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#### Article abstract

The identification of particular vocal techniques in singing, which combine to form distinctive vocal idioms, is important for an understanding of both "classical" and "vernacular" musical styles. The modern critical literature on song is based largely on the limited concept of a "word-tone relationship," with musico-poetic synthesis as its ideal. Performance practices are as important to song criticism as is the study of written scores. The elements of voice quality and vocal articulation, with specific reference to the physiology and acoustics of the human voice, provide the analytical tools for defining vocal idioms and their role in the value and success of a song. The description of such idioms requires a *rapprochement* between vocal history, pedagogy, and science. Using the bel canto paradigm as a reference point, this article discusses a variety of vocal idioms. Gluck's aria, "Che farò senza Euridice" is used to illustrate how an understanding of vocal idioms can alter our judgment of a piece which has sometimes been condemned for its poor word-tone relationship.

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# ON THE ROLE OF VOCAL IDIOMS IN SINGING

*James A. Stark*

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In the modern scholarly literature about vocal music, there is little to be found regarding the parameters of vocal usage that constitute distinctive vocal idioms, that is, the specific vocal techniques used in the performance of particular styles of music. By contrast, the historical treatises of Giulio Caccini (1602),<sup>1</sup> Pietro Francesco Tosi (1723, 1743),<sup>2</sup> or Manuel Garcia II (1841, 1847),<sup>3</sup> to name but three, linked certain vocal techniques to the musical styles of the day. These treatises included both vocal and musical advice, since vocal technique was considered inseparable from matters of musical style. Today, however, there seems to be a gulf between studies of musical style and studies of singing. Musicologists have concentrated on the printed musical score and have created an analytical concept known as the *word-tone relationship*, in which the value of a song depends upon the balance between textual and musical elements in the score, but this concept accords little attention to the essential role of the singer. In this sense, the word-tone relationship might better be called the *word-note relationship*. Vocal pedagogues, on the other hand, are concerned with methods of using the voice as a musical instrument. Their focus is on the vocal techniques generally associated with so-called “classical” singing styles, especially the *bel canto* techniques of Italian opera, with little attention to the broader spectrum of vocal styles or the popular forms of singing often referred to as “vernacular” styles. Voice scientists try to quantify the physiological and acoustical elements of the singing voice, most often in a laboratory situation, by using procedures that isolate aspects of the voice. But the scientific method is too specialized to address the complex question of diverse musical styles, and references to vocal idioms

1 Giulio Caccini, *Le nuove musiche* (Firenze: Marescotti, 1602); ed. and trans. Wiley Hitchcock (Madison: A-R Editions, 1970).

2 Pietro Francesco Tosi, *Opinioni de' cantori antichi, e moderni* (Bologna: Lelio dalla Volpe, 1723); trans. J. E. Galliard as *Observations on the Florid Song* (London: Wilcox, 1743), facs. ed. (New York: Johnson Reprint Corporation, 1968).

3 Manuel Garcia II, *École de Garcia: Traité complet de l'art du chant* (Paris: the author, 1841); expanded edition in two parts (Paris: the author, 1847); reprint of 1847 edition (Geneva: Minkoff, 1985); the editions of 1847 and 1872 ed. and trans. Donald V. Paschke (New York: Da Capo, pt. 1, 1984; pt. 2, 1975).

are fragmentary. I believe it is only through a *rapprochement* of vocal history, pedagogy, and science that an understanding of vocal idioms can be gained.

Idiomatic singing is not a peripheral element in the success of a song; it is an integral part of it. To illustrate this, I can think of no better example than the famous aria “Che farò senza Euridice?” from Gluck’s *Orfeo ed Euridice*. This piece has been harshly dealt with by some critics, from Eduard Hanslick in 1854<sup>4</sup> to Peter Kivy in 1980,<sup>5</sup> as a song in which the somber mood and character of the text is contradicted by Gluck’s rather jaunty melody in the major mode. One opera manual states: “It is a strange air – strange because, despite its pathetic words and the sense of agonized loss which it supposedly expresses, its straightforward, major-key tune has none of the purely musical features which normally convey pathos in singing.”<sup>6</sup>

There are good reasons to agree with this view if one simply studies the score for its word-note relationships, or indeed, if one hears a performance in which the singer does not use the devices of idiomatic singing to capture the mood and character of the text despite the major-mode melody. However, there is contradictory evidence in the historical accounts of past singers who have captured the intended affect of the aria. For instance, the first Orfeo, castrato Gaetano Guadagni, was praised by Hogarth for “the impassioned and exquisite manner in which he sang the air.”<sup>7</sup> Later, Hector Berlioz lauded the singing of Pauline Garcia Viardot in the 1859 revival of *Orfeo*.<sup>8</sup> It was Gluck himself who, in 1770, remarked on the importance of vocal idioms in the performance of “Che farò”:

Little or nothing, apart from a slight alteration in the mode of expression, would be needed to turn my aria in *Orfeo*, “Che farò senza Euridice?” into a puppet-dance. One note more or less sustained, failure to increase the tempo or make the voice louder, one appoggiatura out of place, a frill, a passage or roulade, can ruin a whole scene in such an opera.<sup>9</sup>

4 Eduard Hanslick, *Vom Musikalisch-Schönen*, trans. Gustav Cohen as *The Beautiful in Music* (Indianapolis and New York: Bobbs-Merrill, 1957), 32–34.

5 Peter Kivy, *The Corded Shell: Reflections on Musical Expression* (Princeton: Princeton University Press), 73–76.

6 Arthur Jacobs and Stanley Sadie, eds., *The Pan Book of Opera* (London: Pan Books, 1964), 34.

7 George Hogarth, *Memoirs of the Opera in Italy, France, Germany, and England* (1851), reprint edition, 2 vols. (New York: Plenum Publishing Corp., 1972), 2:143.

8 Hector Berlioz, *Gluck and His Operas, With an Account of Their Relation to Musical Art*, trans. Edwin Evans (London: W. M. Reeves, 1914), 14–21.

9 Hedwig and E. H. Mueller von Asow, *The Collected Correspondence and Papers of Christoph Willibald Gluck*, trans. Stewart Thomson (London: Barrie and Rockliff, 1962), 217.

While these early performances are, of course, lost to us, there are nevertheless some modern recorded performances that demonstrate the rôle of idiomatic singing in capturing the affect of this aria. For instance, a recording of Tito Schipa, made in 1932,<sup>10</sup> draws the listener into Orfeo's mood of despair by the quality of the singing. Word-note analysis can do nothing to explain this; word-tone analysis, which takes into account idiomatic singing, can change our judgement of the piece. I shall return to this recording later.

As a starting point in addressing the question of vocal idioms, I propose the following definition: A vocal idiom is a combination of vocal techniques that distinguishes one singing style from another. These techniques fall under two headings: (1) *voice quality*, which is determined by different glottal settings, subglottal breath pressures, breath flow rates, vertical laryngeal positions, acoustical formants, registers, vibrato, and dynamic gradations, and (2) *vocal articulation*, which is determined by the ways in which tones are begun, joined, separated, and ended, and by certain rhythmic alterations of the notes. It is the highly variable way in which these techniques are employed that defines idiomatic styles of singing. Using these techniques as critical criteria, one can distinguish between a wide variety of both classical and vernacular singing styles. For purposes of comparison, my reference point will be the so-called *bel canto* vocal paradigm, extending from Caccini through Garcia and his disciples. Modern voice scientists agree that this paradigm is characterized by an exquisite level of vocal efficiency and control, and that all other singing methods must be measured against this standard.

Of primary importance to vocal idioms is voice quality, that is, the actual timbral characteristics of the singing voice. The voice is capable of producing an incredibly wide range of tone qualities, depending upon a number of physiological factors. Chief among these is the glottal setting, in which the singer controls the type and strength of vocal fold closure. The glottis is the variable opening between the vocal folds (also known as the vocal cords or bands). The quality of tone depends greatly on the amount of glottal resistance to the breath. This glottal resistance was first described by Manuel Garcia II, the celebrated nineteenth-century voice teacher, scholar, and the inventor of the laryngoscope. Garcia recognized that the vibrating portion of the glottis could be reduced by a firm closure of the glottis. This required a strong contraction of the muscles which draw the arytenoid cartilages together firmly at the posterior end of the glottis:

It is necessary to know that the lips of the glottis can vibrate equally, either when the posterior extremities are put into contact (by bringing together of the internal processes of the arytenoids), or when these extremities remain

10 Angel Recording COLH 117.

separated. In the first case, the sounds are emitted with all the brilliance possible; in the second, the voice takes on a dull character.<sup>11</sup>

In order to achieve the former glottal setting, Garcia advocated a strong “pinching” of the glottis:

Let us add that when we pinch the glottis strongly, we synergistically bring about a certain contraction, a kind of condensation of the tissues of the pharynx, most favorable states for the vitality and the brilliance of the voice. On the contrary, the separation of the arytenoids brings about the softness of these same tissues, as a result of which, the sonorous waves, absorbed or poorly reflected, lose nearly all their brilliance.<sup>12</sup>

Recent research points to a strong level of contraction of the internal tensors of the vocal folds as well.<sup>13</sup> It appears that strong vocal fold adduction is created by complex muscular contractions not yet fully quantified.

For simplicity's sake, I call the two settings described by Garcia *firm closure* and *loose closure*. Firm closure generally requires higher subglottal breath pressures than loose closure. Studies have shown that operatic singing can produce breath pressures many times higher than speech.<sup>14</sup> The famous nineteenth-century Italian voice teacher Giovanni Battista Lamperti repeatedly advocated the “holding back” of “compressed breath” for operatic singing, and the avoidance of “loose breath.”<sup>15</sup> Strong glottal resistance was the foundation of both the Garcia and the Lamperti methods. While this model has always had its detractors, it must be acknowledged that it produced an astonishing number of great singers.<sup>16</sup> The schools of Garcia, the Lampertis (father and son), and their followers, dominated nineteenth-century singing.

11 Garcia (1847) 2:54, trans. Paschke (1975), 152.

12 Paschke (1975), 153.

13 Joel J. Pressman, “Sphincters of the Larynx,” *Archives of Otolaryngology* 33 (1941), 221–36; also “Physiology of the Vocal Folds in Phonation and Respiration,” *Archives of Otolaryngology* 35 (1942): 355–98; Richard Luchsinger and Godfrey E. Arnold, *Voice-Speech-Language* (Belmont, California: Wadsworth Publishing Co., 1965), 72.

14 Donald F. Proctor, *Breathing, Speech, and Song* (Vienna and New York, 1980), 36, 93; T. A. Sears, “Some Neural and Mechanical Aspects of Singing,” *Music and the Brain*, ed. Critchley and Henson (London: Heinemann, 1977), 82–84; G. A. Cavagna and Rodolfo Margaria, “Airflow Rates and Efficiency Changes During Phonation,” *Annals of the New York Academy of Sciences* 155 (1968), 152–63. Harm Schutte, *The Efficiency of Voice Production* (Groningen: Kemper, 1980), 150; Raoul Husson, *Le Chant* (Paris: Presses Universitaires de France, 1962), 21–28.

15 William Earl Brown, *Vocal Wisdom: Maxims of Giovanni Battista Lamperti* (New York: Arno, 1957), 23, 25, 51, 65, *passim*.

16 For an extended discussion of this, see James A. Stark, “Garcia in Perspective: His *Traité* after 150 years,” *Journal of Research in Singing* 15, no. 1 (1991): 2–56.

The differences between firm and loose glottal closure in singing are significant, even radical. The former is characterized by complete glottal closure during each cycle of vibration; the rate of closure of the vocal folds is faster than in loose phonation, and the vocal folds remain closed a larger percentage of the time during each vibratory cycle. This creates a source spectrum which is rich in high-energy partials, thus providing a better signal for the vocal tract to work upon. A bright edge to the voice has been recognized by many names over the centuries. For instance, Zacconi in 1592 called it *mordente*, literally the “sting” or “bite” of the voice;<sup>17</sup> Caccini referred to it as *voce piena, e naturale* (“a full, natural voice”)<sup>18</sup> while later, Garcia called it *éclat* (“brightness”).<sup>19</sup> In contrast, a loose glottal setting results in a higher rate of breath flow, lower subglottal pressure, and weaker energy to the upper partials. Zacconi complained of an *obtuse* (“dull”) voice,<sup>20</sup> while Garcia called it *sourd* (“veiled”).<sup>21</sup> In the loose setting there is sometimes a tendency for “wild air,” or “shunt,” to escape, especially through the cartilagenous portion of the glottis, causing a breathy tone. Garcia observed the difference in breath flow between the two glottal settings, saying that the loose setting expended up to four or five times the amount of breath of the firm setting.<sup>22</sup> Other terms are sometimes used to describe the two glottal settings. Luciano Pavarotti states that the lyric or dramatic tenor sings *con la voce* (“with the voice”) and with *voce piena* (“full voice”), unlike the *tenore leggero* (“light tenor”) who does not.<sup>23</sup> Firm closure is the technique that provides the vocal power necessary to be heard over a full orchestra in a large hall without amplification. In some cases, of course, this technique is adopted by singers outside of opera, but even then it is still associated with an operatic idiom.

In contrast, loose closure is the normal vocal setting for speech and for most vernacular styles of singing where strong vocal projection is not a requirement.<sup>24</sup> It is probably also the setting for early singing styles associated with Medieval song<sup>25</sup> as well as for most choral singing. The use of a microphone has been

17 Lodovico Zacconi, *Prattica di musica* (Venice: Girolamo Polo, 1592), fol. 77.

18 Caccini, [viii].

19 Garcia (1847) 1:15, 25, *passim*.

20 Zacconi, fol. 77.

21 Garcia (1847), 1:15, 25, *passim*.

22 Garcia (1847), 2:54.

23 See the recording and accompanying transcript of *Scuola di canto*: Pavarotti-Freni, Mizar Record PF3, Bologna, 1976), 1.

24 G. A. Cavagna and E. M. Camporesi, “Glottic Aerodynamics and Phonation,” in *Ventilatory and Phonatory Control Systems*, ed. Barry Wyke (London: Oxford University Press, 1974), 87.

25 John Potter, “Reconstructing Lost Voices,” in *Companion to Medieval and Renaissance Music*, ed. Tess Knighton and David Fallows (New York: Schirmer Books, 1992), 311–16.

inextricably linked to vernacular styles, from the crooning of Bing Crosby to the breathiness of rock star Brian Adams. A striking example of the incompatibility of firm phonation and loose phonation can be heard on the 1981 recording of a song called "Perhaps Love," in which the operatic tenor Plácido Domingo sings a duet with the popular balladeer, John Denver.<sup>26</sup> The piece exemplifies *mixed idioms*, and owes much to the studio technicians who had to balance the two voices. In 1992, a concert by "Pavarotti and Friends" similarly employed mixed idioms.<sup>27</sup> A different phenomenon occurred during the 1950s in the singing of Mario Lanza, a Hollywood operatic singer whose venue was film, radio, and recordings rather than the opera house itself. What made Lanza unique was that he shifted between loose phonation and firm phonation within the same piece, reserving the operatic sound for the exciting climaxes and final ringing high notes in these Hollywood-style songs. This, too, was helped by the microphone and good technicians. It was a formula that worked, and Lanza became a star. A good example is his recording of "Loveliest Night of the Year" from the MGM film, *The Great Caruso*.<sup>28</sup> Lanza begins the piece with loose phonation, as if crooning, and ends with decidedly firm phonation, singing stentorian high notes of operatic persuasion.

Closely allied to glottal settings is the matter of vertical laryngeal positions and their effect on voice quality and idiom. The larynx, or "voice box," is suspended in the neck by "strap" muscles which can raise or lower the entire laryngeal structure, thereby shortening or lengthening the vocal tract, or resonance tube. The effects of the vocal tract upon voice quality, especially vertical laryngeal positions, have been widely discussed in the voice science literature, beginning with Manuel Garcia. There is general agreement that untrained singers sing with a higher larynx than trained singers. Since firm phonation requires higher muscular effort to maintain glottal closure against elevated subglottal breath pressure than is required for speech or loose phonation, it also requires the singer to employ certain concomitant vocal maneuvers in order avoid an overly tense or strained vocal quality. Chief among these is the gesture of keeping the larynx in a low vertical position against the upward pressure of the breath that would otherwise push the larynx too high for good singing. Such laryngeal lowering is often accompanied by a raising of the soft palate to such an extent that the velum seals off the nasal cavities and creates a wide space in the pharynx, which further adds roundness to the tone.

Lowering the larynx has a significant effect on the energy peaks, or formants,

26 CBS Recording 37243.

27 Pavarotti & Friends, London CD Recording 444 100-2, 1993.

28 RCA Red Seal Recording LSC-2748 (e).

which are resonated in the vocal tract. Vowels are acoustically distinguished by their formants, with each vowel having distinctive energy peaks. A lowered larynx tends to lower all the vowel formants, thereby “darkening” them. As well, lowering the larynx increases the length of the vocal tract, and widens the pharynx in a region below the epiglottis and above the glottis, which significantly alters the vocal sound. In the male voice, this causes a clustering of the third, fourth, and fifth formants by narrowing the frequency separation between them. The resulting energy peak at around 2800–3500 Hz is called “ring” or the “singer’s formant.” This adds a band of resonance to the voice which helps it to project over heavy accompaniment without artificial amplification. Female singers, in addition to lowering the formants by maintaining a low laryngeal position, can enhance the sound of the higher notes by adjusting the vocal tract with the jaw and lips, so that the first formant coincides with the fundamental frequency.<sup>29</sup> Laryngeal lowering and vowel colouring is sometimes used to excess in classical singing. Too often singers darken the vowels to such an extent that the words can no longer be understood. Consider the current practice in opera, both in the opera house and on television, of providing subtitles or supertitles in English for operas which are actually being sung in English! Something has gone terribly wrong when an overly coloured tone quality takes precedence over intelligibility.

The tonal ideal for the classically trained singer is *chiaroscuro*, a voice quality which is both bright and dark at the same time.<sup>30</sup> The brightness is achieved by the glottal setting for firm phonation with its high energy partials, coupled with the vocal tract modifications that result in the singer’s formant. The dark quality is caused by the laryngeal lowering and expanded pharynx which darkens all the vowels, but without distorting them beyond recognition. It would be fair to say that *chiaroscuro* is idiomatic to classical singing, and is especially necessary for opera. While *chiaroscuro* is thus an essential goal of classical vocal training, this same quality may be unsuitable for many vernacular styles. Popular forms of vocal music seem to be oriented toward verbal rather than timbral priorities as they rely heavily on the musical rendering of a text in a natural, or speech-related manner. Too much vocal artifice can estrange such a text from its origins in speech. *Chiaroscuro* is not associated with normal speech, and hence does not seem well suited to anything of a vernacular nature. This is why some “crossover” singing is unsuccessful; the tone quality of the opera singer is incongruous with popular song styles.

29 Johan Sundberg, “The Acoustics of the Singing Voice,” *Scientific American* (March 1977), 82–91.

30 Giambattista Mancini, *Pensieri, e riflessioni pratiche sopra il canto figurato* (Vienna: Ghelen, 1774), 40; Brown, 38–39.



Vernacular styles of singing, then, generally use loose phonation and a higher laryngeal position than classical singing. This results in low subglottal pressure and vowel formants that are closer to speech than to classical singing. The low intensity and weak harmonic structure of such singing often requires the use of amplification, since there is little inherent "projection" in such a voice quality. There are other limitations as well. Phrase lengths are generally short, since the high level of breath flow does not allow for phrases of more than a few seconds' duration. Vernacular songs are generally written within a rather narrow range of pitches, usually not much more than an octave. Even this is an expansion of the range of ordinary speech inflection. To extend the voice beyond this range in vernacular styles has two hazards: it might once again stretch the popular vocal idiom to where it loses touch with its speech origins, and it creates serious vocal problems for the untrained singer, who does not know how to handle vocal registers.

The accepted definition of vocal registers again takes us back to Manuel Garcia, who stated that a register "is 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."<sup>31</sup> While the subject of registers is contentious, a widely accepted view maintains there are two main vocal registers which are achieved "with extreme and mutually exclusive adjustments of the larynx."<sup>32</sup> These are the so-called natural registers as heard in a yodeller, who purposely switches back and forth between the lower and upper registers. In simple terms, it can be said that in the lower register, which goes by many names but is usually called "chest voice," there is an internal tension of the vocal folds which causes them to remain relatively short and thick. The stiffened folds then vibrate with large amplitudes, engaging the main body of the folds. In the upper register, which is often referred to as "head voice" or "falsetto," vibration is largely confined to the inner margins of the vocal folds, since tension is created by the stretching of the vocal ligaments which are located within the medial edges of the folds. In this mode the amplitude of the vibrations is small as the vibrating mass is reduced, and the vocal folds close less sharply, sometimes barely touching. This results in a tone with few high-energy partials.

In the untrained voice there is a sudden shift between the two modes of vibration which constitutes an audible break. As well, there is a noticeable

31 Garcia (1847) 1:6, trans. Paschke (1984), xli.

32 Janwillem van den Berg, "Register Problems," *Annals of the New York Academy of Sciences* 155, 132; see also by the same author, "Vocal Ligaments versus Registers," *Current Problems in Phoniatrics and Logopedics* 1 (1960), 19–34.

difference in quality between the two registers. In order to avoid this, most vernacular styles use one-register singing, thereby avoiding the problem of blending or uniting the registers. Male singers sing largely in the lower register, while a few make a mannerism of singing in the falsetto. Some vernacular singers, such as country-and-western singers, unabashedly switch registers, often with an audible break. This seems to heighten the rough-hewn and sentimental nature of this style. Nowadays, many popular female singers, including Anne Murray, sing almost entirely in the lower register, with the occasional foray into the upper register for effect. It could be argued that, since females generally speak in the lower register, then singing in the same register maintains the vernacular quality of the idiom. Some Broadway musicals also call for low-register singing from women, as opposed to the older operettas which employed upper register singing similar to opera.

One particularly interesting technique associated with some popular forms of vocal music is "belting." This occurs when the singer carries the lower register well above its normal limits by employing firm phonation and a high laryngeal position, coupled with high subglottal pressure. This requires a high level of physical effort.<sup>33</sup> The resulting tone, which rather resembles yelling, is considered appropriate for the high-strung nature of some songs, both Broadway songs and torch songs. Two of its chief practitioners today are Liza Minelli and Barbra Streisand, and it is common among both male and female singers. Belting is considered inappropriate for classical styles.

The classical vocal idiom, on the other hand, cultivates an even, or "equalized," voice quality which extends over an expanded range of two octaves or more, with no apparent break between the registers. In the classically trained voice, the stable maintenance of firm phonation, moderately high subglottal pressure, and low larynx tends to give a more uniform quality to the registers, often obscuring their differences entirely. This is one of the most difficult aspects of a singer's training. Register unification has been the ideal of classical singing since the early seventeenth century. Classical styles often encourage singing in the highest portion, or *tessitura*, of the voice. Sopranos sing mostly in the upper register, which, as noted earlier, is not their normal speaking register. Operatic styles especially exploit the extreme high notes, sometimes referred to as the "money notes" by professional singers, since they are essential for a successful operatic career. It is this glorification of high singing which many opera lovers

33 Beth Miles and Harry Hollien, "Whither Belting?" *Journal of Voice* 4, no. 1 (1990), 64–70; Jan Sullivan, "How to Teach the Belt/Pop Voice," *Journal of Research in Singing* 13, no. 1 (1989): 41–58; Harm Schutte and Donald Miller, "Belting and Pop, Nonclassical Approaches to the Female Middle Voice: Some Preliminary Considerations," *Journal of Voice* 7, no. 2 (1993): 142–50.

adore and many opera haters abhor. After all, high-tessitura singing completely removes the voice from its speech-inflection range in favour of the artifices of operatic conventions. For example, when Violetta sings a high B-flat just before dying of consumption in Verdi's *La Traviata*, even an opera lover's suspension of disbelief is challenged. Nowhere is classical singing further removed from vernacular singing than in this matter of tessitura.

In the classically trained male voice, a special vocal technique known as "covering" is required to sing high notes without yelling or switching to falsetto. Apparently this technique did not gain currency until around 1837, when the French tenor Gilbert-Louis Duprez employed the *do de poitrine* ("high C in chest voice") for the role of Arnold in Rossini's *William Tell*.<sup>34</sup> Prior to this, tenors routinely switched to falsetto for the highest notes. First described in 1840 by Diday and Pétrequin<sup>35</sup> and Garcia,<sup>36</sup> covering requires an especially vigorous closing of the glottis and lowering of the larynx against high subglottal pressure. This causes a particular tilt of the laryngeal cartilages that allows the lower register to be extended upward well beyond its usual limits while maintaining a voice quality which is compatible with the lower part of the voice, if not exactly equal to it.<sup>37</sup> These covered high notes are absolutely necessary for an operatic tenor, and are often employed by baritones as well. Duprez's rival at the Paris Opéra, tenor Adolph Nourrit, committed suicide in 1839 when he could not achieve a *do de poitrine*.<sup>38</sup>

Males who sing exclusively in the upper register are called falsettists. The name falsetto was probably derived from the perception that, in the male voice, the upper register was considered effeminate, or false, as compared with the deeper, more masculine quality of the normal male voice. One of the idiosyncracies of the early music movement is the indiscriminate use of falsetto for all styles of early vocal music. There is historical evidence to show that falsettists were important in some types of musical repertoire, such as sacred choral music. Since women were not allowed in cathedral choirs, boys and falsettists had to sing the upper parts. In this case, falsetto singing is indeed idiomatic to the style. However, there is no persuasive historical evidence that early singers of solo

34 Henry Pleasants, *The Great Singers* (New York: Simon and Schuster, 1966), 166.

35 Y. R. Diday, and Pétrequin, "Mémoire sur une nouvelle espèce de voix chantée," *Gazette Médicale de Paris* 8 (1840): 307–14.

36 Garcia (1847), 1:4.

37 Aatto Sonninen, "The External Frame Function in the Control of Pitch in the Human Voice," *Annals of the New York Academy of Sciences* 155 (1968), 68–89. Donald Miller and Harm Schutte, "Toward a Definition of Male 'Head' Register, Passaggio, and 'Cover' in Western Operatic Singing," *Folia Phoniatrica* (1993) (forthcoming).

38 Pleasants, 165–69.

vocal music, such as the Medieval *troubadours*, *trouvères*, and *Minnesingers* sang in falsetto. Yet, it is common to hear performances of this repertoire by falsettists. Regarding Italian monody, Giulio Caccini specifically rejected falsetto singing when he wrote, "From the falsetto voice no nobility of good singing can arise."<sup>39</sup> Yet, Caccini's songs are often sung today by falsettists. "Historical authenticity" is not well served by this practice.

Another vocal quality which plays an important role in idiomatic singing is vibrato. This was exhaustively researched by Carl Seashore and his associates at the University of Iowa in the late 1920s and 1930s.<sup>40</sup> Their findings have been further refined and quantified by later studies. Vibrato is a periodic oscillation of the voice in which there is a fluctuation of pitch, intensity, and timbre. The normal rate of vibrato is between five and eight cycles per second, while the acceptable pitch fluctuation is generally less than a semitone. Vibrato is considered to be a natural vocal phenomenon which is related to neuromuscular tremor, that is, the work-rest cycle which exists in all musculatures of the body, and which becomes especially manifest under certain conditions of muscular stress. When the voice is sustained at a particular pitch and intensity, as it is in singing, there is a fine balance of muscular stresses that results in vibrato.

In an untrained voice, where there is little engagement of opposing muscle groups, there is sometimes little sign of vibrato. Perhaps this is part of the reason why singers who use loose glottal closure, low subglottal pressure, and a high larynx exhibit less vibrato than those who sing with firm glottal closure, moderately high subglottal pressure, and low larynx. In trained voices, however, vibrato is a normal part of the tone. The vibrato provides the voice with a form of inner movement which is often associated with "warmth" and "richness." As the fundamental pitch fluctuates, so do all the harmonic partials and the intensity peaks, resulting in a complex texture of vocal resonance and increased intelligibility. As well, the vibrato can be associated with the tremulancy that often accompanies human emotional behaviour, both vocally and muscularly. The vocal vibrato, then, is an intrinsic part of the singing voice. It does not exist naturally on any other musical instrument, yet it is imitated by many.

There are some significant differences between vibrato as used in classical and in vernacular styles of singing. Classical styles generally employ a steady, even vibrato within the acceptable pitch and frequency parameters mentioned above. Singers of early music and choristers often sing with less vibrato than solo

39 Caccini, [viii], trans. Hitchcock, 56.

40 Carl Seashore, ed., *The Vibrato* (Iowa City: University of Iowa Press, 1932); *Psychology of the Vibrato in Voice and Instrument* (Iowa City: University of Iowa Press) 1936; *Psychology of Music* (New York: McGraw Hill, 1938), 33–52.

singers. Also, some choral directors cultivate a "straight tone" as an easy means of achieving choral blend (despite the colourless character of such a blend). Early music specialists perhaps go too far in rejecting continuous vibrato, regarding it as historically inauthentic due to a lack of historical references to vibrato. But a lack of such references cannot be construed as proof that vibrato was not an ordinary part of cultivated singing. An exaggerated vibrato might well have been considered a special ornament to be used for expressive purposes. However, in order to sing a straight tone, the vibrato must often be purposely repressed. This kind of vocal constraint would likely have merited comment, since it is often difficult and unnatural to sing with a straight tone. I have seen no historical evidence to suggest that early singers repressed the natural vibrato in their voices; until such evidence is found, I will continue to believe that straight-tone singing of early solo vocal music is an idiosyncrasy of the early music movement. The untrained singer of modern vernacular styles of music does not always generate an even vibrato, and may purposely avoid it. A common technique in popular singing is the so-called "vibrato crescendo," that is, a sustained note that begins with a straight tone and then develops a vibrato, often an exaggerated one, part way through the duration of the note. This is especially apparent in belting. If a similar effect is heard in students of classical singing, it is immediately criticized as a pop mannerism.

Some vocal scholars believe that the same mechanism which produces the vibrato also propels vocal trills and florid vocal roulades.<sup>41</sup> The trill is considered to be an expansion of the compass of the vibrato to the extent that two pitches are perceived rather than one; the same physiological mechanisms are present in both, and the trill rides on the impulse of the vibrato.<sup>42</sup> By extension, the impulse of the vibrato can be used as the vehicle for florid passages; the singer simply changes pitches on each cycle of the vibrato, thus making the passages self-propelling.<sup>43</sup> This technique is useful only as long as the rate of note change is no faster than the rate of the vibrato.

One final aspect of voice quality which is idiomatic to the classical singer is the ability to sing over a wide dynamic range, from the softest pianissimo to the loudest forte, while maintaining a uniform voice quality. In many singing

41 Seashore, 1932, 114; Thomas Shipp and Jean Hakes, "Voice Frequency Oscillations During Vibrato, Trill, and Trillo," *Transcripts of the 14th Symposium: Care of the Professional Voice* (New York: The Voice Foundation, 1986), 1:72.

42 Seashore, 1932, 63, 365; Fritz Winkel, "Physikalische Kriterien für objektive Stimmbeurteilung," *Folia Phoniatrica* 5 (1953): 232; William Vennard, *Singing: The Mechanism and the Technique* (New York: Carl Fischer, 1967), 199.

43 William Vennard, "The Relation Between Vibrato and Vocal Ornamentation," *Journal of the Acoustical Society of America* 49 (1971): 137.

manuals, one of the primary goals of vocal training is the ability to create crescendos and decrescendos on individual tones. Caccini called this *crescere e scemare della voce*, and it was essential for his *esclamazione* and other expressive devices.<sup>44</sup> In later vocal manuals, the true test of a singer's vocal technique was the ability to sing a *messa di voce* (a gradual crescendo and decrescendo on a sustained tone). This requires a mastery and coordination of glottal closure, subglottal pressure, stable vertical laryngeal position, and register unification. It is a staple in the vocal arsenal of the trained singer. The *messa di voce* and other dynamic gradations do not figure strongly in vernacular styles, especially when amplification and signal compression are involved.

The second important category of idiomatic techniques is related to *vocal articulation*, or the manner of beginning, joining, separating, and ending the tones in a musical phrase. Here again there are differences both within and between classical and vernacular styles of singing. Certainly the most characteristic idiom of articulation in the trained singing voice is the *legato*, or smooth connection of successive notes in a musical phrase, with no perceptible breaks or interruptions of the tone. Such a connection can only take place if pitches can be modulated on a continuum, with no abrupt mechanical changes. It is probably true to say that, among all musical instruments, the only one capable of a true legato is the human voice. Pitches, dynamic levels, voice colours, and vowels can all be changed without discrete breaks in the tone, due to the elastic properties of the vocal instrument. No mechanical instrument can make the same claims. Classical singing styles have always capitalized on the potential for legato in the voice. The great nineteenth-century voice teacher Francesco Lamperti (father of Giovanni Battista) said: "Without legato there is no singing [*Chi non lega non canta*]; and the two things that render the human voice superior to every other instrument are the power of *legato*, and the variation in colour."<sup>45</sup>

Vernacular styles of vocal music are often more concerned with intelligibility than with a smooth legato. Popular styles of singing not only maintain vowel formants close to those of normal speech, but also articulate the words in a speech-like manner. This was observed by musicologist Charles Seeger in his classic study of the folk-song, "Barbara Allen":

The singer trained in the bel canto of Italian opera or in the tradition of the German *Lied* tries to produce a desired quality in the stream of sound rather than in each separate note (barring, of course, exceptional notes to which they wish to give special effect). The British-American folk singer, on the

44 Caccini, 8.

45 Francesco Lamperti, *A Treatise on the Art of Singing* (New York: E. Schubert, [1871]), 21.

other hand, seems to give no special thought to quality of sound, but sings in as “natural” a voice as that in which he talks. Consequently, the singing voice varies greatly according to sex, age, and an infinite number of psychological and physiological factors. The lack of any preconception of what it ought to be gives, however, to the quality of the traditional singer’s singing a clearly recognizable character that can be instantly recognized by other carriers and by connoisseurs of the tradition.<sup>46</sup>

Seeger’s remarks have recently been echoed by early music specialist Paul Hillier, not in relation to folk song, but in relation to early singing styles. He suggests “getting away from modern vocal production with its largely undifferentiated sound, to a more vernacular, speech-based idiom and style of production.”<sup>47</sup> To a degree, all vernacular singers share some of the qualities of the folksinger in giving a higher priority to the words than to musical values.

Another technique of articulation is the use of the neutral vowel *schwa* [ə] which sounds rather like “uh.” When one word ends with a consonant and the next word begins with a consonant, a *schwa* can be interpolated between the consonants while maintaining the poise of the throat. This contributes greatly to intelligibility. Irish tenor John McCormack used *schwa* to such an extent that it became a mannerism. Unfortunately, *schwa* is neglected today by many singers, often at the expense of intelligibility.

Also important to idiomatic vocal styles is the way a note is begun and ended. This is known as vocal onset and release. In a written musical score, the notehead represents the “target pitch” of each tone. With an instrument such as the piano, all tones are entirely target pitches, due to the nature of the instrument itself. But with the voice, which is not restricted to fixed pitches, there is a good deal of variation in arriving at and leaving the indicated target pitch. In classical singing, close attention is often paid to spending as much time as possible on the target pitch, with accuracy of both onset and release being a priority. Of course, complete accuracy is not possible, and vocal onset and release often rise to or fall from the target pitch. Caccini spoke about one type of vocal onset, called the *intonazione della voce*, which approached the target pitch from an interval a third below the indicated note. He said it was a commonplace in the singing of his time, but cautioned that the low onset “should be scarcely suggested.”<sup>48</sup> This practice is, even today, more widespread than many listeners might realize. In fact, there

46 Charles Seeger, “Versions and Variants of the Tunes of ‘Barbara Allen,’” *Selected Reports of the Institute of Ethnomusicology of the University of California at Los Angeles* 1 (1966): 130.

47 Paul Hillier, “Framing the Life of the Words,” in *Companion to Medieval and Renaissance Music*, 308.

48 Caccini, [iii]; trans. Hitchcock, 48.

are some fine singers who sometimes approach the target pitch from an interval of more than a third below the written note. If this is done quickly, as Caccini suggested, the listener may not even be aware that it is taking place. If, however, it is done too slowly, it just sounds like sloppy singing. Caccini called it “unpleasant.” Francesco Lamperti called it “*strisciato* – that is, slurring up to his notes in mistake for legato;”<sup>49</sup> today it is usually called “scooping.”<sup>50</sup> When done with good taste, low pitch onset can enhance both the expression and the intelligibility of a text, and provide a link to the pitch modulation of the spoken word. Perhaps this is why vernacular styles allow for, and even encourage, much more leisure in the way pitches are approached. In general, the singer of vernacular music spends considerably less time on target pitches than does the classically trained singer.

*Portamento* is a vocal technique related to legato, and it is one of the chief devices of the old Italian school of singing. It is the gliding of the voice from one pitch to another while passing through all intervening pitches, in a slower manner than in vocal onset or in legato itself. While it can occur between any two pitches, it should be used sparingly for expressive purposes.<sup>51</sup> It occurs more frequently when descending from a higher note to a lower one than vice-versa. The Italian word *portamento* suggests “carrying” the voice from one pitch to another, rather than using an abrupt shift of pitch. The same device is used frequently in vernacular styles, but probably for a different reason. Whereas the classical singer uses *portamento* as an enhancement of legato, the vernacular singer does it because of its close relationship to the natural modulations of speech.

There is one special form of vocal articulation which is specific to a certain kind of florid singing used chiefly in early seventeenth-century Italian opera and monody, as well as in some later styles. Today this is called “glottal articulation,” and it is produced by separating successive notes in a phrase with a rapid opening and closing of the glottis, in which the steady stream of tone is interrupted by the quick opening and closing of the arytenoid cartilages, probably aided by aerodynamic forces.<sup>52</sup> Glottal closure is incomplete, as some breath continues to escape through the glottis, and this results in low subglottal breath pressures and

49 Francesco Lamperti, *The Art of Singing* (New York: [1916]), 17.

50 Michel, John F., “Scooping,” *Transcripts of the 11th Symposium: Care of the Professional Voice* (New York: The Voice Foundation, 1983), 1:100–102.

51 Francesco Lamperti [1916], 16–17; Garcia (trans. Paschke), 85.

52 S. L. Hamlet and J. M. Palmer, “Investigation of Laryngeal Trills Using the Transmission of Ultrasound Through the Larynx,” *Folia Phoniatrica* 26 (1974): 362–377; Jean Hakes, Thomas Shipp, and E. T. Doherty, “Acoustic Properties of Straight Tone, Vibrato, Trill, and Trillo,” *Journal of Voice* 1, no. 2 (1987), 148–56; Shipp and Hakes, 1985; Jean Hakes, E. T. Doherty, and Thomas Shipp, “Trillo Rates Exhibited by Professional Early Music Singers,” *Journal of Voice* 4, no. 4 (1990), 305–8.



weak energy in the upper partials of the tone. Glottal articulation is often managed better by those who sing with low subglottal pressures than by those who sing with high tones, and better by females, falsettists, and tenors than by the deeper voices. Glottal articulation can be faster than vibrato or vibrato-generated trills and passages, reaching ten to twelve pulsations per second; it can also lead to pitch, rhythm, and resonance irregularities.

Historically, glottal articulation was sometimes used for long passages of notes in scalar patterns, called *passaggi*, as well as for a reiterated single note called the *trillo*, both of which were a part of early seventeenth-century opera and monody. Glottal articulation was described by numerous seventeenth-century authors.<sup>53</sup> Giulio Caccini and Claudio Monteverdi are especially associated with the *trillo*, which was fashionable for about forty years. But the technique was not universally admired, perhaps because of poor execution. It was sometimes criticized for its similarity to the bleating of a lamb or goat, and it became known as the *Bokstriller* or *chevrement*. It is the antithesis of legato. Perhaps the reason why the *trillo* faded after such a relatively short period is that its associations with non-musical or even bestial sounds were so distracting; or, perhaps it was just too difficult to execute in a pleasing musical way. While the *trillo* was short lived, the use of glottal articulation for florid vocal passages continued into the eighteenth and nineteenth century, with names such as *marcato* or *martellato*. It was especially associated with the music of Rossini. Later composers demanded a larger vocal tone to compete with a larger orchestra, and the resulting high-pressure singing was not well-suited to glottal articulation, which gradually faded from operatic styles.

There are several other aspects of articulation which play a role in vocal idioms, and which are related to speech. One of these is diphthongs, or the gliding from one vowel sound to another on the same syllable, as in the word "sky." In classical singing, the first vowel [a] is held for as long as possible, only gliding to [i] at the last instant. In popular singing, at least in English, just the reverse is usually true, as the first sound is quickly left in favour of the second. Another technique is the tempo rubato. This is a misunderstood term that is sometimes thought to mean the rhythmic give-and-take of varying the tempo of the entire musical texture by means of accelerandos and ritardandos. But that is not what it means at all. Garcia made a clear distinction between the two practices:

In order to make the effect of the tempo rubato perceptible in singing, it is necessary to sustain the tempo of the accompaniment with precision. The

53 Sally Sanford, "Seventeenth- and Eighteenth-Century Vocal Style and Technique" (Ph.D. dissertation, Stanford University, 1979), 56–63.

singer, free on this condition to increase and decrease alternately the partial values, will be able to set off certain phrases in a new way. The *accelerando* and *rallentando* require that the accompaniment and the voice move together and slow down or speed up the movement as a whole. The tempo *rubato*, on the contrary, accords this liberty only to the voice.<sup>54</sup>

This was a technique that pianist Frédéric Chopin imitated in his *Nocturnes* for piano after hearing the bel canto singing style of Bellini's operas.<sup>55</sup> Unfortunately, these pieces are no longer played with tempo *rubato*. The celebrated French composer Camille Saint-Saëns also learned *rubato* from a singer, namely, Pauline Viardot, Manuel Garcia's sister. Saint-Saëns remarked, "Through Madame Viardot I learned the true secret of tempo *rubato* ... in which the accompaniment holds its rhythm undisturbed while the melody wavers capriciously, rushes or lingers, sooner or later to fall back upon its axis."<sup>56</sup> A related practice had earlier been called *sprezzatura* ("nonchalance") by Caccini,<sup>57</sup> and *il rubamento di Tempo* ("the stealing of time") by Francesco Tosi.<sup>58</sup> It would not be unreasonable to suggest that the practice extends all the way from Medieval troubadour songs to jazz. After all, language is made up of syllables of varying duration, even in metrical poetry, and cannot easily be shoehorned into the confines of strict metrical units without becoming rather rigid in the process. If singing is meant to be an extension of the expressive use of language, it too must engage in this kind of rhythmic articulation. Unfortunately, tempo *rubato* is neglected today, often being regarded as sloppiness rather than an expressive use of rhythmic tension.

There were other dimensions of rhythmic freedom as well. Tempo changes, *accelerandos*, and *ritardandos* have probably always been a part of vocal music. Caccini admonished singers to sing sometimes *senza misura* ("without measure") or *senza battuta* ("without a beat"), meaning again a disregard for the notated time values in favour of a certain rhythmic leisure that followed the accentuation of the words.<sup>59</sup> In Ireland, *sean-nos* (old style) singing is still practiced in "slow airs," where a high female voice sings in a highly ornate style with no accompaniment and great rhythmic freedom. This may be a remnant of

54 Garcia (1847) 2:24; trans. Paschke (1975), 75–76.

55 Jonathan Bellman, "Chopin and the Cantabile Style," *Historical Performance* 2, no. 2 (1989), 63–71.

56 Quoted in Bellman, 67.

57 Caccini, [i]; Hitchcock, 44–45.

58 Tosi, 99; Galliard, 156.

59 Caccini, [viii], *passim*.

a Medieval practice, with certain Arabian influences.<sup>60</sup> It seems that vernacular styles of music, especially jazz, use rubato and rhythmic bending to a much greater extent than do classical styles. Perhaps this is because vernacular styles stay closer to the speech origins of song than do classical styles, and allow for more rhythmic freedom.

These, then, are the main vocal techniques as they relate to both voice quality and articulation, and which combine in various ways to create distinctive vocal idioms. They include firm phonation versus loose phonation; the varied vocal colours created by vertical laryngeal positions and altered formants; the use of the singer's formant; *chiaroscuro*; the use of voice registers in particular ways, including one-register singing, register shifting, equalized registers, covered singing, and belting; types of vibrato, trills and floridity; dynamic gradations and *messa di voce*; the use of *legato*; various types of onset and release, including low pitch onset and *portamento*; the use of *schwa*; the use of glottal articulation on reiterated pitches or florid passages; different types of diphthongs; and the use of *tempo rubato*, freedom from metrical time values, and variations of tempo. To be sure, there are other idiomatic techniques as well, but those described here provide the basic critical tools necessary for an understanding of idioms.

As one example of how to apply these criteria, I now return to my earlier example of "Che farò senza Euridice," in which Gluck is said to have used a happy tune to set a sad text. The happy quality comes from the diatonic major-mode melody which follows rising contours.<sup>61</sup> Musical conventions of Gluck's day would have suggested a chromatic minor-mode melody with drooping melodic gestures to reflect the dark feelings of Orfeo who, having won Euridice from the Underworld, loses her for the second time by turning to look at her. Happy tunes do not work well for laments. So, what is the poor singer to do in order to compensate for this apparent compositional anomaly?

Tito Schipa's recording offers a case study. Schipa demonstrates that certain vocal techniques associated with *bel canto* have the ability to infuse this melody with pathetic elements not readily apparent in the written notes. Critical listening suggests that Schipa sings with firm phonation and a moderately high subglottal pressure, while keeping the larynx in a stable low position. This is heard as a "contained" sound in which glottal resistance "holds back" the breath. At the ends of phrases, one can often hear the quick release of breath pressure. The innate expressiveness of this kind of tone production may be due to the physical sense of pent-up emotion which this voice manifests. Emotion is born of conflict, and Schipa's vocal tone is also born of conflict: the conflict of breath pressure

60 Charles Acton, *Irish Music and Musicians* (Dublin: Eason & Son, 1978), 8.

61 Kivy, 74–75.

against glottal resistance, and of muscular antagonisms within the larynx itself. This was described aptly by English voice teacher, William Shakespeare:

With the great singer a never-ceasing pressure of breath is maintained, alike when he is singing his softest notes and when he is making his most dramatic effects; but through his natural production the effect reaches the audience as intensity of emotion, and so touches the soul, without the hearer being reminded of the force of breath and effort employed. Should this become apparent, the artistic effect is destroyed.<sup>62</sup>

Schipa's voice has both a bright edge and a dark hue, thus constituting *chiaroscuro*. *Chiaroscuro* itself contains an extraordinary acoustical polarity, dramatic by nature, that makes it compelling, and lends itself to the equally extraordinary world of opera. This vocal quality entirely transcends the vocalism of speech, and elevates the text to another aesthetic plane. Still, the vowels have not been altered beyond recognition, so the words are clearly intelligible. Schipa sings in the chest voice but with frequent episodes of covered singing, especially on the climactic high notes. This extraordinary maneuver again transcends the expressive range of normal speech or casual singing, and suits Orfeo's extreme emotional state. Schipa sings with an even, steady vibrato which enriches the sound and gives it a fragile tremulancy that might be equated with human emotional behaviour. He sings with a flawless legato, which suits the outpouring of emotion. He sometimes uses low pitch onset and *portamento*, which enhance the legato and add to the expressiveness and the intelligibility of the singing. His use of dynamic gradations on sustained tones, including crescendo, decrescendo, and a faultless *messa di voce*, further adds to the expressive quality of the singing. As well, Schipa chooses a slow tempo which is appropriate for the mood of the text. He uses tempo changes and rallentandos effectively to follow the ebb and flow of Orfeo's emotional state, and his climactic accelerando in the final section is gripping. He follows Gluck's admonition by avoiding empty vocal flourishes, and he certainly does not turn the aria into a "puppet-dance." Schipa's combination of idiomatic vocal techniques fits Manuel Garcia's description of *canto spianato*:

This style, the most noble of all, but also the least zesty, because of the slowness of its movement and the simplicity of its forms, rests only on the shades of the emotion, and the variety of the musical chiaroscuro. Here nothing can substitute for the correctness of the intonation, the expression

62 William Shakespeare, *The Art of Singing* (London: Metzler, 1910), 42.

of the voice, the purity and the effects of syllabication, the musical coloring. This style has for its principal resources the clarity of the articulation and the various degrees of energy which it includes; the breadth and the equality of the voice; the agreement, the fusion or the delicacy of the timbres; the use of drawn out sounds in all varieties; the finest shades of dynamics, potamentos, the tempo rubato. The artist who has obtained this result, so difficult to obtain with only these resources, completing their effect with the cantabile, knows how to phrase all kinds of songs.<sup>63</sup>

As sung by Schipa, “Che farò senza Euridice” is indeed the affective piece that Gluck intended. The true measure of its success is in the word-note-tone relationship. Idiomatic singing has more than compensated for Gluck’s apparently faulty tune.

The critical understanding of vocal idioms is, I believe, a necessary analytical tool for the study of historical and contemporary styles of music. What I have presented here is but a start toward defining these idioms, and a single example of how to apply them analytically. Any vocal style can be better understood using vocal idioms as an analytical tool. One thing is certain: the *bel canto* paradigm of classical singing remains the goal of serious students of art music. Its idiom is the product of a particular kind of vocal training which transforms the organs of speech into a virtuoso musical instrument capable of musical feats far removed from simple verbal communication or popular forms of music. Vernacular idioms, on the other hand, belong to the world of popular culture in which the singing voice remains closer to its speech origins, while eschewing the artifices of *bel canto* and employing the devices of electronic technology. Perhaps Kipling was right when he said, “Oh, East is East, and West is West, and never the twain shall meet.” Despite attempts at crossover singing, classical and vernacular vocal idioms maintain their distance from one another. The wonder of it all is that the human voice is so adaptable and multifaceted that it can satisfy the demands of such an enormous range of musical styles.

## Abstract

The identification of particular vocal techniques in singing, which combine to form distinctive vocal idioms, is important for an understanding of both “classical” and “vernacular” musical styles. The modern critical literature on song is based largely on the limited concept of a “word-tone relationship,” with musico-poetic synthesis as its ideal. Performance practices are as important to song criticism as is the study of written scores.

The elements of voice quality and vocal articulation, with specific reference to the physiology and acoustics of the human voice, provide the analytical tools for defining vocal idioms and their role in the value and success of a song. The description of such idioms requires a *rapprochement* between vocal history, pedagogy, and science. Using the bel canto paradigm as a reference point, this article discusses a variety of vocal idioms. Gluck's aria, "Che farò senza Euridice" is used to illustrate how an understanding of vocal idioms can alter our judgment of a piece which has sometimes been condemned for its poor word-tone relationship.