer three examples and invite you to feel what the performers are feeling:

The first is a song of connection to God from the soulful gospel singer Callie Day, rehearsing a portion of "Hear My Prayer" arranged by Moses Hogan. It also speaks to the human need—regardless of one's religious or nonreligious perspective—to feel at the end of the day that your life has meant something, has counted for something. This recording enters mid-sentence in the prayer's text:

When my work on earth is done, And you come to take me home, Just to know I'm bound for glory; And to hear you say, "Well done!" Done with sin and sorrow. Have mercy. Amen.

[Example: Callie Day, "Hear My Prayer"; https://www. youtube.com/watch?v=S2V9nZ465Co]¹³

The second example is of imminent loss. It is American soprano Leontyne Price in recital, singing an aria that epitomizes the suffering brought on by colonialism. In Puccini's *Madame Butterfly*, the female character Cio-Cio San had been abandoned by her American sailor husband. She expected and awaited his return, faithfully caring for their child. He did eventually return, but with an American wife, and with plans to take the child back to America. Cio-Cio San has planned to take her own life, believing this alone will free the child to leave her. In this aria she bids her little boy farewell, and sends him out to play, so that he will not see what she is about to do. Note the audience's visceral, empathic response. [Example: Leontyne Price, "Tu, piccolo iddio" from Puccini's *Madama Butterfly*; https://www.youtube.com/ watch?v=qji9pwrvNf4]¹⁴

The third example, also about lost connection, is of Spanish singer Mayte Martin, singing "Navega Sola." The text in short is:

With the first ray of light in the morning I awake always asking where you are. With clouded breath on the glass of my window I see my boat going out to sea.

It sails alone. My boat sails alone over the waves.

Although you distance yourself from me, I will keep loving you. Your love was the light That brightened my path. Ahí, what a great loneliness I feel without you.

[Example: Mayte Martin, "Navega Sola"; https://www. youtube.com/watch?v=JsmjFLcRNu8]¹⁵

After WWI, Alfred Wolfsohn studied singing in an attempt to overcome what we now would call posttraumatic stress disorder. He would later write:

When I speak of singing I do not see it as an artistic exercise, but as a possibility and a means of recognizing oneself, and of transforming this recognition into conscious life.¹⁶

Authentic singing is in some sense a conscious, uninhibited, open, vulnerable expression of one's participation in life. Voice pedagogue Stephen Smith entitled his book on singing, The Naked Voice. Someone else has called authentic singing "emotional streaking." It is a fearless activity that embraces the risks involved. Tensions that interfere with liberated singing come from many possible sources, including inhibitions caused by stern or misguided instruction, but also including psychological wounds, suppressed feelings, self-doubt, and questions of self-worth. People who have been told as children that they cannot sing because of early struggles with pitch matching, carry the damage of that verdict throughout life. Children who have suffered abuse struggle with voicing their feelings in both speech and song. Diane Austin writes in *The Theory and Practice of Vocal Psychotherapy*: Children who are raised in an atmosphere of fear, hostility, violence or neglect have been silenced . . . Sometimes the silence is selective, some things are allowed to be talked about, some feelings are allowed expression and some clearly not. Sometimes the silence is loud; words and feelings come tumbling out but fall on deaf ears or are beaten down and stifled. Needs and feelings remain unmet and the voice becomes inaudible . . . and tense, breathy and undefined . . . in essence a wounded person often survives by forfeiting his or her own voice.¹⁷

Children are not the only ones whose voices have been silenced. Any abuse of power or privilege that peddles fear can suppress expression. Since voice essentially expresses feeling to establish connection, suppression of voice suppresses feeling and results in isolation and bitterness. The late Wisconsin poet, Elizabeth Rooney, poignantly expressed this isolation, drawing upon the account in Genesis of Lot's wife, in a poem entitled "Bitter Lot."

It is the drying up of unshed tears That turns us in the end To shafts of salt. The feelings unexpressed all down the years Precipitate within us Leaving grief In layers on our vulnerable souls. Our hardened hearts Began as soft and tender as a child's. After so many wounds With so much salt poured into them, We have grown stiff with pain. Unable to follow even those we love Into new lands. We find we must remain Stranded in bitterness, irreconciled, As lonely pillars in a desert wild.¹⁸

The American ethnic dancer la Meri advised, "The only reason for mastering technique is to make sure the body does not prevent the soul from expressing itself."¹⁹ In my work as a voice teacher, I have noticed that when we integrate and embody effective expression of feeling and thought, improving coordinations and removing inhibitions, the person before me seems more fully and authentically herself—at peace, comfortable in her own skin, expressing herself from a secure place of identity and strength.

A voice teacher colleague reported the following exchange. Let me prepare you for it with this insider

information: voice teachers often use pallesthesia, the sensation of vibrations, to guide vocal function. This teacher wrote:

One of my favorite students happens to have autism. He always performs with reckless abandon, sometimes with emphasis on the reckless part. He sings all the way in and out of the building and all the way down the street. I love it! We [recently] had the following exchange:

"So, when you are singing, do you ever feel your face buzzing with resonance?"

"Well, um, you see, I don't feel singing in my face. I feel it in my soul." 20

Another voice student reported:

You know what happens when you connect more with your voice? You connect more with yourself and who you are. I had overlooked how important our voices are to our sense of identity until I started singing lessons.²¹

Sometimes health issues cause the loss of voice. Loss of voice can come from misuse, injury, or from unavoidable illness. Regardless of the cause, voice impairment can have a dramatic effect on your confidence, social interactions and sense of wellbeing. I'll offer two examples.

Parkinson's disease causes a person's brain to underestimate the amount of movement and energy necessary for simple tasks like walking and talking, even when actual ability is still possible. Notice in this next example the impact on this patient of the loss of her voice's strength, and the subsequent change in her confidence and mood after successful voice therapy. [Example: Parkinson's patient; https://www.youtube. com/watch?v=gNIdxYjGVV8]²²

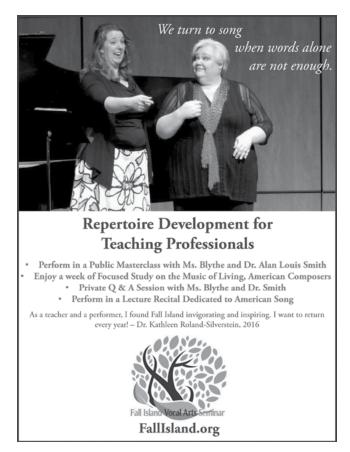
On January 8, 2011, just a week into her third term, Gabby Giffords, the U. S. representative from Arizona, was the victim of an assassination attempt outside a supermarket where she was meeting with supporters. She was critically injured by a gunshot wound to the head, which damaged the center of speech in her brain's left hemisphere. Prior to this injury, Gabby was a vivacious, multilingual speaker. The loss of her voice and the struggle to regain it was intense. Music therapy was eventually used to shift her speech center to the undamaged right hemisphere of her brain. Notice her struggle during therapy at being able to think but not to form the words. [Example: Gabby Giffords Therapy; https://www. youtube.com/watch?v=tiJ9X_wLSWM]²³

Kenneth Bozeman

To conclude, your voice is a sacred asset. Value it highly as crucial to who you are, the way you connect with others, the way you impact your community, and the way you will make a difference. Find your voice. Develop it. Cherish it. Listen empathically and respectfully to the voices of others. Speak up for and encourage those who have been silenced. Give your soul free and full access to your voice to express itself.

NOTES

- 1. Noah Pikes, *DARK VOICES: The Genesis of Roy Hart Theatre* (New Orleans, LA: Spring Journal Books, 2004), 53–55.
- Baby example: https://www.youtube.com/watch?v=RW st8Mz2m2E.
- 3. Paul Newham, *The Prophet of Song: the life and work of Alfred Wolfsohn, with overture by Marita Günther* (London/Boston: Tigers Eye Press, 1997), 2.
- Lynn Helding, "Emotion and Empathy: How Voice Can Save the Culture," *Journal of Singing* 73, no. 4 (March/April 2017): 432.



- B. Kleber, R. Veit, N. Birbaumer, J. Gruzelier, and M. Lotze, "The Brain of Opera Singers: Experience Dependent Changes in Functional Activation," *Cerebral Cortex* 20, no. 5 (May 2010): 1144, 1148.
- Ian Howell, "Parsing the Spectral Envelope: Toward a General Theory of Vocal Tone Color" (DMA thesis, New England Conservatory of Music, 2016), 29–30; https://www.academia. edu/29162454.
- Wolfgang Saus, quoted from his presentation at the 5th Physiology and Acoustics of Singing Conference, Stockholm, Sweden (August 10–13, 2010).
- 8. Anna Maria Hefele; https://www.youtube.com/watch?v=UH TF1-IhuC0 .
- 9. Ingo Titze, *Principles of Voice Production* (Englewood Cliffs, NJ: Prentiss Hall, 1994), xvii.
- 10. Anne Karpf, *The Human Voice: The Story of a Remarkable Talent* (London: Bloomsbury Publishing, 2006), 29–73.
- 11. Aristotle, *On the Soul (De Anima)*; 420b ff. This appears on page 7 and is related to the faculty of imagination (Phantasia).
- Laila Tasleem, "Singing Develops More Than Your Voice," guest blog, Nov 5, 2017; Spencerwelch.com/singing-devel ops-voice.
- Callie Day example; https://www.youtube.com/watch?v=S2 V9nZ465Co.
- 14. Leontyne Price example; https://www.youtube.com/ watch?v=qji9pwrvNf4.
- 15. Mayte Martin; "Navega sola"; https://www.youtube.com/ watch?v=JsmjFLcRNu8.
- 16. Newham, 17.
- 17. Diane Austin, *The Theory and Practice of Vocal Psychotherapy* (London: Jessica Kingsley Publishers, 2008), 24.
- Elizabeth Rooney, *Storing September* (Blue Mounds, WI: Brigham Farm Publishing, 2001), 68.
- 19. la Meri; https://www.inspiringquotes.us/author/5564-la-meri.
- 20. Posted by Kaylee Nichols in *Professional Voice Teachers*, Facebook page (April 13, 2017).
- 21. Tasleem.
- Parkinson's patient; https://www.youtube.com/watch?v=g NIdxYjGVV8.
- 23. Gabby Giffords; https://www.youtube.com/watch?v=tiJ9X_wLSWM.

[Note: Video of Address: https://www.youtube.com/watch? v=_scN9ABnZZg&t=40m20s.]