

# INTERDISCIPLINARY DOCTORAL SCHOOL

Faculty of Music

PhD. Candidate Anda Olimpia Pop

# CONSCIOUS BREATHING – THE CONNECTION BETWEEN REPERTOIRE VERSATILITY AND VOCAL HEALTH

# **SUMMARY**

Scientific supervizor:

Prof. Filip Ignác Csaba, PhD.

BRAŞOV, 2023



# **TABLE OF CONTENT**

IIV	ITRODUCTION		6
1	CONSCIOUS	BREATHING – THE FOUNDATION OF VERB-VOWEL CONSTRUCTION	8
	1.1 Conscious	breathing or the art of breathing	8
	1.1.1 Singing	g is another way of breathing (Rilke)	8
	1.1.2 How th	ne body is affected in working with breathing	8
	1.2 Instrumer	nt body or breathing body	9
	1.2.1 Comple	exity and self-regulation of the vocal system	9
	1.2.2 Matter	and structure of the instrument body	9
	1.2.2.1	Skeletal-muscular system	9
	1.2.2.2	Larynx	10
	1.2.2.3	Laryngeal suspensory system	10
	1.2.2.4	Respiratory system	10
	1.2.2.5	Diaphragm chain	10
	1.2.2.6	Vocal tract	10
	1.2.2.7	Ear and other sense organs	10
	1.2.3 Self-or	ganisation, differentiation and self-regulation of the respiratory system	11
	1.2.4 Inhale	and exhale	11
	1.2.4.1	The importance of the diaphragm – myth or reality	12
	1.2.4.2	Types of breathing	12
	1.2.5 Effects	of posture on costo-diaphragmatic breathing	13
	1.2.5.1	Correct and incorrect posture	13
	1.2.5.2	How a vocal professional breathes	13
	1.2.5.3	Support (Appoggio/Support)	14
	1.2.5.4	Appoggio and relationship with phonation	14
	1.3 The vibrat	ting body	15
	1.3.1 Theorie	es of sound production assume the following factors:	15
	1.3.1.1	Subglottic pressure (the force that opens the glottis)	15
	1.3.1.2	Vocal cord elasticity (the force that closes the glottis by recoil)	15
	1.3.1.3	Mobility of the vocal cord mucosa	15
	1.3.1.4	The effect of Bernoulli's law.	15



	•	1.3.2 Consci	ous breathing and vocal resonance	16
		1.3.2.1	Breathing and mouth position	16
		1.3.2.2	Lower jaw	17
	,	1.3.3 Profes	sional singer intonation and vocal audio feedback	17
		1.3.3.1	Voice control through the cybernetic circuits of the ear	17
	,	1.3.4 The vo	ice – mirror of the professional performer's body organisation	19
	1.4	Conclusio	n: Conscious breathing – the connection between body, mind and voice	19
2	Т	HE IMPORT	TANCE OF CONSCIOUS BREATHING IN MAINTAINING VOCAL HEALTH	20
	2.1	The voice	, the most fragile instrument	20
	2.2	Factors le	eading to vocal dysfunction	20
	2	2.2.1 Breath	ning difficulties encountered by the professional performer	21
	2.3	Conscious	s breathing and emotions	22
	2	2.3.1 Voice a	and emotions	22
	2	2.3.2 Why d	o we cry in singing lessons?	22
	2	2.3.3 The ca	use of accessing emotion	22
	2	2.3.4 What i	s Trauma?	23
	2	2.3.5 Effects	s of respiratory alkalosis on the body	23
	2	2.3.6 The co	nnection between conscious breathing, memory and somatic therapy	23
	2	2.3.7 Deep o	connection with ourselves through working with the breath	24
	2	2.3.8 Psycho	ological implications of conscious breathing	24
	2.4	Vocal the	rapy - techniques and exercises	25
	2	2.4.1 Consci	ous breathing exercises	25
	2	2.4.2 Exhala	tion prolongation exercises	25
	2	2.4.3 Exercis	ses for postural awareness and the connection of posturing with breathing	25
		2.4.3.1	Wall exercises	25
		2.4.3.2	Floor exercises	26
		2.4.3.3	Exercises on the chair	26
	2	2.4.4 Open r	ib awareness exercise	26
	2	2.4.5 Therap	peutic vocalizations	
		2.4.5.1	Roll lips vocalisation	27
		2.4.5.2	Voice flexing vocalisations	27



		2.4.5.3	Descending vocalisation	27
		2.4.5.4	Voice timbre vocalisation	27
		2.4.5.5	OA diphthong vocalisation	27
	2.5	Conclusio	n: Vox sana in corpore sano	27
3	TI	HE DEMAN	NDS OF THE SPOKEN AND SUNG VOICE - SIMILARITIES AND S	TYLISTIC
D	IFFEI	RENCES IN	OPERA, OPERETTA AND MUSICALS	28
	3.1	The voice	as a versatile creator of musical genres	28
	3	3.1.1 Word	or Music?	28
			ous breathing – fundamental role and control in the stylistic-interpretive eretta and musical characters	
		3.1.2.1	The declamation of the libretto	29
		3.1.2.2	Music, Setting and Character	29
	3.2	The role o	of Eliza Doolittle in Frederick Loewe's musical <i>My Fair Lady</i>	30
	3	3.2.1 The m	usical – a brief history, evolution and development	30
	3	3.2.2 <i>My Fa</i> .	ir Lady – "the perfect, miraculous and irresistible performance"	30
	3	3.2.3 The st	ory of the perfect musical – ingredients, happenings, coincidences	30
		3.2.3.1	Authors in search of success	30
		3.2.3.2	Famous performers – the guarantee of success	31
		3.2.3.3	From Broadway to the Oscars	31
	3	3.2.4 The lar	nguage requirement – the first step in Eliza Doolittle's transformation	31
		3.2.4.1	Covent Garden Market	31
		3.2.4.2	Higgins House	32
		3.2.4.3	Ascot & Going to the Ball	33
		3.2.4.4	The soul cannot be put on the gramophone	33
		3.2.4.5	The Heartless Haiman wanders around London	33
		3.2.4.6	Mrs. Higgins' house	33
		3.2.4.7	Instead of a happy ending	33
	3.3	The role o	of Rosalinde in Johann Strauss' operetta <i>The Bat</i>	34
	3	3.3.1 Vienne	ese operetta, between entertainment and cultural identity	34
	3	3.3.2 Johanr	Strauss the son, the creator of waltz operetta	34
	2	333 <i>The R</i> :	at – Operetta or the predestination of success	34



3.	3.4 Rosalin	de, the absorbed prima donna	34
	3.3.4.1	Act 1 – Rosalinde von Eisenstein – the female prototype of Viennese society	35
	3.3.4.2	Act 2 – The Hungarian Countess	35
	3.3.4.3	Act 3 – All's well that ends well	36
3.	3.5 Epilogu	e	36
3.4	The role of	FCio Cio San in Giacomo Puccini's Madama Butterfly	37
3.	4.1 Giacom	o Puccini – the composer with "more heart than genius"	37
3.	4.2 Puccini	's Decalogue of Directions	37
	3.4.2.1	Tempo	38
	3.4.2.2	Colour of expression	38
	3.4.2.3	Colour of sounds	38
	3.4.2.4	Choruses	38
	3.4.2.5	Portamenti	38
	3.4.2.6	Artist dedication	38
	3.4.2.7	Scenery and dramatic atmosphere	38
	3.4.2.8	Importance of the curtain	38
	3.4.2.9	Sound of the stage	38
	3.4.2.10	The suggestive power of bells	38
3.	4.3 Cio-Cio	-San the most complex role of her career	38
	3.4.3.1	Geisha or Flower Woman	38
	3.4.3.2	Act 1 (Duration 48 minutes)	39
	3.4.3.3	Act 2 – Part 1 (Duration 47 minutes)	40
	3.4.3.4	Act 2 – Part 2 (30 minutes)	41
3.5	CONCLUSI	ONS: 20 years on the Brasov Opera stage	43
FINAL CONCLUSIONS44			
ORIGINAL CONTRIBUTIONS PEDAGOGICAL PERSPECTIVE 45			



#### Introduction

Respiration is the phenomenon with which life begins and ends. It is the mystery by which God or the Universe allows or does not allow the manifestation of life in the newborn child. "... made man and breathed into his face the breath of life and man became a living being." (Genesis 2:7) writes the Book of Genesis.

Breath describes the relationship we have with ourselves through the quality of its action and interaction with the body. The way we breathe is fundamental in singing not only for good laryngeal functionality but also for the development of musicality. The breathing of the professional singer is reflected in the quality of the sound and attack of the musical phrase. It develops and takes shape over time.

The breath in and breath out and the tension/relaxation relationships related to them prefigure the musical metrics and dynamic relationships within the musical phrase. For this reason, learning to listen to the breath is already a way of educating the ear.

**Theme of the paper:** the importance of being aware of the correlation between the art of breathing, the health of the phonatory apparatus and the approach to a repertoire as diverse as possible.

In my personal and teaching practice I always stress that conscious breathing is the source of the connection between body, mind and voice. It is the vital link to being present, connected and engaged.

**Purpose of the work**: This work was born out of a desire to share my experience as a stage performer and teacher with students and younger colleagues. Its main purpose is to clarify the more arid notions of anatomical construction and versatile functioning of the respiratory apparatus, as well as awareness of personal possibilities in their use.

Any educational intervention on the voice must start from the dismantling of anything that could be an obstacle to the body's natural reflexes. Excessive emphasis on active breath control, i.e., on the breathing muscles, risks generating vicious circles in which voice and breath - instead of interacting - hinder each other.

From a triple perspective - that of a performer, a teacher and a graduate of the Faculty of Medicine in Bucharest (class of 1996), I propose technical solutions, easily applicable, for the artistic preparation of the professional performer and his recovery after the vocal effort during rehearsals and performances.

It seems to me important and necessary to be aware of the correlation between the health of the phonatory apparatus and the respiratory technique, implicitly vocal. Too much constant air pressure on the vocal cords leads to premature vocal fatigue. This is why it is essential to address the repertoire appropriate to the vocal typology, as well as optimal vocal hygiene that will prevent the onset of vocal dysfunction.

The ultimate goal of my practice as an artist and pedagogue is to return to natural breathing and through awareness of it to achieve an authentic and personalised vibration of sound. This primarily requires honesty and trust between the people involved in the process.

The aim of the work is to clarify the relationship we have with our breath and personal voice in order to become performing artists. It offers therapeutic musical solutions (vocalizations and exercises) as



well as solving vocal technique problems by connecting conscious breathing with the various functional compartments of the human body.

Knowledge, control and awareness of breathing in different musical styles, leads implicitly to raising the quality in the musical dramatic interpretation of roles and prolonging the years in which the phonatory apparatus remains in perfect functioning and health. The development of repertoire versatility is only possible if we are aware of how our own body works, with its pluses and minuses, exploiting qualities and turning weaknesses into virtues in order to achieve a quality artistic act.

Being a long-lived singer requires vocal health determined in turn by a mental, hormonal and spiritual balance interconnected with a sporty and conscious lifestyle.

#### Structure of the work:

The paper is structured in 3 main chapters:

- 1. Conscious Breathing-the foundation of verb-vocal construction
- 2. The importance of conscious breathing in maintaining vocal health
- 3.The demands of the spoken and sung voice similarities and stylistic-interpretative differences in opera, operetta and musicals

I consider it essential in a professional singer's career to be aware of their breath and instrument body. These are the foundation of verbo-vocal construction. Keeping the voice in an optimal state of health will increase the possibility of achieving a diverse repertoire through vocal versatility and thus build a successful artistic career.



# 1 CONSCIOUS BREATHING – THE FOUNDATION OF VERB-VOWEL CONSTRUCTION

# 1.1 Conscious breathing or the art of breathing

Breathing is the core of the voice. The rhythm of the breath and the rhythm of the musical phrase shape each other in a dynamic play involving the whole body as in a dance. The belcanto school has always considered breathing as the key to vocal technique, the virtual ladder on which a voice climbs from speaking to singing.

#### 1.1.1 Singing is another way of breathing (Rilke)

How does an opera singer breathe correctly?

The conclusion, after years of research, is that coordinated or conscious breathing is that type of breathing which engages all the voluntary and involuntary muscles involved in the process and determines the functionality of the lungs with maximum efficiency and minimum effort (Alexander technique)<sup>1</sup>.

The effectiveness of control over mind, body, emotions, posture and behaviour (influenced by temperament type) is determined by breath control.

### 1.1.2 How the body is affected in working with breathing

Breath control and its determining effect on the body can be understood if we understand its coordination by the CNS<sup>2</sup>. The CNS is made up of two parts: the SNS<sup>3</sup> & the PNS<sup>4</sup>.

The SNS increases the pulse and breathing rate, and the parasympathetic slows both and triggers natural resting and digestive functions. Studies show that by changing the way we breathe, we change the information being transmitted to the brain.

Every physiological, psychological and emotional state has a corresponding breathing pattern. Mindful breathing techniques have the potential to improve quality of life and are powerful and natural alternatives to treat various illnesses, stress and anxiety.

<sup>1</sup> Frederick Matthias Alexander (1869-1955) – was an Australian actor and author who developed the Alexander Technique, an educational process that recognizes and surpasses the usual reactive limitations in movement and thinking.

<sup>2</sup> Central nervous system

<sup>3</sup> Sympathetic nervous system

<sup>4</sup> Parasympathetic nervous system



A. Tomatis<sup>5</sup> also states in relation to sound that aesthetic poverty goes hand in hand with physiological response poverty. (Tomatis, 1993, p.46) The qualitative richness of vocal sound therefore contributes to improving muscle tone and raising the attention level of the singer. The more aware the breath is, the more the quality of the voice will be optimised.

# 1.2 Instrument body or breathing body

Learning, in my opinion, does not consist in imposing singing principles by one's own will, but in acquiring the ability to eliminate or inhibit certain parasitic actions that hinder the process; then it is very important to succeed in motivating the student throughout his journey towards self-knowledge. The phonatory apparatus is made up of three sections: the resonatory, phonatory and respiratory stages. These are permanently connected and perfectly synchronised.

#### 1.2.1 Complexity and self-regulation of the vocal system

Respiration is at the core of essential life processes and of the cybernetic relationships between humans and the environment.

According to the theory of living systems as networks developed by F. Capra<sup>6</sup> in 1996, the nature of the system is always different from the pure and simple sum of its parts, but derives from the quality of the relationships and interactions between them. In the light of this view the voice is a function of the organism and can be seen as a partial system in relation to the overall nature of the complexity of the human being, since it is determined by the relationships between its constituent parts.

Vocal function involves not only the larynx, the vocal tract and the organs involved in breathing, but the body as a whole, the sensory organs and in particular the ear, the psyche, the brain in its multiplicity of levels and functions and finally sound itself.

#### 1.2.2 Matter and structure of the instrument body

In this sub-chapter we have made a schematic of the functional and structural data that constitute the instrument body

#### 1.2.2.1 Skeletal-muscular system

First of all, it guarantees the postural/motor function: its structure is made up of bones, muscles, tendons and ligaments.

<sup>5</sup> Alfred A. Tomatis (1920-2001) - ENT doctor and neurologist who discovered through research with professional comedians, singers and musicians the fundamental link between the ability to hear sounds and the ability to reproduce them vocally or with a musical instrument

<sup>&</sup>lt;sup>6</sup> Fritjof Capra (b.1939), physicist and systems theorist, author of The Web of Life: A New Scientific Understanding of Living Systems



#### 1.2.2.2 Larynx

The larynx is the organ in which vibration, the primary sound, is generated. It transforms air energy into acoustic energy; it guarantees the function of speech, and as a valve (glottis) it also contributes to the respiratory function; it also has a sphincteric function, and through the epiglottis it contributes to the nutritional function.

#### 1.2.2.3 Laryngeal suspensory system

It is a part of the muscular system, very important because of its specificity to the vocal function. It is a muscular complex, defined as the extrinsic musculature of the larynx that regulates the spatial positioning of the larynx and therefore determines its upward or downward movements.

#### 1.2.2.4 Respiratory system

At the organic level, its structure is formed by the lungs and airways (nose, pharynx, larynx, trachea, bronchi). Specialised muscle groups determine by their activation the changes in thoracic volume associated with the phases of inspiration and expiration. In this respect, the respiratory muscle par excellence is the thoracic diaphragm.

#### 1.2.2.5 Diaphragm chain

The diaphragm chain is made up of muscles which, due to their highly elastic nature, react to pressure changes in the spaces they define, thus helping to regulate the balance of air pressure throughout the body.

They are: 1.the pelvic floor; 2. the thoracic diaphragm; 3.the true and false vocal cords; 4.the floor of the mouth;5. the soft palate; 6. the sellate diaphragm where the pituitary gland is located.

#### 1.2.2.6 Vocal tract

It consists of cavities located in the upper part of the laryngeal tube and whose main anatomical components are the pharynx, hard and soft palate, tongue, mandible, teeth and lips. The entire respiratory tract is involved in both phonatory and respiratory and nutritional function.

#### 1.2.2.7 Ear and other sense organs

According to A. Tomatis the ear is an organ of major importance in the process of vocal production, regulating both the mechanisms of reception of vocal sound and the gestures necessary for the act of singing. Man, says Tomatis, is nothing but an ear - which speaks and sings (Tomatis, 1993, p. 32).

According to researchers at the Lichtenberg Institute, the ear acts as a resonator of the voice for high frequencies (see article. http://studia.ubbcluj.ro/download/pdf/1467.pdf)

The following considerations follow from this perspective on the instrument body:

- There is no body part or functional level that is not involved in the vocal gesture
- The matter of which the vocal instrument is made is endowed with great elasticity and is thus capable of participating in sound vibration. This is the basic quality that makes it possible to



transform the human body into a musical instrument, which is the primary objective of singing education.

#### 1.2.3 Self-organisation, differentiation and self-regulation of the respiratory system

Self-organisation is the property of open systems to develop new patterns of behaviour and new structures under the influence of environmental stimuli, using energy absorbed from outside and defining their own internal organisation.

In the case of the respiratory system, we can speak of different functions in conjunction with the needs in which it is involved.

Breathing is therefore a creative activity that can become transformative for the whole body as it is consciously carried out.

Functions of the larynx - according to G. Rohmert<sup>7</sup>

Primary function – sphincter - involves the false vocal cords

Secondary function – vibratory – involves the true cords and relates to everyday communication and expression.

The lux function – vibratory – involve the true vocal cords that manifests itself in artistic performance activity (Magnani, 2005, p.178).

At a concrete level, careful observation of the pupils/students is required, avoiding underestimation of significant bodily and vocal signals and, from a methodological point of view, activating strategies which, instead of imposing models or techniques, appeal to the inner resources of the individual, calling upon the self-regulating capacity of the vocal system.

#### 1.2.4 Inhale and exhale

Inhale is achieved by enlarging the thoracic cavity in all its diameters and with it the lungs. During inhale, the lungs expand with the help of the inspiratory and expiratory muscles.

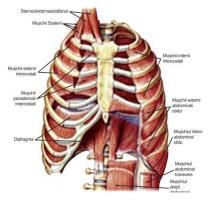


Figure 1 inspiratory and expiratory muscles

٠

<sup>&</sup>lt;sup>7</sup> Gisella & Walter Rohmert, founders of a singing method based on the consideration that the larynx is both a balancing and vibrating organ. The most important thing is to feel your body and bring it into a state of total balance and relaxation. Only in this way can the voice become a therapeutic instrument.



#### 1.2.4.1 The importance of the diaphragm – myth or reality

The diaphragm is the main inspiratory muscle, but it does not have a recurrent nerve (nerve that transmits information to the CNS) and therefore cannot be controlled directly. What we can control are only the striated muscles of the abdominal girdle on which the diaphragm inserts. The insertions at the level of the ribs and the spine give it a very important role in controlling the posture of the spine, constituting a "support sleeve for the spine" (Patalini, 2015, p. 27).

Loss of diaphragm elasticity definitely causes important dysfunctions - from "inspiratory chest block" to hiatal hernias, breathing difficulties, increased lumbar and cervical spine curves, gastric reflux.

An opera singer should manage breathing by controlling the inspiratory muscles even during exhalation so that the exhalation is prolonged. Contraction of the diaphragm during exhalation is not part of the body's natural physiology, however, which provides for its release. Diaphragmatic support (appoggio) causes a slowing of exhalation and an increase in sound intensity.

It is therefore very important to be aware of the diaphragmatic posture and the elasticity of the inspiratory muscles. Any supporting manoeuvre that is performed thanks to the contraction of the inspiratory muscles is limited if these muscles are already contracted.

Also, in the breathing of the professional singer, it is necessary to have a fair amount of air available for the subglottic pressure required for vocal delivery.

#### 1.2.4.2 Types of breathing

Every student, professional singer, vocal teacher or speech therapist asks the question which type of breathing is most advantageous. Over the years various classifications have been made:

- Humeral or clavicular breathing (upper breathing)
- Thoracic or costal breathing
- Costo-diaphragmatic breathing
- Abdominal breathing
- Dorsal breathing

In 1987 J. Sundberg<sup>8</sup> classified the breathing technique of singers according to the position of the abdominal wall into "belly in"/"belly out"<sup>9</sup>.

My method is based on costo-diaphragmatic breathing combined with the "belly in" method. To these mechanistic techniques I have added body and breath awareness.

12

<sup>&</sup>lt;sup>8</sup> Johan Sundberg (b.1936), musicologist, Honorary Doctor of Musical Acoustics 1996, University of York, UK

<sup>&</sup>lt;sup>9</sup> Translated: with the navel retracted / with the navel out



#### 1.2.5 Effects of posture on costo-diaphragmatic breathing

This is one of the most important chapters of the foray into the secrets of the voice and the human body. Problems that seem insurmountable will be solved when we have correct posture, optimal support and conscious **breathing**.

We are talking about the 3 C's Way: **Control**, **Conviction** and **Consistency**. Without constant control over our bodies, we will not feel capable and confident that we can succeed, no matter how talented we are. And singers who know how to control their posture and breathing become consistent; they will always sing well because things are not left to chance.

In accordance with the systemic view of the body, I remind you that the processes of development of human functions are neither linear nor hierarchical. Therefore, it is not simply a matter of training the body so that the voice develops and progresses, but rather of activating a circuit in which the voice, the ear and the body interact with each other, and the listening function integrates with the motor and vocal functions.

In conclusion: the effectiveness of body training will be measured not only in terms of physical well-being, but especially in terms of sound quality.

Sometimes you need to relax the body, sometimes you need to activate it. For some the breath needs to become wider or calmer, for others more invigorating.

The quality of the voice is always a faithful mirror of the body's organisation and harmonisation.

#### 1.2.5.1 Correct and incorrect posture

Posture has a major effect on all aspects of singing.

If the body is perfectly aligned-that is, there is skeletal balance between the head, neck, cervical spine, lumbar spine, pelvis and legs-it will have a positive effect on the respiratory muscles, which will function smoothly and in a coordinated manner. This coordination of all the body's compartments is in fact the key to achieving full (complete) breathing and optimal vocalisation.

#### 1.2.5.2 How a vocal professional breathes

Singing involves three important functional criteria:

- 1. A free breath, which is possible with correct posture.
- 2. Exhalation control during the musical phrase.
- 3. A relaxed body at the end of the musical phrase, which leads to a healthy inspiration for the next phrase



#### 1.2.5.3 Support (Appoggio/Support)

What is essential for comfortable singing is to understand and control the supporting or sustaining mechanism. Short for abdominal breath support, the word support or abdominal support in performance singing is the key to a well-functioning voice and a long-term healthy voice. Also ongoing optimization prevents voice overload and derivative pathology.

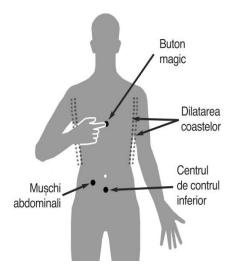


Figure 2 - Magic button

There are 4 major elements to control and synchronize in achieving optimal support:

**Table 1 -** The 4 essential elements of abdominal support

Nr	Action / Position
1	Keep the chest open with sternum raised and slightly pushed forward
2	Keep our ribs dilated in front and back. We don't let them fall off
3	BM stands firmly and gently off throughout each singing note
4	Abdominal muscles and CCI will retract towards the spine, in an antagonistic movement to BM

#### 1.2.5.4 Appoggio and relationship with phonation

In the presence of correct relaxation capacity, the release of breath is produced by physiological relaxation of the diaphragm, and the singer who wishes to increase the duration of exhalation must necessarily limit the ascent of the diaphragm. This can be done by contracting the diaphragm during exhalation as well. It is not possible to manage the upward movement of the diaphragm in exhalation if we do not control the contraction of the diaphragm itself.



It is important to be able to distinguish between a voluntary contraction of the inspiratory muscles, aimed at managing the singing exhalation and constituting the support (appoggio) and an involuntary contraction of the same muscle. This occurs when the respiratory mechanics become unbalanced by stiffening of the muscles involved.

The ability to control the muscles involved in the breathing process is the fundamental basis of a clear and lasting learning path for effective and efficient artistic vocality.

# 1.3 The vibrating body

Sound, even before it is a foundational element of musical language, is a form of energy that can be known, understood and consciously used for the purposes of human well-being.

Since the voice does not exist outside the listening condition, awareness of the voice and awareness of sound become two inseparable factors in the process of musical and vocal growth, which progressively matures in parallel.

Listening is no easier than producing. Achieving listening quality is by no means simple, and teachers are well aware of this. For this reason, developing listening quality is an important objective of music education in general and vocal education in particular.

The sound emitted by the subject mobilizes internal sensations and those of the mucous tissues, even visceral, more than the perception of a sound coming from the outside could manage (Tomatis, 1993, p. 30) And thanks to the conscious listening to these sensations, the singer can control and modify the vocal gesture.

The awareness of being a body capable of vibrating is at the basis of the formation of the vocal instrument, so any experience that develops and strengthens this awareness has a priority value.

#### 1.3.1 Theories of sound production assume the following factors:

Theories of sound production assume the following factors

- 1.3.1.1 Subglottic pressure (the force that opens the glottis)
- 1.3.1.2 Vocal cord elasticity (the force that closes the glottis by recoil)
- 1.3.1.3 Mobility of the vocal cord mucosa
- 1.3.1.4 The effect of Bernoulli's law.

The union of the vocal cords in optimal phonation using a minimum amount of air is the first sign of vocal health.



#### 1.3.2 Conscious breathing and vocal resonance

Vocal resonance refers to the natural amplification of sounds. It takes place in the resonator floor, consisting of the oral pharyngeal area (primary resonance zone) and the sinuses, teeth, facial bones (adjacent resonance zone).

The primary source of resonance in the voice is an open pharynx. It consists of three parts: nasopharynx, oropharynx and laryngo-pharynx.

The intensity of the vowel formed in the pharynx allows the singer to feel the front air (mask resonance) as a result of an open acoustic space and correct tongue position (the tip of the tongue should rest at the base of the teeth on the mandible). When the tongue is arched and resting correctly on the teeth of the lower jaw, the front vibration is the result of two factors: a wide-open pharynx and perfect closure of the vocal cords (vocal cord adduction). I stress the importance of the position of a singer's tongue, because this muscle can cause a lot of dysfunctions and emission problems. A correct setting is the consequence of an open throat and a tongue that has a relaxed base and tip resting on the teeth.

Since the voice is neuro-endocrine conditioned and very often closely related to innate temperament<sup>10</sup>, this is a very important factor in determining the type of technique correlated with vocal classification.

As an educator I consider it essential to determine the personality type of the student we are working with in order to be able to correctly frame the vocal typology and choose an appropriate repertoire. This is a decisive factor for his further progress. Depending on their temperament, each individual artist will define for themselves the elements of inner support to motivate their professional progress.

The right vibration in the voice, the one that gives it brilliance, is preserved in all registers by the even blowing of a column of air with just the right subglottic pressure.

Principles for homogenising voice registers:

- 1. Vowels are formed in the larynx.
- 2. It is amplified by an open throat and a soft raised and domed palate (image of a church dome)
- 3. The muscles at the base of the larynx are relaxed.

A raised and domed soft palate prevents an exaggerated lowering of the larynx. Combined with a correctly positioned and relaxed tongue, this avoids tubed singing, loaded with too many low harmonics and a forced thickening of the voice.

#### 1.3.2.1 Breathing and mouth position

The position of the mouth should be oval and vertical, not horizontal. Put your fingers in the middle of your cheeks and press down leaving your chin soft so that your mouth becomes round and oval. This

<sup>10</sup> The temperament, or character, of a being shows us how it reacts or behaves in certain situations of change in its environment. The temperament structure, or type of temperament, is inborn and is the hereditary element in the internal organisation of the personality.



is possible if there is no stiffening of the muscles and the chin is allowed to drop as if it were pulled by the force of gravity.

Along with costo-diaphragmatic breathing and abdominal support, the position of the mouth (an important resonator in singing) is essential.

#### 1.3.2.2 Lower jaw

The chin and mandible should be relaxed and lowered, as we feel these parts when undergoing anaesthesia at the dentist. The more we relax the jaw and neck, the softer and better the sound will be. We should think of the whole oral cavity as an elevator, with the mandible being the part that connects the elevator to the basement. The higher we go up the tones of the voice, the lower the mandible will be, and the more the mouth will stay oval and sound round.



Figure 3 - The position of the mouth

#### 1.3.3 Professional singer intonation and vocal audio feedback

The research of the French ear doctor Alfredo Tomatis<sup>11</sup> revolutionised medical science in the middle of the last century and has exerted a growing interest in the field of music pedagogy, especially regarding the importance of the relationship between ear and voice.

According to Tomatis<sup>11</sup>, the recoverable loss of certain frequency areas of hearing may actually derive from unconscious self-protective mechanisms that are triggered not only when the individual is concretely attacked and stressed by forms of noise pollution, but also when he or she feels psychologically threatened by certain sounds or voices. Very often in his writings Tomatis emphasises the difference which he considers fundamental between hearing, which is the passive way of receiving sound, and listening, which is the conscious act revealing the subject's will and desire to communicate and therefore to extract all possible information from the acoustic message received.

#### 1.3.3.1 Voice control through the cybernetic circuits of the ear

If we look at the mechanisms by which the ear controls the singer's instrument-the voice-we can extrapolate that everything that exists, from the smallest cell to the entire universe is coordinated and controlled. Cybernetics is the science that deals with control mechanisms

<sup>&</sup>lt;sup>11</sup> A. Tomatis (1920-2001), a French otorhinolaryngologist, developed the psycho-audiophonological method, which he applied in specialized centers for the re-education of vocal functionality



When intonational problems occur, it means that certain circuits and bodily reflexes are not well controlled cybernetically.

In concerts, the ear acts together with the nervous system, which also calls for auditory control, adding related motor impulses to direct the motor apparatus. Each part of the body that is activated responds at a centralised level, so that sensorimotor control conforms to the demands of the ear.

Singing is therefore not just one of many possible human activities, but is considered a true human function. Singing responds to the need for self-expression and self-awareness, it allows man to communicate and dialogue with the environment through sound vibrations and acoustic feedback, and due to the higher frequency components of the voice, it helps to nourish the nervous system, giving him sensory stimuli that are essential for his vitality. A beautiful voice is therefore a voice that, thanks to its acoustics, especially its high harmonics, offers well-being to both the speaker and the listener.

The concept of ordering is a fundamental concept of synergy theorised by the physicist Hermann Hacken. He states that in the self-organising processes that characterise complex systems, the different parts of the system know how to be guided by an invisible hand, but at the same time it is the same parts that, in turn, coordinate themselves to create this hand. This type of invisible entity is called an organiser. (Hacken, 1983, p.17) Applying this point of view to the singing system, G. Rohmert identifies the vocal sound as a potential ordinator which, once produced by the coordinated action of the system's elements, becomes an autonomous entity capable of guiding and organising the system itself, optimising its resources.

According to G. Rohmert, a permanent sound energy can only be guaranteed by a frequency range that remains stable regardless of the pitch of the fundamental sound played. This stable frequency range is identified in the singer's auditory stimulus set. (Rohmert 1995, p. 62) These are harmonic groups, located around 3000, 5000 and 8000 Hz, whose presence in the vocal sound manifests itself not as an additional upper voice, but as an energetic timbral quality, defined as voice brightness.

It is very important for those training singers to perceive the particular correspondence of these sounds, found by the Lichtenberg<sup>12</sup> researchers, with the resonance frequencies of the outer (3000 Hz), middle and inner ear cavities (5000 and 8000 Hz). By virtue of this correspondence, a vocal sound containing these stimuli constitutes a kind of biological key to the ear and through it to the nervous system and therefore to the whole body. Brilliance thus becomes a property of the voice whose importance goes far beyond the aesthetic dimension, and acquires functional value when it assumes the role of an organiser of the internal singing system. Thus, all functional levels are ordered with a self-regulating mechanism.

Not only is the importance of the ear and the function of listening to the voice confirmed, but sound itself becomes part of the singing system as an autonomous entity that interacts with the other elements that compose it. The role of auditory awareness remains fundamental. In fact, about auditory stimuli, Rohmert says that only when singers consciously listen to and recognise these elements can they then evolve as new teachers<sup>12</sup>.

<sup>&</sup>lt;sup>12</sup> Lichtenberg Institut für funktionales Stimmtraining (Germany), founded in 1982 by Gisela Rohmert.



#### 1.3.4 The voice – mirror of the professional performer's body organisation

From the singer's point of view, the knowledge of the voice is a unitary act and takes the form of a sensory experience in which auditory and bodily perception and the sense of self as an instrument are inseparable. Awareness of sound, breath and mode of emission develops simultaneously. It is a process that has no limits and can be an inexhaustible source of exciting discoveries and profound acquisitions that no book and no scientific knowledge can offer.

For the singer, it is above all important to know how to stay in touch with sound and the sensations it generates and thus to make his auditory and kinaesthetic images clearer and clearer. I stress that these sensations are strictly individual and that is why it is sometimes so difficult to obtain them, to become aware of them and to apply them through specific commands.

In the case of the voice teacher/educator, refinement of perceptual sensitivity is a professional necessity. Moreover, the impossibility of visually checking the muscular processes implemented by the pupil/student (as can be done in the case of other instruments) must be compensated for by the development of an extremely fine auditory quality, a kind of sympathy, even empathy, in the etymological sense of the term, i.e. an ability on the part of the teacher to feel the same sensations as the pupil, thanks to a resonance process that transforms the acoustic message coming from the student's voice into a kinaesthetic tactile perception.

# 1.4 Conclusion: Conscious breathing – the connection between body, mind and voice

I think it is very important for all of us to know our instrument body, to be aware of its structure and the mechanisms by which it can be accessed. There is no part of the body or functional level that is not involved in the vocal gesture.

By focusing our attention on the breath and turning it into a conscious one we suddenly place ourselves in a state of presence and the mind will focus on the phenomenon being studied.

Our voice is the mirror of all inner phenomena. With the help of conscious breathing, we will be able to balance the instrument body and put it in a condition to adopt the correct posture for singing. It is also very important to mention that the "conductor" of all the connections in the body to produce a correctly intoned sound is the ear. *Man is nothing but an ear; an ear that speaks and sings.* (Tomatis, 1993, p.125)

Aligning the body in a listening posture and the ability to control the muscles involved in the breathing process is the fundamental basis of a clear and lasting learning path for effective and efficient artistic vocality.



# 2 THE IMPORTANCE OF CONSCIOUS BREATHING IN MAINTAINING VOCAL HEALTH

# 2.1 The voice, the most fragile instrument

The voice follows the body to which it belongs through everything it is (intensity, colour, pitch, duration of sound), and we must adapt daily to its new requirements. Herein lies the difficulty of this career, a successful performer is one who is inventive, adaptable and versatile, who through an intellect at the service of emotional intelligence proves elasticity and mental strength to adapt to both environmental variations (from atmospheric pressure, temperature, humidity, food) and psycho-affective ones arising in the social environment.

Since we live in a century of speed and very often young performers aim for star status, neglecting the natural stages of a voice's development, they skip the natural development in age-appropriate repertoires, thus creating gaps in the construction of the vocal edifice which will lead to cracks in their self-confidence and then to damage to the muscles involved in phonation and vocal cords. Forcing the voice beyond its natural limits leads over time to premature wear, loss of brightness and flexibility, and the appearance of "annoying sway" through loss of control over vibrato. It can also cause more or less reversible disorders and diseases (from various forms of dysphonia, chronic laryngitis, to vocal nodules and paresis).

# 2.2 Factors leading to vocal dysfunction

"The vast majority of functional voice disorders begin with excessive use of muscle force". (Bogdan, 2001, p. 189)

The vicious circle of vocal strain is characterised by the following elements:

- 1. Alteration of the general attitude which has two associated elements:
  - loss of verticality
  - · facial twitching
- 2. Altered glottic attack: the larynx takes over the role of the diaphragm in regulating exhalation. The vocal cords are already tense, and the adjustment of subglottic pressure during vocal emission is defective.
- 3. Decreased suppleness of the voice and phonatory apparatus, due to the impossibility of rectifying vocal behaviour (straightening, relaxation).
- 4. Vocal alteration

Voice overload - forcing the voice - is the key factor in destabilising vocal production. However, this factor is not sufficient to cause vocal cord damage. There are a number of other triggering and promoting factors that add to overload and cause various pathologies.



Table 2 - Triggers and facilitators of voice impairment

No	Triggers	Facilitating factors
1	Repeated ENT conditions	Strained voice
2	Stress	Mentally labile, emotional, nervous, anxious and even perfectionistic individuals or in aggressive, antagonistic, competitive and hypertensive individuals.
3	Physical and intellectual overwork and fatigue	Prolonged conflict situations
4	Tracheitis	Job dissatisfaction
5	Menstrual period	Excessive alcohol use
6	Thyroid/hormonal conditions	Smoking
7	Destructive emotions, anxiety and depression	Chest infections of the respiratory and upper digestive tract: tonsillitis, sinusitis, pharyngitis
8	Pregnancy and related hormones	Hypoacuzia
9	Back and neck pain	Poor vocal technique
10	Gastro-oesophageal reflux	Exposure to dust, irritating fumes and air conditioning leads
11	Prolonged vocal rest	
12	Asthma and allergies	

In addition to total vocal rest-short-term but extremely important-and drug treatment taken on the specialist's recommendation and under supervised control, the therapy of dysphonia and its complications consists of breathing exercises and correction of body posture, to which are gradually added phoniatric exercises – whereby the singer begins to speak and sing again, aiming to return to the body's basic physiological movements, mental and physical relaxation.

#### 2.2.1 Breathing difficulties encountered by the professional performer

Returning to the specific case of breathing in the artistic act, we can conclude that in order to correct the breathing problems frequently experienced by singers, such as difficulty in obtaining a satisfactory intake of air, the slowing down and speed of exhalation, the tendency towards what is commonly defined as a feeling of suffocation, we must consider a loss of elasticity of the inspiratory muscles. This leads to the sensation of breathlessness and then the body tends to hyperventilate.

During hyperventilation blood flow to the brain is drastically reduced, associated with symptoms such as headaches, dizziness, weakness, restlessness, palpitations and even fainting.



Caruso said in 1914 in his lectures, "I take no more air than when having a normal conversation with a friend", while the famous soprano Nelly Melba recommended "just enough air to make the strings vibrate". This is also the sign of healthy strings: they vibrate correctly throughout their length with a minimum amount of air.

How does a singer breathe? Through the nose or the mouth?

Healthy, nasal breathing starts at birth. The nasal turbinates inside clean, slow and pressurise the air so that the lungs can get as much oxygen as possible from each breath. This is why nasal breathing is much healthier and more efficient than oral breathing. "The nose is a silent soldier: the guardian of the body, the pharmacist of the mind, and the mortician of the emotions" (Nestor, 2021, p. 74).

# 2.3 Conscious breathing and emotions

#### 2.3.1 Voice and emotions

The connection with one's own emotions is fundamental in the expression of the singing voice, not only because vocal and musical expressiveness is underpinned by the energy and quality of emotions, but especially because the imprinting of emotion on the larynx and pharynx is crucial to the sound of the voice. The primary emotions expressed (laughing, crying, screaming, sighing) are the precursor of later sound versatility in approaching different repertoires.

The quality of the voice is evaluated as an indicator of the balance of internal energy (Qi energy in Chinese medicine) and in fact an indicator of the psychophysical state of the individual. The fear, even unconscious, that our voice will display emotions or aspects that we wish to hide, justifies the modesty that always accompanies the first experiences in singing.

#### 2.3.2 Why do we cry in singing lessons?

This question is the main catalyst for understanding the phenomenon experienced by very many students studying singing; their teachers have reported in various written documents the spontaneous release of emotions through crying or other forms of release.

Because breathing is so deeply rooted in the functionality of the body and mind, the answer to the question of why people cry in singing class is closely related to breathing.

#### 2.3.3 The cause of accessing emotion

In order to achieve an expressive, free and healthy voice we must be free of all that obstructs us, namely those destructive emotions. In order to achieve our pedagogical goal, we use conscious breathing exercises and those related to posture to gain better control over our body and eliminate unhealthy habits.

What is a habit or behavioural pattern?

A physical habit turned into a behavioural pattern becomes an addiction. It starts with a reaction to a stimulus, usually physical or emotional discomfort or some pain that we learn to hide. We avoid pain by taking on a habit that over time will affect our behaviour. If the pain or discomfort persists and we



continue to call on that bodily reaction to cope with it at some level, the behavioural habit will become a state of fact, a reflex, a conditioned pattern ingrained in muscle memory.

Healing trauma is often achieved through awareness. What caused that behavioural pattern? What is the source of the pain for which the body shuts down?

Breathing and trauma are deeply and profoundly interconnected; when we become aware of this connection through the use of mindful breathing exercises as part of the singing class and related vocalizations, we discover a highly effective tool in releasing and healing trauma. It doesn't happen all at once, but progressively as we become aware, breathe, sing and induce a state of well-being in the body.

#### 2.3.4 What is Trauma?

Trauma is a severe assault caused by a violent attack or accident or a severe emotional shock; it can also be pain caused by an extremely upsetting experience. An assaulted body responds with a 'fight or flight' reaction and chemical reactions are triggered in the body that will cause clavicular respiration to set in. If the body remains in this defensive state for a long time, shallow breathing will induce respiratory alkalosis in the body.

#### 2.3.5 Effects of respiratory alkalosis on the body

- Desensitising effect on the brain and body the system is less reactive to pain
- Contraction of blood vessels-blood loss is reduced
- Inhibited blood flow-oxygenation of tissues is reduced dizziness, loss of concentration, memory loss occurs
- Feelings of disconnection and depersonalisation (Saraswati, 1999, p.28)
- Together with the stimulating effect of chemical stress, it causes an intensification of muscle fibre contraction

Muscle tension will over time develop into behavioural patterns and will also manifest itself in physical structure.

If stress is prolonged and recurrent trauma leaves the body in a continuous state of tension, it is extremely difficult to reach the part that feels, let alone express it. Unreleased emotions then hyperbolize the problem, adding deeper and deeper layers of tension, inhibition and repression.

# 2.3.6 The connection between conscious breathing, memory and somatic therapy

Wilhelm Reich and Stanley Keleman are among the most renowned therapists who have revolutionised the medical view, developing a new therapy based on three fundamental concepts:

- 1. Body and mind are indivisible.
- 2. Trauma that affects the individual somatises and takes shape in the body e.g. muscle tension.
- 3. Breathing plays a crucial role in both aspects and helps release trauma.



The body that has suffered trauma is out of balance. Effective communication through the usual channels through which vibration is transmitted to the tissues is blocked.

The solution is to reintegrate the compromised tissue into the energy matrix through the effect of pressure. (Boston & Cook, 2013, p. 79)

The pressure the body needs for rebalancing comes from inhaled air. So mindful breathing exercises that connect us with the pressure forces involved in the expansion and contraction activity of the diaphragm contribute significantly to the release and realignment of tissue throughout the torso.

Emotion, according to Dr Candance Pert's<sup>13</sup> research, is a form of energy that is transmitted to cells in the form of information. What we experience as emotion is simply the effect of the transmission of information through specific biochemical cells, neuropeptides and their receptors. (Pert, 1997, p.276)

Controlling the breath through awareness is a process of fundamental importance in freeing us as a person from our traumatic physical, psychological and emotional history.

#### 2.3.7 Deep connection with ourselves through working with the breath

Another aspect of the deep connection with ourselves that conscious breathing achieves is one that always demands the attention of singing teachers, namely the connection between breath, emotions and the gut. Singing teachers are always talking about sustained, centred singing with abdominal support. What we always want is the realisation of the connection with the deepest emotional resources and their engagement in expressing what they find inside, in the abdomen. This phenomenon is not a metaphorical or philosophical concept, but is based on the physiology of the body and in neuro gastroenterology the concept of the 'brain in the gut' known as the enteric nervous system (ENS) emerges.

Deep and full breathing requires the release of muscles intimately connected to tissues. When these tissues are soft and pliable, there can be no disconnection from the emotions so often held there. The force of pressure involved in lowering the diaphragm encourages the continued release of tissue in the gut, allowing it to remain energetically connected to living matter and thus the flow of chemical information to flow freely through this highly sensitive second brain.

Knowing this, we realise why after a certain amount of body and breath work, people can come to experience a spontaneous release of long-stored emotions. And they cry a lot, liberating, healing.

#### 2.3.8 Psychological implications of conscious breathing

The voice cannot be treated as a mechanism; it must be treated holistically, accessing the whole spectrum of the personality-physical, vocal, emotional. Understanding the means by which trauma of any kind becomes an integrated part of the body, as well as one of the key mechanisms by which it is released, can go a long way toward alleviating the fear and anxiety that both students and now-professional singers may feel in those moments when an apparent vocal or breathing exercise triggers

-

<sup>&</sup>lt;sup>13</sup> Dr. Candace Pert (1946-2013) - American neurologist and pharmacologist who discovered the opioid receptor, the cellular binding site for endorphins in the brain. Author of the book "Molecules of Emotion"



something deeply personal in someone and makes them vulnerable. Trusting that this release is a healthy, necessary and indispensable process for becoming a performing singer is very important and depends very much on the one who guides this process, namely the singing teacher.

# 2.4 Vocal therapy - techniques and exercises

These exercises aim to correct incorrect body positions, which have also led to incorrect vocal projection, by integrating the notion of body verticality in conjunction with conscious breathing into the singer's daily behaviour.

#### 2.4.1 Conscious breathing exercises

- Heart coherence exercise,
- Conscious yawning exercise,
- Breath holding exercise,
- Rebirth breathing exercise,
- Prayer of the heart in connection with the heart coherence exercise.

#### 2.4.2 Exhalation prolongation exercises

#### 2.4.3 Exercises for postural awareness and the connection of posturing with breathing

#### 2.4.3.1 Wall exercises

Back to the wall, Balancing breathing with head position, Positioning sternum and ribs, Jaw opening whispering AH/SA, Performance posture.

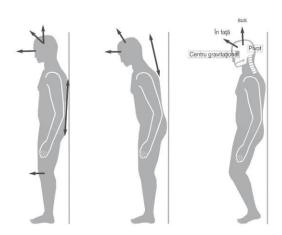


Figure 4 - Posture



#### 2.4.3.2 Floor exercises

Child's pose, Use of open back ribs

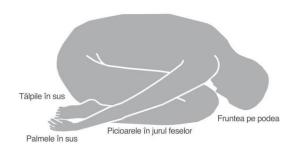


Figure 5 - Child's pose

#### 2.4.3.3 Exercises on the chair

Forward head flexion in exhalation, Awareness of abdominal support, Exploring the correct position of the head and neck.

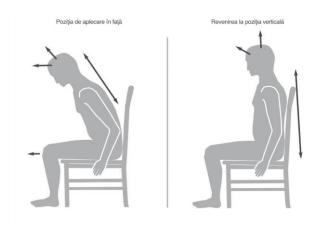


Figure 6 - Exercises on the chair

#### 2.4.4 Open rib awareness exercise

#### Conclusions:

A motor activity, such as laryngeal gestures and respiratory mechanics, becomes efficient and economical if it is based on good internal muscle tone: eutonus

Through all these exercises, each subject will find the key to understanding the phenomenon by which the bone, muscle and neuro-chemical systems are interconnected and influence through their synchronous action the optimal functioning of the respiratory apparatus.



#### 2.4.5 Therapeutic vocalizations

Therapeutic vocalizations are voice warming exercises that put the vocal cords in a position for effective phonation. They are performed with a minimum amount of air, with a voice that is as straight as possible, without vibrato but with a corresponding body mobilisation.

- 2.4.5.1 Roll lips vocalisation
- 2.4.5.2 Voice flexing vocalisations
- 2.4.5.3 Descending vocalisation
- 2.4.5.4 Voice timbre vocalisation
- 2.4.5.5 OA diphthong vocalisation

The time allocated to these vocalisations is 20-30 minutes and they should be part of the singer's daily routine. After about an hour of performance the larynx will feel relaxed and flexible.

They can also be used at the end of a rehearsal or performance to relax larynxes that have been under too much air pressure. As the vocal apparatus is always overworked in rehearsals and performances, these vocalizations also have a therapeutic role through their relaxing effect.

When we succeed in emitting the various vowels or groups of vowels using a minimum amount of air that vibrates the phonatory apparatus and the vocal cords are perfectly united along their entire length without any air escaping, we can speak of a healthy apparatus, capable of being subjected later to the great effort of an opera performance.

# 2.5 Conclusion: Vox sana in corpore sano

"For a singer to be able to make a career of it, he or she must observe with sanctity the four of too much: never sing too much, too loud, too high and too often.... strings are a complex of muscle levers that tire, they are biocurrent batteries that need recharging...they will end up with chordal paresis, vasomotor disorders, laryngeal nodules. These four too are a sine qua non for the preservation and valorisation of vocal capital". (Constantinescu, 2001)<sup>14</sup>

<sup>&</sup>lt;sup>14</sup> Gabriel Popescu Năruja, bass-baritone and phoniatrist in dialogue with Luminița Constantinescu



# 3 THE DEMANDS OF THE SPOKEN AND SUNG VOICE - SIMILARITIES AND STYLISTIC DIFFERENCES IN OPERA, OPERETTA AND MUSICALS

# 3.1 The voice as a versatile creator of musical genres

The voice is the mirror of the singer or actor's inners word. In 1987, Johan Sundberg<sup>15</sup> said of the human voice that "we seem to know exactly what we mean by the word voice as long as we do not try to define it". Richard Miller<sup>16</sup> pointed out that "...it is difficult to say where the carcass of a singer's instrument ends and begins. For any given event, the singer's instrument is dependent on the condition of the shell that carries it". (Miller, 1996, p. 218)

#### 3.1.1 Word or Music?

Speech and stage singing are performed by the same instrument; we move from one activity to the other within the same breath, the technique required for the two activities being similar. It is to the credit of the eminent Professor Nicolae Gafton that he has studied and published in Romania his "Treatise on Sonopoetics and Speechology" in which he describes the neurochronic theory on which his method of teaching *performance speech* is based.

In an article written by Pat. H Wilson<sup>17</sup> in 2013 about the functional ambivalence of the voice used in musical theatre, she refers to research by American neurologists (Jeffries et. al, 2003, p. 57-59) who have described in detail how the brain reacts and activates during the two activities. As long as the two phonatory processes are reflected cortically differently, not being mirror images, those training actors and singers should use the complementary process - singing for actors and speaking for singers - to expand and develop brain activity during the learning process. (Willson, 2014, p. 3)

The difference between the two processes is the position of the larynx. Numerous studies have concluded that the phonatory process is identical but the position from which it is performed differs.

These changes in position of the phonatory organ associated with different areas of resonance, if not trained correctly, lead to muscle fatigue and a certain stiffness of the voice as air energy stops flowing naturally and the voice makes dangerous and alternating leaps of placement and pitch. (Rodenburg, 1997, p. 98)

In order to train a musical theatre performer there should be a symbiosis between the departments of singing and speech performance, since "misuse of the spoken voice or a tired voice in speech directly or indirectly influences the sung voice". (Callaghan, 2000, p. 105)

<sup>15</sup> Johan Sundberg (b. 1936) - specialist in the acoustic aspects of music, member of the Royal Swedish Academy of Music.

<sup>16</sup> Richard Miller (1926 - 2009) - American author of numerous books on vocal technique and vocal pedagogy.

<sup>17</sup> Pat H. Wilson (b. 1948) - Australian journalist and singer, author of numerous articles on vocal technique.



# 3.1.2 Conscious breathing – fundamental role and control in the stylistic-interpretive approach of opera, operetta and musical characters

In his book, *The Actor's Work with Himself*, Stanislavski<sup>18</sup> describes the stages through which the actor passes in the realisation of the theatrical character, concluding that naturalness and truthfulness can only be achieved by accessing the subconscious. The principle on which the art of acting is based is the subconscious creation of nature accessed through the artist's conscious psychophysics (subconscious through conscious and involuntary through voluntary).

Extreme affective states lead to constriction of the extrinsic muscles of the larynx, preventing the relaxation of the larynx necessary for a normal phonatory process. Stress "hoarseness", a lump or claw in the throat, occurs, discomfort that can lead to spastic dysphonia and loss of voice.

A professional performer is creative and therefore a good connoisseur of his body, mind and emotions. His art is one in which he will simulate the emotional state through an expressive state of performance that is based on an embodied and conscious verbo-vocal technique. (Creanga, 2014, p. 75)

Nowadays it is confirmed by specialists that the body's conscious response to the breath is the key to bodily relaxation. Conscious breathing also helps in the concentration of thought which acts in accessing the impulse of the text, in releasing frozen emotions and a muffled or pushed voice.

#### 3.1.2.1 The declamation of the libretto

The construction of a character, a role in any musical genre, obviously begins with the reading of the libretto. Saying the text without music, but on the right air column and breath, leads us to the setting and character of the character.

#### 3.1.2.2 Music, Setting and Character

The question can be asked... does every character have a vocal identity? Definitely yes – just as every human has a vocal imprint and we can recognise ourselves by our voice, so every character will have their own vocal colour and temperament.

What is always changing is the way to drive the air column to different resonance points, to adapt to different dramatic situations the way to blow the air, although the muscles involved are the same, but the rhythmicity and alternation of breathing times (inhale, exhale and apnea-upper full or lower empty) differ.

The next stage in the construction of the character, once it is very clear who we are, in what era we live and what our relationship with all the characters is, is the "putting into voice" of the musical text. This is painstaking work and requires patience and very good breathing and vocal technique.

All insufficiently studied or cracked rolls will crack or fail over time.

<sup>&</sup>lt;sup>18</sup> K. S. Stanislavski (1863-1938) - Russian theatre director and theorist, innovator in theatre and acting



# 3.2 The role of Eliza Doolittle in Frederick Loewe's musical *My Fair Lady*

Eliza Doolittle, a role of extraordinary femininity and great complexity illustrates beyond the story our capacity for transformation. It was the "touchstone" through which I stepped into this beautiful, difficult, challenging and transformative profession on 5 December 2001 on the stage of the Brasov Opera.

#### 3.2.1 The musical – a brief history, evolution and development

The word musical, adopted by the current vocabulary of the 20th century, is short for musical comedy or musical play. The defining characteristic of the musical is that music and dance are no longer merely entertainment, but become an integral part of the story, characterise the characters by clarifying emotional conflicts through the rendering of specific atmospheres, propel the dramatic action by conveying meaning through sound and movement, take on meaning and significance by becoming modes of dramatic

#### 3.2.2 My Fair Lady – "the perfect, miraculous and irresistible performance".

By far the most successful musical ever to hit Broadway was *My Fair Lady* (1956), and this was due to Bernard Shaw's<sup>19</sup> dramatic text. Celebrity was the ingredient that eventually prompted the show's creators A. Lerner & Fr. Loewe to agree to override Shaw's refusal to turn his masterpiece of contemporary social comedy into a musical.

#### 3.2.3 The story of the perfect musical – ingredients, happenings, coincidences

Declared the best musical of the 20<sup>th</sup> century, *My Fair Lady* wins more than a third of the 17 Tony<sup>20</sup> Awards for New York theatrical productions, and is presented 2017 times, breaking every known Broadway record.

#### 3.2.3.1 Authors in search of success

The author of this masterpiece, Frederick Loewe, was born at the turn of the century, in 1901 in Berlin into a family of musicians, operetta artists who made their careers in the theatres of Vienna.

An American born in New York in 1918, Alan Jay Lerner was a subtle man of letters, a proponent of a theatre of modern civilisation. He won an Oscar for his screenplay for *An American in Paris*<sup>21</sup> in 1951, foreshadowing his 1956 success with *My Fair Lady*.

<sup>19</sup> George Bernard Shaw (1856-1950) - playwright, literary critic, Nobel laureate in Literature in 1925

<sup>&</sup>lt;sup>20</sup> The "Antoinette Perry"; Awards for Excellence in Theatre, known as the Tony Awards, are given as a recognition to American stage actors for their performances throughout a year

<sup>&</sup>lt;sup>21</sup> An American in Paris; a musical written by George Gershwin with a screenplay by Alan Jay Lerner, won numerous Academy Awards.



#### 3.2.3.2 Famous performers – the guarantee of success

Undoubtedly, the actor who has remained etched on the retina and in the memory of viewers around the world for his portrayal of Professor Henry Higgins was Rex Harrison. It is also well known that Harrison in real life was domineering, chauvinistic, contemptuous, narcissistic, difficult and uncontrollable, just as Professor Higgins was on stage.

Born in London in 1935 into an obscure working-class family, resembling in origin the character who was to make her a definitive star, Julie Andrews impressed from the start with her voice of astonishing range and power (over 4 octaves) at not quite 14 years old. (Garebian, 2016, p. 35)

#### 3.2.3.3 From Broadway... to the Oscars

After its phenomenal success on the evening of March 15, 1964 at the Mark Hellinger Theatre in New York, the show ran for six years behind closed doors before coming to the attention of film producers. Instead of Julie Andrews, Audrey Hepburn was chosen for her more docile and fragile physique and her already famous name in cinema. The film receives 8 Oscars and has an unparalleled impact and audience.

#### 3.2.4 The language requirement – the first step in Eliza Doolittle's transformation

It is no coincidence that the creative genius of G. B. Shaw's genius has as its reference point the Greek myth of Pygmalion transferred to the level of language, because that is where education begins, this cultivation of the spirit, "the pragmatic means by which humanity can save itself". (Pleṣu/Liiceanu, 2015, p. 215) The Greek term for educating someone implies the idea of rhythm, *rythmizomai*, education being similar to imprinting a rhythm on someone, to put them into a certain dynamic regularity. In general, the uneducated and uneducated man walks chaotically, stumbling along an arbitrary path, the style and inner order being seen immediately in the allure and assurance of the step. The gait is defining in the characterization of any character, denoting as I said, his inner rhythm.

Inner order is primarily given by that of the thoughts and is concomitantly controlled by the breath, since we cannot aspire to the level of performance state towards which any performer who takes on the responsibility of such roles aims without having total control over the mind and body. "The purpose of breath control is to master the body, to master the needs of the body in order to transcend the conscious to a higher level of awareness." (Budoiu, 2007, p.59)

This whole process of transformation from a primitive being with an almost inarticulate language into a mannered and elegant young lady is the most challenging part of the female lead.

#### 3.2.4.1 Covent Garden Market

Very many interpreters of Eliza Doolittle have 'stumbled' over this first part of the character's personality. Beneath the shabby dress and soot-stained cheek must lie a mind and distributive attention that controls the shouting, screaming, crying, specific accent, and disordered body movements. The end of the tableau brings the first piece of music to the fore, and Eliza must sing and dance with the chorus and ballet with joy and hope. No one needs to hear what trauma the larynx has gone through in the first fifteen minutes of this performance.



Written in a serious register for the soprano voice, but requiring the brightness that characterises the aria *Wouldn't it be loverly* has a span of a tenth, a spirited and catchy melody very easy to remember, nothing complicated or complex. This keeping of the voice in the middle/low register in the musical discourse, with short, disparate phrases and even inserted onomatopoeia, joins Eliza's sooty image to better highlight the optimism she maintains in the dirty, dark, uneducated world of the street from which she wants to rise.



Musical example 1

Fr. Loewe, My Fair Lady, excerpt from the aria Wouldn't it be loverly

#### 3.2.4.2 Higgins House

A prose picture follows, requiring acting readiness, science in pronunciation and bodily expression, the thick but generous text lending itself to innumerable colours, shades, interpretations, so that we always find other and different ways of expression.

Finally accepting the governess's care, Eliza begins her lessons. The lessons are played through three moments:

The first moment – that of rebellion, in which under the threats of Professor Higgins Eliza bursts into the aria *Just you wait* in which she plays and sings revenge, shooting her teacher full of satisfaction. There are problems with diction and voice homogenisation between registers, and two or three types of vocal emission are clearly audible. These signal that Eliza is still in the process of adapting and still in a phase where she seems to be returning to a world where sounds are pressed, shouted, distorted, out of the control of the Higgins House.

The second moment of the lessons takes the form of Eliza Doolittle's language transformation, and the joy of all bursts forth in the tercet *The rain in Spain stays mainly in the plain*. The vocality of the triplet changes register this time, the only spoken lines being declamatory, and the octave leap and keeping the voice on a relatively high weave, with ascents in E natural sounding bright and ample in the soprano voice brings Eliza slowly but surely closer to the ideal she is aiming for with this experiment.

The third moment is one of exuberant success. Eliza's happiness is not only due to the fact that she has overcome her linguistic limitations but because of the attention and intimacy that is created in the spontaneously bursting dance and even if there is no affection expressed, the music complements what words have not been allowed to express. Eliza, with a controlled verbal and body language now displays a clean voice (set, clear and with impeccable diction) and sings legato for the first time, arriving



at the end of the piece in a G2 (the note that makes the transition between the upper middle register and the high register) proving that she is ready to enter the much desired world. (*I Could Have Dance All Night*)

#### 3.2.4.3 Ascot & Going to the Ball

In a changed mood and with the allure of a young lady from the "good world", Eliza enters on the arm of Colonel Pickring and wins over the audience and Freddy Einsford Hill's heart with her "new way of speaking for today's youth".

The reality of the three months between Ascot and Going to the Ball is compressed into the seven minutes in which Freddy sings his aria and Eliza changes her dress, entering imposing, beautifully serious, excited and ready for the most important evening of her life so far.

#### 3.2.4.4 The soul... cannot be put on the gramophone

The scene on the way back from the ball is a difficult one from an acting point of view. I have always struggled with finding the right tone, the right inflections and the strength to speak when I was about to burst into tears.

#### 3.2.4.5 The Heartless Haiman wanders around London

The departure from the Higgins House is made in an agitation and excitement expressed in the tirade of words hurled at Freddy in a tempo akin to a state of mind (Molto agitato). The song is a display of impeccable diction, a voice with a wide range of colours and puzzlement at a feeling about which there is much talk but no action, the words actually preventing the true manifestation of love.

#### 3.2.4.6 Mrs. Higgins' house

The two protagonists now meet on neutral ground.

In the ensuing dialogue between the two, two personalities equal in strength and inner power are pitted against each other.

Musically concluding all the accumulated knowledge, this song includes all types of utterance, homogenised in some way, from parlato, to chest singing and beautifully articulated legato, requiring ample knowledge of vocal technique and just the right breath to colour and portray all the states Eliza is going through now at the end of the performance when she has the opportunity to face her teacher.

#### 3.2.4.7 Instead of a happy ending

The authors' desire for a somewhat romantic ending overrode even Bernard Shaw's elaborated obsessions in the play's postscript, Eliza's return bringing the couple closer to the legend of Narcissus and the nymph Echo.

"The voice is the dramatic artist's most necessary instrument (...) Never will a defective voice allow an artist to develop his art fully however intangible. He will stumble over an insurmountable material obstacle...". (Creanga, 2017, p. 25)



# 3.3 The role of Rosalinde in Johann Strauss' operetta *The Bat*

#### 3.3.1 Viennese operetta, between entertainment and cultural identity

Operetta, more than opera, has materialised into an artistic genre specific to a middle-class urban bourgeoisie, representing its opinions and nostalgia. It must therefore be seen not only from a traditional musicological perspective, but also from that of the socio-political and cultural context in which it is constituted par excellence as an entertaining musical theatre, becoming a mirror of the social and individual consciousness of its time.

#### 3.3.2 Johann Strauss the son, the creator of waltz operetta

The Strauss dynasty has closely and deeply linked its name to that of the waltz, which continues to charm us today with its tenderness and sweet elegance. The success of the young Johann Strauss was immediate and overwhelming, with Viennese audiences captivated by the spontaneity of his musical expression, his waltzes creating the spirit of Vienna. Comedy and humour were seen as the essential criteria distinguishing operetta from opera, and it was precisely through satire and satirical perspective that operetta took on the task of criticising the social and political conditions that defined bourgeois society around 1900.

#### 3.3.3 *The Bat* – Operetta or the predestination of success

Johann Strauss writes a new and authentic Viennese operetta in six weeks, becoming the voice of his city, expressing at length the gaiety and slightly frivolous levity of bourgeois behaviour. Its premiere on 5 April 1874 at the Theater an der Wien was an unparalleled success and its author was considered by Spiedel<sup>22</sup>, a critic of the time, a true *god of joy*.

#### 3.3.4 Rosalinde, the absorbed prima donna

Rosalinde von Eisenstein, the female prototype of the Viennese bourgeois class, beautiful, courted, slightly spoilt by life, but living the monotony of an already routine marriage to the full, is the prima donna of the operetta *The Bat*. With a musical writing that abounds in coloratura, but approached by sonorous voices in the medium-low register, this operetta character requires particular vocal versatility, the transitions from spoken prose voice to vocal coloratura with extreme treble being made abruptly and without prior preparation.

Performing Rosalinda's score in style is a milestone for any soprano. It must be kept in mind that we are talking about music subordinate to the German text in the original, the setting in operetta being a specific one, the sound has a lighter and more strident colouring, it is not so overcast as in the opera setting, the word is paramount and the change of the larynx position between that optimal for speaking and that of the sung sound is most tiring. Add to this the emotion that must be experienced authentically, the excitement of movement and dance associated with the musical numbers, and the

<sup>&</sup>lt;sup>22</sup> Ludwig Spiedel (1830-1906) – German writer, literary critic of theatre and music.



timing of all these elements and we realise that the only salvation for any performer is mastery of the muscles that control breathing and its practical application in a well-mastered vocal adaptability.

In operetta, more than in opera, we need an optimal combination of breath support in vocal effort and an extreme mobility of the body demanded by scenic and choreographic movement.

This decoupling of diametrically opposed functions of the abdominal muscles requires sustained and permanent training in order to have a natural and neat verbo-vocal emission of optimal impedance and to avoid a breathy, unsightly or screaming voice caused by too frequent breaths and an elevated larynx lacking the necessary corporeality to function within normal limits.

The role of Rosalind requires solving all these kinds of coordination, in addition to building the character on Stanislavski's principles and finding the right tone of speech are other aspects that must be added to those outlined above.

#### 3.3.4.1 Act 1 – Rosalinde von Eisenstein – the female prototype of Viennese society

Imbued with the melancholy typical of the age of Monarchic modernization, Rosalinde is the female prototype of the bourgeoisie, a slightly bored woman nostalgic for the times "when she was not married". In this first act, the characters do not have individual arias, but are characterized through their relationships with others. Rosalind's score abounds in coloratura and extreme leaps of voice, making it difficult for prima donna voices, but thus characterizing her as she has a moment of wandering on New Year's Eve. Also, abrupt changes in mood are illustrated by her shift from high to low middle register without any prior preparation.

The topical humour of this text, untainted by the passage of time, proves that society has changed little and the comedy of manners is still enjoyed to the full by the public. Its music supports or illustratively persiflage the text, and the characters are characterised by unforgettable sound moments, which have become famous and a reference for the concept of romantic irony, rediscovered by contemporary musicology.

#### 3.3.4.2 Act 2 – The Hungarian Countess

The Viennese Ball is the centre of the action of the second act and the reason why Johann Strauss accepted the libretto, which possesses the "Dionysian force of true musical comedy", which led to its transformation into a true opera buffa. From beneath the masks of the characters, dialogues burst forth, hilariously and harmlessly camouflaging social and political criticism. To these are added important areas in the characterisation of the characters, some of them extremely difficult, such as Rozalindei's Csárdás.

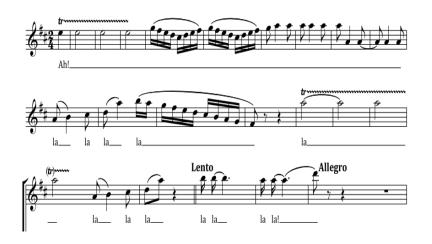
Rozalinda's big aria, the Csárdás, immediately follows the duet between the couple, which is also demanding both vocally and in breathy dosage. It is arguably the act in which the female lead reveals her true personality, the Csárdás's long and difficult phrases, dramatic coloratura, ample breathing, diversity of colour and vocal effects making this the highlight of the operetta. Written in two parts with different tempos and characters, the Csárdás in Lilac is one of the representative arias of the operetta soprano voice. Extremely difficult, this musical moment often tests the physical, mental and vocal stamina of the performers. In addition to an optimal vocal performance, we need impeccable diction,



the diverse vocal colours being the result. The energy of each word conveys a certain sonority, but at the same time the virtuosity of the colouring gives the aria the character of the Viennese temperament with accents specific to the Austro-Hungarian Empire.

The most difficult is still the final aria in which, in addition to the coloratura in Allegro – Friska, some directors associate the specific Hungarian dance, and the performers find it quite difficult to manage their breathing to reach the final counter D.

After this moment it can be said that for the prima donna of the show what was difficult is over.



Musical example 2

J. Strauss, The Bat, excerpt from Nr. 10, Csárdás – the second part

#### 3.3.4.3 Act 3 – All's well that ends well

This act is one in which prose predominates. After a brief and amusing dialogue, the words turn to music as the triptych between Rosalinde, Alfred and Eisenstein takes shape, in which the latter turns from accuser to accused. The musical part is not a difficult one this time, although we find the intervalic leaps and certain coloratura written for Rosalinde, but the finale in which the three run accusingly across the stage is impetuous and tests the physical stamina of the performers.

#### 3.3.5 Epilogue

An art form such as operetta that addresses a wide audience, in order to be successful, had to use various musical and literary codes that could be decoded by the receivers creating frames of life on the theatrical stage with which the spectators could identify, finding their identity of existential space. Waltzes, csárdás or Viennese folk songs were for the spectators musical signals that belonged to everyday reality, and by offering these symbols in a constant interweaving and joining, operetta created a set of musical and thematic references contributing both to musical acculturation and to the integration of foreign elements into one's own cultural heritage. (Csáky, 2013, p. 219-221)

The Bat remains Johann Strauss's operetta that managed to overcome time, fashion and modern cultural diversity, bringing the audience into a beneficial state through each performance with its champagne-like music and typical Viennese humorous spirit.



# 3.4 The role of Cio Cio San in Giacomo Puccini's Madama Butterfly

### 3.4.1 Giacomo Puccini – the composer with "more heart than genius"

"Music was written first by God and then by me", declared the composer who left posterity a series of musical dramas that are today unmissable in the repertoire of the great opera houses. The unmistakable signature, the unlimited warmth and inspiration, the permanent connection with immediate reality translated into a deep theatrical language and the music that constantly portrays the state of mind of the characters make Giacomo Puccini the last great star of the glorious Italian operatic tradition.

The passionate melodies breathe something of the atmosphere of Italian folk song – "the turn of phrase, the sequence of intervals, the shape of the cadences – with sudden falls from dominant to tonic, the melodic digressions evoke the southern way of musical expression". (Sbârcea, 1958, p.18)

The credibility of the libretto remains the composer's main concern and this is one of the main characteristics of his masterpieces. The music is subordinated in detail to the action, and the directorial indications are written directly into the score by the composer.

Puccini's operas open up a new artistic horizon with their verbal plasticity, sensitive melodic line and reduced form of the arias.

Even though the arias are short compared to those in the romantic operas, the phrases are so emotionally charged that they consume you until your last breath. This is a big mistake of performers who think that in verismo it's all about force and intensity. The multiple nuances, the different ways of shaping the air column towards the climactic climax of the finale, make any Puccini aria a touchstone for less experienced interpreters.

"Not everything can be written down" Puccini warned, referring to musical perception as well as the way in which expressive force often becomes condensed into a single note, pause or breath, in those silences the Maestro called "musica sottintesa". "But if it is not possible to write everything down," Puccini continues, "then the performers must strictly observe what has already been noted by the authors in the score." (Ricci, 2003, p. 9)

#### 3.4.2 Puccini's Decalogue of Directions

This decalogue, summarised by Luigi Ricci, the composer's personal assistant and vocal coach over the years for many performers of the time, seems to me essential for singers tackling the Puccini repertoire. The "ten commandments" outlined by the composer influence both the way of breathing before a phrase and the finished product determined by the modulation of the exhalation according to the issues to which it draws attention and thanks to the implicit expressiveness that comes from observing them.



- 3.4.2.1 Tempo
- 3.4.2.2 Colour of expression
- 3.4.2.3 Colour of sounds
- 3.4.2.4 Choruses
- 3.4.2.5 Portamenti
- 3.4.2.6 Artist dedication
- 3.4.2.7 Scenery and dramatic atmosphere
- 3.4.2.8 Importance of the curtain
- 3.4.2.9 Sound of the stage
- 3.4.2.10 The suggestive power of bells

#### 3.4.3 Cio-Cio-San the most complex role of her career

#### 3.4.3.1 Geisha or Flower Woman

Wherever you are in the world, when we talk about geisha, we think of Japan, the only country where this special profession, which has gradually been separated from other trades, still exists. The written word is made up of two ideograms: "gei"=art and "sha"=person.

Geisha has always represented the Japanese female symbol. She is both an object of desire and a moving work of art. According to oriental tradition she has many aspects. She is simultaneously an actress, a craftswoman, a dancer, a woman experienced in the art of conversation and tea ceremony, a human type on the edge of cultural cliché, impossible to render in Western categories.

Butterfly is in Puccini's conception the most appropriate typology of the flower-woman. The costume and make-up complement the character and help us identify with her, but most important is how we move, breathe and walk in this costume which can sometimes be very heavy.

Walking is a basic feature of the character; it needs to be studied and adapted to the costume and the situations experienced on stage. Great performers impress by simply appearing on stage, before singing or saying a text, by the way they wear a costume, walk and breathe they transmit to the audience the energy and emotion of what is to come. A Japanese woman's gait, her kneeling and rising, and her wearing of the kimono should be studied like musical phrases. It is the adaptation to a new way of life. The specific gestures, body expression and the correlation of these movements with the music are the real challenge of the role.



#### 3.4.3.2 Act 1 (Duration 48 minutes)

The vocality of the first act is typical of the 15 years old. The lyrical, bright and even childlike vocal colours of the voice in this first act are associated with the happiness and excitement of the day when she believes she has found her ultimate happiness. The tone and colour of happiness associated with cherry blossoms finds its ultimate expression in the soft, cupped accents and long-breathed phrases, completed in nuanced and mysterious colours.

The column of air needed to create the heroine is concentrated and quite thin. The effect of a young, supple, innocent and candid voice is achieved. The musical motif resembles a sincere sigh. By making Butterfly heard before she is seen, Puccini does not bring something new. Instead, by allowing her voice to float above the chorus, which is essentially an image hovering above the tonality, he achieves the perfect fusion of sensation and image. (Budden, p.247-248, 2000)

The duet *Viene la sera* comprises generous, specifically Puccinian phrases whose difficulty increases progressively, requiring great caution, science and a meticulous and thoroughly studied gradation of the air column.

At the heart of the love duet, we have a cantabile and quiet section, *Vogliatemi bene*, comparable to the central cantabile parts of the post-Rossinian era. Its oft-repeated theme is heralded by a solo violin accompanied by muted strings, a symbol of the tender affection Cio-Cio-San expects from her husband.

This sweet and sustained piano is emblematic of the love duet between Butterfly and Pinkerton, pianissimo on the Ab note being one of the challenges of this act.



#### Musical example 3

G. Puccini, Madama Butterfly, act 1, Un bene da bambino

If the attack on the note B<sub>b</sub> is not with the larynx very relaxed and low, the pianissimo on the A<sub>b</sub> will not be qualitative and sufficiently cupped. Very important is the way the air is carried towards the G note, where the bambino word ends.

This is a benchmark title for any soprano who manages to hold it in her repertoire. It is one of the most difficult operas to perform on stage, due to the length of the two acts, as well as the wide range of emotional states the main character goes through. These moods are reflected in the various timbral colours used, as well as in an astonishing gradation of vocal power that increases as the action unfolds. If in the first act Cio-Cio-San is 15 years old, and her voice must be crystalline and of a purity typical of the lyric soprano, the second act finds her and Suzuki (her maid) in the same house, but three years later, weighed down by the anguish of waiting and the uncertainty of tomorrow.



#### 3.4.3.3 Act 2 – Part 1 (Duration 47 minutes)

The soprano's voice suddenly becomes much fuller and with a changed colour. Cio-Cio-San has gone through a pregnancy, is wracked by inner conflict and the uncertainty of tomorrow. We discover at curtain up a woman matured too soon, sad, full of fears, on the verge of poverty, watching the horizon of the daily bay, waiting, letting doubt creep in.

Technically we use a more consistent air column and aim for the voice to be full of harmonics in all registers. The colour is that of the lyric soprano.

The maid's tears and lack of faith trigger the heroine's natural reaction: *Piangi, per che, perche... Ah la fede ti manca! Senti....*<sup>23</sup> and thus is born the central jewel of the opera, the aria *Un bel din vedremo*, so melodious and stylistically varied, moving naturally from quasi-spoken moments to those of great vocal intensity and dramatic unfolding.

The beginning in piano on Gb, the passing note in the soprano voice, is a difficult and hard one to achieve as Maestro Puccini intended: on the first beat of measure 1/ p.133 the note Gb is attacked in piano, dolce with a confident smile. In measure 4 on the same page, Puccini calls for a legato between the note D and E - which is not observed in many interpretative variants - precisely because of the difficulty of achieving that pp after the decrescendo and continuing the phrase to the indicated breath



#### Musical example 4

G. Puccini, Madama Butterfly, act 2-1, excerpt from Un bel di vedremo

Puccini proves to be a very good psychologist in his musical expression of how Cio-Cio-San substitutes an illusion for certainty. Bizarre timbres always appear in the orchestra, achieved by pairing glassy high-pitched harp sounds with flutes and violins. In the second part of the aria, generous phrases and Puccinian melodic arcs appear, as well as syncopated rhythms associated with the emotion of expectation.

If we fail to dose the air well throughout the aria and muscular tension arises due to the emotion expressed, there will be problems in sustaining the final sibilant. The whole aria is in the middle/high register (between C2-G), the passage area of the soprano spinto voice. That's why it's essential to keep the throat relaxed and not overload certain sounds, especially towards the end of the aria, in order to arrive with a sense of comfort in sustaining the final treble.

In *Che tua madre*, the protagonist's second aria, evocative amonic combinations abound. They result in the sad and tender song written in Ab minor, woven into a theme worthy of carving in marble. (Ricci,

\_

<sup>&</sup>lt;sup>23</sup> Translation: Cry, why, why... Ah, you lack faith! Listen...



2003, p. 137) and which turns out to be one of the most interesting as it makes the connection between the Puccini style and a Japanese musical theme.

Elements of kabuki theatre are added to the scene, and the unexpected presence and reactions of the child give this moment a particular emotional intensity. The agogic differences are directly proportional to the sadness and burden of the gheisha life narrated, the aria beginning in Andante molto mosso, at bar 10 in No. 56 the indication of Animando un poco appears, and at No. 57 the tempo quickens with the indication Mosso.

The sounds foreshadowing the death wish are difficult and incisive, their colour is strident and sharp like a knife blade.

Morta! Morta... mai piu danzar! is a signed will. The attack of the acute notes is difficult to sustain and perform with the child beside you, and the accuracy of the final sib-I of the musical phrase below depends on their correctness.



#### Musical example 5

G. Puccini, Madama Butterfly, act 2-1, Piu tosto la mia vita vo troncar...

At the end of Act 2, Butterfly returns to her lyric soprano voice, with bright iridescence. Puccini had inspiration and managed with masterly skill to reinvent the soprano's sound by writing this great Act 2 finale, the music imbued with luminous joy. *Scuoti quella fronda di ciliegio!* as if all the flowers of the world would fill the "beloved's soul". (Arnesen, 2009, p. 127)

#### 3.4.3.4 Act 2 – Part 2 (30 minutes)

Begins with an orchestral intermezzo that is nothing less than the poem of sleeping nature and watching love. Then, as the night fades, we hear the sailors' invocations in the bay gilded by the rays of dawn. The sun rises, but it is not the dawn of Tosca or Boheme in which hope is glimpsed, but a Japanese morning suggestively illustrated by pizzicato violins, clarinets and trumpets that creep in with a cool light heralded by woodwinds that end the spellbinding atmosphere of dawn in just two bars. *Gia il sole...*says Suzuki, and the house is full of flowers that have lost their freshness, mirroring the disappointment of unfulfilled expectation. *Verra, verra vedrai...* says Cio-Cio-San in a register in which the soprano voice barely finds its colour, being at the transition to the lower register.

With the child in her arms, overwhelmed by its weight, Butterfly exits the stage to the rhythm of a last lullaby, ending in a natural B written in pp, the hardest note for the lyric soprano-singer who has reached the end of the second act in which she has gone through all the possible nuances of her register.



After an hour and a half of singing, the soprano rests for 15 minutes. The swan song follows - heartbreaking and dramatic.

When she re-enters the wilted flower room untimely looking for Pinkerton, but sees Suzuki crying, she falls silent for a few bars. She tries to understand. We no longer have music, but theatrical dialogue accompanied by broken, dissonant, disjointed chords and many pauses that speak more expressively than ever.

Ah, e sua moglie! she must address the audience (Puccini wanted her to) and stand there petrified, a statue of pain, speaking on notes without looking people in the face because it's all over for her. The eyes emptied of life and gazed into the void, into the terrible and mysterious void of the future, for the duration of the scene until the moment everyone had left

Finally, we rehearse the theme from *Un bel di vedremo*, this time in a minor key, expressing the last wish.

On her knees, ready for the final gesture, with her last vocal resources, Butterfly sings her last aria, dramatically and expressively with her child.

This is the most difficult musical moment of the opera. The emotional charge, the intensity of expression, the impossibility of relaxing to the musical phrases that come one after the other, like a testament in which she wishes to expose all her feelings, overwhelms and consumes.

After this heartbreaking farewell, Butterfly playfully blindfolds the child and moves behind the screen. The accompaniment expressed in constantly ascending three-sound chords gives us a sense of the heroine's heartbeat. Her suicide is musically illustrated by the monotone theme and the rising clop of timpani in a syncopated pulse of trumpets, English horns and cellos. From there, on a measure of pause, the falling knife is heard.

At the moment of death, the balance of power shifts. Butterfly sees a frightened Pinkerton kneeling before a scene that will haunt him all his life. Puccini could find no more fitting musical illustration than the G major chord that suddenly appears in B minor. There are many interpretations of this finale. Some scholars of Puccini's work see it as a cadential device specific to Japanese music, while others see it as the expression of the suicide's yawning eyes. (Sbârcea, 1959, p. 110)

Puccini confessed that he did not enjoy listening to his operas "except for the last act of Bohemia. Cio-Cio-San, however, is an exception: it enchants and interests me from beginning to end. It is the most modern of my operas." (Sbârcea, 1989, p. 112)



# 3.5 CONCLUSIONS: 20 years on the Brasov Opera stage

Breathing is the most important part of any human activity. Speaking and singing, our main means of communication, require a thorough knowledge of breathing techniques and its control mechanisms, especially when it has to be used in prosodic and musical declamation.

Speech and stage singing are performed by the same instrument, we move from one activity to the other within the same breath, the technique required for both activities being similar. What differs considerably is the position of the larynx, which if not properly trained, will not be able to respond without fatigue to these dangerous and alternating leaps of placement and pitch.

One might ask... does each character have a different setting? Definitely yes. Just as no two people speak identically and we recognise each other by our voices, so each character will have his or her own vocal identity, another colour, another temperament, another way of feeling and reacting. What is always changing is the way we drive the air column to different resonance points. We adapt the way we blow the air to different dramatic situations, although the muscles involved are the same, but the rhythm and alternation of breathing times (inhalation, exhalation and apnoea – upper on full or lower on empty) differ.

One cannot sing at random, and the meaning of the words must be searched for over and over again. Just as a book read a second or third time reveals other and different meanings, so in the art of singing the meticulous study of the text, of the libretto, is the performer's primary duty and thus opens the door to the creation of the character.

To shape a character, we need thousands of colours, shades, moods, feelings. The intensity of the voice is not just about forte and piano. Just as in painting every bright colour is accompanied by a shadow, so every feeling or transition from one state to another is accompanied by a multitude of nuances, all passed through the filter of vocal possibilities and the way of conducting the air column to express the respective mood.

Singing after saying prose, dancing while singing a difficult coloratura in the high register, and making this performance seem natural is what turns the musical theatre performer into a performance athlete. By using breathing techniques, we can influence the activity of the neuro-vegetative system and thus gain better control over the body, mind and emotions, with breath awareness being the most effective tool to reduce stress.

Breath is the key to the connection between the body's systems and the human voice, which is not just a musical instrument, but one integrated into the body and thus subject to emotional, nervous and articulatory language impulses. Changing the way the voice works (spoken voice/sung voice) means reviewing the breathing process at a deeply involuntary neuro-psychological, psycho-physical level, as well as changing brain commands. Any practice of breathing and voice needs to be made conscious and brought to the level of activities that are part of the reflexively and unconsciously performed sector of everyday life. The body will be able to adapt to the various artistic practices and the attention will be directed towards the interpretation of the role when breathing, speaking and singing are already well-integrated reflex acts of the human body. This becomes possible through awareness of the breath and its transformation into conscious breathing.



#### FINAL CONCLUSIONS

This paper "Conscious Breathing – the connection between repertoire versatility and vocal health" highlights the importance of being aware of the correlation between the art of breathing, the health of the phonatory system and the approach to a diverse repertoire.

I consider it a necessity to address such a topic, given the specificity of body-based vocal singing. Optimal vocal technique can only be built and strengthened with the help of conscious breathing in constant connection with the movements of the body. This has been revealed and confirmed to me during 20 years of experience in the field of opera soloing. During my artistic career I have tackled very different roles stylistically, from W. A. Mozart to G. Verdi and G. Puccini, from Fr. Lehar and J. Strauss to Fr. Loewe. My professional experience has confirmed that vocal and scenic success in the creation of a character is closely linked to the science and art of breathing and to the maintenance and preservation of the health of the phonic apparatus. Vocal technique and the correct coordination of the air column change according to the musical language (melody, rhythm, orchestration) specific to each musical era. I think it is important and necessary to be aware of the correlation between the health of the phonatory apparatus and breathing technique, including vocal technique, as I am also a graduate of the Faculty of Medicine and Pharmacy and I know in depth the effort that the body makes in vocal singing, on the one hand, and on the other hand, what negative repercussions can have on the vocal cords when approaching an inappropriate repertoire.

Vocal cords that are constantly under too much air pressure will tire prematurely. Tackling a difficult repertoire when breathing and vocal technique is not well mastered can cause muscle fatigue. If neglected, vocal cord fatigue will gradually develop into dysphonia, which in turn can develop into nodules and even vocal nodules. This is why an ENT check-up and a visit to the phoniatrist is a professional obligation for the opera singer. Correct and conscious breathing applied to a healthy larynx leads to increased and appropriate expressiveness in any musical style approached.

Any educational intervention on the voice must start from the dismantling of anything that could be an obstacle to the body's natural reflexes. Awareness and connection to the breath, releasing excessive muscular action that inhibits breathing and restricts the voice is the essence of the vocal technique I practice and teach.

In fact, the development of conscious vocalism is accompanied by the ability to listen to one's inner needs and to recognize one's limits, to seek to overcome them, to reach a balance in the body and in relation to the environment. Awareness itself, whatever the element on which it focuses, is always a fundamental resource for the human being.

Its development in relation to the voice, which is an important component of personal identity, is an opportunity that school should be able to offer to all.



#### ORIGINAL CONTRIBUTIONS, PEDAGOGICAL PERSPECTIVE

The originality of this work lies in an analysis of the roles that is less often practised by specialists, namely that of the importance of the exhalation character in the realisation of the vocal colours that characterise the characters and the effort to which the phonatory apparatus is subjected. Also, to conclude this analysis, based on personal experience and artistic activity for over 20 years, I have drawn attention to how the vocal health of the opera, operetta and musical performer is affected when the effort of the vocal apparatus is constant, without pause or discernment in the choice of repertoire.

The present work proposes a holistic vision of the human voice, offers therapeutic musical solutions (vocalizations and exercises), as well as the resolution of vocal technique problems by connecting conscious breathing with the various functional compartments of the human body. The development of repertoire versatility is only possible if we are aware of how our own body functions, with its pluses and minuses, exploiting native qualities and transforming weaknesses into virtues in order to achieve a quality artistic act.

I also talk about the connection between voice and emotions, stressing the importance of emotional intelligence, manifested in the performer's ability to connect with the emotion of the character through conscious breathing. The difference between two professional soloists tackling the same role is always the interpretation and the ability to master emotions.

The intention of this work is to promote a new paradigm on the study and control of the voice. It addresses both students and vocal professionals and reveals the importance of awareness of a tool that is within everyone's reach: the breath. It can help us reconnect with our own body and help others to do so.

To some extent it can be said that simply working with yourself and gently and gradually applying breathing practices is part of the healing and trauma release process.

The concept outlined above has tremendous significance for a singer-performer, as any athletic, artistic, and intellectual performance is enhanced when all of the body's channels of communication are open and balanced (Oschman, 2003, p.90). As a performer and voice teacher, I know that accessing the inherent power of emotionally challenging scores requires the performer to be particularly free and available, both physically and vocally.

The voice cannot be treated as a mechanism that simply needs adjustment. It is a reflection of the whole person and must be treated holistically, accessing the full spectrum of the personality-physical, vocal, emotional and accepting the challenge of approaching it from all these points of view.

Understanding the means by which trauma of any kind becomes an integrated part of the body, as well as one of the key mechanisms by which it is released, can go a long way to alleviating the fear and anxiety that both students and now professional singers may feel in those moments when an apparent vocal or breathing exercise triggers something deeply personal in someone and makes them vulnerable. Trusting that this release is a healthy, necessary and indispensable process for becoming a performing singer is very important and depends very much on the one who guides this process, namely the singing teacher.



"Know thyself", the thought that has crossed all philosophical currents from ancient Greece to the present day, becomes sine qua non for any vocal performer. Likewise, those who educate, train and guide the voices of performers are bound to follow the same rules. You cannot explain and teach what you have not practiced yourself.

An individual who does not totally inspire, does not totally inspire, does not totally accept the surrounding reality. An individual who inhibits his exhalation will not fully empower and trust his surroundings. An individual who does not breathe fully and consciously restricts their personality.

(Stanley Keleman, 1981, p.154)