

Aspects regarding articulation in vocal art

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Abstract: *Singing being nothing more than words that communicate and sounds that move, singers are distinguished from instrumentalists by having to respond to a particular challenge, that of singing words, that is, vocals are given a specific pitch and sustained according to the rhythmic demands of the music. While vowels are the carriers of vocal tone, consonants suspend it, but word meaning, timing, and rhythm cannot be communicated and conveyed accurately if the consonants are not well articulated.*

Great pedagogues of the 19th century and especially of the last century, analyzed all aspects of articulation, its correct education and formulated solutions to possible questions or stages of vocal education.

Key-words: *articulation, vowels, consonants*

1. Introduction

The main element which determines the quality of a vocal soloist is the voice, the sound produced by the vibration of the vocal cords and modified as amplitude and pitch by the resonator cavities. But the human voice has yet another precious characteristic, that of producing vowels and consonants. This gift, specific to the human being, has a special meaning when it comes to displaying ideas and emotions, this trait enriching limitlessly the power of expression and conviction.

With all the differences of opinions and methods of education, since „we cannot speak about a unanimous opinion concerning the vocal education, because there is no pedagogy but pedagogues, who do not have in common but a part, more or less meaningful, of values of vocal pedagogy.” (Ardelean 2020, 11-12) some aspects being controversial or possibly interpreted differently, the authors emphasize the fact that without knowing the basic principles of the anatomical-physiological elements of the phonator apparatus, of the functional methods of voice education, it is not possible to cultivate a voice with plurivalent tonal qualities, with flexibility and technical complexity. Singing, that is flawlessly

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controlling your voice, is a simple act in itself and there is no point in complicating it, but it is necessary to establish its foundations: breathing, resonance, emission and articulation.

The music critic Henry Pleasants, in his work *The Great Singers: From Jenny Lind and Caruso to Callas and Pavarotti*, summarizes the effects of a correct singing from the technical point of view: „Round, full sound, homogeneous spread over the entire tonal scale, clean intonation, unbroken legato, eloquence of phrasing, purity of vocal constructions. Shouting, harsh, uncontrolled-open sounds, violent or vulgar expression are to be avoided.” (Pleasants 1981, 19) This requires a perfect control of breathing (*sul fiato*), the awareness of a laryngeal-pharyngeal resonance, a homogeneous emission and an articulation that is only possible if the generating tone works independently of the articulation process.

2. Objectives

The purpose of this paper is to identify works that deal with articulation in singing and to provide a synthesis of the ideas included, in the subsidiary, the engagement of students in the examination of good quality sources, the valorization of theoretical-informative tools and practical-action, by implementing a training method.

3. Chapters and headings

The major challenges faced by the singing teacher are, among others, those regarding articulation, choosing the best resources among the many available, and providing effective instruction in the time allocated to these courses being a duty, even a leadership one. With so many demands, it is difficult for the student to meet these challenges and therefore it is important for the teacher to be aware of the most current and acceptable approaches to teaching these contents.

Over time, several pedagogues showed a special interest in articulation, considered a major aspect of vocal technique in the 19th century, among the most remarkable being Manuel García (1805-1906), Francesco Lamperti (1811-1892) and his son, Giovanni Battista Lamperti (1839-1910), and in the 20th, Cornelius Lawrence Reid (1911-2008) and Richard Miller (1926-2009).

This study first wants to highlight the consulted treatises and the opinions of the five authors regarding the articulation, but also to emphasize the reality of the research on the subject analyzed starting from the 19th century results based on

methods borrowed from other fields: physics, medicine, mathematics, biology, aesthetics, etc. demonstrating that the only functional methods in voice education are those based on the anatomical-physiological elements of the phonator apparatus.

Name of the author	Title	Publishing House	Year
Manuel García	Art of Singing	C. H. Ditson & co.	1800
Manuel García	Hints on Singing	E. Ascherberg	1894
Francesco Lamperti	Guida teorico-pratica-elementare per lo studio del canto	Ricordi	1864
Francesco Lamperti	The Art of Singing	G. Schirmer	1890
Giovanni Battista Lamperti	The Technics of Bel Canto	G. Schirmer	1905
William E. Brown	Vocal Wisdom: Maxims of Giovanni Battista Lamperti	Taplinger Publishing Co.	1931
Cornelius L. Reid	The free voice, A Guide to Natural Singing	Joseph Patelson Music House	1975
Richard Miller	The Structure of Singing: System and Art in Vocal Technique	Schirmer Books	1986
Richard Miller	On the Art of Singing	Oxford University Press	2011
Richard Miller	Solutions for singers, Tools for Performers and Teachers	Oxford University Press	2004

Table 1. *Table of Treatises*

4. Results

James Stark, in the treatise *Bel Canto A History of Vocal Pedagogy*, states a great truth, that is „There is an expressive power in the trained singing voice that I like to refer to as the ‘vocal aesthetic.’ This is the power of the singer to astonish, charm, or move an audience in a way no other instrument can. Part of the power of expression, of course, is due to the presence of words, which convey their own meaning.” (Stark 1999, 309)

4.1. Manuel García

In *Art of Singing*, Manuel García, after recalling the four main organs and their function in singing (the lungs, with the role of the bellows, the larynx, the vibrating device, the

pharynx, the sound propagation device and the oral cavity, the articulation mechanism), he emphasizes that in this last system happens the union of the sound with the text, an act of first importance, because, "Where the singer has not attentively analyzed" the mechanism that produces both vowels and consonants, his articulation will be deficient in ease and energy inasmuch as he has not learnt the secret of giving that development and equability to the voice, which he might attain in simple vocalization, and cannot employ at pleasure the timbre suitable to the passion he wishes to express." (García 1800, 43)

Analyzing the vowels, whose number from a sound point of view he considers unlimited, and their production, he states that the oral apparatus is the most important organ of articulation. He notes that the choice of the colour of each vowel depends on two aspects: pitch, determined by the desired emotion, and the homogenizing of the registers, vital to a quality vocal performance and which, although different, are desirable to coexist. The solution lies in his opinion, in modifying the vowel, „by this means, a seeming equality results from a real, but well-concealed inequality of the vocal sound. This precept applies to each register throughout the entire compass. If a vowel remained constantly open, as the a when sounded in the word madre, it would give brightness to the low and middle sounds, while high notes would be shrill and shrieky; whereas a vowel that is invariably covered, like the o in the word monte. would give richness to high notes, and make low ones veiled and dull. This method applied to all vowels, will supply us with the following principle: The "a" approaches the open "o". The open e approaches the e; and next to it, the eu. The "i" (Italian) approaches the "u", without the aid of the lips. The "o" approaches the "ou". When a vowel is to be brightened, an exactly opposite process to that above indicated is requisite: the "ou" approaches "o" ; o, a; and so on with the rest. Vowels which are very acute as i (Italian,) and u (French,) if sung as they are spoken, would contract the voice, and inconvenience it. To avoid this, a pupil should open these vowels a little more than is required for spoken pronunciation." (García 1800, 44)

He draws attention to the jaws muscles, which must remain flexible at all times. Regarding consonants, after formulating a classification of them into explosive and sustained, he describes the physiological processes that occur when they are articulated. In one of the last works approved by Manuel Garcia, Hints on singing, written in question-answer form, in the chapter called The Articulation, he emphasizes that the training of a performer is not complete without the study of articulation because "To express any particular feeling or idea we must make use of words. Hence the importance for the singer of delivering these with the utmost distinctness, correctness, and meaning, under the penalty of losing the attention of the audience." (García 1894, 45)

Although he reiterates the principles of vowel and consonant formation and

highlights the importance of stress identification, the practical aspects are dominant. When asked if there is any analogy between vowels and pitch, Garcia answers that this is not only a reality, but that it is "The most intimate. We know that changes of form in the vocal tube determine analogous changes in the timbre. Vowel-shades and timbres are but two different names to express the same modifications of sonority in the voice. The result of this mutual dependence between Pharynx, Timbres, and Vowels is that a change in one produces corresponding changes in both the others." (García 1894, 46)

For the emission of vowels, which support the voice, pitch quality, tonic stress and vocalization, „it is required first that the jaw should be drooping loosely, secondly that the vocal arch should be expanded. The tongue should be flat and limp for the a, hollowed at the back for the o, and somewhat raised in the middle for the e (tregua). The closed é (nero) needs that the distance between the tongue and palate should be lessened, and that the edges of the tongue should touch the upper teeth at the sides. When the Italian and English i (io), ee (free) are to be uttered, the tongue still further reduces its distance from the palate, while its edges are pressed between the lower and upper molars. The closed o (volpe, correre) is the result of the expansion of the arch coupled with a very moderate rounding of the mouth. The increase of this movement will produce the Italian u and the English oo." (García 1894, 46)

Consonants are produced by the lack, partial or not, of the emission of sounds by the lips, teeth, tongue, hard palate, soft palate etc. They represent the skeleton of the words and have three distinct functions: to convey the meaning of the words, to segment the time and to mark the rhythm through their percussion. There follows a series of exercises for acquiring a correct mastery of the articulation of consonants, but also for fixing some problems regarding keeping the generating tone at the junction with the words.

Concerning the accents, he distinguishes two more important categories: grammatical, that is „the prolongation or certain vowels in the word (accente tonico of the Italian)" and gives two examples, I mentioned only the first of them: *Nessùn maggior dolòre che ricordàrsi del tèmpo felice nèlla misèria* (Dante) and expressive, because „In singing a melody we have to add to the prolongation the elevation, the intensity of the sound and the timbre. These three characteristics constitute the pathetic accent." (García, 1894: 46)

4.2. Francesco Lamperti

Approaching the same structure himself, question-answer, in *Guida teorico-pratica-elementare per lo studio del canto*, referring to articulation, he states that „In order to obtain all the resources it offers, voice must be released with a long sustained sound, with the concern that articulation does not destroy with any justified reason the

sonority, because such modification, besides the fact that is detrimental for the expression, brings terrible damage to uttering syllables.” (Lamperti 2015, 37) and that a wrong articulation in singing may lead to hardness and harshness. He also offers a few exercises to acquire an accurate mastery of articulation.

Nineteen years later from the publishing of the first work (1864), in *L'arte del canto* (1883), although he changes his opinion concerning some statements, he remains determined about the presented subject.

4.3. Giovanni Battista Lamperti

His son, Giovanni Battista Lamperti, the one who developed and promoted the principles of Lambert school, in the only book he published, *The Technics of Bel Canto*, confirms his father's statements and exercises. William E. Brown, in the thesis *Vocal Wisdom: Maxims of Giovanni Battista Lamperti*, in which the disciple highlights the ideas and principles of his great pedagogue, including the emission of vowels and consonants, when he refers to the connection of word with tone and breathing, states that Giovanni Battista Lamperti believed that if diction dominated the interpretation, the throat relaxes instantly, word, tone, breathing balance, resonance, energy and expression become smooth and manageable, whereas a greater tension in any aspect of word, tone and breathing destroys the connection. If breathing excesses, support is ruined, if tone exaggerates, phonation becomes pressed, and if word is unclear, this is a sign that the other two are inaccurately executed, except for the high-pitched notes. (Brown 1931, 104)

4.4. Cornelius L. Reid

In the treatise *The free voice, A Guide to Natural Singing*, mentioning that all processes of instruction must be supported by theoretical postulates, states that „beauty of tone is dependent upon the purity of the vowel. From this it is evident that vowel purity should be a constant object of attention when the voice is exercised. Vowel purity is the same as physiological rightness. There is only one way for the vowel to be pure and that is for the principal resonators i.e., the laryngeal, oral, and postnasal pharynx, to adjust with precision. (...) One of the focal points upon which the successful training depends is an insistence on vowel purity.” (Reid 1975, 88)

The essence of all vocal exercises in the author's opinion, is the legato, the accurate articulation becoming from its accurate execution. „In effect, legato singing equates to technical proficiency and indicates that adjustment has been maintained throughout the length of the musical phrase within which all functional elements have met in agreement. To the extend the adjustment is correct, a natural homogeneity is

attained which affords the singer more than ample control over his technical resources (Reid 1975, 95-96).

A precise legato assures the connection between registration and resonance adjustment. „It encourages the presence of vibrato and helps link one vowel to another smoothly. Finally, it coordinated all of these factors into a functional entity. The legato is fundamental to good singing” (Reid 1975, 96).

4.5. Richard Miller

Professor Richard Miller, in the treatise *The Structure of Singing: System and Art in Vocal Technique*, mentioning the contributions of some of his contemporary researchers, considers that vowels are „capable of maintaining a specific vocal tract configuration and sustaining phonation. In singing, such a configuration of the vocal tract may extend through an entire expiratory phase of the breath cycle, if so desired. Unless vowels are improperly produced, no friction noises intrude during the sound. The characteristic quality of the vowel depends on the vowel formants, which have fixed values for each particular shape of the vocal tract” (Miller 1986, 70).

He examines the vowels' formation and the position of the mouth for vowels during singing and although he accepts the ideal of pure vowel, he believes that „It is not possible to set a basic posture of mouth, lips, tongue, and jaw through which all vowels are to be sung, without distorting most (or all) of them. The jaw and the tongue are not in the same positions throughout all vowel sounds in speech; a hand placed lightly on the jaw will register considerable jaw mobility during speech; observation with a mirror will verify that the tongue is not equally flat, low, and grooved throughout the sequence of vowels. Why, then, could one basic posture be appropriate for singing?” (Miller 1986, 74) he offers several exercises for vowel differentiation.

Regarding the consonants, he thinks that they are mainly responsible for the transition sounds which appear. „Transition sounds (also known as glides) result from the constantly changing positions of the vocal organs as they approach the subsequent phoneme (on-glide), or as they leave a phoneme (off-glide) (Carhart et al. 1961, xxiv-xxxi). Such intermediate positions of the resonators, so common in speech, must be minimized in singing if voice timbre is to remain uniformly resonant. Consonants need not be considered unwelcome intruders that impede good vocalization. If each consonant is permitted to enjoy its brief but exact phonetic location and is allowed a clean departure when its stint is over, the singer's ideal of the "pure" vowel will not be violated” (Miller 1986, 79). He also elaborates exercises for consonants on different types of problems which may occur.

As a conclusion, he states that „Neither the demands of articulation nor the search for resonance sensations must be permitted to fragment the scale.” (Miller 1986, 150).

In the thesis *On the Art of Singing*, he confirms the statements from the previous volume: “Tone and the individual vowel, as has been seen, result from the matching configurations of the larynx and the vocal tract. For the singing voice, as for the speaking voice, neither undistorted tone nor recognizable diction can be superimposed on a single predetermined acoustic posture. As spectrum analysis demonstrates, diction need not be inimical to tone, because it is part of the timbre balance. (...) Diction does not exist as a separate entity from tone” (Miller 2011, 27).

The last book written by Richard Miller is *Solutions for singers, Tools for Performers and Teachers*, where, in the question-answer frame, emphasizes once more that he disagrees with a fixed position in uttering vowels, stating that „To hold the jaw or mouth in a single shape while attempting to define vowels is contrary to normal, uncontrived vocal-tract response to laryngeally generated tone. It is in direct conflict with the adage of the historic international school, *Le parole sempre sulle labbra* (the words always upon the lips). If the mandible is retained in one low position, all vowel sounds share a common quality of distortion. The changing postures of the lips, the tongue, the jaw, the fascia of the zygomatic region, the velum, and the larynx determine flexible articulation. No one of these contributors, including jaw and tongue, can be held in a set position without inducing strain and distorted voice quality” (Miller 2004, 66-67). He also mentions that the way a singer manages the consonant phonemes vocalic and non-vocalic influences the success of the phrase direction and legato line. „The consonant is as important as the vowel. Appendix III illustrates IPA symbols for most of them, with model words in several languages. In my teaching I draw particular attention to the need for skillful handling, in every musical phrase, of anticipatory consonants, single consonants, doubled consonants—both voiced and unvoiced—and the retention of their phonetic values. Relationships among properly articulated vowels and consonants are the very substance of good vocalism. Diction is not something that is added on as an overlay to voice technique; it is one of its chief determinants” (Miller 2004, 111). He offers lots of solutions for flaws occurring when articulating vowels and consonants.

5. Conclusionss

Without exception, the mentioned vocal pedagogues state that, without knowledge of the basic principles, of the anatomical-physiological elements of the phonatory apparatus, of the functional methods of voice education, it is not possible to cultivate a

voice with multilateral tonal qualities, with flexibility and technical complexity. For example, Francesco Lamperti, in the study *Guida teorico-pratica elementare per lo studio del canto*, Milan, 1864, highlights the fact that “without a fundamental advance study of singing we will have shouters gridatorii, but never real singers. Their hazardous and shrill sounds, outside the norms of art, will be cold, in spite of force or sonority, always without expression, devoid of true dramatic emphasis, always monotonous, and incapable of varying the form and meaning of the concept created by the imagination of the composer and librettist. The lack of artistic experience will determine, as I have already mentioned, the ruin of the voice and the premature disappearance from the artistic life.” (Lamperti 2015, 17-18) and his son, Giovanni Battista Lamperti, in *The Technics of Bel Canto* says that “The human voice is the most precious of musical instruments, and more delicate than any other. Only a singer who can sing well is able to endow it with sustained force and expressiveness. It is a matter of but a short series of successive tones yet what a difference in effect between the finished artist and a bungler! The singer who is once in possession of a perfectly trained voice, will preserve this inestimable treasure till an advanced age. How rich a reward for a few years of sensible and diligent study, reinforced by an orderly mode of life!” (Lamperti 1905, 36)

There is a clear correlation between articulation, legato and phrasing, they have common principles of education, a legato being only considered to be of quality when the notes are linked with the same tonal color and with good highlighting of each individual tone. Most pedagogues consider that one of the most difficult stages to overcome is that of combining legato and *sul fiato* phrasing, with articulation, i.e. finding that compromise necessary to separate and at the same time combine the art of singing with that of speaking, without compromising one of them.

After going through the mentioned works, I think that we cannot talk about a correct vocal emission without an appropriate articulation. The notion of articulation, however, is not identical to diction, because although many singers try to pronounce the text as intelligibly as possible, this does not mean much, the text can only be transmitted correctly when *sul fiato* is articulated, it becoming intelligible exclusively by vocal means and without fracturing the melodic line.

Professors Reid and Miller describe in detail the articulatory apparatus, consisting of the tongue, lips, teeth, hard and soft palates, which modify the acoustic properties of the vocal tract, the articulation depending on two different muscular processes: a first group of muscles is that which produces and forms the tone on the vowel at the level of the vocal cords, the second is the muscles of the tongue, jaw, lips and face. The production of tone is not allowed to disadvantage the articulation, but the education of a singing on an exaggerated articulation will certainly disturb the resonance, a singer of value distinguishing himself by knowing how to use the

transition from one vowel to another in the musical phrase, with legato and properly controlled respiratory support.

A correct method of study requires the release of the voice and the control of phonemic forms.

I share the opinion that such studies are a necessary resource, which have the potential to answer possible questions or reinforce acquired feelings. The format of such an analysis becomes relevant to the extent that it will encourage the reading of all the mentioned treatises.

6. References

- Brown, William Earl. 1931. *Vocal Wisdom: Maxims of Giovanni Battista Lamperti*. New York: Taplinger Publishing Co.
- García, Manuel. 1800. *Art of Singing*. New York: C. H. Ditson & Co.
- García, Manuel. 1894. *Hints on Singing*. Translated from French by Beata García. London: E. Ascherberg.
- Lamperti, Francesco. 1864. *Guida teorico-pratica-elementare per lo studio del canto*. Milan: Ricordi.
- Lamperti, Francesco. 2015. *Ghid teoretico-practico-elementar pentru studiul cântului*. Foreword, notes, translation from Italian and book coordination by Ioan Ardelean. București: Musical Publishing House.
- Lamperti, Francesco. 1883. *L'arte del canto*. Milano: Ricordi.
- Lamperti, Giovanni Battista. 1905. *The Technics of Bel Canto*. New York: G. Schirmer.
- Miller, Richard. 1986. *The Structure of Singing: System and Art in Vocal Technique*. New York: Schirmer Books.
- Miller, Richard. 2011. *On the Art of Singing*. New York: Oxford University Press.
- Miller, Richard. 2004. *Solutions for singers, Tools for Performers and Teachers*. New York: Oxford University Press, Inc.
- Pleasants, Henry. 1981. *The Great Singers: From Jenny Lind and Caruso to Callas and Pavarotti*. Simon and Schuster. New York.
- Reid, Cornelius L. 1975. *The free voice, A Guide to Natural Singing*. New York: Joseph Patelson Music House.
- Stark, James. 1999. *Bel Canto - A History of Vocal Pedagogy*. University of Toronto Press.