

The Use of Psychotechnical Methods in Formation of Vocal Performance

Li Eryong

College of Art, Jiangxi University of Finance and Economics
Nanchang, Jiangxi 330013, China
lieryong@yandex.by

Abstract: A professional training of singers shall have a scientific basis, and the teaching of vocal technique (singing technique) shall be based on the use of various formation methods of the exponent's professional qualities. The analysis of activity of leading vocal teachers of the past and present brings us to the conclusion that psychotechnology, as a method of professional training, has always been and still remains one of the most efficient methods of vocal training, in particular, at the initial stage of singer upbringing. Thus, in our opinion, the psychotechnical methods are the most promising ones. The article deals with the possible use of psychotechnical methods in formation of such vocalicity components, as singing breath and adequate emotional state.

[Eryong Li. **The Use of Psychotechnical Methods in Formation of Vocal Performance.** *Life Sci J* 2013;10(4):818-823] (ISSN:1097-8135). <http://www.lifesciencesite.com>. 103

Keywords: psychotechnology, psychotechnical methods, practical psychology, singing breath, emotional state, muscular tension.

1. Introduction

In the opinion of V.I. Yushmanov, "the main secrets of singing skill, "something" intangible, shall be searched in the sphere of psychology, in the peculiarities of willed and subconscious singers' control over the work of their instruments"[1]. Thus, the success in vocal art is directly connected with the singer's mental state.

With regard to the fields of Chinese psychology, psychotechnology, psychology of music and psychotechnology of music (vocal music) can be derived from the end of 20th century. Professor Yang Xinhui of Jiangxi Normal University, who was the first one to study psychotechnology, had brought forward the concept of establishing modern Chinese psychotechnology in 1980s. In 1991, Professor Yang Xinhui set up the first domestic psychotechnology application research institute in Jiangxi Normal University, successively recruited and cultivated numerous masters and doctors; in 2000, he established Chinese psychotechnology application research society. In 2005, he compiled the *Modern Psychotechnology*, elaborated on the development history of psychotechnology, necessity of building this concept as well as the construction system, described the personnel psychological quality testing technology, social psychological testing technology, psychological consultation and psychotherapy technology and economic psychotechnology. [2] As the first literature addressing psychotechnology published in China, the book made remarkable contributions to the expansion and development of Chinese modern psychotechnology. Currently Yang

Xinhui is titled as the psychology professor and tutor of doctorate candidate of Nanjing Normal University.

Let us narrow down to the terminology. The word "technics" is used in different meanings, including the aggregate of means, used in any labor. Its meaning is connected with the Greek *techne* - artificial, art, skill.

Initially, "psychotechnology" was understood as the use of psychology in economy and industry. The range of psychotechnology use was very wide. The attempts were made to determine the optimal working time duration. There were made the experimental studies of fatigue problem, the profession analysis methods were created, and the so-called professional orientation gained the popularity. The book "The Psychology of Industrial Productivity" (1913) by G. Munsterberg contained a wide plan of development of industrial psychology (psychotechnology) It dealt with the problems of scientific factory management, professional selection and orientation, industrial training, adjustment of equipment to psychological human capabilities and other factors of increasing of workers efficiency and income of employers.

The psychology of music, as one of the branch subjects of psychology, this concept can be ascended to the Spring and Autumn Period and the Warring States Period during the long-standing Chinese history. The thought of psychology of music can be found in historic theories of music, philosophy, aesthetics works and other history literatures records. In the recent period, the musician Dr. Wang Guangqi (1892-1936) had initially researched the modern psychology of music, and he

completed the first Chinese book about the research of psychology of music—the *Psychology of Sound* in Germany, which was published on the core magazine of Chinese education named the *Chinese Education Circles* in Sept. 1927. In this book, the author firstly introduced the research conditions of world leading German psychology of music at that time. From now on, he launched the research history of Chinese modern psychology of music.

Being restricted by multiple reasons and conditions like social politics and economy, Chinese vocal psychology was blank without research since 1980s. At the end of 1980s, the new subject namely “psychology of vocal music” had been launched initially. In 2002 Chinese Association of Psychology of Vocal Music was established in Beijing, and some scholars gradually dedicated themselves to the research of psychology of vocal music. It is worth mentioning that the article compiled by Xu Xingxiao and Xu Qian *Review and Thoughts about the Research of Chinese Psychology of Vocal Music in the 20th Century* [3], which comprehensively described the study on overall situation of the psychology of Chinese modern vocal music since 1980s, and analyzed literatures about the psychology of vocal music written by numerous scholars. The development of psychology of Chinese modern vocal music was concluded as following trends by the author: general situation and academic dynamic research of the psychology of vocal music; psychological training and research of vocal music teaching; psychological change research of vocal music study; study on vocal music cognition and emotion; psychological states of arts practice; all these five points show the academic achievements of the psychology of Chinese modern vocal music.

The earlier Chinese literatures involved with the psychotechnology of vocal are as follows: Liu Yuantong, *Discussion about the Basic Principles of Drama Performance Psychotechnology (the First and Second Parts)*, which summarized the drama performance rules about actors how to grasp and exert performance actions with singing skills in the field of psychotechnology [4, p.21-23]; Yang Yihe, *Aesthetic Thoughts about the Performance Psychotechnology—Inspiration of Stanislavsk Performance System (The First and Second Parts)*, which introduced the differences between drama and music. The author advocated that actors should perfect their performance by using the psychotechnology into reference [5, p.7-12]; Jiang Daikang, *Study on the Psychotechnology of Vocal Music Stage Singing Performance*, this article studied the singers’ singing emotion, interior monologue, singing image and audience communications from the point of psychotechnology [6]; Wang Yongjiang,

A Brief Analysis of the Psychotechnology of Vocal Music Stage Singing Performance, which simply analyzed singers’ nervous psychotechnology and brought forward corresponding solving methods, such as intensifying their basic skills and drawing away their attention [7]; Ren Cheng, *Discussion about the Psychotechnology of Vocal Music Stage Singing Performance*, he brought forward that all singing organs were affected by the psychotechnology, advocated that singers should establish correct idea when they were singing [8]; Gao Yinan, *Conscious Psychotechnology Produces Subconscious Creation of Actors*, which pointed out that there were double egos existed during performance namely the true ego and role ego, actors must blend themselves into role performance based on psychotechnology [9].

It is obvious that this subject needs to be constructed urgently as it has no specialized publications only based on several articles about the psychology of Chinese modern music (vocal music).

The 21st century is marked as the famous age of psychotechnology of music, whose development is closely connected with human being’s destiny, and the research of music mode and development of music behaviors are necessarily based on its strength. We believe that the development of Chinese psychotechnology of music subject is launched, as it defines subject character, research objects and methods, academic team construction, etc. The research personnel will abstract theories from western psychotechnology of music widely, based on broad angles, blend the ancient history with present situations, and interpenetrate the eastern and western concepts to begin dialogues among diverse cultural traditions. As a result we believe that the development of psychotechnology of music will accumulate huge potential and life force and will become one of the leading subjects in the 21st century.

As the psychotechnology behaviors run through the whole vocal music performance, besides professional singing skills, actors should emphasize psychotechnology contents training. In consideration of that singing psychotechnology factor and physiological factor grow commonly, singers only can deduct perfect performance under any circumstance if they draw support from correct singing methods and combine physiological quality with psychotechnological quality.

In our understanding the word “psychotechnology” belongs to the sphere of practical psychology; it is understood as the scientifically grounded psychological methods, procedures and operations in work with people and solution of applied problems. In this article it is also used in this

context, as applied to the vocally-performance activity.

Thus, in vocal performance the psychotechnology is an art of formation of psychological aspect of singing skill. The procedure of psychotechnology is a way of developing of abilities and creation of more efficient behavioral models.

Grasp of psychotechnology presupposes, that the professional singer possesses the specific knowledge of vocal psychotechnology, and also skills and habits, formed in the process of systematic use of the knowledge in practice.

In our opinion, the main components of vocality (irrespective of the talent from above) are breath, emotional state and physical health of the vocal apparatus.

Thus, to work with psychotechnology, there are three basic components of one foundation - breath, emotions and sensation. They are brought together and cannot exist apart from each other.

The famous masters of psychotherapy V. Reich and A. Lowen, the founders of bioenergetics analysis, studied the functioning of man's psycho in categories of body and energy, considering the suppression of feelings, as a source of neurosis, depressions and loss of identification; it manifests itself in chronic muscular tension, blocking the free flow of energy in organism. V. Reich and A. Lowen paid much attention to the practice of deep quiet breathing. "Breath is directly connected with exited state. When we are relaxed, our breath is free and quiet. In the state of strong emotional excitement, breath becomes fast and intense. In the state of fear, we are breathing sharply and hold our breath. In the state of strain our breath becomes shallow. A converse statement is also right: deep breathing makes the body calm"[10]. Thus, there is a connection of muscular tension with emotional block.

Entering upon the vocal practice, undoubtedly, you face with the influence of emotional state on the acting skills. Firstly, they are the problems, connected with insufficiently free breath, strain and impaction. In his psychological practice, Reich succeeded in curing the patients of psychopathic and neurotic character, using the practice of free and deep breath.

That is why, those, who start their career in profession, connected with vocality, taking into consideration the tempo of modern living and stresses of urban space, shall start their training with the practice of deep free breath, liberation from depressed emotions and relaxation. Only when a man, studying the vocality, feels the muscular freedom and learn to breathe deeply and free, he can

start to study the next breathing methods and vocal lessons.

The main tasks of right singing breath are breath stretching (i.e. air, breathed during inhale), creation of pressure in subglottic area, necessary for normal work of vocal cords, and flowing exhale.

A.G. Menabeny writes: "In vocal-pedagogical practice the most convenient breath is low-costal diaphragm breath, i.e. the combined breath, at which the low ribs rise and expand during inhale, and the rest of chest is nearly motionless, the diaphragm and abdominal muscles are active. The movements of abdomen front wall are well felt.... The singing inhale is taken quietly, rather deeply, with the feeling of semi-yawn. When inhaling, you should not try to breathe the great amount of air, as in this case the sound producing and the vocalization itself are made difficult.... The singing inhale and exhale are divided by the momentary pause - breath stop, after which the exhale begins..."[11].

Z.I. Anikeeva and F.M. Anikeev in the book "How to Develop a Singing Voice" suggest the exercises for developing the singing breath and speech apparatus of the vocalist. There are also the examples of exercises, improving the mental state of the singer and removing the muscular tension. "The acquiring of slow exhale technique are of great importance for the singers", state the authors [12].

Such well-known teachers, as A.M. Dodonov, I.P. Pryashnikov, O.L. Lobanova and P. Organov also recommended the singers to do the special breathing exercises in order to acquire the slow exhale. Special training is very important for development and holding of singing breath: it helps the singer to learn much faster not to produce the noisy exhale, not to inhale the excessive amount of air, to get the great sound effect with small amount of exhaled air.

Enrico Caruso followed a method of Italian masters bel canto. Salfatore Fuchito and Barnet J. Beyer, speaking about the vocal methodology of Caruso, write: "He inhaled, stopped and then spent his breath absolutely the same way, as the masters did, in other words, he used the diaphragm, intercostal breath. It shall be underlined that Caruso held his body absolutely free, without any strain. Then he contracted abdomen muscles barely perceptible and inhaled calmly, without any hurry. The second movement was the exhale. Because of great breathing force of Caruso, it is necessary to underline willed factor as another important one. Caruso could slowly and gradually inhale so deeply, and prolong his exhale for a significant time interval, also because he simultaneously joined the conscious breath control to the physiological act" [13].

As is seen from the abovementioned, both the suggested breathing practice of V. Reich and different vocal schools of famous masters do not exclude each other, but, on the contrary, mutually complement.

In the opinion of N.Knyazhinskaya, it is possible to feel the movements of abdomen anterior wall well, only if you can relax and tense these muscles. If these abdomen muscles are in usual spastic state, i.e. the abdomen is hard and inactive; it is possible to get positive results only if practicing the deep breathing, involving abdominal muscles and diaphragm. It is necessary to free the depressed emotions, to give utterance to concealed feelings, to free yourself from the customary, but so uncomfortable inhibition. Then, when the stain is relieved, and a man feels the muscular freedom and heartsease, it is possible to start gently the study and practice of vocal breath and sound production. Air stretching during exhale also requires the inner tranquility and physical work. At that, the abdominal muscles shall be elastic and flexible. To learn how to control your breath is possible only gradually, by feeling your body, getting rid of inhibitions and then by regulating the inhale and exhale, understanding the right muscular activity. For the newcomer vocalists it is the main factor in training. The subconscious right breath comes only with the experience, gained in trainings under supervision of the experienced coach and teacher. The right singing breath does not only develop the singer's vocal possibilities, but it is also curative, as all components of breathing school are aimed at mental and physical health care [14].

Let us fix on the following component of vocality - emotional state.

N.P. Voronina pays attention to the specific role of temperament problem in the science of vocal art. She considers that, as the temperament is closely connected with the creative process, the specific peculiarities of the singer's artistic performance are in its direct dependence. That is why in the art of singing it is important to know your temperament and how to use it skillfully in the creative process. The temperament frequently corresponds to the type of voice. However, sometimes there is no such correspondence. For instance, the singer has a sanguine temperament, i.e. he is liable to deep emotions, dramatics, but he has a lyrical voice, and in the process of singing, he tends to show the traits of his temperament to the full extent; it undoubtedly results in the voice trauma for him. That is why the teacher should follow not only the inborn temperament of the student, but also his voice type, not allowing him to sing the dramatic pieces,

especially at the initial stage of singer's development [15].

The state of internal calm and assurance usually comes with the great experience, while for the newcomer exponent it is important to know, that even the drive for internal tranquility plays an important role in acting skills. It is impossible to come to the stage, experiencing everyday troubles. The unrelated thoughts not only prevent from concentration on the performing piece, but enslave the exponent himself, as if tying him hand and foot. Frequently, of course, the exponent's inhibition emerges, unfortunately, not due to common everyday problems. The source of the inhibition can be the deep emotions, hidden in the faraway heartstrings.

The source of the inhibition can be the deep emotions, hidden in the faraway heartstrings, displaced into underconsciousness. More often, the consequences are the frustration, psychic strain, neurosis-like disturbances and depressive states. As it was previously mentioned about breath, the emotional and psychological state of the exponent influences on the breathing function. In the Russian language, there are a lot of statements, characterizing the emotional state of a person, influencing on the voice and breath. For instance: "Mugged breath in goiter" (for joy, surprise), "to begin bawling" (begin to shout or cry loudly), "breathe more deeply" (be attentive, be glad) (joky compellation), "hardly breathing" (tenderly, quietly), "breath of life" (wide semantic meaning), "not breathing" (insensibly at all), "I'm lost for words" (because of indignation and offence), "hoarsen" (because of long quarrel and explanations), "the breath was seized" (because of fear and surprise), "have lost tongue" (due to surprise and miracle), "yell" (shout loudly, call).

If the emotions overflow, a man becomes nervous, the pressure can even rise, there is a rush of blood to the head, and, consequently, swelling of vocal cords, oedema and incomplete interlocking, at strong tense of cords. Then there is hoarseness and temporary voice loss. All these can occur in the matter of seconds, so a man will not notice all these warning symptoms, and everything is only because the invading emotions overwhelmed the rest human feelings. For instance, one more reason of voice loose is the customary inhibition in the area of neck. However, the inhibition emerges, as a rule, because of the deeper psychological problems. The same inhibition of neck muscles can emerge because of different reasons. Frequently, the neurotic state, the state of anxiety, fear, inferiority complex, forgotten stress from childhood, which are concealed by external physical manifestations, emotional rigidity. The consequence is the inhibitions in different parts of body, preventing a person from being free. F.

Alexander also sees a close connection between the breathing and emotional-expressive functions and considers it possible, that psychological factors play an important role in emerging of the majority of diseases and disturbances. [16]. However, unfortunately, up to the present day the systematic studies in this sphere were limited only by the studies of bronchial asthma.

L. Dmitriev writes about the emotional state the following: "Emotions are closely connected with the work of subcortical centers and vegetative nervous system. Emerging as a result of cortical activity, the excitement irradiates into the subcortex, which changes the work of the internals and systems, transferring another tonus to nervous system. That is why the emotions are always expressed in a number of vegetative reactions: breath and heartbeats are changed, people turn pale or red, sweat or cover with "creeps", tremble, feel the hot coppers etc. The motional part is changed very strongly under the impact of emotions. Emotions are always expressed in mimicry, in character of movements and speech. Their impact changes the voice quality and height, at which a man speaks, a manner of words formation, speech speed etc. For instance, at the examination, under the impact of negative emotions, the student's speech often becomes weak, badly audible, the voice is interrupted. On the contrary, in the state of excitement a person speaks loudly, quickly and raises voice. The singer's voice is a wonderful instrument, which can express different human states amazingly fully. Changing the voice quality, dynamics, words accentuation, it is possible only with vocal means to interpret the piece deeply, creating the vocal image" [17].

Thus, it becomes clear, that the emotional state is directly reflected in breath and voice, also influencing directly on physiological state of the vocal apparatus.

In the opinion of N. Knyazhinskaya, the task of the vocal teacher is not to frighten his student, but, on the contrary, like a tender parent, to get onto the exponent's state of mind and to help him to cope with the painful problem, to give him strength, patience and self-assurance. This task requires from the vocal teacher outstanding capabilities of psychologist and great patience.

Sometimes, the teacher faces with the outcry of student, who is against the interference into his state of mind. The student has every right to protest, as he thinks, that others trench on his private and secrete. Probably, in that case the teacher missed a figure and was not tactful to his student.

The work at this level requires incredibly delicate sense, intuition and tact. It looks like an attempt to pet a small bird. The most important is not

to frighten it, and to make it sit on hand; it shall feel comfortable and warm on your hand. It is necessary, that the bird trusts you, only then you will be able to touch it tenderly and set free again [18].

Thus, one of the main components of vocal training is the technique of vocally-scenic creative work, which also includes the psychotechnology. In this connection, the use of psychotechnical methods to improve the acting skills shall include the whole variety of devices, providing the psycho physiological state of singer.

Based on the studies of practices in the sphere of vocally-acting skills, we came up to the conclusion, that the psychotechnical methods shall be aimed at psychophysiological state of breath and emotional state of the exponent.

Corresponding Author:

Dr. Eryong

College of Art, Jiangxi University of Finance and Economics, Nanchang, Jiangxi 330013, China
lieryong@yandex.by

References

1. Yushmanov, V.I., 2002. Vocal Technique and its Paradoxes. Second Edition, St.Petersburg, Publisher: DEAN.
2. Yang Xinhui, 2005. Modern Psychotechnology. Shanghai, Shanghai Education Press, pp: 319.
3. Xu Xingxiao, Xu Qian, 2002. Review and Thoughts about the Research of Chinese Psychology of Vocal Music in the 20th Century. Music Research, #.2, pp: 207-218.
4. Liu Yuantong, 1992. Discussion about the Basic Principles of Drama Performance Psychotechnology. Chinese Theatre Arts, #.11, pp: 21-23.
5. Yang Yihe, 1995. Aesthetic Thoughts about the Performance Psychotechnology—Inspiration of Stanislavskiy Performance System (The First Part). Academic Journal (Music and Performance Edition) of Nanjing University of the Arts, #.4, pp: 7-12.
6. Jiang Daikang, 2010. Study on the Psychotechnology of Vocal Music Stage Singing Performance. Music Exploration 2010, #.03, pp: 78-80.
7. Wang Yongjiang, 2012. A Brief Analysis of the Psychotechnology of Vocal Music Stage Singing Performance. Music Overview 2012, #.05, pp: 55.
8. Ren Cheng, 2012. Discussion about the Psychotechnology of Vocal Music Stage Singing Performance. Popular Songs 2012, #.09, pp: 2-53.

9. Gao Yi'nan, 2012. Conscious Psychotechnology Produces Subconscious Creation of Actors. University Entrance Examination (Comprehensive Version) 2012, #. 12, pp: 25.
10. Lowen, A., 2006. Psychology of the Body. M., Eksmo.
11. Menabeny, A.G., 1987. The Training Procedure for Solo Singing: Training Manual for Students of Pedagogical Institutes. M., Prosveshenie.
12. Anikeeva, Z.I. and F.M. Anikeev, 1981. How to Develop the Singing Voice. Kishinev, Shtyintsa.
13. Fuchito, S. and B.J. Beyer, 2005. The Art of Singing and Vocal Procedure of Enrico Caruso. St.Petersburg, Publisher: Compositor.
14. Knyazhinskaya, N., 2011. Vocal Psychotechnology: Theory and Practice. Moscow.
15. Voronina, N.P., 2008. The Role of Psychotechnology in Development of Vocal Performance. Almanac of Modern Science and Education, Tambov, Gramota, in 2 Parts, Part 2, 6(13): 49-53.
16. Alexander, F., 2002. Psychosomatic Medicine, Principles and Practical Use. Translated from English by S. Mogilevsky. M., Publisher EKSMO-Press.
17. Dmitriev, L., 2007. The Bases of Vocal Methodology. M., Publisher: Music.
18. Knyazhinskaya, N. The Author's Methodology of Psychological Perfection and Revelation of Creative Potential, www.knyazhinskaya.ru/pages/gol-psy-tech.php

16/10/2013