

PROBLEM OF PASSAGE TONE AND APPROACHES TO SOLVE AT VOICE TRAINING PROCESS

Ayhan Helvacı
Uludag University Art Faculty
Bursa/TURKEY

ABSTRACT

Voice training is very complex and difficult process that vary from person to person. Just a fingerprint, everyone have different voice thus requires a different implementation of education for everyone except main issues. This aspect of voice training can be considered to have a privileged place in other branches of education. The methods and exercises which successfully on a student may be ineffective on another student and many specific problems may be encountered. This article discussed the problem of tone of the passage which considered one of these problems and expert opinions are reviewed at different sources. In addition gathered to approaches on this topic from sound educators, compared with expert opinion, discussed and finalized.

Keywords: Voice Training, Passage Tone, Problem, Solution, Approaches

1. INTRODUCTION

Human voice shouldn't only be seen as a tool used for communication. It is also an important part of music. Singing, as different from talking, appears us as voice training for artistic purposes, and being the hardest branch of the music education requiring competence.

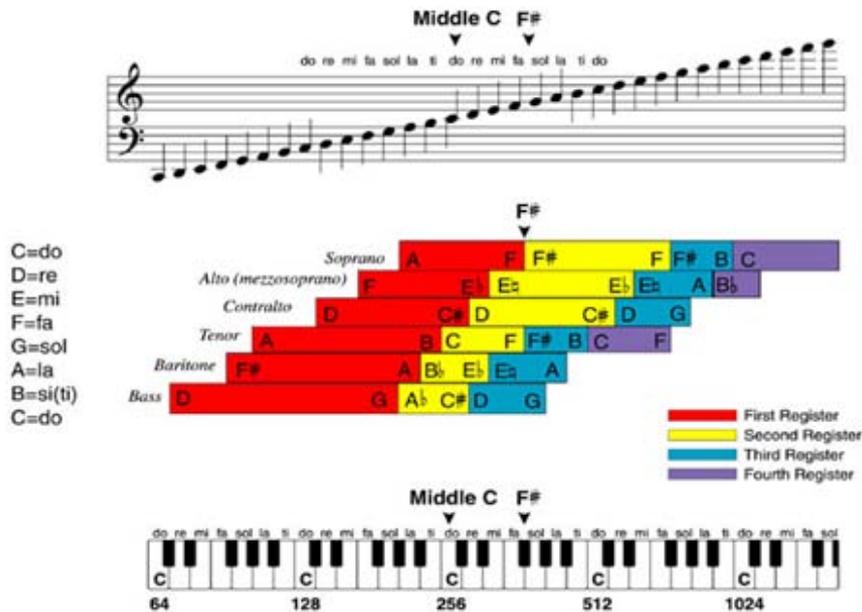
According to Davran (1997); voice training is a training having a privilege among other education branches. It seems that it doesn't have a concrete side apart from some details. A method yielding positive results when applied to a student may not give the same result in another student. This condition may cause excessive rush and self-despair in some students, and mental disorders in others.

According to İkesus (1965); it is impossible to learn voice training by reading a book. These are only learnt from a competent teacher and after years of labor. Books written on this subject might help students, teachers and artists.

Morrison ve Rammage (1994) state that it is important for individuals who will receive voice training to have key features of a good voice, and training only won't be adequate for individuals who don't have these key features. Individuals using their voices for occupational or volunteer purposes should have a healthy voice and should complete an effective voice training process.

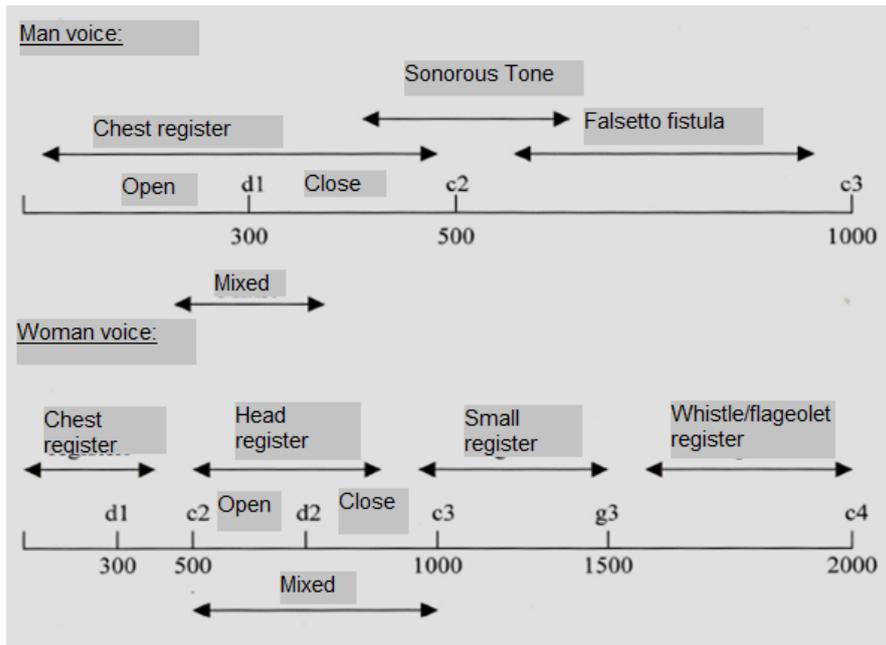
According to Belgin (1996); no matter how excellent the anatomic structure is, peripheral and central arrangements won't be satisfying enough when they aren't treated well.

As understood from the views above, even if anatomic structure of individuals who want to take voice training is appropriate for this job, a voice coach's support is definitely required. This process can be tiring and backbreaking at first. Many problems can be encountered. One of these problems is transition tone problem. It is necessary to know the register notion in order to be able to understand and solve the problem of passage tone.



The Six Species of Human Singing Voice and their Registers
www.schillerinstitute.org, (2012)

What is understood from register notion is that alternate homogeneous tones from low to high are produced with the same mechanical principals and what makes it different is tone sequences produced with different mechanical principal. All tones within the context of the same register are accepted as the same kind. Their natural structures are same even if their resonances or power differences change. Small parts of registers coincide with each other. Tones within the context of a region may simultaneously exist within the context of two different registers. According to Lehmann (1902); vocal register has been defined as calling sequent voices in regard to the positions of throat, tongue and palate.

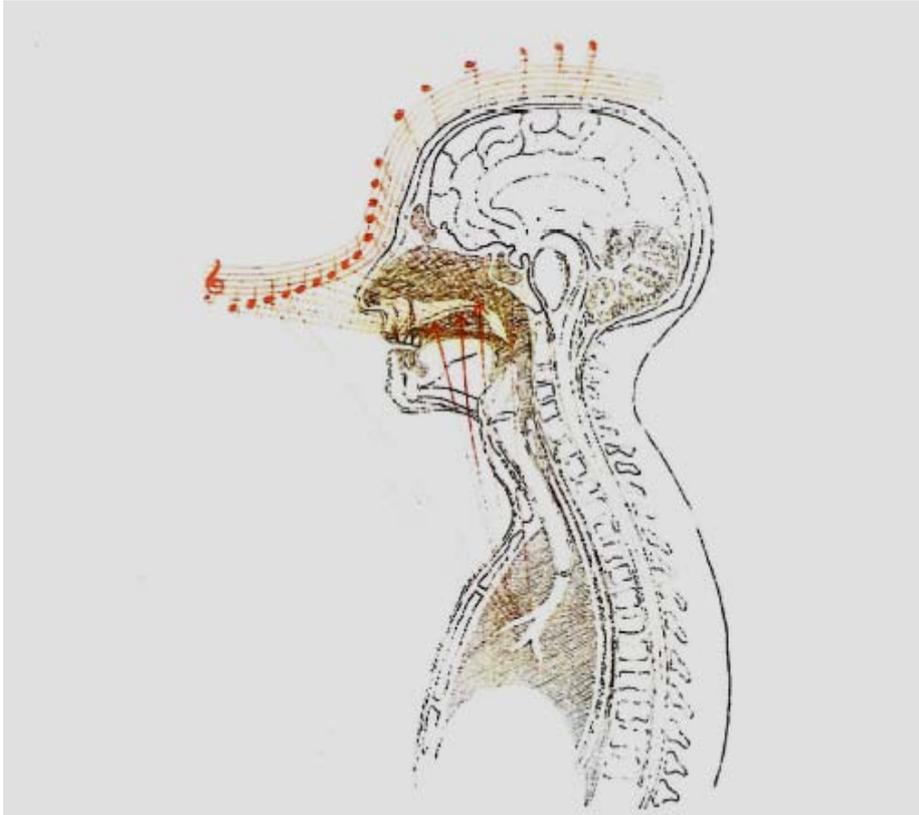


Registers of man and woman voices according to Deitse (1981)

According to Cura (1990); the features of voice produced by vocal cords existing inside the larynx differ in regard to resonance areas. Register notion used to be able define the different vibration movements of vocal cords was used by being inspired from the organ which is a musical instrument giving the same voice with different tones.

According to Maksimof (1993); registers are not only physical (acoustic), but also physiological conditions. Time honored registers in woman voices are chest and head registers. Men sing by using their chest registers. However, uneducated individuals are seen to pass to falsetto registers when they come to high tones. Men don't have head register (excluding the ones received special training).

According to Vennard (1967); human voice has three registers. These are called as normal or chest, head and falsetto in man voice; chest, middle and head register in woman voice. A teacher using this terminology begins training with blending the registers or by trying to compose a passage or bridge between different registers. Bassos use chest voice but they use head voice in very high tones. Falsetto is only used for some funny effects and you can't pass to this tone without some sudden changes. Tenos use chest voice until 'f' or 'f sharp' in fourth octave and head voice until 'a' in fourth octave. They refer to falsetto in higher tones. Baritones are in between, but they are closer to basso as character. Women who have recently started singing should find their own intermedius voice. Sopranos mostly sing with head voice, and chest voice in contraltos. But their vocal developments only start when they find intermedius voice and learn how to reach it. Soprano can sing with her/his chest voice, but they should carry it above 'f' in fourth octave (f below the treble clef) and 'd' in the same octave preferably. Mezzo or dramatic soprano can sing within a very wide range and in each three register smoothly.



Register passes in soprano and tenor voices according to Lehman (1902)

Register passes aren't heard in well-trained voices. There is also a register obtained from being used the head register in man voices in a slightly strong manner, and this is called as falsetto in the meaning of false voice (having the character of woman voice). There are flageolet voices (whistling voice) generally heard after 'c' in fifth octave in excessively high woman voices (Belgin 1996).

* Used in the introduction, notification of excerpts taken from Ayhan Helvacı's "Voice Education Register and Resonance", İnönü University, Music Symposium, 2003.

2. RESEARCH SIGNIFICANCE

The research is seen important in terms of revealing the approaches of experts and voice coaches from different written sources as directed to solution of passage tone problem which is thought to be as one of the most specific problems experienced in voice training process. It is also thought that obtained results will be of use for voice coaches and individuals receiving voice training who experience problems for solution of the problem.

3. METHOD

Descriptive method has been used in the research. Resources about the subject were researched with the purpose of discussing the research extensively and reviews were interpreted. Besides, an interview form was prepared with the aim of determining the approaches of voice coaches regarding the subject who work in various universities giving voice training as Uludağ University (4 of them),

Marmara University (2 one of them), Gazi University (1 one of them) and Hacettepe University (1 of them).

4. FINDINGS

In this chapter, approaches of experts regarding passage tone problem and its solution have been analyzed from different written sources. Besides, data obtained from interview forms filled in by voice coaches with the purpose of determining their approaches regarding the subject were compared with expert opinions in analyzed written sources and interpreted.

Chart 4.1. Experts' Approaches Regarding Passage Tone Problem and Solution from Different Sources

According to **Maksimof** (1993); questions about passage tone gain their importance during voice training. Amateur singers (students) have their own voice registers. Transitional differences are seen in singers trained in certain tone degrees. If these transitions aren't prevented with a great attention, the difference in voice is heard evidently. And this causes a creation of non-esthetics character in singing. This register problem in human voice has always created block center in multiple and vocal environments. This continues today with some details.

According to **Davran** (1997); besides passage tone is indefinite in itself, it can appear in different tones and different ways in other voices although it is the problem of tenor voices. Actually, this problem can be seen where low, middle and high voice registers are mingled together in soprano, mezzo-soprano and tenor voices. Therefore, the teacher should try the student's each tone with various vowels again and again obstinately. During these attempts, the student's passage tone will generally present itself differently with each vowel. Passage tone can appear itself as half in some students and sometimes before a tone. Going back to normal can continue until above half or a tone of actual tone. If a certain tone is determined for the student's passage tone, great difficulties and problems can be experienced in next lessons. Overcoming and correcting them takes too much time.

According to Marchessi (1964); the lowest note of a register in voices is generally less powerful than the highest note of previous register at the beginning of studies. Applied and theoretical explanations to be given to students regarding this event make them believe that this difficulty is caused by physical structure of organs and they can easily get over these difficulties in a short time. In addition to mingling three register, each register's being homogeneous along with its limit depends on the ability of singing master, exercises to be selected according to ability of the student, her/his being patient and resistant and the method used.

Vennard (1967) doesn't find it right to predetermine the notes on which registration change will occur. As Vennard thinks that when the student comes across with these voices, it will cause her/him to feel tension. What brings the passage tone problem into question is below, middle and above registers. Passing from one register to another on the same register by making 'crescendo' and 'decrescendo' will be a good exercise to prevent passage problem and tone breaking. It is necessary to think the registration process not only with register but also with other features of voice.

Vennard puts forth three suggestions regarding the subject:

- About the register; adjustments should be 'slow' (chest) in low tones in order to improve the widest tone as much as possible without any breaking, and the balance should slide towards the 'light' (falsetto) mechanism softly as it proceeds upwards

along with scale.

- About intensity, how soft the tone is in any register, it should be that 'soft' in the mechanism and wind tone shouldn't be allowed. How sonorous the voice is, the mechanism should be that 'heavy'.
- About quality; the adjustment should be heavy in order to obtain a rich tone color. The mechanism should be light in order to obtain sweet and light tone color.

According to **Belgin** (1996); vocal quality of each type comes together in three regions:

- Chest register-below register: It is composed below the low-frequency pharynx in chest.
- Middle register-mixed register: Voices made by chest and other resonators together are called mixed voices. Larynx is at normal position in these voices defining the right vocal definition.
- Head register-above register: It is composed with vibration of the highest resonators. They are the voices that can be sounded with the highest frequency and used in singing.

The voice is heard like a one register after these registers are mixed and bridges can be built in passage tones. Voices produced in different colors are recognized immediately in individuals who can't make these adjustments in passages.

In Chart 4.1., when the views of experts are analyzed from different sources, it is seen that Maksimof emphasizes the importance of training by stating that passage tone problem is encountered during voice training, amateur singers don't recognize this and use their own voice registers, and passages are clearly heard in poorly trained voices and spoils the aesthetic in singing.

Davran states that passage tone problem is generally the problem of tenor voices, it is also seen in other voice groups like soprano and mezzo soprano, and it is encountered where registers are mixed together, it is replaced with each vowel and students may experience problems in next lessons when passage tone is told to them.

Marchesi states that the problem is caused by the physical structure of organs and this condition can be easily overcome by explaining this condition to students applied and theoretically and by making them believe that they can do. Besides, Marchesi states that the solution process of problem may differ as depending on the ability of singing master and the student, the exercises selected, being patient and the method used.

As parallel with Davra's thought, Vennard states that passage tone shouldn't be told to student because students experience tension when they come across with those voices, passage from one register to another by making 'crescendo' and 'decrescendo' is a good exercise in solving the passage and voice breaking problem.

Similar to Marchesi, Belgin states that the voice can be heard as a one register by thinking the registers in three regions and mixing them as interpenetration.

Data obtained from interview forms filled by voice coaches with the purpose of putting forth the views and approaches of voice coaches regarding the subject are prepared as a chart and findings obtained have been interpreted.

Chart 4.2. Professional Experience of Voice Coaches

Options	F	%
1-5 Years	-	0
5-10 Years	2	25
10-15 Years	2	25
15 years and more	4	50
Total	8	100

In Chart 4.2.; it is seen that 75% of vocal coaches have 10 years and more professional experience. Therefore, it is thought that vocal coaches participated in the research may have important approaches about many problems of experience and their solutions.

Chart 4.3. The Mostly Seen Problem Encountered During Vocal Training.

Options	f	%
Breathing problem	4	50
Problems caused by voice disorders	-	0
Passage tone problem	4	50
Problems caused by pronunciation	-	0
Total	8	100

In Chart 4.3.; it is seen that the mostly seen problems that vocal coaches encounter are breathing and passage tone problems. This condition was found important in that passage tone problem is seen as one of the mostly seen problems during voice training.

Chart 4.4. Voice Groups in Which Passage Tone Problem Is Mostly Encountered

Options	f	%
Soprano	2	25
Mezzo Soprano	2	25
Alto	-	0
Tenor	2	25
Basso	-	0
Baritone	2	25
Total	8	100

In Chart 4.4.; it is seen that vocal coaches encounter passage tone problem in all voice groups excluding alto and basso. It is thought that the reason why this problem is encountered in basso and alto voice groups is that these two voice groups generally use chest register. This distribution shows parallelism with the view that the problem may appear in different voice groups and different tones as Davran stated above.

Chart 4.5. Exercises To Be Done To Overcome Passage Tone Problem

Options	f	%
Descending exercises	6	75
Descending and ascending exercises	2	25
Exercises composed of jump voice	-	0
Staccato exercises	-	0
Total	8	100

In Chart 4.5.; it is seen that vocal coaches mostly (75%) make descending exercises done, and some (25%) make both descending ascending exercises done in order to overcome passage tone problem. The finding obtained shows that descending exercises are generally preferred directed to solution of problem.

Chart 4.6. The Condition of Informing about Voices in Which Passage Tone Problem Occurs

Options	f	%
Yes	-	0
No	8	100
Total	8	100

In Chart 4.6.; it is seen that vocal coaches don't tell their students who have problem of passage tone about which tones the passage tones coincide with as in parallel with expert opinions in various sources. Besides, when an open-ended question was asked why they didn't tell, they said that it may cause tension in student as parallel with expert opinions in various sources.

Chart 4.7. Choosing Practice Song for Students Having Passage Tone Problem

Options	f	%
Songs compelling voice limits	-	0
Songs including different registers in it	6	75
Songs composed of jump voices	-	0
Songs directed to singing legato	2	25
Total	8	100

In Chart 4.7.; as stated in expert opinions above, it is understood that the majority of vocal coaches (75%) prefer songs including different registers in choosing a song for students having a problem regarding the subject, and some (25%) prefer songs directed to singing legato, and they don't prefer songs composed of compelling voice limits and jump voices. This condition of practicing songs including different registers for students having passage tone problem supports Vennard's opinion that passage from one register to another by making 'crescendo' and 'decrescendo' is a good exercise to solve passage problem and voice breaking.

Chart 4.8. Educational Background of Vocal Coaches in Their Vocational Trainings Directed to Solution of Passage Tone Problem (Bachelor, Graduate, and Doctorate)

Options	f	%
Yes, I received	1	12,5
No, I didn't receive	7	77,5
Total	8	100

In chart 4.8.; it is seen that the majority of vocal coaches (77.5%) didn't receive training regarding the subject during their vocational training. It was found important in that it shows that the training directed to the solution of passage tone problem which is thought to be one of the most important problems of voice training process should be given during the bachelor and doctorate main instrument education in which career education is received.

Chart 4.7. Vocal Coaches' Encountering Passage Tone Problem.

Options	f	%
I encountered during my first years of being student	1	12,5
I encountered when I entered into the profession	6	75
I encountered in reference books	1	12,5
Total	8	100

In Chart 4.7.; it is seen that the majority of vocal coaches (75%) encountered passage tone problem firstly when they entered into the profession. As shown in chart 4.7., it was found important in that it shows that the training and information directed to the solution of passage tone problem should be given during the bachelor and doctorate main instrument education in which career education is received

5. CONCLUSION

Following the passage tone problem and its solution during voice training process; it was concluded that expert opinions researched from different sources show parallelism in many ways. Views showing parallelism can be specified as below:

- Passage tone problem is clearly seen in register transitions,
- Passage tone problem may appear in different tones in different voice groups,
- Register regions that bring passage tone problem into question may divide into three regions as chest, middle and head,
- The voice is heard as one register after mixing the register and building bridges in passage tones,
- The training has of great importance, passages are heard clearly in poorly trained voices and spoils the aesthetic in singing,
- As voices coinciding with passages tone may cause tension, they can't be told to students,
- It is a subject on which it is patiently emphasized; the problem can be easily overcome with mutual understanding of teacher and student.

The results below have been concluded after the evaluation of findings obtained from interview forms filled by voice coaches with the purpose of putting forth the views and approaches of voice coaches regarding the subject:

- 75% of voice coaches who filled interview forms have significant professional experience of 10 years and more,
- One of two mostly encountered problems is passage tone problem,
- Passage tone problem is encountered in all voice groups excluding alto and basso,
- Descending exercises are mostly (75%) done, and some coaches (25%) apply both descending and ascending exercises,
- They don't tell their students who have problem of passage tone about which tones the passage tones coincide with as in parallel with expert opinions in various sources with the concern that it may cause tension,
- The majority of voice coaches (75%) experience problems related to subject, they prefer songs including different registers in choosing a song for students having a problem regarding the subject, and some (25%) prefer songs directed to singing legato, and they don't prefer songs composed of compelling voice limits and jump voices,
- The majority of voice coaches (77.5%) don't receive education regarding the subject during their vocational training,
- The majority of voice coaches (75%) experience the passage tone problem firstly when they enter into the profession,

In line with these results, it was seen that passage tone problem is one of two mostly encountered problems in voice training process, voice coaches put forward similar approaches as directed to solution of problem with expert opinions in different sources.

References

- Belgin, E., 1996, Ses Anatomisi, Doctorate Program Lesson notes, , Gazi University Gazi Faculty of Education Department of Music, Ankara.
- Cura, O., 1990, Ses Türleri, Otolarengolojide ve Sanat Dallarında Disfoniler, International Symposium, İ.U. Cerrahpaşa Faculty of Medicine publications, p. 36,42, İstanbul.
- Davran, Y., 1997, Şarkı Söyleme Sanatının Öyküsü Evrensel Music House, p. 19-22, Ankara.
- Deinse, J. B., 1981, Register, Fol. Phomiatr., HNO, pp. 32, Berlin.
- Helvacı, A., 2003, Ses Eğitiminde Register ve Rezonans Bölgelerinin Kullanım Özelliklerinin Ses Kalitesine Yansıması, Unpublished Doctorate Thesis, Gazi University Graduate School of Science, Ankara.
- Helvacı, A., 2003, Voice Education Register and Rezonans, Music, İnönü University, Music Symposium, 30-31 October 2003. Malatya, Turkey.
- İkesus, S., 1965, Ses Eğitimi ve Korunması, Milli Eğitim Publication, p.13-16, İstanbul.
- Lehmann, L., 1902, Meine Gesangskunst, Verlag Der Zukunft, pp.15-25, Berlin.

Maksimof, İ., 1993, Vokal Fonoloji – Ses Bilimi, Muzika Sofya, p. 156-164, Sofia.

Marchesi, M., 1964, Bel Canto Teorik ve Pratik Şan Metodu, Milano.

Morrison, M, and Rammage, L. 1994, The Management of Voice Disorders, Chapman & Hall Medical, pp. 12-16, Illinois.

Vennard, W., 1967, Singing (The Mechanism and The Tecnic), Carl Fisher Inc., pp. 35,52-60,80, New York.

www.schillerinstitute.org/music/rev_lрге-rgistrs.html