

**Choral Conductor = Voice Teacher**

**Part I: The Functional Unity Foundation**

*Every art consists of a technical-mechanical part and an aesthetical part.  
A singer who cannot overcome the difficulties of the first can never attain perfection in the second,  
not even a genius.*

Mathilde Marchesi, 1821-1913

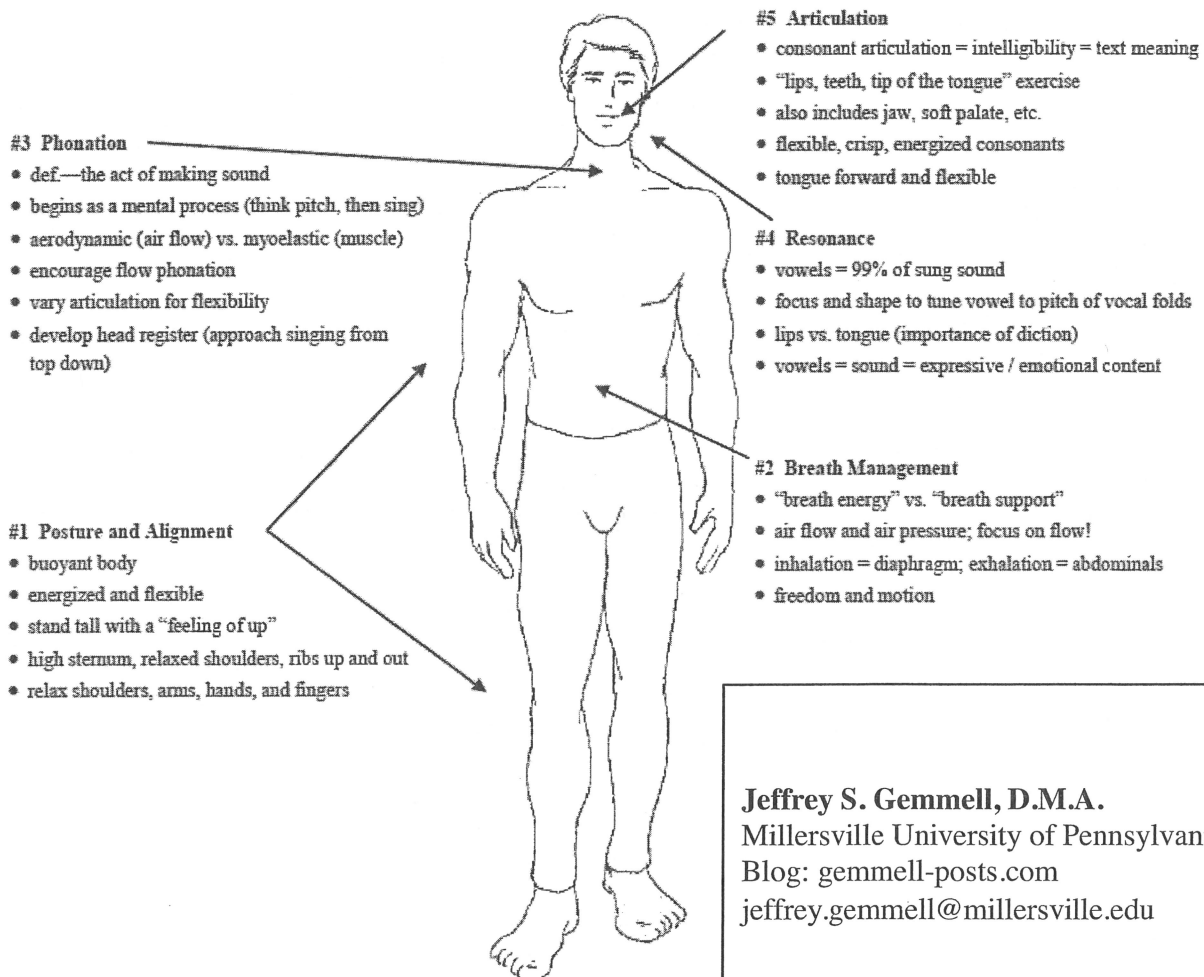
*When the voice works as a functional unit, it allows singers to develop an extended range with an even scale,  
a seamless legato, secure intonation regardless of vowel, tessitura, and dynamic,  
sufficient transmission or projection of sound, and a wide palette of colors.*

*These are the sensuous building blocks of their art...*

*to achieve the gestalt or functional unity of the singing voice is the goal of all singers.*

Barbara Doscher, 1922-1996\*

**"FUNCTIONAL UNITY FRED"**



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\* Doscher, Barbara. *The Functional Unity of the Singing Voice*, 2nd edition. Metuchen, NJ: The Scarecrow Press, 1994.

## WHY STUDY SINGING?

from *Reasons for Studying Singing*, The American Academy of Teachers of Singing (New York)

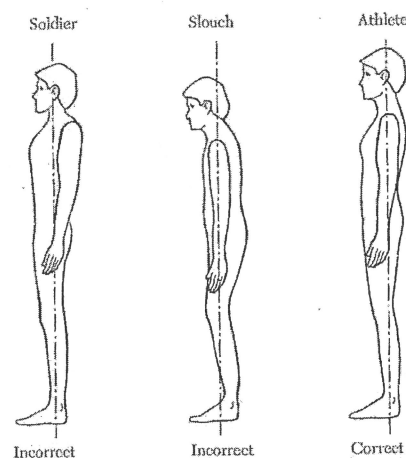
- Fortifies health, widens culture, refines the intelligence, enriches the imagination, makes for happiness and endows life with an added zest.
- It is healthful; it develops the lungs and purifies the blood by emptying more completely the lungs of used air and filling them deeply with fresh air.
- Promotes good bodily posture and graceful carriage.
- Lends expressiveness to the countenance and animation to mind.
- Increases poise and self-confidence and develops character through difficulties overcome.
- Develops a more pleasant, richer speaking voice and improved speech; adds to the charm of personality.
- Strengthens the memory of the power of concentration.
- Acquaints one with the inner meaning of words, and thus stimulates deeper insight into poetry and prose.
- Enables one to understand and enjoy more fully the art of great singers.
- Awakens living interest in the beauties of music and the rich and varied treasure of the literature of song.
- Brings new aspirations and new buoyancy into life through the absorbing pursuit of an ideal.
- As a means of self-expression it is a medium of release for pent-up emotions.
- Gives pleasure to one's self and ultimately to one's friends. Its appeal is universal.

## ESTABLISHING EFFICIENT BODY ALIGNMENT

from *Basics of Vocal Pedagogy* by Clifton Ware (Mc-Graw Hill, 1997, p. 50).

1. Start with "rag-doll" exercise to create spinal stretch from the bottom to the top of the body. Beginning at the feet, slowly straighten up from the bottom upward: first to the knees; second to the buttocks and waist; then vertebra by vertebra upwards to the top of the neck and head.
2. Back up against a wall, allowing as much body surface as possible to touch the wall. Relax all over. Place one hand behind in the small of the back and the other hand behind the head for a cushioning effect.
3. Assume the stance of an athlete ready for action, vital and balanced with feet planted firmly on the floor. One should feel weighty, yet buoyant.
4. Place feet apart 6-8 inches with one foot slightly in front of the other for total balance. For most persons, the left foot will be placed slightly forward of the right foot.
5. Keep the knees flexible and unlocked.
6. Tuck the posterior slightly to avoid a swayback and to balance the pelvic area.
7. The abdominal area remains relaxed on inhalation and the lower abdominal areas remain firm (but not tight) on exhalation.
8. The chest remains comfortably high but not pushed out and upward in the manner of a soldier at attention (see figure below). The rib cage is also slightly expanded outward.
9. The shoulders hang loosely and relaxed with the arms dangling at the sides.
10. The neck is held in erect position, but not rigidly.
11. The head is balanced on top of the spinal column so that it can roll easily in any direction. A good analogy of this flexible balance is a bowl turned upside-down and balanced on the tip of a pencil.

### Incorrect and Correct Body Alignment



## STRATEGIES TO ENCOURAGE HEALTHY BREATHING AND EFFICIENT COORDINATION OF BREATH ENERGY TO SINGING

### 1. Isolated breathing exercises:

- a. Remember that breathing should be:
  - i. Inaudible.
  - ii. Unnoticeable (though active, buoyant and energized).
  - iii. Rhythmic.
  - iv. A natural expansion of the normal breathing process.
- b. To feel abdominals in action:
  - i. Sit with elbows on knees, hands on chin, breathe and feel expansion, let air out slowly on “ss” as if through a leak in an inner tube; concentrate on “normal” breathing then lengthen the time of inhalation and exhalation.
  - ii. Lie on back with books on stomach and *breathe naturally*.
  - iii. Feel base of ribs with thumb and stretch pinkies to waist to create feeling of space and vertical alignment; also measure space in similar way between epigastrium (triangular patch below sternum) and belly button.
  - iv. Be aware of ribs up and out sense expansion of the abdominal muscles – inhale naturally “downward and outward,” exhale with connection to low breath energy.
- c. Other helpful techniques and imagery exercises:
  - i. Say “Hook”... inhale with sip or through lifted, silent “ah”...exhale on “tsssss.”
  - ii. “Smell the rose.”
  - iii. “Cold glass of water on back in shower” (quick catch breath).
  - iv. “Blow the candle out” (awareness of action in the abdominals).
  - v. “Don’t let the candle go out” (when singing to negate overly-breathy tone).
  - vi. “Expand balloon” in abdomen or “expand inner tube around waist.”

### 2. Awareness and coordination of breathing to singing (with lots of air flow and forward resonance)

- a. Exercises:
  - i. Sigh-glide on “ah”
  - ii. Healthy siren (on the breath) and owl “who” (head tone ring through round vowels)
  - iii. Lip buzz/bubble and raspberries
  - iv. Encourage proper humming with lots of mouth space, relaxed jaw, buzzing lips, forward placement “in the mask,” with lots of spinning air flow
  - v. Moaning and whining (avoids pressing or tightening tone); panting creates coordination
  - vi. Connect to nasal resonance with “m,” “n,” or “ng” before well-shaped focused or open vowels
- b. Relate theoretical or isolated breathing/coordination exercises to vocalises immediately. Vocalises are vocal compositions using vowels instead of words.
- c. Encourage movement *during* vocalises to encourage full-body connection (functional unity) to the act of singing. See Charlotte Adam’s *Daily Workout for a Beautiful Voice* that incorporates a multi-modal approach and general teaching scheme that includes:
  - i. [Conceptualization] – introduce concept verbally or non-verbally
  - ii. Visualization – formulate mental picture
  - iii. Movement – kinesthetic motions and gestures to enhance breath flow sound
  - iv. Reinforcement – encourage individuality and praise proper vocalization
- d. Find the natural timbre and unique aspects of each voice (and choral ensemble). Encourage efficient operation of the voice; focus on *quality of resonance* (air flow and vowel production) and *appropriate quantity* of sound (not under- or over-singing). Keep voice free, easy, buoyant, energized, kinetic and flexible.

## PHONATION AND REGISTRATION (#1 and #2 from *Basics of Vocal Pedagogy* by Clifton Ware (Mc-Graw Hill, 1997))

### 1. Three Register Theory [think of “registers” like “vocal gears,” and strive for “smooth shifting”]

- a. *Chest Register* (or heavy mechanism) – physical sensation (vibrations) in chest; may be abused: unhealthy, poorly produced “belting” or forcing of high notes, sometimes referred to as “Annie Syndrome.”
- b. *Head Register* (or light mechanism) – higher and “softer” though when developed usually becomes quite powerful, particularly in the higher range.
- c. *Mixed or Middle Register* – results from blending qualities of head and chest (light and heavy mechanisms) in the middle range of the voice; approximately a third of entire singable range.

## 2. Auxiliary Registers

- a. *Falsetto Register* – primarily associated with male voice; caused by thin, long, stiff and bow-shaped true vocal folds vibrating only at marginal edges (borders); as a technical device, particularly useful for helping hyperfunctional males gain more ease in accessing upper-middle and high notes; healthy and efficient way for singers (especially young tenors) to negotiate higher tessituras and navigate the *passaggio* (“gear” changes; break area).
- b. *Flute/Whistle Register* – high range extension of female voice above C6; often well-focused, penetrating, and “squeaky” or whistle-like. While use of this register is often resisted by women, it offers opportunities to explore coloratura potential and expand range and expression. Also called *flageolet*, *piccolo*, and *bell*.
- c. *Stroh bass* (*Straw-bass*) and *Schnarrbass* (*Growl-bass*) are terms normally associated principally with eastern European choral basses who sing very low notes below the level of normal male range that sound like “popping” or “frying.” If used, should be used infrequently for short periods, preferably with a teacher’s supervision. It is probably an extension of the “glottal fry” technique supported by ample breath flow.

**3. Goal:** to sing and *even* scale, where “registers blend, vowels match, and dynamics merge, so that the differences shade into each other with no perceptible line of demarcation – every tone from lowest to highest matching as perfectly as possible in quality and passing smoothly from one to another, or ‘homogenized’.” [Anna Russell as found in Ware’s *Basics of Vocal Pedagogy*, p. 124]. This is best accomplished by developing good vocal technique:

- a. Cultivate and develop head register.
- b. Bring head register down to blend/mix registers.
- c. Use more air at *passaggio* (register transitions/pivot points).
- d. Use “shifting gear analogy” to help students understand the nature of register changes (relate to air flow, vowel space, light/heavy mechanism, etc.).
- e. Emphasize importance of vowel formation and appropriate mouth space according to pitch being sung.
- f. Concentrate on *quality* of sound in terms of resonance, spin, air flow, etc.
- g. Accept *vibrato* (even fluctuation of pitch that does not draw undue attention to itself) as a *product of a freely functioning voice*; *Wobble* – fluctuations too slow, *Tremolo* – fluctuations too fast. Listen for an even vibrato in solo voices, “match vibratos” in the choral ensemble to create a warm sound through vowel unification and good singing.
- h. Practice effective vocalises with accompanying gestures or full-body motion to encourage and reinforce efficient and healthy vocal technique.
- i. Perform quality choral music with stylistically appropriate sound and articulation.

## 4. Tension (the singer’s worst enemy): Symptoms, Causes, and Cures

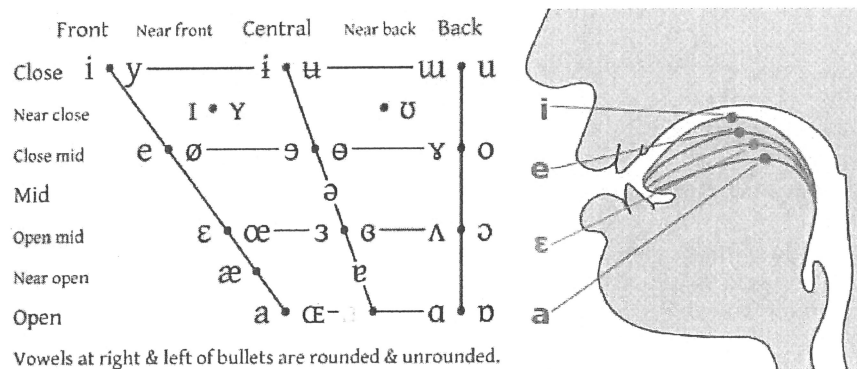
- a. If singing does not feel like a releasing of energy to sustain voice, something is being held – encourage freedom through emphasis on flexibility, air flow and vowel space.
- b. Encourage productive physical involvement (movement) to free muscles in neck, shoulders, back, abdomen, arms, legs, etc.
- c. Use breathing exercises to relax and release tension.
- d. Use well-formed vowels to open and relax throat, jaw and other articulators.
- e. When jaw tightens, neck and face muscles stiffen causing poor intonation. Release jaw tension through awareness of *letting go*, use of *yawn-sigh*, and feeling of indentation at jaw joint in front of ear when jaw is opening freely.
- f. Emphasize facial expression and mouth mobility during songs or just move the jaw during vocalises to aid development of freedom.
- g. Tension in jaw and tongue results in a throaty tone quality and often occurs when a singer tries to force or push to make a big sound. To eliminate throaty production, consider the following: (i) Develop good posture and breathing habits; (ii) Relax jaw and encourage healthy head position; (iii) Phonate and resonate well.
- h. Poor intonation (flat/sharp) may be the result of one or more of the following factors: tension; poor vocal technique; lack of energy; careless vowel formation; unfocused concentration; lazy listening; uncomfortable room environment (too hot? too cold? physically too close together?); singer fatigue. The effective conductor is aware of these issues and offers suggestions to help students solve these problems. Successful solutions are usually based on a firm knowledge of how the voice works, how students learn, and how to teach sensitively. Remember, all of the issues listed above are *fixable*!
- i. Forcing the voice beyond the range of its capabilities results in tension and faulty intonation. It is important not to attempt to move too quickly in the development of range and dynamics. Extending range and dynamics are largely the by-products or end-results of first establishing the basic fundamentals of a functionally unified singing voice (including good posture and alignment, efficient breath management, healthy phonation, free resonance, and crisp articulation).



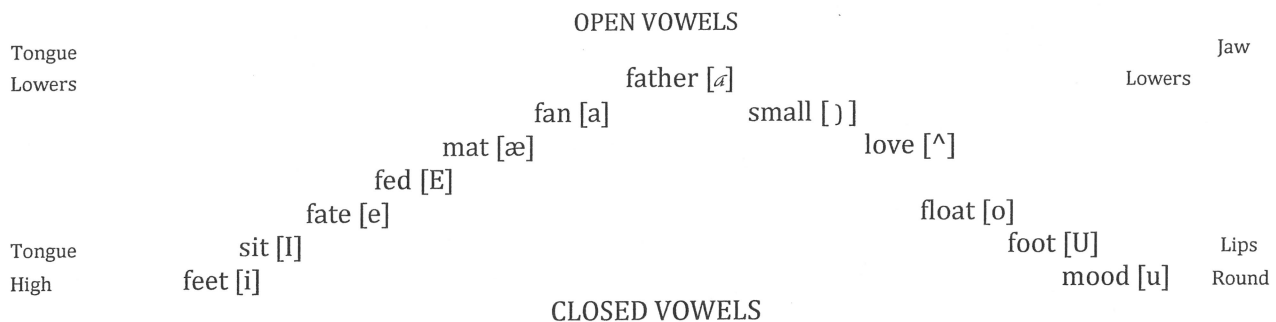
## RESONANCE. Vowels have pitch!!

Resonating spaces are created by the vowels that are produced by movements of the articulators (lips, tongue, soft palate, jaw, etc.). The better the vowel produced, the better the sound. As the palate is raised, the larynx is lowered, creating more resonating space. It is helpful to visualize a consistent lift in the *middle vault* (boundary between hard and soft palates) and the sound as emanating from behind the eyes. Vowels have naturally occurring formant frequencies ("sweet spots"), and if the vowel shape can approximate the tuning of the sung pitch, sympathetic resonance is increased and sound is projected with an efficient amount of vocal energy. The goal is to have the most refined resonance (quality) to create an appropriate amount of sound (quantity). Therefore, resonating cavities (vowels) are tunable and the articulators, especially tongue, jaw and lips, must remain flexible to find the most efficient tuning. In general, the tongue should also remain forward to keep the sound forward.

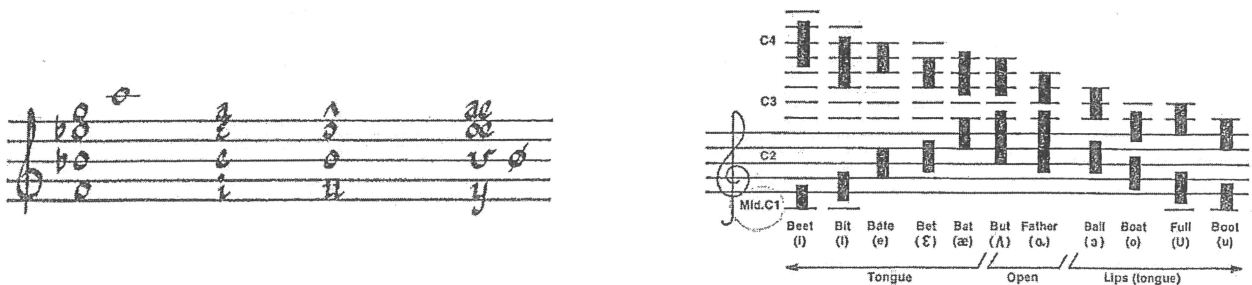
### IPA Vowel Pyramid with Related Tongue Positions



### IPA Vowel Pyramid with English Examples and Open Vowels on Top



### Two Vowel Formant Charts Placed on the Staff



From Doscher's *Functional Unity*, p. 126.

From Alderson's *Complete Handbook*, p. 125.

## SUGGESTIONS FOR DESIGNING VOCAL WARM-UPS AND CHORAL-VOCAL TECHNIQUES

A Sequential Rehearsal Plan includes:

1. Music to be rehearsed: composer, title, pages, concepts/anticipate challenges. Effective musical learnings are the outcome of diligent score study and preparation.
2. Physical exercises for relaxation, stimulation, and group engagement.
3. Strategies to encourage good posture and breathing.
4. Vocalises for individual vocal development and ensembles (flexibility, range, style).
5. Creative activities to promote vitality, energy, animation, buoyancy, and musical understanding (conveyed through dynamics, articulation, eurhythmics, facial expression, etc.).
6. Aural skills (tonal and rhythmic exercises).
7. Rehearsal scheduled with attention to pacing, variety, interest, and active learning; balance Experience (Synthesis)—Analysis—Experience (Synthesis).
8. Closure activities: students demonstrate learning best by *doing*. Have them show their understanding of musical concepts through their musical performance!

## USING MOVEMENT IN REHEARSALS FOR SYNTHESIS OF VOCAL TECHNIQUE AND MUSICALITY

Consider “M & M Days,” where MEMORIZATION and MOVEMENT brings it all together. In general, MOVEMENT:

1. **BALANCES:**
  - a. posture and alignment
  - b. tension vs. release
  - c. aerodynamic vs myoelastic
2. **ENERGIZES:**
  - a. singing and thinking
  - b. breath and gets the blood circulating
  - c. articulation (vowel and consonant)
3. **CONNECTS:**
  - a. phonation to breath stream
  - b. body to singing
  - c. singing to musical material
  - d. music-making to soul/spirit
4. **EXPRESSES/REFLECTS:**
  - a. mental involvement
  - b. conquering of musical concepts and vocal techniques
  - c. awkward or inefficient action
  - d. musical “tension and release” (e.g., “tug-o-war”)
  - e. musical elements: phrase shape, line, direction, pulse, rhythm, harmonic events, articulation (legato, staccato, marcato, martellato, etc.)
5. **ENCOURAGES:**
  - a. cultivation of kinesthetic intelligence (see Howard Gardner’s Multiple Intelligence Theory (MIT))
  - b. creative exploration of sound and sensation
  - c. kinesthetic connection to the abstract and ineffable
  - d. singing and thinking outside of average comfort zone: risk-taking and personal “stretching”
  - e. potential vulnerabilities, which is why it’s important to create a safe, non-threatening atmosphere
  - f. enjoyment and just plain fun!

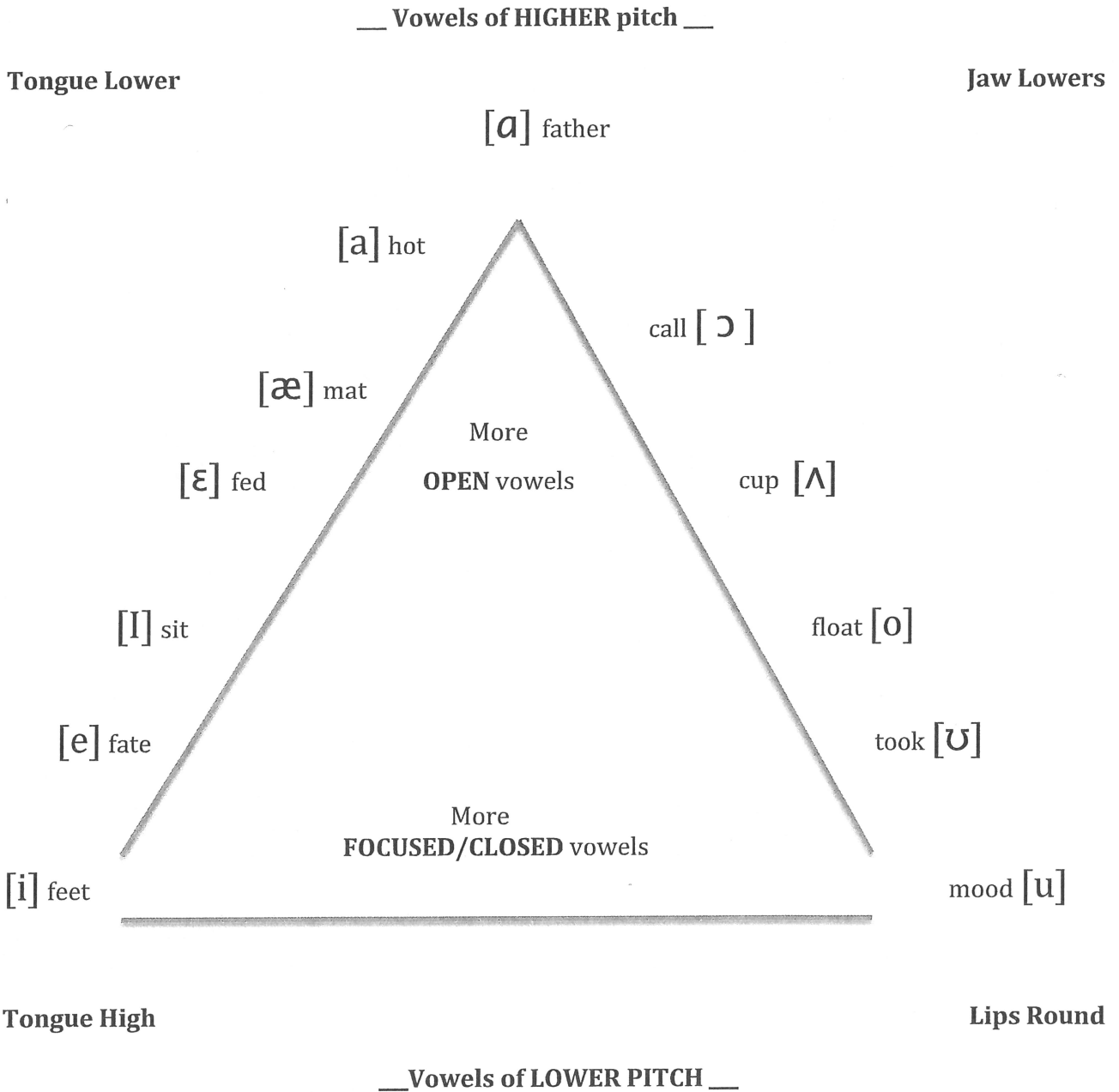
## VOCALISES, TUNING EXERCISES, REPERTOIRE.

# I. P. A. Vowel Pyramid

*Memorize and Use This Tool for Your Entire Career*

*Why are vowels so important? Remember:*

- Vowels have pitch.
- Vowels are 99% of the sung sound.
- Vowels are the way feelings are expressed through music.
- Vowels are used to achieve a beautifully unified ensemble "blend."
- Consonants are needed for intelligibility.



**Game Plan:** Begin working on three basic corner vowels. When vowels are unified and secure, begin working modified vowels.

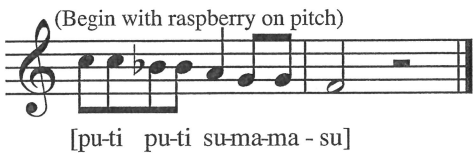
# Vocalises: Resonance

(General and Gender-specific)



## 1. Opener and Focuser

Note: Create space with the [a] and keep back space spacious as you focus the [u] in front. Sustain pitch with spin (caress) and slide between pitches to sing on breath. Use gestures to reinforce this.



## 2. Female Focuser for Middle Voice

Note: Modify [u] to [ae] or [a] as you ascend. Use lots of middle vault space.



## 3. Opener, Extender, Focuser, Releaser

Note: #1 better for females; #2 better for males. Why? "Ng" releases soft palate.



## 4. For Consistency



## 5. For Consistency



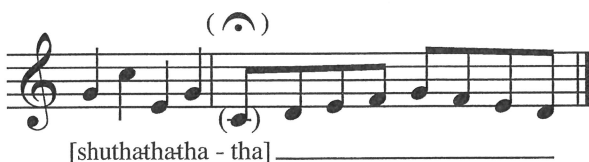
## 6. Male Range Extender (more myoelastic)

Note: modify [e] to [i] as you ascend. Initial [m] creates forward resonance, final [m] releases palate.



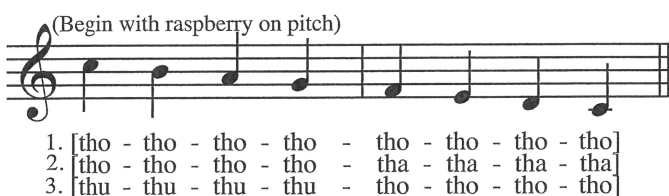
## 7. Male Range Extender, Focuser, Opener (more myoelastic)

Note: modify [e] to [i] as you ascend.



## 8. Female Range Extender with focuser and opener

Note: Eliminate consonants for highest pitches; modify [u].



## 9. Male Blender for consistency (more aerodynamic)

Note: Begin in mid-range w/ #1; take #2 into lower range; take #3 into higher range.

# Non nobis, Domine

*Not unto us, O Lord, but to Thy name be glory given.*

William Byrd (1543-1623)

Edited by J. Gemmell

Psalms 115:1

1 Non no - bis, Do = mi - ne, non no - bis, sed no-mi-ni tu = o da

2 Non no - bis, Do = mi - ne, non no - bis, sed

3 Non no - bis, Do = mi - ne, non no - bis, sed no-mi-ni tu =

6 glo - ri-am, sed no-mi-ni tu = o da glo - ri-am. Non no - bis,

no-mi-ni tu = o da glo - ri - am, sed no-mi-ni tu = o da glo - ri -

o da glo - ri - am, sed no-mi-ni tu = o da glo - ri - am. Non

11 Do = mi - ne, non no - bis, sed no-mi-ni tu = o da glo - ri-am,

am. Non no - bis, Do = mi - ne, non no - bis, sed no-mi-ni tu =

no - bis, Do = mi - ne, non no - bis, sed no-mi-ni tu = o da glo - ri -

16 sed no-mi-ni tu = o da glo - ri-am. Non no = bis, non. \_\_\_\_\_

o da glo - ri - am, sed no-mi-ni tu = o da glo - ri - am. Non.

am, sed no-mi-ni tu = o da glo - ri - am. Non no = bis, non.

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