

Carlo Bassini's *The Art of Singing*, Part 1

Stephen Austin



Stephen Austin

prov·e·nance (prōv'ə-nəns) *n.* Place of origin, source. [LAT. *Provenire*, to originate.]

[This article appeared as the introduction to a facsimile reproduction of Bassini's book published by Plural Press in 2007.¹ While much of the information herein has appeared in previous columns, it is hoped that presenting it in context of Bassini's method will be of interest to the reader.]

IF WE WERE ABLE TO TRAVEL back in time and peruse the bookshelf of a singer or voice teacher in the United States during the last half of the nineteenth century, it is likely that you would find a copy of Carlo Bassini's *The Art of Singing*, first published in 1857. This book was perhaps the most popular text on the art of singing published in America during this period.

Little is known today about Bassini. Born in Cuneo, Piedmont Italy in 1812 of parents who were both musicians, he received intensive training on the violin as a youngster. He began his adult life as a professional violinist. One source suggested that he first came to South Americas as a part of an opera orchestra from Genoese. From there he went to New York to seek fame and fortune as a solo artist. This effort failed, and soon thereafter he was building a reputation as a voice teacher. A somewhat different story was related in a letter to the editor of *The Boston Home Journal* (later reprinted in *Dwight's Journal of Music* in 1878). Ship captain James Madison Hill reminisced about his long-time friend, Carlo Bassini, who had died in Irvington, New Jersey in 1870. He said that he met Bassini in southern France while there on a merchant venture. He reported that he gave Bassini and his whole family free passage from the Gulf of Lyon to New York on his ship in order to flee the terror of Napoleon III. According to Captain Hill, Bassini and his wife Pauline along with five children boarded his ship with nine other passengers for the long journey. At least part of this romantic tale does not stand up under scrutiny. Census records of the United States in 1870 show that the Bassini household included Carlo, his wife and three children, who were all born in the United States!

Even though there is some confusion about how Bassini arrived in the United States, there is no doubt about the reputation he enjoyed as a voice teacher and the success of his method books. He was a prolific author. He published six method books,² and was a frequent contributor to the music journals of his day, such as *The New York Music World* where he offered two

extended series of articles on voice teaching. Richard Storrs Willis, editor of this particular journal, served as editor for *The Art of Singing*, Bassini's first book.

BASSINI'S PEDAGOGIC ROOTS

There is little doubt about Bassini's pedagogic heritage. His method reflected that of Manuel Garcia II (1805–1906), the preeminent teacher in the West during the nineteenth century. Garcia had a clear influence over Bassini's pedagogic thought and practice. His ideas concerning the centrality of vocal registers to the process of voice building, the proper onset—including the controversial *coupe de la glotte*, the timbres—*voix claire* and the *voix sombrée* (a result of the lower laryngeal posture)—all come from Garcia, whom Bassini mentioned repeatedly in his books. His approach was methodic and progressive. This was the tradition of the *bel canto* method that can be traced through the experience of Garcia from his famous tenor father, Manuel Garcia *père*. The elder Garcia was a student of Ansani, who was a student of Porpora.

Bassini's method is not just a historically interesting document; it is the method of *bel canto*, containing the wisdom of the eighteenth and nineteenth centuries. Principles illuminated in the book were those used to train the great singers who were the first to sing the operas of Donizetti, Bellini, Rossini, and early Verdi. Voice training of the period included specific study of the different types of articulation: *portamento*, *legato*, *martellato*, and *staccato*. The timbres of the voice—"closed" and "open"—were specifically studied, and development and coordination of the registers of the voice were central to the method. Bassini promoted register "breaking"—going back and forth between the chest and head voice in an intentional break or yodel—in order to strengthen the registers and ultimately to eliminate the break between them. As was traditional at the time, Bassini offered specific directions pertaining to the appropriate performance of the *appoggiatura*, the *acciaccatura*, and the like.

There are a few inaccuracies in Bassini's writings concerning certain vocal and respiratory functions.³ The value of Bassini's book lies in its pedagogic value as well as its heritage. Even though it is obviously based on the monumental work of Garcia, it is not known whether

Bassini ever studied directly with Garcia—possibly in Paris before Garcia went to London and before Bassini came to the United States. Garcia's monumental text *The Complete Treatise on the Art of Singing* would certainly have been available to Bassini.⁴ It very well may be that Bassini was teaching fundamental principles that he learned from Garcia's book—a concept that is often rejected by teachers today: that one can learn anything about teaching voice from reading a book!

Central to most methods of the nineteenth century was the concept that vocal exercises were the means for training the ear and developing the necessary coordination between breath, voice, and articulatory structures. Specific exercises were also used to acquire or restore proper muscular strength in the intrinsic muscles of the larynx and their ability to coordinate appropriately. Through careful evaluation of the tone of the voice, the teacher would determine the deficiencies of the instrument and proceed with appropriate remediation. Targeted exercises strengthened the registers and, as a consequence, the voice would take on size and ring, brightness and flexibility.

Bassini's method can best be appreciated by putting some of the major concepts found therein in context of pedagogic thought of the nineteenth century. It is not that *The Art of Singing* is difficult to read; quite the contrary. But any historical document is best understood when it is evaluated in light of the culture from which it arose.

VOCAL REGISTERS— A LARYNGEAL EVENT

The registers of the voice have been the subject of intense scientific investigation over the last several decades, yet agreement in the voice community as to how many registers there are or what to call them remains elusive. Science has taken most of the mystery out of the subject, and our understanding of the physiology of the vocal registers is at this point well defined. It is interesting that even though the physiology of the registers has been defined by voice scientists only in the last fifty years, we see practical application of that knowledge practiced in previous centuries, long before teachers really understood why. Careful observation in the studio over many decades revealed these truths to those

who taught. It really should be no surprise that this is the case, since optimum voice use would naturally be narrowly defined and guided by the potential and limitations of the human voice. Art follows nature.

Anatomic structures concerned with voice production had been clearly described for many years by the time Bassini wrote his book; however, a statement concerning the nature of the registers of the voice awaited Manuel Garcia's first edition of *The Complete Treatise on the Art of Singing* in 1841.

By the word register we understand a series of consecutive and homogeneous tones going from low to high, produced by the development of the same mechanical principle, and whose nature differs essentially from another series of tones equally consecutive and homogeneous produced by another mechanical principle. All the tones belonging to the same register are consequently of the same nature, whatever may be the modification of timbre or of force to which one subjects them.⁵

This observation came ten years before he was to visualize the larynx with the laryngeal mirror. The definition seems almost too simplistic to be true in today's tangled web of terms and ideas about the registers, but Garcia's idea reflected the thinking of the time. The teachers of the eighteenth and nineteenth centuries had a much simpler approach to registers than might be found today. There were usually only two or three that had been defined. There was the chest voice—everyone agreed on that. Giambattista Mancini (1714–1800) described a second register that he called falsetto or head voice in his well known book of 1774, *Pensieri, e riflessioni pratiche sopra il canto figurato*.⁶ Mancini said that there were only two fundamental registers of the voice. The chest voice or *voce di petto* was the full, bright, ringing quality of the lower range in most singers. Mancini stated that if the voice were big and powerful, it is so because the chest voice was strong and well developed. If a voice were weak and light in quality it was because the chest register was undeveloped. He went on to say that if a “feeble” voice were to sing only in the chest voice for a while, then it would grow and become more robust! Some voices were by nature big and bright, but if it were not so endowed, it could be acquired by “study and art.”

The falsetto was not considered to be a viable option for performance, but useful nonetheless because of its positive influence upon the upper part of the chest voice.

Our modern understanding of falsetto is usually the sound produced by most countertenors. It is doubtful that was what these early masters had in mind. A few years ago a scientific investigation by Rubin and Hirt identified two distinct qualities of tone in the human larynx, both called falsetto; the “open” and “closed chink” falsetto.⁷ In the closed chink falsetto the vocal folds made contact at the midline during each phonatory cycle, producing a brief moment when airflow was completely (or nearly) cut off. This adjustment produces the imitative soprano sound in the male singer. The open chink falsetto was characterized by a constantly open glottis with the vocal folds oscillating, but not touching. This of course produces a very breathy quality—Garcia likened the sound of falsetto to “the low tones of a flute.”

The practical use of falsetto was to introduce ease and to modify the overpowering strength of the chest voice when it occurred. It is useful to remediate excessive tension in the larynx.

Bassini said “in theory, all are falsetto tones, which are not produced from the chest,” affirming the traditional view of his day, that there were only two registers for the male voice.⁸ He went on to say:

But men have nothing to do with the head register. It is feminine and, in them, effeminate. Mario has occasionally struck a high note with the head tone; but this great tenor only thereby lost musical caste and respect, with all persons of culture and good taste.⁹

This idea has been confirmed by the work of Minoru Hirano and William Vennard (1907–1971) in a series of studies using electromyography that identified the vocalis muscle as the primary “register agent.”¹⁰ They showed that the chest voice was always characterized by high levels of contraction in the vocalis muscle. When the vocalis muscle was passive the register was falsetto.

One recalls the story of the tenor Duprez who returned to France to sing at the Paris Opera after a successful career in Italy. While there he acquired a new way to sing the high voice. He returned to Paris in the role of Arnaldo in Rossini's *Guillaume Tell* and amazed the audience with a full-bodied tone all the way up to the tenor high C—reportedly the first time that it had ever been heard in Paris. They called it the “do di petto,” the C₅ in the chest register. Because of the reaction that it received it is reasonable to conclude that there was

another type of sound that was being used in Paris before Duprez. The great tenor Nourrit who was the reigning *primo uomo* before Duprez apparently approached his high voice in a lighter mechanism that we might call today *voix mixte* or perhaps an intensified *falsetto*—what Bassini would have called “head voice.” Of course, it is difficult to know for sure.

Bassini suggested that men, women, and children all have the chest voice. He also described the medium register in men and women, although particularly to women’s voices. He suggested that the medium register goes to about C₅ (the octave above middle C, or C₄) in both men and women and that the head voice goes up to D₆ or higher in the female voice, but not in the male.

Although the nomenclature and the theory may be a little different than the way the registers are discussed today, the pedagogic process is clear:

In training the voice, the teacher should commence with the chest register: and this from the fact, that where the chest and medium registers play into each other (in the manner shown) the voice is weak and uncertain, and it is an extremely difficult matter to strengthen and equalize it. But this equalization is just the important task to be accomplished. The method to be pursued is this:—the tones which are common to both the chest and medium registers must be practiced alternately with each. For, just as the skilful workman, who would join two pieces of wood and make the strength at the points of adjustment equal to the rest, will dove-tail the two, by extending the end of one sufficiently far in upon the end of the other to prevent any weakness at the extremities; so the skilful teacher will extend the limit of one register into the middle of the next, until the weak tones of both are blended and become equally sound and strong—the point of contact being smoothed and obliterated altogether.¹¹

The idea that the medium register is an entity in itself and therefore can be strengthened by exercising the tones associated with the medium register is not supported historically. However, it is common to find teachers who strive to fix the problem of the weak middle voice by drilling the middle voice. The singer often resorts to altering the vowel—usually toward a darkened or covered vowel quality. They may also use pressed phonation that impedes the free access into the high voice.

REGISTER SHIFTING

Register shifting was a common unification device found in many sources in the nineteenth century, begin-

ning with Garcia. It was the practice of beginning a tone in one register and, without stopping the air flow, allowing the tone to “flip” into the adjacent register. Register shifting, or “breaking” as it is sometimes called, depends upon the fact that the range of adjacent registers overlap and a number of pitches can be sung with one of several laryngeal adjustments, or registers. In Garcia’s method these were “first studies.” Speaking of the female voice:

When the chest voice has been well established (which should be done in a few days), the student must immediately work to blend that register with the next. Sometimes nature herself has undertaken that task, but voices thus favored are rare. This necessary study nearly always disheartens the student, but it is up to the teacher to direct capably and to take care of the voice which has been confided to him. One will practice by passing alternately from one register to the other on the tones D₄-F₄ without interruption and without aspirating in that passage between registers. This succession should take place on the same breath; it should be practiced seldom and performed slowly, firmly bringing out the passage, then the speed and the number of repetitions can be increased. At one time the student should begin with the chest register tone, at another with that of the falsetto. One must not be afraid of accentuating the kind of hiccup which occurs in the passage from one register to the other; only continued practice can first alleviate it, then make it disappear.¹²

This advice applied to female and tenor voices. Garcia suggested that if the baritone and bass want to blend the two registers, they should do it too, but a third lower.

The great basso of the Paris opera (who was also a physician) Charles Battaille (1822–1872) prescribed the alternation of registers as well.

In practice this returns us to the necessity of studying in principle the passage from one register to the other; from F₄ to G₄ for women and tenors, from E₄ to F₄ for baritones, because between these two points the muscular tension is moderated and the falsetto register has gained enough ring for it to be used with advantage. This brings us to the following exercise: the alternating and frequent repetition of the notes F₄ in chest and G₄ in falsetto for tenors and for women, E₄ to F₄ for baritones, producing these two sounds with the aid of a slow and regular expiration. Such movements allow the fascicles of the thyro-arytenoid to become accustomed to being stretched and relaxed with ease, speed, and dexterity.¹³

Battaille performed extensive observations using the laryngoscope and posed theories that were confirmed by the work of Hirano and Vennard one hundred years later.

Another famous nineteenth century *basso*, Luigi LaBlache (1794–1858), described the same exercise in this way:

The two registers of the male voice frequently afford unequal sounds, which would produce a very disagreeable effect, if the ability to unite them could not be attained by study. The highest tones of the chest are very strong, by the very effort which they require, while the first head-tones are very soft and often feeble. Hence it is necessary to apply one's self to strengthening the latter, and softening the former. As our organs permit us to produce the extreme sounds of one register in the next register, the best means of uniting the two kinds of sounds, is to begin by making a single sound pass from the chest-register to the head-register, and vice versa.¹⁴

It should be no surprise then, that Carlo Bassini also utilized this method for unifying the registers. He recommended that after the chest and medium voices have been established they need to be united.

The female voice may begin the task of joining the two registers by using first one and then the other on each of these notes: [C₄-G₄]. Take fresh breath on each sound, until the difference between the two registers is perfectly well heard and understood; afterward, however, sing with the same breath the note twice over; first in the chest and then in the medium register but with great care to make as perceptible as possible the sort of hiccup between the notes, that marks the passage between the two registers when fresh breath is not taken. . . . Care must also be taken not to lessen the force or intensity of the chest note, in order to give the medium note all the strength of which it is capable. One of these registers is always the weaker of the two, and the greater strength lies generally in the chest voice: in order to equalize the two, it would seem at first perhaps natural and proper to reduce the power of the stronger to a level with the weaker; but this is wrong; for experience has proved that such a proceeding would weaken the voice.¹⁵

Bassini included many exercises for both male and female voices utilizing register shifting for the unification of the registers. In his method one will note that over each note he placed a "C" for the chest voice, an "M" for the medium voice, and an "H" for head voice.

I have included a number of extensive quotations here to make the point that this practice was broad and cannot all be attributed to the influence of Garcia alone. Many other eighteenth-century pedagogues included register breaking in their books. In a dissertation on register switching, Lyle¹⁶ listed many other pedagogues

from the nineteenth century who utilized this technique including the renowned German baritone Julius Stockhausen,¹⁷ Heinrich Panofka,¹⁸ Auguste Panseron,¹⁹ the American George Frederick Root,²⁰ and the renowned Australian Dame Nellie Melba.²¹

The *voix sombrée* and the *voix claire*

Soon after Duprez's debut in June of 1837, a report was made to the French Académie des Sciences by two French biologists, Diday and Petrequin. They described the new timbre and the laryngeal posture as practiced by Duprez, which they called the *voix sombrée ou couverte* (dark or covered voice). The fact that the singing of the new tenor at the opera house warranted a scientific report before a government agency lends *gravitas* to the notion that his approach was something quite new and remarkable. A few months later a new teacher at the Paris Conservatory by the name of Manuel Garcia made his own report to the Académie where he described the same phenomenon and claimed that he had been teaching this new technique since 1832. Garcia went on to describe in much greater detail the effect of laryngeal posture, the vocal registers, and the two vocal timbres he called the *voix sombrée* and the *voix claire*. Garcia was the first writer who specifically taught the low larynx and *voix sombrée*; he was also the first teacher to separate the contributions of register and timbre. He proposed that the fundamental registers of the voice were the "chest" and the "falsetto-head," and that the singer had two fundamental qualities or timbres, the *voix claire* (also known as the *voce aperta* or "open voice") and the *voix sombrée* (the *voce chiusa* or "closed voice"). The timbres and the registers could be combined in several ways. One could sing any register in either open or closed quality, but Garcia insisted that closed voice be thoroughly taught. The use of open timbre was probably more frequently heard in his day than now. Garcia talked about using open timbre to portray specific emotional content, even above the *passaggio* for the male voice.

The pedagogy of low larynx and vocal timbres became common themes in pedagogic treatises in the nineteenth century, including Carlo Bassini's. The importance of this concept is supported by the regularity of its description by other noted authorities.

Julius Stockhausen (1826–1906) was one of the most celebrated baritones in the middle of the nineteenth cen-

ture. He was a renowned opera singer as well as a respected oratorio and recital performer, and he did a great deal to popularize the music of Schubert and Schumann in much of Europe. Johannes Brahms wrote his *Magelone* lieder for him, as well as the baritone solo in his *Requiem*. He was also a conductor and teacher. On the subject of the laryngeal posture, Stockhausen was unequivocal in his *Gesangsmethode*.

The dangerous tendency of the larynx to rise to the position it takes in speaking must be carefully avoided.²²

And further:

... it is only with a fixed position of the larynx, and with the right use of the two chief qualities of sound, that a beautiful, well-rounded whole can be produced.²³

Italian baritone Enrico Delle Sedie (1822–1907) was known for having sung Germont, Renato, and Figaro at Covent Garden and La Scala. He taught at the Paris Conservatory beginning in 1867 and was the author of seven volumes on training the voice, including his four-volume *Aesthetics of the Art of Singing*. He held similar views as Stockhausen and Garcia concerning the position of the larynx.

The soft palate rises in a direction opposite to that of the larynx, following the same regular order of gradations; viz.: it rises with the height of sound, whilst the larynx, for giving to the voice a homogeneous and easy tone should descend in the same order.²⁴

He described what happens when this advice is not heeded.

When the larynx is so raised we may emit high sounds, but thin and shrill. It is true that we are disposed to raise the larynx when we want to emit high sounds, but if we would closely observe the timbre, we would recognize that they are thin, contracted and shrill.²⁵

Apparently, like today, many must have disagreed with this thinking and Delle Sedie showed signs of weariness over the arguments.

I will not extend myself too much on a subject so often disputed, but will limit myself to expose the practical use of my theory.²⁶

Bataille reported his findings on the subject of laryngeal posture.

Moderate lowering of the larynx has the certain result of giving the voice suppleness and power, thereby encouraging the enlargement of its natural limits.²⁷

He offered an historical perspective.

This procedure, familiar to the great Italian School, has been given the term *somber voice*, and it has been associated with vocal emission. Duprez “naturalized” this term in France during his operatic debuts, but the expression had already been in use in Italy for some time.²⁸

Stockhausen and Battaille were both students of Garcia, so some agreement in philosophy shouldn't be surprising. However, other authors without such close connections to Garcia's legacy promote similar ideas. Edmund Myer (1846–1934) was a well known teacher and a prolific author. In his book *The Renaissance of Vocal Art*, he said:

For artistic tone, the soft palate must be high, the larynx must be low, and the throat and mouth allowed to form, not made or compelled . . . The larynx must be low in adjustment for the production of beautiful tone, but it must never be locally adjusted.²⁹

Myer identified a common point of contention. Many teachers then, as now, were opposed to any sort of localized effort or to directing the attention to the function of a part of the mechanism. This is evidenced by the fact that there arose two opposing schools: the “local effort school” and the “no effort school.” The latter arose as a direct reaction against the mechanistic methods of Garcia. The goal was the same, but the methods differed considerably. No better example of this can be found than the sentiments expressed by D. A. Clippinger (1860–1938) who decried the “lowered larynx” as an abomination, but gave as his first exercises to develop the male head voice descending scale passages using [o] and [u]; both vowels are properly produced with the larynx in a low position.³⁰

The famous teacher G. B. Lamperti (1830–1910) was opposed to many of Garcia's teachings, particularly his description of the onset, the *coupe de la glotte*. William Earl Brown (1863–1940), a longtime student and protégée, recorded Lamperti's thoughts in his book *Vocal Wisdom*. Here are some of Lamperti's dictums and sayings as recorded by Mr. Brown:

"Covered tone" is a misleading term. "Closed tone" should take its place.³¹

In their inception all tones are dark to be opened or closed at will.³²

All tones are closed until opened.³³

Although you may acquire a wide range of voice, you cannot modulate the sounds until the resonance of your tones becomes round and rich, *chiaroscuro*.³⁴

The guiding principle expressed by Lamperti was that there was a balance of color or timbre that was to be established and maintained. The closed quality of the vowel was at the center of the ideal. The source of the closed quality was defined by Lamperti to Brown during one of his own lessons with the master.

One must sing all exercises with an open throat—then the voice develops by itself. If you sing exercises with a dark (covered) tone, the voice cannot develop as it should. Later on, one can sing all tones (dark and light) with an open throat. If you begin studying the voice with dark tones only, it will be difficult to sing clear (light) ones.³⁵

Lamperti expressed the legitimate caution that open throat and closed timbre are not to be misunderstood. Note his caution in the use of the word "covered" as opposed to "closed." The timbre identified as *chiaroscuro* is a balance of color, and brightness should not be neglected.

Many more contemporary sources may be cited in support of this pedagogic practice, but Richard Miller (1926–2009) put it succinctly.

There can be little doubt that in desirable "closed voice" (*voce chiusa*), a timbre that should prevail throughout the singing voice regardless of range, as opposed to "open voice" (*voce aperta*), there is a stabilized laryngeal position—relatively low—and a somewhat widened pharynx. These conditions together with proper vowel modification (*aggiustamento*) produce the so-called "covered sound" of the upper range.³⁶

The practice of maintaining a lower than neutral laryngeal posture provided the means for giving access of the qualities of the low mechanism all the way to the top in the male singer. This practice apparently began in Italy in the early nineteenth century and, as was already noted, introduced to Paris by the tenor Gilbert Duprez in 1837.

Bassini offered specific instructions on how to produce the clear and the somber timbre. Like Garcia before him, he promoted a more liberal use of the open timbre than would be acceptable today.

[Continued in next issue.]

NOTES

1. Carlo Bassini, *Bassini's Art of Singing*, ed. by Richard Storr, with introduction by Stephen F. Austin (San Diego: Plural Pub., 2007; originally published by C. H. Ditson, 1857).
2. *The Art of Singing* (1857), *Melodic Exercises* (1865), *Education of Young Voices* (1865), *Method for the Tenor* (1866), *Method for the Baritone* (1868), and *New Method* (1869).
3. Bassini ascribes to the diaphragm the important function of moving air out of the body, rather than its only true function moving air into the body as the primary muscle of inhalation, not exhalation. This was and remains a very common misconception among voice teachers and singers.
4. Manuel Garcia, *Complete Treatise On the Art of Singing, Part 1*, trans. and ed. by Donald Paschke (New York: Da Capo Press, 1984), 50–51; originally published as *Nouveau Traité Sommaire sur l'Art du Chant* (Genève: Minkoff Éditeur, 1847).
5. Manuel Garcia II, "Memoire on the Human Voice," in *A Complete Treatise on the Art of Singing, Part 1*, xli.
6. Giambattista Mancini, *Practical Reflections on Figured Singing*; editions of 1774 and 1776, compared, trans., and ed. by Edward V. Foreman (Minneapolis: Pro Music Press, 1967).
7. H. J. Rubin and C. C. Hirt, "The Falsetto. A High Speed Cinematographic Study," *Laryngoscope* 70 (1960): 1305–1324.
8. Bassini, 6.
9. *Ibid.*
10. Minoru Hirano, William Vennard, John Ohala, and Bjorn Fritzell, "A Series of Four Electromyographic Studies" (Jacksonville, FL: NATS, 1971).
11. Bassini, 7.
12. Garcia, *Complete Treatise On the Art of Singing, Part 1*.
13. Charles Battaille, *Physiology as Applied to the Study of the Vocal Mechanism*, found in *Pioneer in Vocal Science and the Teaching of Singing*, trans. and ed. by Richard Joiner (Lanham, MD: Scarecrow Press, 1998), 178; originally published as *De la physiologie appliquée à l'étude de la mechanisme vocal* (Paris: Victor Masson and Sons, 1863).
14. Luigi LaBlache, *LaBlache's Complete Method of Singing*, translated from the original French (Cincinnati: John Church Co., n.d.), 6.

15. Bassini, 11.
16. John Christopher Lyle, "Register-switching as a pedagogical device for register unification of the singing voice: an historical analysis" (PhD dissertation, University of Oregon, 1995).
17. Julius Stockhausen, *A Method of Singing*, translated by Sophie Löwe (London: Novello, 1884); originally published as *Julius Stockhausen's Gesangs-methode* (Leipzig: Peters, 1884).
18. Heinrich Panofka, *The Art of Singing* (New York: G. Schirmer, 1900).
19. Auguste Panseron, *Method of Vocalization for Soprano and Tenor* (New York: G. Schirmer, 1898).
20. George Frederick Root, *Introductory Lessons in Voice Culture and in the Principles of Execution* (Philadelphia: Theodore Presser, 1901).
21. Nellie Melba, *The Melba Method* (Melbourne: Chappell and Co. Ltd., 1926).
22. Stockhausen, 44.
23. *Ibid.*, 43.
24. Enrico Delle Sedie, *Esthetics of the Art of Singing*, Vol. II (New York: G. Schirmer, 1885), 25.
25. *Ibid.*, 22.
26. *Ibid.*
27. Bataille, 174.
28. *Ibid.*
29. Edmund Myer, *The Renaissance of Vocal Art* (Boston: The Boston Music Company, G. Schirmer, 1902), 87.
30. D. A. Clippinger, *The Head Voice and Other Problems* (Boston: Oliver Ditson Company, 1922), 19.
31. William Brown, *Vocal Wisdom, Maxims of Giovanni Battista Lamperti* (New York: Taplinger Publishing Co., 1957), 37.
32. *Ibid.*
33. *Ibid.*, 53.
34. *Ibid.*, 38.
35. *Ibid.*, 129.
36. Richard Miller, *The Structure of Singing* (New York: Schirmer Books, 1986), 151.

Stephen F. Austin, MM, PhD, is a singer, voice teacher, and a trained scientist. He received a masters degree in vocal performance with the late Dr. John Large at the University of North Texas, and a PhD in Voice Science at the University of Iowa with Dr. Ingo Titze. Dr. Austin's dissertation was titled "The Effect of Sub-glottal Resonance Upon Vibration of the Vocal Folds." This and other research is published in the *Journal of Voice*.

Dr. Austin recently joined the faculty of the University of North Texas, where he is associate professor of voice and voice pedagogy. He is associated with the Texas Center for Music and Medicine. The center provides a unique opportunity for collaboration among musicians, physicians, researchers, psychologists, educators, and biomedical engineers.

Dr. Austin has presented recitals, lectures, and workshops across this country and in Australia and Europe. He is regularly featured on the faculty of the Annual Symposium: Care of the Professional Voice sponsored by The Voice Foundation. He has made presentations to national conventions of the National Association of Teachers of Singing (NATS), the American Speech and Hearing Association (ASHA), and the Music Teachers National Association (MTNA). He has been a featured guest lecturer at the summer and mid-winter workshops sponsored by NATS. Dr. Austin has been a regular contributing author to *Australian Voice*, the journal of the Australian National Association of Teachers of Singing, and he serves NATS as the chair of the Voice Science Advisory Committee and as a member of the editorial board for the *Journal of Singing*. He also is a member of the Scientific Advisory Committee of The Voice Foundation.

Dr. Austin is a successful studio teacher with students singing in opera houses of Germany and the United States. His students are regular members of young artist apprenticeship programs around the country, including the Houston Grand Opera Studio, Grass Roots Opera, Des Moines Metro Opera, Seagle Colony, and many others.

Through every fibre of my brain,
Through every nerve, through every vein,
I feel the electric thrill, the touch
Of life, that seems almost too much.

I hear the wind among the trees
Playing celestial symphonies:
I see the branches downward bent,
Like keys of some great instrument.

O Life and Love! O happy throng
Of thoughts, whose only speech is song!
O heart of man! canst thou not be
Blithe as the air is, and as free?

From "A Day of Sunshine"
Henry Wadsworth Longfellow