

A study on the Basic Elements of Voice Culture for an Ideal Singing Voice

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Abstract

Our voice is the best way to express or communicate our inner feelings. Singing is producing musical sounds with the voice. Voice box may be regarded as the natural instrument, bestowed as a blessing to humans by God. This instrument mainly consists of four parts: - power source, vibrator, resonator and articulator. Many instruments consist of the first three parts but the articulator is the characteristic feature of the human voice.

This article will help to acknowledge the importance and benefits of voice culture for a vocalist. Voice culture is the scientific method of improving, learning, molding and culturing voice quality for singing. The audience always likes to hear a soothing, melodious, loud enough, enthusiastic but steady voice; which much be dexterous and flexible. Voice also has great therapeutic as well as aesthetic effect.

Keywords: Voice, Voice Culture, Voice Production, Voice Training, Singing techniques

Introduction:

The human voice is superior in all respects to man-made musical instruments. The human voice is the most intricate and magnificent instrument of all, even the greatest virtuoso will find it difficult to match the level of emotions expressed with an instrument, in comparison to human voice. The human voice was the first instrument and remains the most powerful and effective method of musical creation and emotional transference.

“The term “Voice” is used in two senses: one is to denote the vocal mechanism which acts as an instrument of speech and song and another is the sound produced in the mouth by human beings in speaking and singing.”¹ Singing is producing musical sounds with the voice and it needs proper training. Enhancing or culturing the voice of a singer is an important thing. Voice culture also helps a singer to communicate to the audience with what he or she wants to express through his singing.

“Voice Culture is also known as bringing the voice under control. Singers require delicacy in controlling over the muscles of the vocal folds.”² The vibration of the vocal folds produces the voice. The adductor muscles are responsible in bringing the vocal folds into approximation. The contraction of the respiratory muscles built an air pressure column just below the vocal folds. Therefore, the vocal folds are seemed to be forced apart, the air passes through these folds and vibration of the vocal folds occurs.

Singers are required to know about the art of voice culture for smooth transition of notes, various tonal shades and modulations which are the major and basic principles of good singing. “A good singer should possess both good voice and musical skills. But the importance of good voice cannot be overestimated. In fact, a singer exhibits his musicianship only through the medium of his voice. Therefore, voice culture is absolutely necessary for every singer.”³ “The concept of ideal voice varies according to the style of music. Therefore, the training method differs according to the style of music.”⁴ To produce high quality of voice is very necessary for every singer. Voice quality is the first equipment of the singer. When a singer starts singing, listener’s first attention is on the singer’s voice. So, in voice culture the first thing is to improve our voice quality.

It is not necessary that every voice would sound melodious. Some may sound shrill, hoarse, very loud or faint. Quality of sound, also called timber is determined by instrument’s shape (here, the shape of mouth and other related organs), by frequency range within which the instrument can produce overtones and by the envelop of the instrument’s sound. It is very important in voice culture. Singers like Akhtari Bai, Gangu Bai Hangal, Moti Bai and Shobha Mudgal etc. have heavy voice which is usually unsuitable for singing but they have sharpened it and modulated their singing which made them one of the greatest singers of classical music and they were largely appreciated by the audience too.

Another factor is nasal tone. Many singers have a slight or more nasal tone in their singing. But some of these singers have made it as a quality or the specialty just like Ghulam Ali (Renowned Ghazal Singer). The training of voice helps to control or balance breath, manage speech, adjustment in resonators, control over pitch and mental perception. Singers are trained according to the type of music they have to sing like classical, semi-classical, light, blues, pop etc. An intensive as well as extensive study of the methods of voice culture is much needed nowadays to help improve the voice quality of the aspiring singers.

Basic Anatomical Structures Required for Voice Production:

The first is for activation (power source) i.e. lungs, diaphragm, intercoastal muscles. These involve breathing of air. Second is vibrator (voice box or layrnx), it helps in the creation of pitch of the sound wave. Third is resonator (pharynx, oral and nasal cavities). This helps in modification of tones into timber. Fourth structures i.e. throat, mouth, lip, teeth and nose are used for articulation.

Voice Production:

Voice production depend on few features given as following-

- The shape of the mouth.
- One should have a good control of breath both in speaking and singing.
- Our speech organs must be flexible to enunciate words and produce musical phrases as well as there must be a good vocal range.
- Good Pronunciation of words as well as clear pronunciation of vowels.
- Audibility and good quality for singing can only be acquired through proper adjustment of resonators.
- Voice adjustment in various tempo is an important factor.
- One should have a good control in the amplitude.
- “Adequate loudness so is to reach a large audience is one of the most important factors in singing.”⁵
- Hearing helps to regulate pitch intensity and timber of the voice that is why hearing plays an important role in the production of voice.
- The most important thing is the imaginative power of the singer and
- Voice quality is a gift of God but it can be modulated through a good Riyaz.

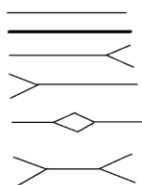
Types of Voices:

Singing voice is classified into 4 types: -

1. CHEST VOICE: - We use our chest voice to speak generally. ‘The sound is produced from the upper part of the chest. “Singing in this manner is also known as open throat singing or full throat singing. This voice is rich and powerful when produced in this register.”⁶
2. HEAD VOICE: - Though head voice is connected to chest voice, the air pressure used in this register is comparatively less. The tonal quality of it is melodious and pleasant. This sound in this register is not as loud as chest voice. “A singer can access this register with proper training specially by concentrating on the area of transition from the chest register with careful voice control.”⁷
3. MIDDLE VOICE: - In this register a cross over from chest voice to head voice takes place in the voice range. After receiving proper training, a singer will be able to use this register to reduce to force of air pressure.
4. FALSETTO VOICE: - “This is not considered as natural voice and is known as false voice. When the range of a singer is examined falsetto is excluded generally.” While singing much higher octaves, singer uses the method of falsetto. This is a weak and very thin voice.

Process Before Doing Riyaz with Proper Techniques:

- First of all, in the early morning before riyaz, one should have his or her stomach clean for good relaxation. Then, he or she should be mentally and physically prepared for riyaz.
- In the first step of riyaz, one has to do some breathing exercise. “Diaphragmatic breathing is the most effective breathing techniques for a singer.”⁸
- We have to breathe deeply for the inhaled air to be absorbed in the diaphragm in large volume.
- Dr. T. Unnikrishnan has very well explained that what should be the physical posture while doing riyaz. For practicing one has to sit in erect position and the shoulders must be drawn little backward. Both inhalation and exhalation must be deep and slow in a rhythmic manner to train the related muscles to achieve proper control.
- For different voice and expression varieties in singing the exhalation part is mostly used.
- While doing practice one must concentrate to inhale more air and to exhale slowly in a controlled way.
- Thereafter, one should start his or her riyaz of Sa by selecting his or her right pitch. It can be done by using humming, Ohm, Aakaar, use of different vowels and Sa itself for 30 min to 1 hour at least. This is the best warm up exercise in the morning as demonstrated by so many renowned artists like Pt. Ajoy Chakraborty, Dr. T. Unnikrishnan, Parveen Sultana, Pt. Bhimsen Joshi etc.
- When one sings in Aakaar the sensation is felt in the chest area or neck area but when one sings Hakaar i.e. adding Ha to Aakaar, the sensation is experienced from abdomen. There is also some change that takes place in the position of throat (pharynx), which affects positions of larynx and lowers it very minutely.
- In this way one sings higher or lower notes slowly he or she can reach them one by one also with increased depth.
- Singing a single note for a long time without trembling makes one more confident the singing resonates, becomes steady.
- One point must be taken into mind that all these practices must be done under a knowledgeable teacher or Guru.
- One should also have his or her legs crisscrossed and spine intact.
- One should start riyaz in the early morning like 4 o’clock that is also known as Bramhamuhurat, so that he or she becomes physically and mentally refreshed after a good sleep.
- One should not miss a single day of practice otherwise it will start affecting the quality of voice.
- One should always be positive so as to remove destructive thought and keep mind calm.

VOICE TRAINING GRAPH AND ITS EXPLANATION BY EXPERTS:-

This graph depicts modulation of voice through perfect voice training. Pt. Ajoy Chakraborty has mentioned six such graphs for the voice modulation.⁹

- I. In the first graph the thin line shows that we have to sing a note very soft and sustained (continuously).
- II. In the second graph the broad straight line shows that we have to sing a note loudly and sustained (continuously).
- III. In the third graph the thin straight line changing to a diverging one explain how a soft note slowly diverges to a loud one i.e., first the voice will be low and then slowly it will be loud.
- IV. In the fourth graph the diverging line changing to a straight line explain how a loud note slowly converges to become a soft note i.e., the first voice will be loud and then it will become soft slowly.
- V. In the fifth graph the straight line first diverges and then converges. It means that our voice will slowly become soft to loud and again soft.
- VI. In the sixth graph the diverging line converges to a straight line and again diverges. It means that a loud voice slowly becomes soft and then again loud.

Kharaj Riyaz For Better Voice Quality: -

The riyaz of Kharaj helps the singer to sing in different octaves. Early morning is the best time of its riyaz. Singing notes in the lower octave in a steady and slow manner gives strength and resonance in the voice. This riyaz is done for complete perfection of the frequency of the notes or Swar (i.e., Sa, Re, Ga, Ma and so on). One must sing the lower octaves or Mandra Saptak notes again and again for a deep voice. “Vidushi Parveen Sultana explains about Kharaj Sadhana that one should sing every individual note with proper Aakaar and without the support of the next or the previous note which is also known as Staccato note.”¹⁰ Kharaj brings echo in voice with the help of Tanpura. Kharaj is Naad Bramha i.e., vibrations which

can be felt internally and it is a tough job to produce such vibration. It enhances our singing range and improves our voice quality.

Different musicians tell different methods of Kharaj sadhna. The most popular being – one should start from Madhya Sa and then gradually one by one should sing lower notes upto mandra Sa. Some say that one should sing aaroah avaroh in mandra saptak. Also, I have heard by my Gurus that, for Kharaj sadhna one should begin with the lowest swara of Mandra Saptak according to the capacity of the singer and then gradually should sing higher notes up to Madhya Shadaj.¹¹ How much time should be given to this sadhna depends on the voice quality of the singer.

Importance of Vowel Practice:

Exercise of vowels is necessary to achieve depth and brightness of tone. Aa, Ae, Oo, Ee, Uu are different vowels for practice. One should remember that the note should be sustained, pressure and quality of tone must remain same for each vowel. If there is any difficulty to sing a particular vowel, the best way is to sing a particular one in a patient manner. Forceful practice spoils the tones. “Ee is a front vowel and if properly practiced, the front tone placement will become easier and gives more clarity. Aa is a middle vowel, while Uu is a back Vowel. Practice with the vowel Oo, will help to increase the depth and volume of the voice. Humming is a good technique to get easy access to all the voice register and also to develop good resonance.”¹²

Some Basic Concepts of Voice Training:

Every singer is unique in their own sense. Male and female have different pitch so they sing completely in a different way. Variations in the pitch, intensity and timber help to culture voice. Voice training basics include: -

- Hearing, listening and perceiving
- Increase of lung capacity and its control
- Practicing correctly
- Mental and physical fitness
- Intake of food must be in such a way that the food should digest properly and cleared
- Hearing our own voice is an important factor for learning.
- A sustaining exercise of a note must be done beginning for 5 seconds to 16 seconds. This factor is known as controlled exhale of breath.
- One must not practice on harmonium because it gives a support whereas singing in Tanpura helps in pitch perfection and correct voice tuning. Due to practicing with Harmonium, once voice in result usually becomes distuned. An amateur singer should start his singing with a Tanpura because it is a perfect accompaniment for vocal practice.

- While doing practice we should sit in front of our Guru who will tell whether the Tanpura is perfectly tuned or not, give proper guidance of basic elements of music. It is better to sing using a manual Tanpura than an electronic one.
- It is all about beauty of phonetics, intonation, structured in the alphabets of Sanskrit words.
- After doing all these above, practice of various Alankaras is very necessary with the proper guidance of a knowledgeable teachers or Guru. One should remember to practice Alankaras in all three octaves.

Things To Avoid While Singing:

- Lack of clarity
- Huskiness, trembling and unsteadiness
- Throatiness
- Improper resonance
- Voice fatigue
- Nasality and dryness
- Inhaling while singing with sound
- Misuse, abuse or overuse of voice
- Pushing the voice while singing lower octaves
- Singing like speaking (that means voice modulation is required during singing)
- Neglecting to train the ears while singing

“Voice training methods across different styles of music due to ornamentation pertaining to unique style is a good technique to overcome the above shortcomings.”¹³

Voice Disorders and Their Remedies:

There are two types of voice disorders namely Functional and Organic:

1. Loud forceful phonation can cause lot of injuries to the vocal folds. Eg. Shouting. Vocal folds cannot be replaced but can be surgically corrected. For growth, nothing can be done.
2. Vocal cord can be harmed due to forceful singing, yelling, screaming and talking loudly. Yoga can help to heal or bring it in a normal position.
3. Throatiness is a problem where two tones are heard from a single voice and it can be rectified through humming practice.
4. There are two palates in our mouth: - Soft palate and hard palate. If the soft palate blocks the passage the tone becomes nasal. So, it is important to lift the soft palate. This can be done by a technique called ‘closed mouth yawn.’ In this method one has to yawn repeatedly by closing mouth, where the lifting of the soft palate will be felt.
5. For the singers who do not have good range of voice (at least two and a half octaves), they have an exercise called ‘movable Sa exercise.’

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Sa, Re, Ga, Ma, Pa, Dha, Ni, Sa

Re, Ga, Ma, Pa, Dha, Ni, Sa, Re

6. "Nodules, Polyps and Laryngitis and Hemorrhage of cords are cause of vocal abuse. Infection in larynx can be a cause. Nodules are small growth found in vocal cords common to young one and polyps are like nodules which grows on cords and prohibits it to close. To keep our larynx proper, we need to drink a lot of water for lubrication of our vocal cord constantly. Body must produce 1litre of mucus per day. Foods like melon, grapes, cucumber are recommended."¹⁴
7. 'In puberty a voice break occurs. This may not occur in females. The length of vocal cord in men increases up to 25 mm, which affects shruti or pitch that leads to crack in the voice while singing in the higher octave.'¹⁵ Solution is humming practice and practicing in higher octaves so that the resonance must be felt in chicks and not in the jaws or any other spot during humming practice.
8. Anti-histamines should not be consumed. Exercising, being healthy, following a good balance diet, meditating or doing any tension releasing exercise are necessary for total fitness.
9. One should have 8 hours of sleep otherwise our vocal cord will be strained.
10. Yoga has a great influence on music. It connects our eternal soul to the ultimate power i.e. Moksh. Some pranayamas like concentrating on middle point of the forehead or the natural flow of the breath. Pronunciation of Om is important. Meditation helps in the knowledge of Shrutis and increases the level of concentration easily. Some of the Pranayamas which is very helpful in singing as well as maintaining our good health are- Bhastrika, Kapalbhathi, Anulom-Vilom, Udgam and Udgeet.
11. There are some Asanas like Simhasana, Matsyasan, Vrikshasana and Sukhasana done for complete fitness of our body. These Asanas are very effective for our spinal cord.

Conclusion:

Though a voice is set naturally that cannot be changed altogether but can be improved and molded to make it sound good by practicing certain techniques which is a part of voice culture. A singer should have a good voice and musical sense so as to reach the satisfactory level of the audience. It is written in the Bruhaddaranyaka Upnishad that people gather around musicians who had good voice quality. Every classical musician needs to enhance his or her voice to improve his or her musical skills. The singer needs to do a continuous hard practice, vocal exercises and many other technical things, so that one can produce whatever one intends to sing. Voice training methods differ according to the style of singing. Any art will be focalized if it gets static. Now a days, the standard of voice quality is getting down and people are using autotuned machines due to the lack of practice or improper practice. Therefore, it is important to have a scientific training of voice i.e. Voice Culture. Good training, by birth talent, regular practice, healthy diet and a disciplined life style are required to maintain a good melodious voice. One should also be optimistic and meditate to have a good psychological balance. One should sleep for 8 hours and wake early in the morning and start our practice.

There are reasons such as infection, congestion of larynx, thickened tongue and wrong use of voice during puberty or voice abuse which makes our voice unsuitable for singing.

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The one which becomes a permanent injury can be rectified by a physician. Our voice is the blessing of God which is very delicate and needs to be protected. A voice trainer enhances our voice to be smooth, melodious, graceful and rich with expressions from adjustment and coordination of muscles of the vocal apparatus while producing different tones. Falsetto is a technique used by light music singers for higher octave but it should not be done in classical music. Practice will help only if it is done with the right technical knowledge. Many singers lose their voice due to incorrect methods of practice. One must refine his voice through logical thinking and scientific approach.

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