



## **Intersections between spanish vocal technique in singing and aspects of voice physiology**

### **Intersecções entre a técnica vocal espanhola no canto e aspectos de fisiologia da voz**

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#### **ABSTRACT**

The Spanish Vocal Technique of Singing, taught in Brazil by Prof. Victor Olivares in the period from the 60s to 2008, and by the author of this article, from 1990 to the present, offers specificities linked to aspects of voice physiology, in the work of Ph.-E. Souchard (1989a and 1989b), also compared to other vocal techniques such as French and German. In this article we discuss these peculiarities, dialoguing with information present in the work of Richard Miller (1997) about vocal techniques of different nationalities.

**Keywords:** Vocal, Voice Physiology, Spanish Technique.

#### **RESUMO**

A Técnica Vocal Espanhola de Canto, ministrada no Brasil pelo Prof. Victor Olivares no período dos anos 60 até 2008, e pela autora deste artigo, desde 1990 até a presente data, oferece especificidades ligadas à aspectos de fisiologia da voz, na obra de Ph.-E. Souchard (1989a e 1989b), frente também à outras técnicas vocais como a francesa e a alemã. Neste artigo discutimos estas peculiaridades, dialogando com informações presentes na obra de Richard Miller (1997) acerca de técnicas vocais de nacionalidades diferentes.

**Palavras-chave:** Vocal, Fisiologia da Voz, Técnica Espanhola.

#### **1 INTRODUCTION**

The Spanish Vocal Technique of Singing, taught in Brazil by Prof. Victor Olivares in the period from the 60s to 2008, and by the author of this article, from 1990 to the present, offers specificities linked to aspects of voice physiology, in the work of Ph.-E. Souchard (1989a and 1989b), also compared to other vocal techniques such as French and German. In this article we discuss these peculiarities, dialoguing with information present in the work of Richard Miller (1997) about vocal techniques of different nationalities.

#### **2 GOAL**

To promote a discussion about specific aspects of vocal technique, especially the Spanish Vocal Technique in Brazil, which produce unique power in the work with the singing voice, compared to the German and French vocal techniques, taking into account elements of voice physiology.



### 3 METHODOLOGY

It is a comparative study and a reflective dialogue. Unique information of French, German and Spanish vocal techniques was approached in relation to aspects of voice physiology, in view of vocal productivity.

### 4 DEVELOPMENT

Breathing was the element focused on the studies. Reflecting on the productivity of breathing types in French, German and Spanish techniques, in the light of elements of voice physiology in the work of Souchart (1989<sup>a</sup>, 1989<sup>b</sup>), specificities of the Spanish Vocal Technique were imposed. Miller (1997) explains that breathing in the French technique, known as "natural breathing", is seen as a practice that does not require any special development or exercise. That's why they call it "natural." In this technique it is also believed that the breath of speech should be the same as that of singing. But we cross-check this information with that of respiratory capacities that Ph.-E. Souchart (creator of the Global Postural Reeducation RPG) indicates in his book *Respiration*: that for speech it is necessary from 1,500 to 2,000 cm<sup>3</sup> and for singing from 3,000 to 4,000 cm<sup>3</sup>. And so we find that there is an idiosyncrasy in this case. We could see that the respiratory capacity of speech is much lower than that of singing. Thus, using it for singing does not seem to be in agreement with this physiological information of respiratory capacities of the human being. Singing requires twice as much breathing capacity as speech. Regarding the German and Spanish techniques, the breaths they use are also the lower abdominal one. There is no indication in the German technique as to respiratory capacity, there are no exercises of its development. Comparing with the Spanish technique, in this one we found an important work of increasing respiratory capacity. This is the "Air Retention" exercise, in which air retention is progressively increased, from 5x 5 seconds to 10x 70 seconds. Thus, with this practice, there is a significant increase in air capacity for the singer.

But this is not the only difference between these two techniques. There is yet another very important one for the productivity and power of vocal performance. The imbrication of the viscera and abdominal muscles with the diaphragm tendon in the Spanish Vocal Technique in Brazil, produces an abdominal movement different from that of the German technique. In this, the lower abdomen moves into the body, towards the back, the spine, and in the Spanish Technique, it moves towards the inside but also upwards, interconnecting the viscera and abdominal muscles with the diaphragm, which is located above. This interconnection is proclaimed by Souchart (1989) and the author indicates that a disconnection of these involved elements would be like a disinsertion of a muscle into a bone. There would be no way to move the muscle, it would be without access. Similarly, if the diaphragm tendon does not interconnect with the viscera and abdominal muscles, the author indicates that it will be without direct access. This interconnection is responsible for the possibility of development of the peripheral muscular portion of the diaphragm, with



specific exercises for this in the Spanish Vocal Technique, a bodybuilding of the diaphragm, and also, of its control in ascent and descent, giving the singer his greatest control. This is relevant in that if the singer can control more his descent and ascent, he controls more the capacity of inspired air (increasing it) and its output, his sung phrase sizes, for example.

It was possible to observe that, in the light of the physiology specifications indicated by Souchard in his books *Respiration* and *Diaphragm*, both the German and French techniques have practices that do not match the physiological aspects of the voice. In this sense, the contribution of the Spanish Vocal Technique occurs as a development of the respiratory capacities and imbrication of the diaphragm tendon with the viscera and abdominal muscles.

## **5 FINAL CONSIDERATIONS**

Singers need vocal techniques that help them to have productivity and power in singing. We also consider it important to make crosses between aspects of vocal physiology with the available vocal techniques. We hope to contribute to the discussion and study of the aspect of breathing in various vocal techniques, as we did for the German, French and Spanish.



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