

## Finding the Key to Resonance

Introduction: Instructor to class

Objectives: Define resonance and resonance balancing

Define resonators and introduce exercises that will help singers discover them

Discover resonance as the key to one's sound – why we sound the way we do

Establish the differences between speech and singing as related to intensity, energy and resonance

### A. Define resonance

- a. The sound produced (process called phonation) is enhanced and amplified by the air-filled cavities through which the sound passes
- b. The sound is enriched, enlarged, improved as it passes through these cavities
- c. Resonance occurs when the vibrations of the sound beam sets other areas of the vocal instrument in motion – a secondary vibrator
- d. Two kinds of resonance - sympathetic and conductive

### B. Resonance balancing

- a. Consonants before and after the vowel change the shape of the resonator
- b. These consonants must be minimized in singing if the vocal timbre is to remain constant and uniformly resonant
- c. Some vowels help us achieve a resonant sound (z, m, m, ng)
- d. Humming sounds also help us with air support/abdominal activity

### C. The vocal instrument's resonators

- a. The chest (although air does not pass through this cavity after phonation)
- b. The trachea/bronchial tubes
- c. The larynx
- d. The pharynx
- e. The oral cavity
- f. The nasal cavity
- g. The sinuses

### D. Exercises for discovering resonance

- a. Find the beginning of a yawn feeling and maintain this relaxed jaw throughout
- b. Place a finger on the knob of your voice box – makes sure it stays seated throughout
- c. Vocalises with a hum or an “nn” or an “mmm” or an “ng”
- d. Lip bubbles
- e. Siren

- f. Hard palate production (sound hits right behind the upper teeth)
  - g. French “nasal” vowels – as in “bon”
  - h. Words like zing, dong, hung, bum, zoom
- E. Resonance – the key to your sound
- a. Consistent airflow
  - b. An open throat
  - c. Soft palate activity
  - d. Lips – the necessary bell on your instrument
  - e. The Singer’s Formant
- F. The differences between speech and singing as related to intensity, energy and resonance.
- a. Speech – rapidly produced sounds that uses many diphthongs; never the pure vowel.
  - b. Song – elongated vowel sounds, which are mostly pure, some diphthongs (even in a diphthong, we generally elongate the first /main vowel sound)
  - c. Energy, as related to airflow, changes in song. In speech, we have gusts of air; in song, a smooth airflow must exist
  - d. Song takes more physical energy for the airflow to be continuous and regulated – breath management
  - e. Airflow must change to support various pitches and vowels
  - f. Energy must change to support various degrees of pitch intensity (volume)
  - g. Use of resonators is more important in song than in speech as we use timbre changes in song that are not in speech
- G. Conclusion
- a. “How We Sang Today” or a symposium song and have all participants sing it several times in several ways.
    - i. High larynx/seated larynx
    - ii. Tight jaw/relaxed jaw
    - iii. Pulled back tongue/relaxed, forward tongue
    - iv. Stiff neck and chin/puffed out neck and “duh” position chin
    - v. Into a pillow (on the soft palate)/In their personal shower – Singer’s Formant (on the hard palate)