Fall 2021 Church Music Association of America Virtual Workshop

Achieving Beautiful Choral Tone
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Beautiful Tone
Healthy, clear, vibrant, flexible, free sound, always focused on pitch

Characteristics of beautiful tone can vary depending on:
Styles of music
Musical Demands
Performance setting
Instrumentation

Contributing to good choral sound requires great discipline. Why?

Types of vocal sound

Definition of subglottic pressure:
"the pressure that builds up beneath("Sub-") the vocal folds. The amount of subglottal pressure generated is determined by the airflow through the leakage of air between the vocal folds and the resistance to that flow during speech or singing."

Breathy Phonation
1. Low subglottic pressure to airflow ratio: air escapes more than usual creating airy sound.
2. A lack of the natural biomechanical energy to produce natural vibrato.

Pressed Phonation
1. High Subglottic Pressure to airflow ratio: the amount of air coming through the folds is minimal, and there is a lot of pressure beneath the vocal folds.
2. Tight sound, unstable vibrato, such as wobble or tremolo

Flow Phonation
1. Balanced Subglottic Pressure to airflow ratio: just enough pressure to fully engage the folds.
2. Natural vibrato, and pedagogically speaking is the healthiest style of singing.

What is Vibrato?

Musical Understanding of Vibrato

- A good vibrato is the pulsation of pitch, usually accompanied by synchronous pulsations of loudness and timbre, of such extent and rate as to give a pleasing flexibility, tenderness, and richness to the tone. (Seashore)
- Most largely perceived in a timbre and quality manner, NOT as a pitch modulation.
- Contribution to a rich, deep, and full vocal sound, and unless the vibrato is excessive, it will go unnoticed to the untrained ear.

Technical Understanding

- Four main descriptors to vibrato: rate, extent, jitter, and simmer.

A good vibrato as a pitch oscillation that oscillates within one half step above and below the sung fundamental frequency, with a rate of 5-8 oscillations per second. The rate of vibrato is heavily influenced by physiology, and most agree that a rate of 7-8 oscillations per second is ideal.

Biological Understanding

- The biological processes that lead to vibrato are very complicated.
- Vibrato occurs naturally when the muscles involved in phonation are allowed to maintain this slight oscillation during phonation (Kirkpatrick)
- To achieve a consistent free ideal vibrato, the singer must achieve regular "posture, breath control, laryngeal coordination, and vowel formation" (Nix, Perna, James, Allen).

Vibrato and intonation:

- When sung correctly, vibrato is both functional and musical in its aid to a singer's performance.
- It improves intonation.
- When trying (consciously or unconsciously) to suppress vibrato, the muscles controlling pitch will experience much more irregular tremors which will thus impact intonation negatively.

Troubleshooting Vibrato Related Faults

Below are four different vibrato related faults, their symptoms, causes, and solutions.

1. ***Wobble:***
    a. **Symptoms**: the wobble is characterized as an excessively slow and wide vibrato.
    a. **Causes:** over-adduction of the vocal folds and tongue tension, or pressed phonation. Common in aging voices
    b. **Solutions:** crescendo work, work towards free flow phonation, and a reduction of tongue tension (using exercises discussed earlier in the semester)

2. ***Tremolo:***
    a. **Symptoms:** characterized as a vibrato that is too fast and typically has a narrow width.
    b. **Causes:** poor resonance and micromanaging of the larynx, as well as pressed

phonation and a high larynx.

c. **Solutions:** releasing tension, and moving towards flow phonation. Reduce subglottic pressure by using sirens and sighs.

3. ***Diaphragmatic Vibrato:***
    a. **Symptoms:** often mistaken for wobble and is produced by air pulses originating from the diaphragm.
    b. **Causes:** poor instruction from vocal teachers, resulting in vibrato manually constructed by pulsing of the upper abdominal muscles.
    c. Solutions: focus on developing a good appoggio technique, and have the student remove all vibrato from their singing while unlearning this habit.

4. ***Pathological Non-Vibrato****:*
    a. **Symptoms:** often mistaken for intentional non-vibrato. This sound is usually found in prepubescent children whose musculature is not yet developed enough to display a consistent vibrato.
    b. Causes: Pressed or Breathy phonation, with either too much or too little subglottic pressure.
    c. Solutions: messa di voce exercises, speaking or singing with a heightened emotion, the "whine" or "cry" instruction can also be helpful in achieving proper glottal closure.

What is "Straight Tone"?

- A vocal color that is just as prevalent as vibrato
- Equally important in the toolbox of the modern day singer
- Impossible for any singer to sing a pure straight tone void of (some level of) vibrato. The modern straight tone is simply a minimized vibrato rate and width, such that the tone is perceived to the listener as a "straight tone." (Davids)

False concept of straight tone

1. It is not healthy to sing straight tone
2. Children do not have vibrato
    - Boy soprano with vibrato https://www.youtube.com/watch?v=qBzSoXUOfos
3. Singing straight tone makes tuning easier

Unhealthy Method

- Breathy/Glottal onset
- Too much/too little breath pressure (Breathy/Pressed Phonation tactics)
- Excess tension in the vocal tract
- High Laryngeal positioning

Healthy Method

- Increased airflow + decreased vocal fold pressure

- Maintain vocal fold pressure, but with slightly more firm vocal fold closure (Davids)
- Remember that the goal is not to eliminate all vibrato, rather to just minimize it to where the tone is perceived as a vibrato-less tone.

Redefining Straight Tone

Danya Katok re-examines "straight tone" in her dissertation, *The Versatile Singer: A Guide to Straight Tone and Vibrato.*

"Straight tone is round and clear in quality. It has minimal vibrato, yet shimmers with energy and pulsation."

Choral directors and voice teachers:

- Take the time to teach them how to do it in a healthy way
- Use the straight tone style as an occasional shift in color, rather than the baseline sound.
- Use terminology other than "straight tone."
- Emphasizing pitch accuracy is the most crucial aspect.
  'Sing with a pure, clear, focused tone that is right in the center of the pitch.'
- Some common issues led to less efficient sound production in choral singing
  Sight-singing posture, folder shoulder, vocal fatigue: lengthy rehearsal
  Loud straight tone Singing: instead, adding more resonance and focus.
- Singing quietly can enhance the ability of the choral singer to hear the choir as a whole without being distracted by his or her own sound

Methods:

The key to healthfully minimizing vibrato. Low subglottic pressure must be combined with low airflow when trying to achieve straight tone. (Sally Sanford)

One controls how one's breath is flowing, but there still has to be a sense of forward motion, rather than the feeling of "holding" the voice back.

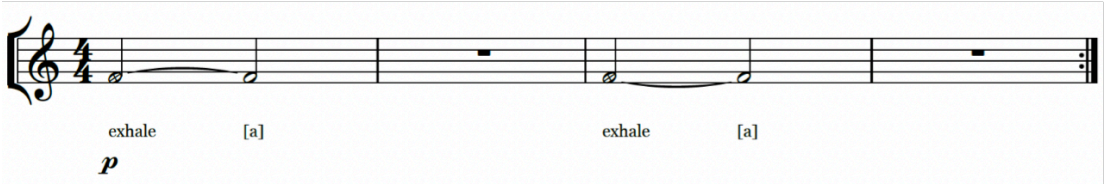
This common mistake, "holding back" the voice, is what causes the tension and fatigue commonly associated with straight tone singing.

Wessinger says, "you have a nice, free, breathy *feeling* that's not breathy."

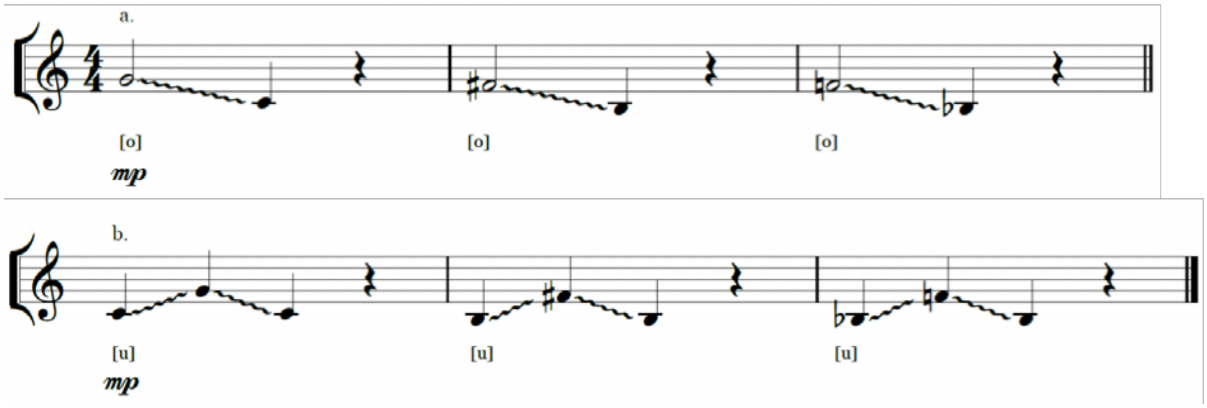
Finding the "Hoot"

<u>Straight Tone Exercises</u>

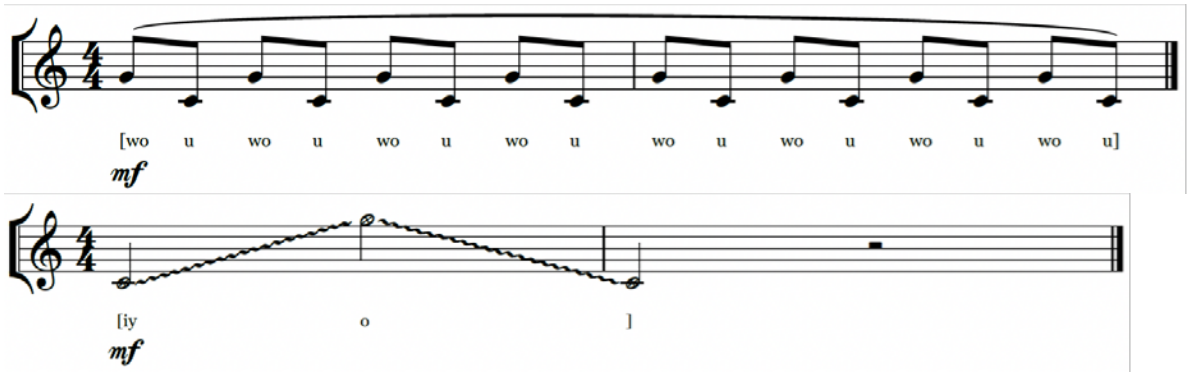
the image of **fogging up a window / Silent Onset Exercise**



Sliding
Slides are an excellent way to access an easy vibrato-less sound, naturally.
encourage bringing the hoot down into the lower register.



Sirens
[w] and [j] helpful: makes it difficult to force a vibrato into the sound. Sirens connote energy, which makes students less likely to micromanage the sound.

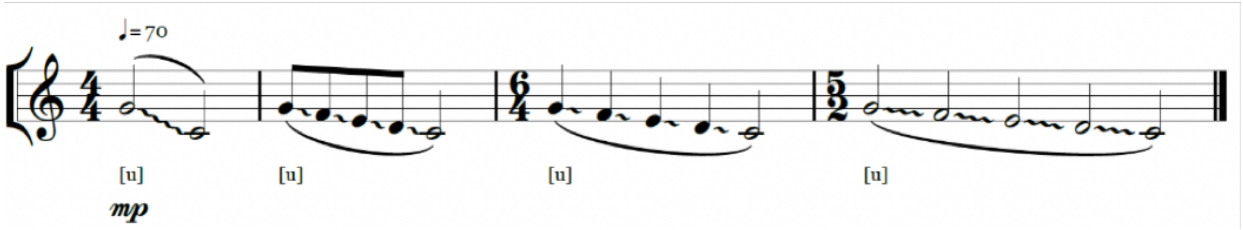


Sighing
Aiming to achieve flow phonation by lessening both the subglottic pressure (what he calls adduction of the vocal folds) and airflow (what he calls breath pressure):

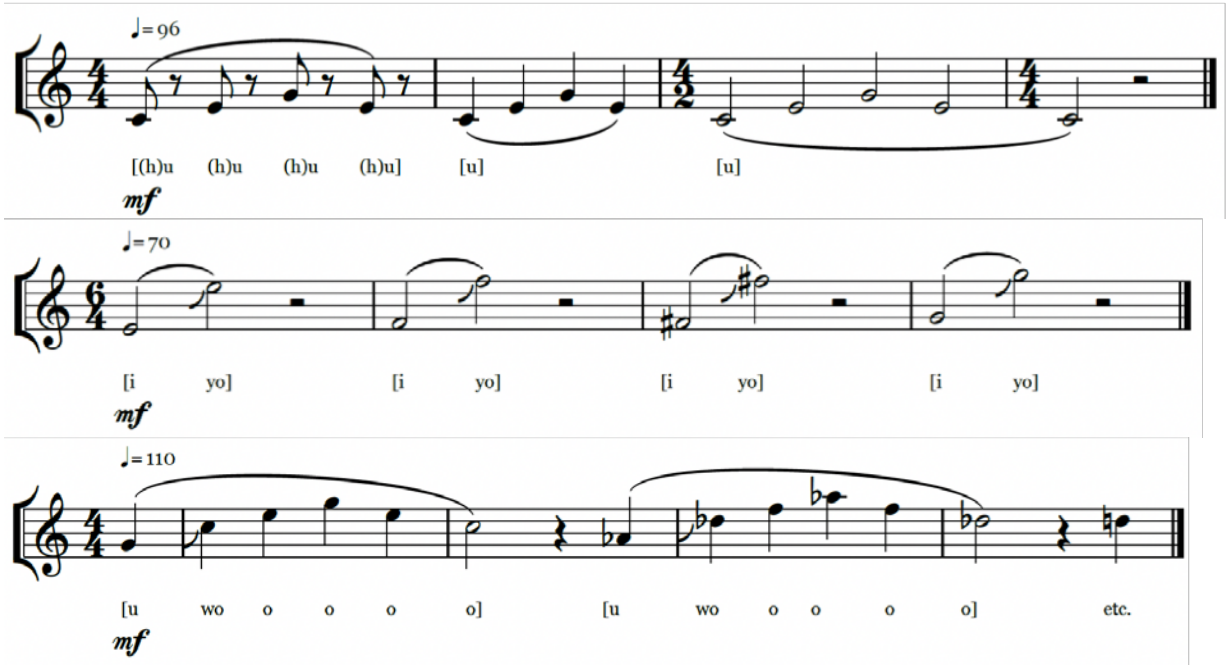
Staccato
Like the slide, a *staccato* note does not have enough duration for there to be an oscillation of pitch.

Silent Onset Exercise
the singer should feel the air of the [h] through his or her lips (it should feel similar to the warmth of fogging up the window) but it should be inaudible..

Using the Slide for a Straight Tone Descending Scale



Using the Staccato Arpeggio for a Straight Tone Arpeggio



Other important aspects to beautiful tone:
Appoggio – Breathe support
Listening skills
Understanding of the function of the articulators – mobility of the mouth.

Some listening samples:

Boy soprano with vibrato- https://www.youtube.com/watch?v=qBzSoXUOfos

Allegri Miserere mei King's college - https://www.youtube.com/watch?v=IX1zicNRLmY

Regensburger Domspatzen boys choir - https://www.youtube.com/watch?v=wwGBn6nIA9E

Vibrato for dramatic operatic repertoire, more intensity - https://www.youtube.com/watch?v=RxZSP1Dc78Q

Monserrat Cabello – o mio babbino caro - https://www.youtube.com/watch?v=oVQxIhgunhw

Barber Knoxville summer 1915
1) Sung by Leontyne price –dramatic soprano - https://www.youtube.com/watch?v=J32S8vYCdcU

2) Sung by Sylvia McNair, light soubrette - https://www.youtube.com/watch?v=WG8_nLJ6238