

VOICE LESSON #6

Resonance: Creating Good Vocal Vibes

RESONANCE is the amplification and enrichment of tones produced by the voice. When we talk about resonance, we're talking about singing with fullness and space.

Without resonance we produce a "thin" sound. As a matter of fact, when our tone lacks resonance we sound like little girls or boys rather than women or men. [See Illustrations #1 and #2]

The tone we produce should be like a diamond on a black velvet pillow with the brilliance, sparkle and projection of a diamond and the warmth, richness, body and texture of black velvet. The velvet effect comes through proper resonance.

Sounds good, you say, but how do we produce resonance? What causes the tone to resonate? Resonance is greatly facilitated with open space in the mouth and throat, coupled with the movement of air, as you learned in previous lesson. Three different chambers serve to varying degrees as resonators for the human voice: [See Voice Lesson 4, Illustration 1]

1. **The pharynx** - the primary resonator - the area behind the mouth that extends down into the throat and up into the nasal area.

2. **The nasal cavities**

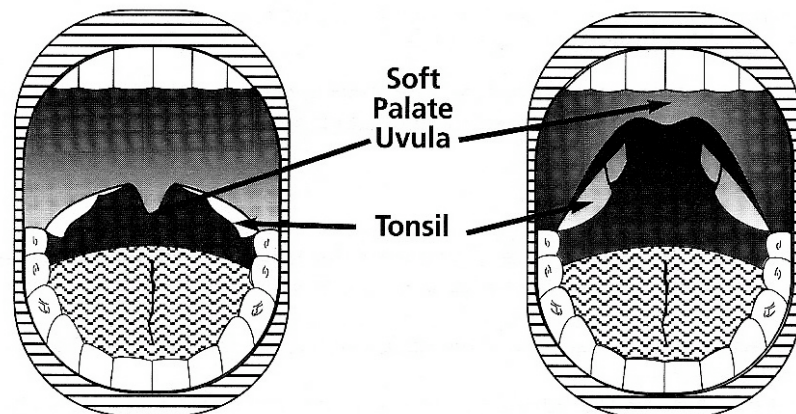
3. **The mouth**

The amount of resonance in the voice is determined by our ability to keep the mouth and head cavities open and relaxed while we sing. The result is what we often hear referred to as an "open, freely produced tone."

The Soft Palate

The SOFT PALATE is the membranous and muscular extension of the hard palate in the roof of the mouth. It serves as a partition separating the mouth cavity from the nasal cavity. The soft palate should always be raised. If you visualize an arch in the back of your throat, your palate will be raised. When you say "ah" at the doctor's office, your soft palate is probably raised.

Every singer needs to keep the soft palate open and the jaw relaxed. [See also, Voice Lesson 4, Illustration 1]



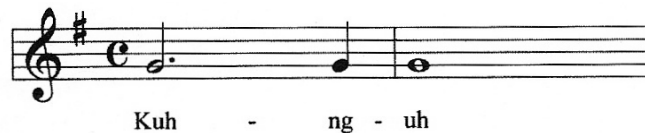
Normal Soft Palate Position

Raised Soft Palate Singer's Position

- When the soft palate is normal, or down, the sound is unpleasant and nasal.
- While looking into a mirror, watch the uvula (the dangling lobe near your tonsils) move up and down. When the uvula is up, the palate is in the proper position for singing.
- The "Pinch Test:" To find out if the soft palate is raised while singing vowels, do the pinch test: Sing a vowel and pinch your nose. If the sound/tone does not change while your nose is pinched shut, your palate is raised. If the sound changes to a very nasal tone, the palate is down. Test yourself often while singing. Learn to feel the difference and consciously think about keeping the palate up. Combined with the inside smile (see below), you'll love the way you sound!

Exercise 6.1:

The following exercise shows that singers are in control of their soft palate as follows: The "kuh" sound provides a reflex action that lifts the soft palate. The "ng" sound allows the palate to drop; the "uh" then lifts it again.



Resonance and Imagination

There is probably no other aspect of singing in which imagination is more important than in learning to resonate well. If you imagine your tone coming through your cheekbones, or through your eyes or out of the top of your head, remarkable changes in vocal resonance can take place. Because the singer hears from the inside, sometimes it is difficult to accurately judge the quality of the sound one is hearing. This is where a skilled teacher with a keen ear is indispensable (See Voice Lesson #9).

Training the human resonating system to amplify, reinforce, and enrich the vocal tone is not usually accomplished in a short time. It is primarily an activity of memorizing sensations, and much of the early learning involves trial and error. But it is encouraging to know that, once acquired, vocal resonance skills are learned for good. Much like learning to ride a bicycle, once you have learned, you will retain the ability.

Part of achieving resonance is a natural lifting of the soft palate, often referred to as using the "inside smile." The inside smile allows greater space in the resonating cavities of the head, gives warmth to the tone and assists in raising the soft palate.

How to Achieve the "Inside Smile"

Exercise 6.2

- Close the mouth, but not the teeth (feeling openness in the whole oral cavity).
- Smile as though you were smiling at someone across the room, a smile you do not wish to be noticed by others.

- You'll feel a slight lifting of the cushions under the eyes and a space opening up over the soft palate.
- You almost feel as though you are going to break into a yawn.
- The soft palate goes up, although you have not pulled it up.
- This lift of the cushions under the eyes and the soft palate are extremely important.
- Pretend you are sniffing the beautiful fragrance of a rose.

Exercise 6.3

- Smile a "natural" smile, not a grimace, just don't let it show on the outside.
- At the same time, lift the outside corners of your eyes.
- Let your eyes show the natural warmth of a smile.
- Grimacing or tightening the cheek muscles and pulling the corners of the mouth wide is incorrect and will create tension in the throat area.
- When you use the "inside smile" there is a feeling of "dome" in the oral cavity; there is also a "yawning up" sensation (never a "yawning down" position which creates pressure on the throat.)
- The same sensation comes into the soft palate area when one is expressing surprise with a slight gasp and the cushions under the eyes lift.
- When one uses the inside smile, the tongue has a sense of freedom. It feels ready to jump into action in any direction the singer desires. When the inside smile is dropped, the tongue feels as if it has fallen into bed for a bit of rest.

Exercises That Help the Singer Relax and Resonate

Many of us keep everyday stress in the areas that need to be relaxed and free for good vocal production: the jaw and neck. It is difficult to sing with an open, relaxed throat if we have not prepared the body properly. Here are some techniques that will help release tension.

Exercise 6.4

- Using your fingertips, gently massage the temples.
- Then massage down the sides of the face and at the jaw hinge.
- Relax and "let go."
- You may feel the urge to yawn.
- Massage underneath the chin, gently loosening the tongue muscles.
- With your face down, gently roll your head from side to side, keeping the shoulders relaxed and sternum high. Feel a stretch up the back of the neck and you should begin to feel more relaxed.
- Pretend you have fallen asleep in a comfortable easy chair. Let your jaw hang loose, totally relaxed.
- Good imagery: Be on the verge of drooling.

Exercise 6.5

Sing the following exercise slowly, being aware of both your breathing and air:

Go up by half steps with each repeat.



Hip hip hip hip ha ha ha ha ha ha ha ha ha.....

The musical notation for Exercise 6.5 is a single staff in treble clef with a key signature of two flats (Bb and Eb) and a common time signature (C). The melody consists of a sequence of notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4. The notes are grouped into four measures of four notes each, with the final note of the fourth measure being a half note. The lyrics 'Hip hip hip hip ha ha ha ha ha ha ha ha ha.....' are written below the staff, with each syllable aligned with its corresponding note.

Exercise 6.6

With arms raised, knuckles placed between the molars of the upper and lower jaws, elbows high, and using the inside smile, sing the following exercise. Let the jaw hang and use just the tongue. This exercise also loosens the front tongue muscles.




Lah lah lah lah lah lah lah lah lah lah lah lah lah lah lah

The musical notation for Exercise 6.6 is a single staff in treble clef with a key signature of two flats (Bb and Eb) and a common time signature (C). The melody consists of a sequence of notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4. The notes are grouped into three measures of four notes each, with the final note of the third measure being a half note. The lyrics 'Lah lah lah lah lah lah lah lah lah lah lah lah lah lah lah' are written below the staff, with each syllable aligned with its corresponding note.

Exercise 6.7

To continue to reinforce relaxed jaw, an open, relaxed throat, and to loosen the back tongue muscles, sing the following exercise. The tip of the tongue should be touching the lower gum ridge and the jaw should stay relaxed. The arm position and inside smile are the same as in Exercise 3.



Yuh yuh yuh yuh yuh yuh yuh yuh yuh yuh yuh yuh yuh

The musical notation for Exercise 6.7 is a single staff in treble clef with a key signature of two flats (Bb and Eb) and a common time signature (C). The melody consists of a sequence of notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4. The notes are grouped into three measures of four notes each, with the final note of the third measure being a half note. The lyrics 'Yuh yuh yuh yuh yuh yuh yuh yuh yuh yuh yuh yuh yuh' are written below the staff, with each syllable aligned with its corresponding note.

Exercise 6.8

Use the same arm position, inside smile and good posture, as in exercise 3. Keep the tip of the tongue touching the lower gum ridge. Allow the tongue to move freely and keep it relaxed so that movement from one vowel to the next is smooth and clear. Get the feeling of singing the vowels with the jaw relaxed, the molars apart, the inside smile and the sternum high and wide. Memorize that feeling.



ee_____ eh_____ ah_____ oh_____ oo_____

The musical notation for Exercise 6.8 is a single staff in treble clef with a key signature of two flats (Bb and Eb) and a common time signature (C). The melody consists of a sequence of notes: C4, D4, E4, F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4. The notes are grouped into five measures of four notes each, with the final note of the fifth measure being a half note. The lyrics 'ee_____ eh_____ ah_____ oh_____ oo_____' are written below the staff, with each vowel aligned with its corresponding note.

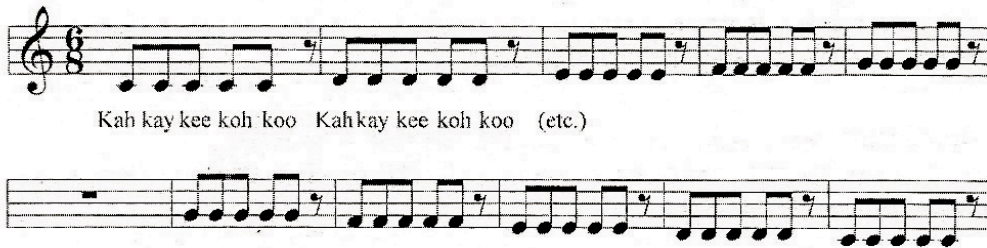
Exercise 6.9

This "K" exercise is used to strengthen the soft palate. When singing any word beginning with a "k" the fine muscles of the soft palate are automatically activated; the palate arches upward. This action opens up the space in the back of the mouth, which gives greater space inside the mouth for resonance and formation of words.



Exercise 6.10

This is another "K" exercise. Use it to strengthen the soft palate and develop the inside arch and the muscles connecting to it, allowing for greater flexibility and resonance.



Some Typical Language Used when Speaking of Phonation

Bubbling (or trilling): A vocal exercise used to relax the lips, jaw, and throat, to open resonators, and to produce a resonant sound. It consists of blowing a stream of air through the lips in imitation of the sound that horses make.

Chest voice (or chest register): Singing using the lower range of the voice.

Head voice (or head register): Singing using the upper range of the voice.

Mask: The facial muscles under the eyes into the temple, around the nose, in the lip area, and from the temples down to the chin.

Physical warm-ups: Warming up the body to provide a suitable environment for the singing mechanism to operate.

Pitch pipe: The musical instrument used to help singers find their starting note when practicing.

Resonators: Any of the cavities or parts of the vocal tract that serve to reinforce and enrich the phonated tones of the singing voice.

Tuning: Refers to the ability to sing both "in tune" and "on pitch." Also called intonation.

Voice Lesson #6, Illustration #1

The Beginning of Resonance!

Repeat a note, progressively matching the space and size
you see below.

ah

AH

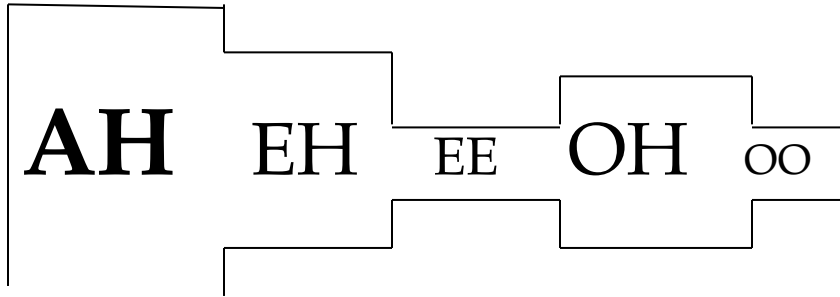
AH

AH

AH

Voice Lesson #6, Illustration #2

THE VOWEL TUNNEL



Space inside
the typical mouth.

TO MATCH RESONANCE, ALL VOWELS NEED TO BE
PRODUCED IN THE "AH" SPACE

AH EH EE OH OO