

Toward a *Bel Canto* Approach to the Horn
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Historical Context

Bel Canto literally means “beautiful singing” in Italian. Historically, it refers to a style of singing that prizes beauty of tone, legato phrasing and purity of vowel, the heart of the repertoire being from Mozart to middle Verdi. While Wagnerian style emphasizes power and rhetorical weight and the *Verismo* composers’ greater emotional intensity, the fundamental technical basis remains the same.

It should be remembered that throughout the 19th century most orchestral employment was in the opera house and that opera was the most popular form of “high culture.” The great tunes of the day were performed in various arrangements in the homes of the middle-class and the gondoliers of Venice were singing “*la Donna e mobile*” the morning after the debut. In America, the immigrant Italian and German communities cherished their opera as an embodiment of their culture, and even today in Germany, your car mechanic might very well engage you in a conversation about the merits of various interpretations of *Parsifal*.

The centrality of a vocal approach to instrumental playing in the 19th century is evidenced by the importance of vocal and operatic melodies and paraphrases and operatic style writing in the methods and etudes of the period, notably Section V of Arban’s famous method, “The Art of Phrasing, 150 Classic and Popular Melodies;” Henri Kling’s “40 Etudes;” and most of the etudes of Gallaay, especially the 22 Studies, 12 Studies op. 57, 12 Grands Caprices, and the 12 Etudes Brillantes.

The criticism of the early valve horn was based on what was perceived as a loss of the horn’s special “poetry” in both its legato and color. Remembering that music of this period is mostly tonal, chromatic alterations were always expressive and the nuance of the lightly stopped leading tones, neighbor tones and appoggiaturae, highlighted this expressiveness. Dauprat attacked the “cor mixte” or f-crook centered style of playing as inferior because by eliminating the different crooks the timbral palette of the instrument was severely limited.

It is obvious that any valve mechanism is going to be detrimental to the legato because of an inevitable interruption of the air stream. At first, poor valve design and crude machining techniques made this problem pronounced. In the preface to *Tristan*, Wagner pronounces this defect in valve-horn playing to have been conquered, but it is interesting

to note that Henri Kling in his 1881 “25 Studies and Preludes” is dissatisfied with the state of horn playing:

These examples should suffice to show to the student the importance of practicing such passages in this manner and very thoroughly. Thus he can achieve total mastery and command on the chromatic horn, an instrument which is so beautiful and unique, which, however, so many mediocre horn players in modern times have brought into disfavor because of their trumpet-like or piston-like handling of it, causing them to totally sacrifice its beautifully mellow tone, its nobility and majesty of expression, intimacy of feeling, and natural charm and grace.

These studies use a mixture of chromatic valve-technique and hand-horn execution using the valves as crook changes. In his method, Kling the first twenty-two pages are devoted to the natural horn and he is firm in the idea that the natural horn should be studied first before employing the valves. Since Kling’s valve-horn was still equipped with crooks, he advocated playing older passages for A and B-flat alto crooks on the indicated crooks (rather than trying to play Beethoven 7 on the E-crook).

Basic Concepts of *Bel Canto* Technique

Bel Canto technique is based on the legato. The first axiom is that one must “sing through” the consonants, i.e. the vocalization must not be interrupted even for un-voiced consonants like “t” and “p”. Even the *staccato* (which of course literally means “separated” as opposed to “short”) is performed “on the breath.” Secondly, vowels must be pure, produced by the tuning of the pharynx as opposed to manipulation with the lips. The Italian language with its round vowels and use of durational emphasis on strong syllables was justifiably prized as the ideal language for singing. One of the great difficulties in singing in German is the greater presence of hard un-voiced consonants that can lead to a tendency to “bark” out the notes, a practice which invariably leads to a decline in vocal health. American English is especially un-vocal because of the brightness and flatness of the vowels, with the notable exception of “Brooklynese.”

One of the most important physical properties of *bel canto* singing is maintaining an open throat. Ideally the throat should remain open, as in yawning, throughout the range, with the change of vowel and tessitura being negotiated by an arching of the back of the tongue (as well, of course by varying elasticity of the vocal chords). One will observe that when yawning, the tip of the tongue pulls down and back, while the base of the tongue moves forward, away from the back wall of the throat.

The last part of the technique to consider is the breath itself. The upper range of most voices, especially the male voices, require more breath-pressure than can be exerted by the expulsion potential of normal respiration. What is utilized in operatic singing is the strength of the intra-costal rib muscles. In this technique, the tension of the diaphragm (which engages on inspiration) is maintained through the start of the phrase. Deprived of

its customary expulsion method (i.e. the release of the diaphragm and the engaging of the *rectus abdominus* muscles) the body is forced to recruit the intra-costal rib muscles to expel the air through a contraction of the rib cage. It turns out that this muscular action is many times more powerful than that of natural respiration, enabling the singer to generate much more air pressure. Obviously, in order to make use of the rib cage to expel the air it must expand in all directions on the air intake. A primary fault is raising the chest on the inhalation as the diaphragm ceases descending and the ribs cease expanding as soon as the chest rises. The breath should begin with a relaxation of the *rectus abdominus* and may include SLIGHT rise of the chest at the end of the breath. The chest must, however descend through the beginning of phonation if this method is employed and must not be allowed to rise again until a rest of sufficient length arises in the music to permit a complete relaxation of the breathing apparatus and re-initiation of the inspiration. It is also interesting to note that tension in the solar plexus reflexively causes tension and closure in the throat.

Lastly, the singer has no objective instrument, but rather relies on developing a precise mental concept of the phrase he wants to sing, and develops a set of feelings that lets him know that things are working. The *bel canto* teacher's job has historically been to provide the feedback as to the result and guide the student to the sounds that are healthy. Interpretively, the singer must have a completely defined musical idea of the phrase before he sings it. In singing the physical follows the conceptual.

Application to Horn Playing

The person who first picks up the horn has, of course, no embouchure development. The beginner does perceive, if unconsciously, that speeding up the air makes the pitch go up. Since the beginner has no ability to use the mouth opening as a valve yet, they almost invariably resort to a constriction of the throat, glottis or both as a means of speeding up the air. Even after developing an embouchure, most students continue to use throat constriction to a greater or lesser degree. Emphasis on the yawning breath and maintaining an open throat is of great help in developing an effective technique.

The 19th century method books all advocate a syllable "tah," "dah," "dü" or French "tu." The French "tu" is perhaps the best vowel to use in the formation of the embouchure insofar as it is the only vowel whose phonation causes a contraction of the lips. One should always be forming this vowel with the embouchure even while changing the vowel inside the mouth as discussed below.

Oscar Franz and others acknowledge the role of vowel in the slur, "dah-eee" for the upward slur and "dee-ah" for the downward. To the person trained in *bel canto* singing this is the clue to pay attention to the raising and lowering of the tongue and it's effect on the air speed. The more one takes advantage of changing the mouth space to influence air speed, the fewer demands are made on the embouchure contraction. This method will allow the intermediate student to ascend to the top-line "F" with only minimal embouchure contraction in most contexts.

The greatest problem for the high brass player is of course developing a strong and reliable high range. It is helpful here to consider the physics of horn tone. What we are attempting to do when we phonate a pitch on the instrument is to get a standing wave to arise in the tube. The air molecules inside the horn compress and rarify at the frequency of the pitch phonated. The radiated wave comes off of and out of the bell. There is also a reflected wave, which comes back to the player and is perceived as “resistance.” Remembering that air has mass, we can appreciate that considerable force is necessary to achieve the high frequencies of the upper range.

This is where the *bel canto* method of intra-costal breath expulsion is essential to the development of an efficient high register for the horn player. In the pedal register, the horn demands copious air volume but almost no air pressure; above the staff, the horn requires tremendous air speed and pressure, but the contraction of the embouchure necessary to provide the elasticity to support rapid vibration, and the strength of the reflected wave result in very little air volume passing through the lips. This is where even the advanced player can start to close the throat in response to this sense of “back pressure.” Admittedly, one can get around the “resistance” problem through large throated mouthpieces and large-belled instruments and use mostly an air-volume approach to the high register, but this method places great strain on the embouchure and limits the player’s ability to play in the lower dynamics, especially in the upper range. In truth resistance can be one’s friend if the right approach is pursued, namely to seek to match the air speed/pressure/volume to the inertia of the air column inside the horn for any given pitch/volume/articulation. If this equilibrium is achieved, the demand on the embouchure is minimized and the high register can be phonated with relative ease and great reliability.

One of the great dangers in instrumental study is the presence of a physical instrument, which gives the player the idea that the instrument is what is making the sound. In brass playing, the fact that we have an embouchure that we can see and that the lips are so incredibly sensitive tempts us to think that the embouchure is the major component. The truth is that just as in singing, it is the player’s body that makes the sound occur, the lips are the vibrating interface between the player’s body and the instrument. No singer consciously controls the “stringing up” of the vocal mechanism, regardless of how much neural feedback the player is getting from his lips, they need to respond to one’s musical intentions rather than being instruments of conscious control. This brings us to perhaps THE central point. It is good musical concepts, both as to tone quality and phrasing that lead to good execution.

Bel Canto as a Guide to Interpretation

We should remember that Strauss was a prolific opera composer and that Mahler was an opera conductor, whose symphonic style is heavily influenced by operatic expression. Music before the more instrumentally conceived music of Bartok and Stravinsky and the ultra-rational styles, are based on vocal models. Wagner in his writings advocated the supremacy of melody and believed the accompaniment (including constant sub-division figures) must adapt to the rhetorical needs of the melody. This is in direct opposition to

what one hears so often the norm in orchestras today, where the player or section with the melody is told they can't play with freedom because there are steady eighth-notes in the accompaniment. The tyranny of the audition approach to "correct rhythm," insisting on only strict mathematical divisions of the beat, is robbing Classical music performance of the central 19th century repertoire of its style. The interpretation of the dotted figure and the placement of the beats in triple or compound meter are the places where this trend seems the most troublesome. As a counter-example to contemporary practice, in Maxime-Alphonse Book III, Etude 2, the composer advises the student that the "correct" interpretation is some undefined, but stylistically satisfying amount between the written single dot and a double dot. We have documentation of how much more flexible the orchestral concept of rhythm was in the past. Investigate the live recordings of Mahler 4 with Willem Mengelberg and the Concertgebouw Orchestra and the "Das Lied von der Erde" with Bruno Walter and the Vienna Philharmonic both from the 1930's. Mahler is known to have endorsed Mengelberg's treatment of his music and Walter was Mahler's protégé. These performances show a Puccini-esque use of rubato with the pulse changing constantly to inflect the musical gesture; especially noteworthy is the degree to which figures within the beat are not apportioned mathematically.

In the case of Italian opera, indeed most vocal music, the rhythm is determined by the words. In most cases the rhythm of the language is not strictly notate-able in our system. If an instrumentalist seeks to faithfully present the music of the period from Mozart to Berg, he should study the extensive record of brilliant vocalists from the early recording era through the 1960's. Caruso, Ponselle, Gigli, Martinelli, Castagna, Melchior, Flagstad, Nilsson, Corelli, Del Monaco, Tebaldi, Callas and Bjorling are a short list of great artists whose work is an objective record for us to emulate in our pursuit of an artistic expression. Indeed, listening to Rosa Ponselle's "Ernani, Involami" should be a prerequisite to studying any of Kling's coloratura variations on operatic themes in his "40 Studies." The stentorian power of Del Monaco or Melchior is a paradigm for the kind of sound one seeks in the climactic passage of the first movement of Mahler's third symphony.

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