

# Building Strong Voices— Twelve Different Ways<sup>1</sup>

Stephen F. Austin



Stephen F. Austin

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

**I**F YOU EXAMINE PEDAGOGIC SOURCES from the eighteenth and nineteenth centuries you find concepts and forms of exercises that were commonly practiced. Historical methods were progressive in nature, like a traditional instrumental method, an approach that is not commonly practiced today in voice training. I have written about many of these over the last several years in this column. In this piece, however, I want to present a list of a dozen exercises that will result in vocal growth and development when properly and consistently applied in the studio and practice room.

Here are a few assumptions that I believe will help us identify a number of tools for building strong voices:

Premise 1: Teachers have been successfully building voices for several centuries and many have recorded their ideas for posterity.

Premise 2: Voice science has helped us understand the way the voice works and therefore has given us a means of judging the effectiveness of a particular method. This is particularly helpful if we are considering methodology that is outside our own personal experience.

Premise 3: Most eighteenth and nineteenth century historical methods focused on training the larynx as the primary component of the vocal instrument.

Premise 4: The concept of the “pure vowel” has always been a primary tenet of the study of elite singing. A vowel is formed by the position of the articulators: tongue, jaw, larynx, soft palate, and lips. A well produced vowel requires a certain amount of tension to produce it correctly, but excessive tension distorts the quality of the vowel. A distorted vowel quality indicates excessive tension which will interfere with optimal vocal production.

Premise 5: The concept of *voce chiusa* represents to singing what *chiar-oscuro* represents to all art: a balance of darkness and brightness. Many important historical methods state that *voce chiusa* should be established right away and that it will facilitate the other studies, particularly those concerning equalization of registers. Most modern methods do not even mention this important concept in favor of “forward placement,” “frontal or nasal resonance,” and other timbral directives.



**Example 1.** *Sostenuto* exercises from Franz Abt, *Practical Singing Tutor for All Voices*.

The exercises below are commonly found in eighteenth and nineteenth century methods. Music examples are taken from original sources. The exercises are presented in the order in which they were typically studied; the implication is that the order makes a difference.

**1. *Sostenuto* or Sustained tones.**<sup>2</sup> Historical progressive methods typically begin with sustained tones. It is the most fundamental vocal expression, and yet requires an extraordinary combination of effort from the phonatory, respiratory, and articulatory systems. *Sostenuto* requires that the singer maintain a tone at the same pitch and intensity for the duration of the exercise, typically over several seconds. These exercises always begin in the low range because of the long-held belief that all voices gain from developing the low mechanism (chest register). Strength in the low mechanism can be likened to the concept of “core strength” in exercise physiology: a strong core (primarily abdominal, thoracic, and back muscles) provides the foundation that the body needs to do everything else well. A strong chest voice provides the strength for the entire instrument for all voice types. I will address this further in one of the later points.

*Sostenuto* exercises are to be sung at the maximum intensity level that the voice can produce freely and without distortion. The voice will grow through the daily practice of *sostenuto*. In most historical methods the exercise is accompanied in order to encourage a sense of musical expression. The vowel varied somewhat, but most sources began with [a]. Example 1 is the first

exercise in a well known method by Franz Abt that is still available today.<sup>3</sup> It is taken from the book for alto voice. Notice that the initial pitch is G<sub>3</sub>; no doubt that Franz Abt expected this exercise to be executed in the chest register.

Sustaining a tone strengthens the intrinsic musculature of the larynx. It is an isometric exercise for the thyroarytenoid and the cricothyroid muscles, the two muscles that control pitch and register. The relative simplicity of the gesture provides the opportunity to address a number of other technical concerns, including onset (discussed in detail below), proper breath management and support, vowel purity, posture, and facial repose. The benefit is belied by its simplicity. Most methods include a full octave ascending and descending by whole or half steps. It is not a trivial task to execute—you really feel like you have done some work at the completion of this task. One of my doctoral students commented to me that “there is no place to hide” in this exercise! Indeed. No detail is small enough *not* to be addressed along the way.

**2. *Portamento*.**<sup>4</sup> Most historical methods introduce *portamento* immediately following *sostenuto*. It was considered to be a vitally important tool in voice building, not just a musical device. *Portamento* is to the voice what *t'ai chi ch'uan* is to the body: a controlled, fluid exchange of dominance between opposing muscles. A *portamento* is a change from one pitch to another which is evenly distributed along the way: a continuity of tone



Figure 2. Portamento exercises by Manuel Garcia from *The Complete Treatise on the Art of Singing* (1847).

from the first to the second note. Imagine a practitioner of *t'ai chi* going through his or her exercises: no discrete movements, but smooth motion from one position to the next. We should have a similar goal when singing *portamento*. When I ask a singer to sing a *portamento* on the interval of a fifth, there is typically some underlying scale-wise movement. The ability to do it smoothly requires great skill and usually has to be carefully studied. In the beginning a singer may be resistant to the sound when it is correctly produced because it just feels sloppy to them. I sometimes liken the correct execution of *portamento* to the sweeping of the second hand of

certain types of clocks: smooth and continuous. When poorly executed we hear discrete movements like the ticking of a different kind of clock.

Manuel Garcia's monumental work *The Complete Treatise on the Art of Singing* is typical of nineteenth century methods in that it includes specific exercises for *portamento*.<sup>5</sup> He begins with small intervals and progresses to larger ones. I find it much easier to begin with larger intervals and narrow them as skill develops over time (Example 2).

The practice of *portamento* trains a smooth coordination between the thyroarytenoid and the cricothyroid

Exercises for Soprano or Tenor

<p style="text-align: center;">Übungen zur Verbindung der Töne.<sup>*)</sup></p> <p style="font-size: small;">Bei diesen Übungen darf nur in den Pausen geatmet werden.</p>	<p style="text-align: center;"><i>Exercices in legato singing.<sup>*)</sup></i></p> <p style="font-size: small;"><i>In practicing these exer- cises, breath may only be tak- en during the rests.</i></p>	<p style="text-align: center;">Exercices pour lier les sons.<sup>*)</sup></p> <p style="font-size: small;">En faisant ces exercices on ne prendra respiration que sur les silences.</p>
---	---	---

Moderato.<sup>\*\*)</sup>

1.

Example 3. Legato exercises by Luigi Lablache, *Complete Method of Singing*.

muscles of the larynx. As these muscles are strengthened through the use of *sostenuto*, *portamento* trains them to work together along the way keeping the voice free. *Portamento* requires a stable and constant breath flow, or support. Any intentional change in pressure from the respiratory system will be evidenced by unevenness in the loudness and quality of the vowel. This is a good time to address the support mechanism and a chance as well to discuss the application of subglottal pressure smoothly and continuously.

*Portamento* was also considered to be a primary register unification device. The underlying principles of register study will be addressed more fully later, but suffice it to say that there are innate qualities of the chest voice that are desirable throughout the whole range: clarity, breath efficiency, and a certain robust quality. The chest register is limited to a particular range and should not be used where it does not belong, but some of the desirable qualities of the chest voice can be transported beyond its pitch boundaries through the use of specific exercises, including the *portamento*. A good example of this would be to have a soprano or alto sing [a] energetically on B<sub>3</sub> (once the chest voice has been firmly established) and then quickly ascend to

the upper octave without disengaging the voice—using a quick but distinct *portamento* to B<sub>4</sub>. This exercise can help bridge the *passaggio* (usually around E<sub>4</sub> or F<sub>4</sub>) and helps to equalize the registration event. *Portamento* can assist middle tones to take on the clarity of lower ones.

*Portamento* is also one of the traditional solutions to the breathy middle voice, so commonly found in young singers. The more contemporary notion of exercising the notes in the middle range to strengthen them and to thereby eliminate these problems is very common, but not as effective as the historical method. Exercising the middle register as a way to strengthen the middle register usually results in vowel distortion and hyperadduction. Addressing it from the historical concept that it is the “meeting place” of the low mechanism and the high mechanism can more effectively result in a middle voice that has strength and clarity. Like *sostenuto*, *portamento* provides the opportunity to focus on a number of other technical issues, including vowel quality, posture, support, and facial repose.

**3. Legato.**<sup>6</sup> *Portamento* provides the technical foundation for connecting the tones without discrete motion or sliding—a true *legato*. These exercises can take many forms. Example 3 is from a method by the famous nineteenth century basso Luigi Lablache (1794–1858).<sup>7</sup>





Example 4. Legato interval studies from Cinti-Damoreau's *Method of Singing* (n.d.).

I always ask new students to sing a five-note scale, usually starting on C ( $C_3$  or  $C_4$  depending upon the gender of the student). I inevitably hear discrete sounds on all or most tones, rather than a *legato* scale. Between each adjacent pitch they introduce a discontinuity of the tone, involving a change in the glottis. It can either be a separation of the vocal folds that creates an ever-so-slight aspirate between each note, like “ha-ha,” or little glottal stop-starts. Between these two extremes (or accompanying them) might be a slight modulation of the tone from the breath. Building legato in the voice will absolutely promote growth of the voice. Legato is the default articulation and is to be used unless there are articulations marked in the score or there are other specific circumstances where another articulation is understood, as in *aspirato*, to be discussed at a later time. This is stated specifically in multiple sources.

**4. Other legato interval studies.** Traditional method books from the past typically included many varied forms of interval studies. The two exercises in Example 4 are taken from a method book written by Madame Cinti-Damoreau, a famous soprano with the Paris Opera in the 1820s and 1830s.<sup>8</sup> She went on to teach at the Paris Conservatory of Music, and her method was adopted by the school for use by the entire student body. Although

there is no date in my original copy of this book, the best publication date that I can determine from secondary sources places it in 1849.

Singing increasingly wide intervals while maintaining a *legato* line supports the building of the voice in many ways. As already mentioned in the discussion of *portamento*, interval studies help to unify the disparate registers of the singing voice by giving the voice the experience of singing through the breaks, or *passaggi*, often enough that the boundaries begin to disappear. I liken this to what happens when you walk repeatedly through a field along the same route. Eventually a path begins to form, and what was once rough and uneven becomes smooth and easily traversed.

Studies like those found in Example 4 can also help singers desensitize themselves to unnecessary concerns of the high notes in their own voices. Singers should be encouraged to sense that all the notes emanate from the same place, eliminating any sense that there is high or low. I suggest to them that they feel all the notes on one level or plane so that they do not reach up for the high notes or down for the low notes. In Example 4b, for instance, the singer should sense all notes emanating from the first tone—the  $C_4$  (middle C). The singer supports the first tone and then sings  $E_4$  without any evi-

This exercise that we owe to Rossini is the best possible to bring out and develop the voice:



Quicken the tempo a little, and sing the exercise twice as marked, without a breath; the second time, sing it *pianissimo*, with every note sustained and *legato*:



Repeat this exercise in various keys, up to and including the key of F Major.

**Example 5.** The great “Rossini Scale” as found in Cinti-Damoreau’s *Method of Singing* (n.d.).

dence of disconnecting the tone or changing the vowel. Each interval proceeds in the same way with the lowest tone serving as the anchor to all the rest. The singer should be cautioned not to provide intentional extra effort to the higher tones, but to let the body respond naturally to the extra physical demands of singing the higher pitches. He should monitor himself in a mirror to assure that the repose of the body remains calm and that no facial or articulatory distortions occur as he goes through the exercise.

Another exercise, also from Cinti-Damareau’s method, is attributed to Rossini (Example 5). It should be sung *legato*. In the male voice this exercise is great for training through the *passaggio* using [o] or [u] at the top to keep the throat open (larynx down). The male voice should approach the top with limited change in the mouth space; in other words without dropping the jaw. Any change of the natural repose of the singer should be avoided. After [o] and [u] have been established the singer should use [a], but allowing the work from the previous two vowels to inform the throat they will avoid an open yell at the top.

This is also a good exercise for training the soprano and mezzo soprano to drop the jaw as they go above the top of the treble staff. This is called formant tuning, and it allows the high voices to gain in intensity by tuning the lowest vowel formant close to the fundamental frequency. This will be taken up in greater detail in a later discussion, but suffice it to say that this is a critical issue for the female singer and it should be specifically trained. It is so common to see a young woman struggling with her high notes when the solution is so simple: “Drop to the top”! I have experienced so many times an instantaneous release of the tensions in singing high notes resulting in guaranteed smiles of amazement from a young singer who first experiences this in her singing.

**5. Onset.**<sup>9</sup> The onset must be addressed at the very beginning of the work. It is a part of the proper execution of *sostenuto*, *portamento*, and *legato*. The proper way to begin a tone has been a controversial issue at least since Manuel Garcia first described what he observed singers doing in the professional marketplace of his day. Garcia coined the term *coupe de la glotte*, or “shock of the glot-

## EXERCISES TO SECURE THE RIGHT ACTION OF THE GLOTTIS.

In commencing these exercises I stated that the word *sea* would be used on account of certain advantages its structure secured, as to a pleasant and natural position of the mouth, and the proper stroke of the glottis.

I need not here dilate upon the difficulty of obtaining from a beginner in the study of music a correct emission of the vowel *a*—it is sufficient that this is the fact, and it was to avoid the loss of time that the word *sea* was used. But we have now arrived at a point where we can dispense with it, and use the proper vowel *a*.

In singing, if you wish to alight upon the tone with neatness, with true intonation, and will not have the tone preceded by some undesirable aspiration, like *h'a*; or, if you wish to avoid wasting a particle of your breath, the proper action of the glottis must be employed.

The following four exercises are written with a view to this end, and will prove a valuable study, not only on account of this glottis-stroke, but as a means of learning how to command the motions of the diaphragm. Baritone voices will find these exercises of special use.

Let there be a short interval, or rest, between every note, apply neatly to the first note the syllable *sea*, and then, without taking breath or changing the position of the pharynx, pronounce *a* to the other notes, precisely as you did in its connection with *sea*. The principal agent in this exercise is the diaphragm. Let every note be given with an outward impulsion of the diaphragm. It can easily be felt by holding your hand on the lower part of your chest. Begin very slowly and take the *a* from the bottom of the throat. Recollect that the *a* has the Italian sound, like *ah*.

## No. 32.

**Example 6.** Exercises for training the “right action” of the glottis, from Carlo Bassini, *Art of Singing* (1884). In this exercise he explains his understanding of how the onset should be produced.

tis,” as the ideal onset of tone. Immediately much of the voice community reacted negatively to it; however, many nineteenth century sources promoted Garcia’s definition of the *coupe de la glotte*. The proper application of the term promotes a clean, precise onset where the vocal folds are in full contact just prior to phonation. The singer develops just enough subglottal pressure to begin the tone without any airflow preceding it. This is analogous to what one can observe on the lips when pronouncing [pa]. If it is pronounced in a natural way, the pressure behind the lips builds until an emission of voice

occurs. Detractors have claimed that practitioners have ruined voices due to the aggressive, overly-muscular nature of the gesture, but the examples that they offer are typically grossly exaggerated and do not reflect the gentle approach that was described by Garcia.

Proponents claim that the correct balance of medial compression or closing effort and breath pressure provides a clear, ringing quality that cannot be accomplished with other concepts such as the “coordinated onset” or “balanced onset.” We know that firm glottal closure produces greater energy in the higher partials.



Depending upon the desired timbre and dynamic level that is called for, this approach creates the fullest, richest sounds of which a singer is capable without undue effort.

Of course, one does not always want the full-voiced richness of firm glottal adduction. An intentional “cushioning” of the tone with a little air slipping by unrealized by the vocal folds can sometimes be just what is artistically desired and can provide a softer, “loftier” sound. My point on this issue is that singers should be able to do both, but that a habitual easy onset robs the voice of maturity, fullness, and richness of tone. New York voice teacher David Jones promotes the idea that training the clean onset can be easily accomplished by having the singers say “uh-oh” like a young child who has just dropped something. This is brilliant and very simple! It is a light, yet clean onset of tone: not “huh-hoh.” Example 6 is from Carlo Bassini’s method, the most popular book on singing printed in the United States in the second half of the nineteenth century.<sup>10</sup> I am pleased to say that it is available again in an historic reprint with an introduction provided by this author.<sup>11</sup>

The *coupe de la glotte* trains the intrinsic laryngeal muscles that are responsible for opening and closing the glottis. These muscles are critical for firm closure, the source for ring in the voice. As I indicated in a previous column, my opinion and practice on this issue has changed completely in the last ten years.<sup>12</sup> I was taught the “well-coordinated onset” as described by William Vennard in his writings. I was presented with unjustified bias against the *coupe de la glotte* in every pedagogy class I had in graduate school, so I thought I was doing the right thing. A few years ago I read Stark’s excellent history of voice pedagogy and was convinced by his persuasive argument that I had been unintentionally misled.<sup>13</sup> Upon reading Garcia’s actual words for the first time and the clear directions that he offered (as presented in Stark’s book), I began to experiment with my students and in my own singing. There is no doubt remaining in my mind that Garcia’s onset, which I simply call “neat and clean” is the only way to fully develop the full potential in a singer. I have noted that when you listen to Vennard himself demonstrate the beginning of the tone in his *Developing Voices* recordings, he actually

demonstrates the historic *coupe de la glotte* and not his own “well-coordinated” one!<sup>14</sup> He describes an onset that seems less harsh than his misunderstanding of the original idea, but clearly uses Garcia’s onset—because it is the only way to optimize the quality of the tone. This argument plays itself out in academic circles. Professional singers use the “neat and clean” onset because it is the only way they can keep their voices fresh and “in the house.” Many of our problems arise from misuse of terminology and the misunderstanding of the words we use.

[Continued in next issue]

## NOTES

1. A similar paper under the same title appeared in *The Choral Journal* 48, no. 7 (December 2007).
2. Stephen F. Austin, “First Things First,” *Journal of Singing* 64, no. 1 (September/October 2007): 89.
3. Franz Abt, *Practical Singing Tutor* (New York: G. Schirmer, 1921), 2.
4. Stephen F. Austin, “Chi non lega, non canta,” *Journal of Singing* 60, no. 3 (January/February 2004): 301.
5. Manuel Garcia, *Complete Treatise On the Art of Singing, Part I*, transl. and ed. by Donald Paschke (New York: Da Capo Press, 1984): 63, 65; originally published as *Nouveau Traité Sommaire sur l’Art du Chant* (Genève: Minkoff Éditeur, 1847).
6. Austin, “First Things First.”
7. Luigi LaBlache, *LaBlache’s Complete Method of Singing* (Cincinnati: John Church Co., n.d.), 10.
8. Laure Cinti-Damoreau, *Method of Singing* (Philadelphia: A. H. Rosewig, n.d.).
9. Stephen F. Austin, “The Attack on the *coupe de la glotte*,” *Journal of Singing* 61, no. 5 (May/June 2005): 521.
10. Carlo Bassini, *Art of Singing* (Boston: Oliver Ditson & Co., 1884), 116.
11. Carlo Bassini, *Art of Singing*, with an introduction by Stephen F. Austin (San Diego: Plural Pub., 2008).
12. Austin, “The Attack on the *coupe de la glotte*.”
13. James Stark, *Bel Canto: A History of Vocal Pedagogy* (Toronto: University of Toronto Press, 1999).
14. William Vennard, *Developing Voices* (New York: Carl Fischer, 1973).