CHORAL JOURNAL

A Focus on the Voice

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"The contribution of Peter Tiboris and his marvelous team to the musical life of America is incalculable. His company was the first, and is still the best, in the field. We all have been raised up by the music that he has encouraged us to make." John Rutter, *Cambridge*, *UK*



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(Photo: Jeff Goldberg / ESTO)

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ADVOCACY STATEMENT

The human spirit is elevated to a broader understanding of itself and its place in the world through the study of and participation in choral music. Singing in a choir produces more active and involved citizens. It affects self-worth in youth and adults. It builds connectivity throughout communities. Society benefits from the aesthetic beauty and community of singers created by choral programs within schools, houses of worship, and community organizations through involved citizenry, connectivity throughout communities, and feelings of personal selfworth. The American Choral Directors Association and its membership resolve to ensure the survival of choral programs for this and future generations by:

Actively voicing support for funding at local, state, and national levels of education and government; collaborating with local and national organizations to ensure the distribution of arts funding data and artsrelated activism opportunities; advocating for full access to choral singing and inclusion of all singers in a choral program; and ensuring the distribution of advocacy statements and data regarding choral programs.

From the **Executive Director**



Moving Forward!

Try to remember back to this time a year ago. The world as it relates to COVID was still very much unknown to us. Were vaccines worth it or even working? Should we continue to mask? How much harm was masking doing

Robyn Hilger

to vocal health? Should our ensembles return in person? Would our ensembles ever be able to stay in person? When I think back to how I felt, on top of launching the Children and Community Youth Retreat and the Region conferences, I remember with clarity the complete and utter uncertainty of the time. My, what a difference a year makes!

We have much progress to celebrate as we close 2022 and look forward to 2023 and beyond. So what does the future hold for us?

First, we will see the return of the in-person ACDA National Conference for the first time since 2019. The conference committee, led by David Fryling, has been at work for almost two years on this event, with our fingers crossed that we could once again gather together as an ACDA community. Those plans have paid off and we are full steam ahead into February 2023. The conference has some unique features this year as well that you will want to ensure are in your plans. Tuesday evening will open with a welcome concert titled "Your Hand and Mine." The University of Cincinnati-Conservatory of Music Chamber Choir under the direction of Joe Miller, The Cincinnati Youth Choirs under the direction of Robyn Lana, and invited area select ensembles will open the conference and welcome us all to Cincinnati. Henry Leck will be recognized for his incredible contributions to youth and children's choirs across the world and will conduct the premiere of "The Human Touch" by Marques Garrett. Throughout the rest of the conference, we will celebrate the 150th anniversary of Cincinnati's May Festival Chorus through their headliner performance with the Cincinnati Symphony. We will enjoy the celebration of new music performed by the Grammy winning ensemble, The Crossing, who will also premiere the ACDA Brock Commission by Jennifer Higdon. And, the Jason Max Ferdinand Singers, an ensemble of extraordinary talent, will headline and also premiere the ACDA Brock Prize for Professional Composers winning piece by Jeffrey Derus. New this year is the addition of Immersion Choirs to the conference schedule. The 2023 National Conference Immersion Choirs are FREE, optional experiences intended to provide artistic, cultural, and educational experiences for attendees to actively engage in while at the conference. You are encouraged to immerse yourself in a wealth of literature, styles, and rehearsal techniques that may be different from your own traditions and experiences. Two Immersion Choirs are offered in each track. Gold Track Immersion Choirs are the Black Diaspora Immersion Choir directed by Donald Dumpson and the Indigenous People's Immersion Choir directed by Jace Saplan. Blue Track Immersion Choirs are the Vocal Jazz Immersion Choir directed by Matt Falker and the Latinoamérica Immersion Choir directed by María Guinand. Participation in these choirs is optional for attendees. Participation is limited to 200 participants per choir so you will want to register early to ensure you have a spot! You can find additional descriptions about the Immersion Choirs on the FAO page of the conference website (www.acda.org). Our Honor Choirs will be in full swing with more than 1,000 participating students. Each honor choir will also premiere a new composition for each ensemble. Completely new this year, you can already read all about the interest session offerings on the conference website. You'll want to pay particular attention to the addition of Insight Choirs, who will be offering us examples from across the country of the connection between practice, pedagogy, ADEI values, and connection to community through the work of their ensembles. Finally, in an effort to connect directly with our collegiate members, the full day of student-focused activities will be livestreamed to our collegiate chapters through a dedicated link. We hope this provides an opportunity for our student members to plan to meet up and also to share the experience within their colleges and universities as a contribution to the overall school community.

Moving forward past National Conference, ACDA will become more focused on providing resources to members outside of the in-person conference experiences we've always known and loved. One of the first launches of new resources will be through our National R&Rs areas, targeted for late March/early April 2023. Every other post in our Facebook groups are about repertoire needs and your National Chairs are mobilizing to be an even greater resource to you. Regions are revitalizing R&R structures and your states will be called to action as well. We know we have many members who have ideas to share. We are paving the way for these new connections. You will also see this movement to "the other days of the year" as new webinar series and ways to connect launch in 2023. Stay tuned and continue to tell your state, region and national leaders about all the things you would like to see from ACDA.

Finally, a reminder for when we burrow in during those long, dark nights of winter. If we truly believe that choral music has the capacity to transform peoples' lives for the better, we must endeavor greatly every day to make this belief a reality. We can be uplifted by the progress we are making and recognize there is, and will always be, much more to do. This dynamic tension makes me grateful for the opportunity to do work that matters every day with you.

Kobyn Hulger

THE PURPOSES OF ACDA

- To foster and promote choral singing, which will provide artistic, cultural, and spiritual experiences for the participants.
- To foster and promote the finest types of choral music to make these experiences possible.
- To foster and encourage rehearsal procedures conducive to attaining the highest possible level of musicianship and artistic performance.
- To foster and promote the organization and development of choral groups of all types in schools and colleges.
- To foster and promote the development of choral music in the church and synagogue.
- To foster and promote the organization and development of choral societies in cities and communities.
- To foster and promote the understanding of choral music as an important medium of contemporary artistic expression.
- •To foster and promote significant research in the field of choral music.
- •To foster and encourage choral composition of superior quality.
- To cooperate with all organizations dedicated to the development of musical culture in America.
- •To foster and promote international exchange programs involving performing groups, conductors, and composers.
- To disseminate professional news and information about choral music.
- To foster and promote choral singing in the pursuit of peace and justice that enhances social and emotional well-being.
- To foster and promote diversity and inclusivity through active engagement with underrepresented choral musicians and potential choral participants.

-ACDA Constitution and Bylaws

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From the — **President**



Sing, Sing......Everybody's Got to Sing!

For thirty-one seasons, I conducted the Tallahassee Community Chorus. It is a non-auditioned ensemble that welcomes all, resulting in a choir population from ages 16-88 yrs. of age. My belief is that we come into the world singing and should leave the world singing. Therefore...I believe my job is to help facilitate the success of every sing-

er in my ensemble.

How do we help to facilitate the singers' successes, and what are some of the benefits of singing that we can offer? Research has shown that singing can be good for you on many levels. Some researchers point to lowering stress, boosting immunity, enhancing memory, and being helpful when coping with physical and emotional pain.

In an article in the *Chicago Tribune*, March 15, 2019, "The Health Benefits of Singing a Tune," the author maintains that singing may release endorphins associated with feelings of pleasure and stimulate the release of oxytocin, a hormone found to alleviate anxiety and stress.

The University of Frankfurt research, "Psychobiological Effects of Choral Singing on Affective State, Social Connectedness, and Stress: Influences of Singing Activity and Time Course," found that amateur choir members who had their blood tested before and after an hour-long rehearsal displayed a more significant number of antibodies called immunoglobulin A after the rehearsal. These increases were not found in the choir members who merely listened to music. Amazingly we instruct our conductors to let the singers sing more and talk to the ensemble less in rehearsal, and even that small, but intentionally pointed suggestion turns out to be a health benefit to the singers by increasing antibodies and boosting the immune system!

In his 1588 volume *Psalmes, Sonnets, & Songs of Sadness and Pietie,* William Byrd writes about the virtue of singing, first stating...

"It is a knowledge easily taught, and quickly learned, where there is a good master and an apt scholar."

To accomplish being a good master, we must continue learning about the many voices in our ensembles and continue developing techniques to assist our singers in their successes, remembering that each person is a whole being. This edition of the *Choral Journal* offers us information focusing on some of the many voices—including adolescent singing, the aging voice, the trans voice, and others. As we approach the holiday season and the many concerts, remember that we work with the whole person, not just the voice alone. If we do our job well, we will become that good master, and the singers become the apt scholars.

"Since singing is so good a thing, I wish all men would learn to sing."

-William Byrd

andre' J. Showas

From the **Editor**



Amanda Bumgarner

This month's issue features a section of articles related to the voice. In November 2008, *Choral Journal* published a focus issue with articles dedicated to the topics of voice and voice teaching, guest edited by Sharon Hansen, and including articles authored by Drs. Ann Howard Jones, Richard Miller, Robert Sataloff, and Ingo Titze. I am excited to have Sharon included in our Choral Conversations column this month, where

she speaks about founding the "On the Voice" article series in *Choral Journal*, why staying current with voice is important for the choral conductor, tips for conductors working with festival/all-state choirs, and more.

Also featured in this collection of voice topics, Stevie Hirner shares a methodology called line recombination that promotes the inclusivity of transgender and gender expansive individuals in choral ensembles. Learn how to create your own lines and provide alternatives for singers who may be transitioning between voice parts.

Next, Jennifer Trost offers advice for those working with aging singers. She shares challenges, solutions, and vocal exercises that will help singers maintain or improve their aging voice. In 2021, ACDA hosted a webinar on the topic of the aging voice, and following this article is an excerpt adapted from the transcript of that conversation. If you are interested in further reading on the aging voice, see page 37 of this issue for a list of related *Choral Journal* articles selected from the archives.

Patrick Freer's article on singing and adolescence reviews research published during the last decade. Medical/scientific research was surveyed for new information related to the anatomy, physiology, and acoustical properties of the adolescent voice change. Next, Robert Jordan and Catherine Walker contribute an interview where they discuss "strategies for applying voice pedagogy in the overlapping rehearsal contexts of choral music and musical theatre."

Finally, don't miss the abstracts from a special vocal health collection of articles in ACDA's research publication, the *International Journal of Research in Choral Singing* on page 76.

I invite you to explore the topics in this issue and hopefully find something to take with you into your classroom, rehearsal space, community choir setting, on the high school theatre stage, or even in your own home!

Amenda Sumjana.

Editor's Correction: The September issue of *Choral Journal*, page 46, included a photo of several ACDA past presidents. Jerry McCoy (far left) was incorrectly listed as Jerry Warren.

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LAURA WIEBE wieb0043@morris.umn.edu (Trans)itioning Voices: Inclusivity through Line Recombination

Stevie J. Hirner

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n recent years, the inclusion of transgender and gender expansive (TGE) individuals has become a more visible and increasingly discussed topic in both national and regional conferences of the various professional choral organizations. These have featured interest sessions on terminology, vocal changes due to hormone replacement therapy (HRT) along with the related vocal pedagogy, and some logistical accommodations that choral directors can employ in their classrooms such as inclusive choral attire and identity-affirming choral placement.¹ The 2021 book titled Honoring Trans and Gender Expansive Students in Music Education, written by TGE allies Drs. Joshua Palkki and Matthew Garrett, contains discussions on several such accommodations.² However, apart from these worthy topics of discussion, there is a lack of actionable, research-informed tools developed by TGE communities themselves that address the vocal needs of TGE singers in choral ensembles.

As a member of the TGE community, I am presenting a codified methodology called "line recombination" to supplement the efforts of those who have come before me in order to further the goal of a more inclusive choral environment. Through the recombination of vocal lines in their repertoire, choral directors can repurpose similar principles employed for cambiata voices in middle school classrooms—and other such situations that involve revoicing an existing vocal line—in order to meet the vocal needs of transgender and gender-expansive singers in their ensembles who may be exploring a vocal transition, all without compromising the singer's vocal health or musical integrity.

Normalizing the use of line recombination to help TGE singers can provide actionable alternatives for singers who may be transitioning between voice parts in order to align better with their gender identity. First, a brief exploration of trans-related terminology and potential vocal issues that TGE singers may face is necessary in order to lay the foundation for understanding the methodology behind line recombination. After which, the examination of five contrasting "classics" from standard choral repertoire helps determine a set of parameters that can assist directors in creating their own recombined lines for singers in need.

Terminology

In order to use inclusive language when discussing this topic, it is important to establish a few key terms.³ The concepts discussed here are those that are relevant to the discussion of line recombination, and it is not intended to be a comprehensive guide to TGE-inclusive terminology, as that is not the goal of this article. The acronyms AMAB and AFAB mean "Assigned-Male-At-Birth" and "Assigned-Female-At-Birth," rather than using "male" or "female," respectively.⁴ This delineation is important to note because the sex assigned to an individual at birth does not necessarily coincide with their gender identity. An individual whose gender identity aligns with the sex assigned to them at birth is known as "cisgender," while an individual whose gender identity is different from the sex assigned to them at birth is known as "transgender." When abbreviated to "trans," this can be used as an all-encompassing term for any individuals who are not cisgender. However, individuals who are not cisgender may prefer a term other than "trans." It is always better to ask and never to assume. "Gender expansive" is another phrase that is becoming more common and is used as an umbrella term for individuals who broaden their own culture's commonly held definitions of gender, including expectations for its expression, identities, roles, and/or other perceived gender norms.⁵ Therefore, the acronym TGE is applied to the entire phrase "Transgender and Gender Expansive" in order to represent as many individuals' identities as possible.

When referring to a woman who was assigned male at birth, the term trans woman is typically applied, and a man who was assigned female at birth is referred to as a trans man. These terms used to be (and unfortunately still are in some cases) referred to as "male-to-female" and "female-to-male," or MTF and FTM, respectively. However, these phrases are now considered insensitive, over-medicalized, and outdated, and they should not be used.⁶ In the case of individuals who are not within the traditional gender binary of "male" or "female," often the term "non-binary" is used. Non-binary individuals can be AMAB or AFAB and may be another gender that is not male or female, have no gender at all, or are a combination of genders.

Before one can empathize with a TGE individual's perspective, the concept of dysphoria must first be considered. "Gender dysphoria" is a persistent dissatisfaction with or distress related to one's inner sense of self (gender identity) not aligning with their sex-assigned-atbirth, their physical appearance, and/or how their gender is perceived by others.⁷ One potential manifestation of dysphoria that choir directors may observe is vocal dysphoria, which means that the individual experiences distress related to their speaking or singing voice not aligning with what is expected of their gender identity.8 For example, a trans woman may experience distress because they are assigned to sing in the baritone section, which is not a voice part that is traditionally perceived as feminine. However, while many TGE individuals do experience some form of gender dysphoria, not all do, and as such, the presence of gender dysphoria is not necessary prior to validating a TGE individual's identity.9

Lastly, if an individual takes steps to present themselves or to experience the world in a manner more closely related to their gender identity, this is known as "transitioning." Generally, there are three different categories of transitioning that individuals may choose to undergo: social, legal, and medical. Social transition refers to things such as changing the name or pronouns they use, how they dress or act, or their living circumstances. A legal transition refers to changing one's name or gender marker on legal identification and any other necessary documents, and a medical transition refers to individuals who undergo hormone therapy or other medical procedures to alter their body physically to align with their gender identity. It is important to note that not all individuals who are TGE undergo any form of transition, often due to a lack of qualifying medical insurance or financial resources rather than a lack of desire. Regardless, transitioning (whether social, legal, or medical) is not essential in order for someone's gender identity to be valid. It is simply through the individual's self-identification with their identity that it becomes valid.¹⁰

TGE-Related Vocal Transitions¹¹

There are several common misconceptions or misunderstandings about TGE singers that may lead a choir director to be unsure about how to proceed if they have a TGE singer in their ensemble. For instance, some may believe that if a singer is undergoing hormone therapy, they will be unable to sing well enough to be able to continue singing in an ensemble because they can negatively impact the corporate sound if they are allowed to sing in a section that is different than one would expect of their sex assigned at birth (e.g., someone who was previously singing baritone and wants to sing in the alto section).

One of the more incorrect beliefs about HRT's effects on the voice is that a TGE singer taking testosterone would never be able to sing like someone who is cisgender. While these perceptions are not of malicious intent, they are not accurate representations of the experiences of TGE individuals. To address some of these misconceptions and to illustrate line recombination's usefulness in assisting individuals seeking a vocal transition, a brief introduction into medical transition's actual impact on the voice is essential, but an in-depth discussion of its effects on the voice is not included here, as that is not the focus of this article.

Introduction to Medical Transition's Impact on the Voice

First, there are little to no discernable side effects to the anatomy of the larynx of an AMAB individual undergoing feminizing hormone therapy post-puberty, which includes the reduction of testosterone and the addition of estrogen in the body. Some anti-androgens (testosterone blockers) can have a dehydrating effect on the individual, but conscientious hydration can abate any concerns in that area.¹² However, there are phonolaryngeal surgical options that some TGE individuals choose to undergo in order to raise the natural speaking pitch of their voice, and if they do, their range will be impacted significantly. If this is the case, any singing should be cleared through vocal health professionals before resuming choral activities. Because HRT has limited effects on the voice and surgical options are incredibly risky, trans women who are singers may undergo voice therapy to feminize their speaking voice and/or learn to sing in a soprano or alto register in a manner similar to a countertenor.¹³

In contrast to feminizing hormone therapy, masculinizing hormone therapy does have a significant impact on vocal production. The primary hormone prescribed for these individuals is testosterone, and the extent of the impact of testosterone depends greatly on the age and vocal development of the individual when they begin hormone therapy.¹⁴ However, regardless of age, changes can be observed rather quickly, and the effects are analogous to a cisgender AMAB individual's changing voice during puberty.¹⁵ Similar to a middle schoolaged AMAB person, individuals taking testosterone can still sing throughout their voice change, but the amount of time it can take for the voice to stabilize fully can vary from two to six years.¹⁶

On the whole, the extent of the effects of hormone replacement therapy on an individual is largely contingent upon the age at which they begin treatment. It is extremely rare to encounter a teenager who is undergoing HRT, whether masculinizing or feminizing. Instead, the use of puberty blockers may be employed to delay the onset of puberty until the family decides whether to proceed with HRT along with a team of medical professionals.¹⁷ Because puberty blockers postpone the onset of hormonal effects on the body, resonance may be impacted due to the delayed initiation of development of the ribcage and skull. Despite this, it is important to note that teenagers looking to transition socially or to sing in a different section, even if they are not on HRT, can still benefit from line recombination because it can provide a healthy, gender-affirming vocal line that may ease vocal dysphoria.

Line Recombination

Line recombination is a codified methodology of creating a new, intermediate vocal line by combining portions of the existing alto and tenor lines in a composition in order to provide an accessible vocal line that can be sung by individuals seeking to perform a voice part that traditionally corresponds to their affirmed gender identity. It is important to note that line recombination is not the creation of new material. Instead, through notating a hybrid line that consists only of notes from the alto and tenor lines, line recombination does not change the musical content of a selection. It can provide a healthy, gender-affirming alternative to singers who are transitioning between voice parts, or those who are unable or do not want to sing in their current section due to vocal constraints or their gender identity, all while eliminating the need for the singer to jump between staves to accomplish a similar result.

When recombining lines, the most important consideration is the range of the new voice part. Generally, recombined lines should stay within an overlapped tessitura of the AFAB lower register and the AMAB upper register. This allows for the line to encompass a range that can be sung by most individuals, regardless of sex-assigned-at-birth. Because range varies widely from person to person, even within the same fach, registration events serve as a better starting point when determining the range for recombined lines. This is because the locations of registration events are more consistent within voice classifications, which would imply that there is some degree of range overlap at those pitch levels.

As discussed in Richard Miller's The Structure of Singing, all voices have at least one registration event between G3-A4, as shown in Table 1 on page 11.¹⁸ Using that information and the "chest voice" ranges that Miller indicates for upper voices, one can extrapolate that-on average-most voices have an overlap in range around G3-A4 as well, with the possible exception of basso profundos who do not have a developed upper register that enables them to sing above their secondo passaggio. To allow for some margin of error, I narrowed this range even further to try to avoid reaching the extremes of those individuals' ranges. As a result, I recommend the range of A3-F[#]4 for recombined lines with some flexibility for brief deviations outside of that tessitura-as long as the line does not stay beyond this limit for extended periods of time or go higher than A4 or lower than F[#]3, if possible. Of course, one must take into account the difficulty of navigating the passaggi in this range-particularly for tenors, baritones, and bassesdue to potential fatigue and audible registration shifts. Recombined lines can, however, be used as an opportunity to develop a lighter vocal mechanism that will allow them to navigate this challenging tessitura as they work toward their desired voice part.

The second consideration in line recombination is "singability." An effort to avoid extremely disjunct lines should be made, thus creating the smoothest recombination possible—unless the character of the music calls for a more disjunct approach. Lastly, one should try to utilize material primarily from the voice part that the singer desires to perform. If that is not possible due to the nature of the music, a neutral line can be created.

Hypothetical Examples

To visualize some potential circumstances in which the method of line recombination can be applied, five hypothetical singers of collegiate age or older are discussed here for consideration, but again, these principles can be applied in teenagers as well as adults, regardless of HRT status.

Sally

First is Sally (she/her), a thirty-year-old trans woman who has been on feminizing hormone therapy for five

years. She is a former baritone, has been training as a countertenor for five years, and currently sings alto I and soprano II. Because Sally already has training in safely utilizing her upper register to sing in her desired voice part, there are not any vocal accommodations needed from the choir director to help her participate in choir apart from awareness of the blending of timbres—which is the case for any section in a choral ensemble, regardless of whether or not its members are TGE.

Sam

Sam (they/them) is a twenty-two-year-old, AMAB, non-binary singer who has not undergone any hormone therapy. Sam currently sings baritone, but they want to sing alto because singing in the baritone section causes them dysphoria. For them, line recombination is a potential solution in order to provide Sam with an inclusive, alto-dominant option while they learn to navigate

Table 1. Registration Events Across	Voice	Types
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their upper register in a manageable range. It is worth noting that using the term countertenor or falsetto can potentially cause dysphoria because of the connotation that those terms are male-based. Instead, using "upper register" is more appropriate.

Tom

Tom (he/him) is a twenty-six-year-old trans man who does not plan to undergo masculinizing hormone therapy, but he does experience vocal dysphoria and would like to sing tenor in his natural lower register.

Jake

Contrastingly, Jake (he/him) is an eighteen-year-old trans man who has been on masculinizing hormone therapy for six months and was not on hormone blockers prior to beginning HRT. He used to sing soprano, but his voice is already changing, and he has dysphoria when singing in his upper register. Similar to Sam, both

Voice Part	Range of Primo Passaggio	Range of Secondo Passaggio	Chest Voice Range (if relevant)
Soprano	$E^{\flat}4$	F [#] 5	G3-E ⁹ 4
Mezzo Soprano	E4-F4	E5-F5	E3-F4
Contralto	A ^b 4-G4	D5	D3-A ^b 4
Tenor	C4-F4	F4-B ^{\$} 4	Not discussed
Baritone	B ^b 3-B3	E [♭] 4-E4	Not discussed
Bass	G3-A3	C4-D4	Not discussed

Consolidation of registration events' locations as discussed in Richard Miller's *The Structure of Singing: System and Art in Vocal Technique* (New York: Schirmer, 1996), 117, 134-135. Miller does not discuss ranges for lower voices, but he does include "chest" voice range extensions for the upper voices.

Tom and Jake can benefit from line recombination to serve as a safe, comfortable vocal option, but in this instance, one would seek to create a tenor-dominant line instead of an alto-dominant one. This can provide a comfortable, affirming option for Tom if the tenor line becomes too low, and it can serve as a temporary middle ground for Jake while he navigates his voice change as the effects of the hormones progress and his register lowers.

Jodie

Lastly, Jodie (she/her) is a twenty-five-year-old trans woman. She has been on feminizing hormone therapy for a year and a half and is happy singing tenor. Because Jodie does not experience vocal dysphoria, she can continue to sing tenor in choir, and there are no vocal accommodations needed.

Repertoire Examples

When considering repertoire for this project, it was important to include works that are well known and frequently performed in the choral community.¹⁹ The selections discussed here encompass a wide range of styles and composers varying from the Renaissance to the twentieth century, featuring differences in range, texture, voice leading, and harmonic and rhythmic content in order to provide a thorough test of the methodology of line recombination. First to be examined is Sicut Cervus by Palestrina; followed by Ave verum corpus, K. 618 by Mozart; "Warum," Op. 92, No. 4, by Brahms; Gloria, No. II, "Laudamus Te" by Poulenc; and The Seal Lullaby by Eric Whitacre. For clarity of notation and discussion, all excerpts of the recombined lines provided here are color coded with alto-line material in red and tenor-line material in blue, but that is not a necessary part of the methodology.

Sicut Cervus

Originally published in the *Motectorum liber secundus*, 4vv (Second Book of Motets for Four Voices) in 1584, Sicut Cervus has become one of Palestrina's most frequently performed motets.²⁰ The work is scored for SATB a cappella voices, originally in F major. Today's performances are often in G major, but the key is flexible as is common with much Renaissance music. The two- to three-minute motet is through-composed and features points of imitation that are exemplary of Renaissance style with entrances overlapping one another and melismas used to emphasize certain words.²¹ Each phrase of text changes thematically, but the next section typically begins as the previous is ending. It also contains frequent voice crossings between the inner voices, which poses unique choices with regard to line recombination.

The recombined line discussed here is alto-dominant, which tests the process of line recombination and would make the line ideal for the hypothetical singer, Sam. To remain congruent with Sam's desired voice part, the line has been notated on the treble clef just like the original alto line. The part could also be notated on the tenor treble clef if desired, but because of the methodology's determined range, recombined lines can only have a maximum of three ledger lines when notated on a traditional treble clef (down to $F^{\sharp}3$). This line, in its entirety, contains material from the tenor line in only twenty-two out of fifty-eight measures, and as mentioned previously, the voice crossings in the inner voices pose some interesting opportunities for line recombination.

For instance, in mm. 13-18 (See Figure 1 on page 13), the alto and tenor line frequently overlap, and the majority of both lines fall within the designated tessitura of A3-F#4, with only a few outliers. Because of this, these six measures could be combined in a variety of ways, but this particular recombined line illustrates Sam's preference to sing the alto line, which happens to remain within the confines of the prescribed range for the duration of this excerpt. As such, the recombined line stays on the alto line for the entirety of this example. Had this been a recombined line intended for an individual who wants to sing tenor, it could remain on the tenor line here instead. In contrast, a balanced line that favored neither part over the other would require creative decisions regarding text setting-as illustrated in the example seen in Figure 2 on page 13, but the actual notes themselves provide great flexibility for any number of melodic variations.

As seen in m. 20 of Figure 2, I switched to the tenor line on the downbeat to avoid sustaining the G4 that appears in the alto line for such a long period of time.







Figure 2. Giovanni Palestrina, *Sicut Cervus*, mm. 19–24. Alto-dominant recombined line included with lyric adjustment when switching to tenor

ed. James Gibb, 2017. Choral Public Domain Library.

Exactly when to switch to the tenor line, though, is at the discretion of the conductor. For instance, I have chosen to switch directly to the tenor line on the downbeat of measure 20, on the final syllable of the word "desiderat." However, some directors or singers might find this to be an awkward solution due to splitting up the word. So, another potential route one could take in a situation such as this would be replacing the D4 on the downbeat with a half rest, and then continuing with the alto line on beat two: the D4 with the word "ad." In either case, the importance of maintaining a singable, satisfying line that is helpful to the singer is paramount. In all, this selection exemplifies the versatility of early music with regard to recombination because of the flexibility of performance key and the similar ranges of the inner voices.

Ave verum corpus, K. 618

Wolfgang Amadeus Mozart (1756-1791) wrote his *Ave verum corpus*, K. 618, in the summer before his death, almost eight years after his last religious composition.

Composed for Anton Stoll (1747-1805), the choirmaster in the small town of Baden, its simplistic texture and singable lines are ideal for the amateur ensemble for which it was intended.²² Because of this, it is one of Mozart's most frequently performed choral works. Originally scored in D major for SATB chorus, strings, and organ, there are countless modern arrangements of the three-minute, through-composed tune varying in voicing and performance forces. In its original form, however, the composition maintains its relatively static vocal lines and primarily homophonic texture throughout its three distinct sections, which lends itself to limited ranges of the voice parts, especially for the inner voices.

Because of the nature of the limited ranges of the vocal lines in this work, *Ave verum corpus* further demonstrates flexibility of line recombination to fit almost any circumstances for TGE singers. This malleability can be easily observed through examining measures 1-18 of the work in Figures 3, 4 on page 15, and 5 on page 15. Figure 3 shows these measures with an alto-dom-







Figure 4. W. A. Mozart, Ave verum corpus für gemischten Chor, Orchester, und Orgel, KV 618, mm. 1–18. Tenor-dominant recombined line included (Neue Mozart-Ausgabe)





inant line, in which the total measures for the whole piece borrowed from the tenor line in fourteen out of forty-six measures. The recommended deviations to the tenor line create a singable line that remains within the prescribed tessitura. The line deviates from the alto line in measures 11-18 because the original alto line goes beyond the ideal tessitura of A3-F#4 for extended periods of time. Contrastingly, the tenor-dominant line shown in Figure 4, which contains only seven measures of material from the alto line in the entire piece, does not borrow from the alto line at all in measures 1-18 because the original tenor line is extremely favorable for the recombined tessitura. Then, Figure 5 shows a neutral version, in which the total recombined line contains eighteen measures from the tenor line and twenty measures from the alto. This neutral recombined line was created to test the flexibility of this methodology in order to create as many options for transitioning singers as possible and to demonstrate the plethora of creative decisions that can be made. All three of these versions are manageable, singable, and adhere to the guidelines for recombination, which further illustrates that line recombination can be a meaningful contribution toward inclusivity in choral ensembles.

"Warum," op. 92, no. 4

Johannes Brahms (1833-1897) wrote two compositions titled "Warum." The first, his op. 74, an a cappella motet scored for SSATB is perhaps performed more frequently than his op. 92, no. 4, which is discussed here. The latter is scored for SATB chorus and piano and was published in a group of four quartets, Vier Quartette, in 1884. As is typical of Brahms's music, "Warum," op. 94, no. 4, is harmonically explorative, featuring frequent chromaticism as well as asymmetrical phrases. Because of the extensive ranges (alto: $A^{\flat}3$ - $E^{\flat}5$; tenor: D3-G4) and disjunct vocal lines, this two-minute selection poses a particular challenge as it relates to line recombination. In this through-composed work with distinct A and B sections, Brahms also employs contrasting meters and tempi as well as changes in texture, voice groupings, and homophony versus polyphony.

When creating a recombined line in this work, the voice leading presents challenging decision making be-

cause of the ranges and disjunct nature of the lines. As a result, line recombination may require moments where only one or two notes are taken from a different voice part in the context of the phrase or text may be repeated or left incomplete, similar to the previously discussed *Sicut Cervus*. This can be seen in mm. 8-12 of Figure 6 on page 17, which features a neutral recombined line, or in mm. 24-25 shown in Figure 7 on page 18 where only one note out of a measure is borrowed to make the line more singable.

In the effort to create two separate recombined lines-both a tenor and an alto-dominant line-it becomes clear that some recombined lines may yield more balanced results than others. For instance, when creating a tenor-dominant line, I only deviated to the alto line in five out of fifty-six measures, but when trying to create an alto-dominant line, the result was a line in which thirty-two out of fifty-six measures contain borrowed material from the tenor line, thus creating a more neutral line than a part-dominant one and certainly not an alto-dominant line. This leads one to conclude that the more extensive the ranges of the voice parts or disjunct the melodies are, the more likely it is to require the creation of a neutral line instead of a part-dominant one, and this idea is explored further in the next selection from Poulenc's Gloria.

Gloria, No. II, "Laudamus Te"

Gloria by Francis Poulenc (1899-1963) was written in 1959-1960, and is a unique and arguably irreverent take on the traditional Catholic text, but it has still become a notable standard in choral repertoire.²³ Scored for soprano solo, SATB chorus, and orchestra, the composition represents Poulenc's playful melodic and rhythmic style with unexpected text emphasis, mixed meter, and regular chromatic alterations. The short, cellular phrases of the three-and-a-half-minute "Laudamus Te" often feature voice pairings of alto and bass or soprano and tenor across its three sections and coda, and the extensive ranges, particularly for the alto, pose unique challenges.

When recombining the tenor and alto lines, it becomes evident that a part-focused recombination is not achievable. Instead, it is more important to create a singable line, and the result is a neutral recom-



Figure 6. Johannes Brahms, *Vier Quartette*, "Warum," Op. 92, No. 4, mm. 8–14. Neutral recombined line included ed. Rafael Ornes, 2000. *Choral Public Domain Library*.

bined line, containing thirty measures of material from the alto line and thirty-three measures from the tenor. When dealing with music of this complexity, similar to the Brahms "Warum," the versatility of a neutral line cannot be denied. This flexible solution puts vocal health at the forefront of the decision-making process while still providing an inclusive alternative for TGE singers. That said, in measures where multiple viable options exist, another possible solution would be to notate both parts on the recombined line, especially in homophonic texture, thus allowing the singer to take their most gender-affirming solution where possible, as seen in Figure 8 on page 19, measures 77-85.

The Seal Lullaby

When discussing contemporary choral music, the influence of Eric Whitacre (b. 1970) cannot be denied.²⁴ The four-minute composition, *The Seal Lullaby*, is scored for SATB chorus and piano, and the composition is characterized by wave-like motion with emphasis on downbeats, and the application of disjunct, parabolic lines to create "waves" throughout the four sections of through-composed music. Although still containing disjunct lines, the ranges of the voices are far less challenging than Poulenc's *Gloria*, which provides more flexibility when creating the recombined line, because, while voice crossing does not occur, there is a regular overlap between the ranges of the inner voices for the majority of the work (alto: $A^{\flat}3$ - $B^{\flat}4$; tenor: C3- $E^{\flat}4$).

Building off the lessons learned from the Brahms and the Poulenc recombined lines, I opted to create a neutral line rather than focusing on a part-specific recombined line as an example of the flexibility of expression and musicality that line recombination affords. A work such as this allows for a variety of creative possibilities as exemplified in mm. 23-27 of Figure 9 on page 19. In these



Figure 7. Johannes Brahms, *Vier Quartette*, "Warum," Op. 92, No. 4, mm. 24–25. Neutral recombined line included ed. Rafael Ornes, 2000. *Choral Public Domain Library*.



Figure 8. Francis Poulenc, *Gloria*, "II. Laudamus Te," mm. 75–85. Neutral recombined line included Published by Editions Salabert, a catalog of Universal Music Publishing Classical. International Copyright Secured. All Rights Reserved.

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Figure 9. Eric Whitacre, *The Seal Lullaby*, mm. 23–31. Neutral recombined line included

© Copyright 2009 Shadow Water Music. This arrangement © Copyright 2022 Shadow Water Music. International Copyright Secured. All Rights Reserved. *Reprinted by permission of Hal Leonard LLC.* measures, the ranges of the alto and tenor lines overlap almost entirely, and when combined with the disjunct, wave-like melodic shape, the parts allow for any number of decisions when creating the recombined line. In cases like this, the final iteration may come down to the directors' or the singers' preference, as there are countless possible solutions. This flexibility provides an opportunity to stray away from phrase-focused recombination, as seen in Mozart's Ave verum corpus, thus creating a line that can change note to note rather than using whole phrases or complete measures if one so chooses. In this version, forty-one out of seventy-seven measures contain material from the alto line, thirty-one from the tenor, and eight measures contain material from both lines interchangeably, still leaving room for further possible recombinations.

Discussion

When considering the method of line recombination, some conductors may be concerned with the musical integrity of the composer's original intent or even potential copyright issues in non-public domain works, but one could argue that adjustments similar to line recombination are already made by choral directors on a regular basis without changing intent or raising copyright concerns. For instance, rewriting or adapting vocal lines is commonplace for middle school teachers to adjust for their singers' needs without ill-effect on the music, and accommodating the vocal needs of TGE singers can be very similar.²⁵ Also, renowned conductors such as Robert Shaw would have altos join tenors or utilize other such doublings to meet the demands of countless choral masterworks, and this has now become standard practice.

It is important to note that, because line recombination is essentially creating an alternative roadmap through a piece by moving between the inner voices, copyrighted material is not being altered in any way because no music is added or changed. If the line is intended for someone who is comfortable jumping between staves, no engraving would be needed because the roadmap can simply be marked in the score; but if engraving the line is preferred by the director and the singer for ease of reading, it would not be necessary to include the alto and tenor lines in addition to the recombined line, which may further alleviate copyright concerns.

In the event a conductor is concerned about copyright, contacting the composer or the publisher directly to receive permission is not out of the question. In time, it is my hope that line recombination will become such a norm that publishers and composers will be aware of and openly support its application to copyrighted works, especially in academic environments—perhaps even to the point where composers will begin including recombined lines in their published works prior to distribution, which would alleviate copyright concerns entirely.

Until that is the case, however, the thought of choral directors engraving lines themselves and having to contact publishers is likely daunting, particularly as it relates to the time required to do so. To address this potential hurdle, I have created a free, crowdsourced database of recombined lines that can be accessed and contributed to by anyone in the field. This Recombined Choral Library (RCL), which already contains the recombined lines discussed in this article, can be found at www.TransitioningVoices.org. The goal of the project is to provide an easily accessible resource where choir directors can go to download a part for their singers that has already been created if they do not feel comfortable and/or have time to create their own recombined lines. If the desired piece is not present in the library, one can request a recombined line, and the team will create the requested line for them, even contacting publishers if necessary. I hope that the RCL and (Trans)itioning Voices will be able to remove as many potential hurdles to utilizing this methodology and its recombined lines as possible.

After its introduction at the Western ACDA Conference in Long Beach in March of 2022, the project and the number of volunteers are already growing exponentially, and through the inclusion of additional contributors in the coming months and years, it will continue to do so. Anyone who would like to get involved can reach out through the contact form at www. TransitioningVoices.org. The more contributors the project gains, the more accessible this resource will be to the choral field. Regarding the repertoire itself, the lessons learned through the selections here serve as valuable insight regarding the practicality of the method of line recombination as it relates to various repertoire. Early music is easily adapted because choice of key is flexible, and the inner voices often overlap, as seen in Palestrina's *Sicut Cervus.* Static vocal lines, like in the discussed composition by Mozart, provide the opportunity to create unique, part-specific recombined lines. However, when the lines become more disjunct or harmonically explorative, a neutral line may be the best solution, as in the Brahms and the Poulenc selections.

Lastly, the example by Whitacre demonstrates that there is no "correct" answer, and the efficacy of the recombined line is only limited by the director's creativity. Another factor for consideration is that compositions with extensive divisi may actually make line recombination easier because divisi typically reduces the range of each voice part, thus creating more static lines. When commissioning works, one could request a recombined line, either consisting of material from the alto and tenor, or perhaps the creation of a unique, inclusive part, similar to a cambiata line.

Through line recombination, TGE singers can be shown acceptance and active support of their identity that may alleviate any apprehension they have about being able to sing in a choral ensemble. When combined with thoughtful choral positioning and inclusive uniforms, this empathetic approach can provide a safe, validating alternative for these singers that is fulfilling and meaningful as they transition between voice parts.²⁶ That said, line recombination is not a perfect solution to the growing challenges that choral directors are facing, but it is a viable stopgap when working toward inclusivity. As such, providing an inclusive, supportive environment for all singers is a goal worthy of pursuit, and educators can do so by remaining open to learning about differing perspectives or experiences and by being mindful of ways they can incorporate new methodologies.

A potential concern that directors may have regarding ensembles with high performance expectations is that including line recombination may result in a singer being unable to perform at the same level on a recombined line that they might have been able to on their previous voice part. For instance, there may be a singer who can meet expectations as a tenor but is not proficient enough with their upper register to meet the expectations as an alto or through a recombined line. This is the reality of being a musician, and it would depend on the comfortability of the singer whether they are willing to compromise in order to be in that ensemble.

Through line recombination, TGE singers can be shown acceptance and active support of their identity that may alleviate any apprehension they have about being able to sing in a choral ensemble.

As a member of the USC Thornton Chamber Singers at the University of Southern California, I approached Dr. Jo-Michael Scheibe about singing recombined lines in the spring of 2022 after singing tenor in the ensemble for a year and a half. He was open to giving it a try, but added the understandable disclaimer of, "I need to hear it in the sound of the ensemble first." Fortunately, I was able to maintain the high performance standard of that ensemble, but had I not been able to, I would have had to decide if I was okay with only singing tenor or if I would rather sing a recombined line in another ensemble. When directors are faced with a circumstance such as this, it is important to consider whether the singer has not qualified for an ensemble because all avenues (including line recombination) have been explored and they are found not to be capable, or whether it is because of a hesitancy caused by misunderstanding or the fear that it would be too much work to provide the singer with accommodations.

In the event that a singer approaches a conductor with a request to sing in another section, the director should be careful to respond with empathy and to begin a dialogue with the singer without being immediately dismissive, as it may not be clear why the singer is asking to change parts. Through careful conversation and consideration, the director and the singer can work together to develop a plan that is specific to that individual. Conductors should be aware of singers' identities and their abilities as best they can and strive to be as empathetic as possible, allowing their creativity and musicianship to create the best experience for their singers, but at no point should a director require a singer to "come out" in order for their request to sing in another section to be considered.

In some instances when there is a desire not to draw unnecessary attention to the TGE singer while using recombined lines, a more discreet approach may be appropriate. Depending on the comfortability level and musical independence of the TGE singer, more individuals could perform the recombined line along with them, thus allowing a degree of anonymity for them while also normalizing the practice and providing musical support through the added singers. The success of any implementation of this methodology hinges greatly on the director's relationship with their singers and the inclusive environment that they have fostered

Suggested Reading in ACDA Publications

Blaisdell, Gayla, "Fostering Inclusion: Unpacking Choral Dress Codes." *Choral Journal* 59, no. 1 (August 2018): 59-66.

Cates, Dustin, "Key Changes: Choral Directors' Experiences with Gender-Inclusive Teaching," *International Journal of Research in Choral Singing* 10 (2022): 242-271.

Palkki, Joshua, "Inclusivity in Action: Transgender Students in the Choral Classroom," *Choral Journal* 57, no. 11 (June/July 2017): 20-35.

Ramseyer Miller, Jane "Creating Choirs that Welcome Transgender Singers." *Choral Journal* 57, No. 4 (November 2016): 61-63. in their classrooms and ensemble spaces.

Directors and educators have a significant responsibility to create a meaningful, comfortable experience for all singers in their ensembles. This means that gatekeeping and decision making based on false preconceptions must be avoided through consciously committing to learning to understand others' identities. Directors can utilize the accommodations discussed here, while trying not to limit their perceptions of what line a singer is capable of performing without considering a recombined line as a possibility to help them feel welcome and validated. Inclusion such as this can significantly reduce stress and anxiety for TGE singers, and it can provide an overall feeling of acceptance, which may be lacking in many TGE individuals' lives. Above all, this practice is borne out of a desire to promote inclusivity and empathy, which should always be the goal, not just as choral directors, but as human beings.

NOTES

- ¹ While these topics are not the primary focus of this discussion, they are worthy of further exploration. See the following references: Christopher Cayari, "Demystifying Trans*+ Voice Education: The Transgender Singing Voice Conference," *International Journal of Music Education* 37, no. 1 (December 2, 2018): pp. 118-131, doi: 10.1177/0255761418814577; Joshua Palkki, "Inclusivity in Action: Transgender Students in the Choral Classroom," *Choral Journal* 57, no. 11 (2017): 20-35; Jason M. Silveira, "Perspectives of a Transgender Music Education Student," *Journal of Research in Music Education* 66, no. 4 (October 4, 2018): pp. 428-448, doi: 10.1177/0022429418800467.
- ² Matthew L. Garrett and Joshua Palkki, *Honoring Trans and Gender-Expansive Students in Music Education* (New York, NY: Oxford University Press, 2021).
- ³ Definitions discussed here are found in the Oxford English Dictionary, unless otherwise indicated. Oxford English Dictionary: The Definitive Record of the English Language, (2020).
- ⁴ "PFLAG National Glossary of Terms." (PFLAG, July 2019): https://pflag.org/glossary

⁵ Ibid.

⁶ Ibid.

- ⁷ Jack Turban, "What Is Gender Dysphoria?," American Psychiatric Association, November 2020, https:// psychiatry.org/patients-families/gender-dysphoria/whatis-gender-dysphoria.
- ⁸ For examples, see: Joshua Palkki, "My Voice Speaks for Itself: The Experiences of Three Transgender Students in American Secondary School Choral Programs," *International Journal of Music Education*, 38(1), (2020), 126–146. https://doi.org/10.1177/0255761419890946
- ⁹ Jack Turban, "What Is Gender Dysphoria?"
- ¹⁰ "PFLAG National Glossary of Terms." (PFLAG, July 2019): https://pflag.org/glossary
- ¹¹ This is not a comprehensive list of potential medical transitions and their side effects, as that is not the primary focus of this article. Topics discussed here are to provide context for accommodations one might make to the vocal lines in their repertoire.
- ¹² "Spironolactone (Oral Route) Side Effects." (Mayo Clinic. Mayo Foundation for Medical Education and Research, October 1, 2020), https://www.mayoclinic.org/drugssupplements/spironolactone-oral-route/side-effects/ drg-20071534?p=1.
- ¹³ For more discussion regarding vocal pedagogy in TGE singers, see: William Sauerland, *Queering Vocal Pedagogy:* A Handbook for Teaching Trans and Genderqueer Singers and Fostering Gender-Affirming Spaces (Lanham: Rowman & Littlefield, 2022); William Sauerland, "Legitimate Voices: A Multi-Case Study of Trans and Non-Binary Singers in the Applied Voice Studio. (Ph.D. diss., Teachers College, Columbia University, 2018).
- ¹⁴ Tessa Romano, "The Singing Voice During the First Two Years of Testosterone Therapy: Working with Trans or Gender Queer Voice," (diss., University of Colorado Boulder, 2018).
- ¹⁵ "Hormone Therapy." (Hormone Therapy | Transgender Care, 2019), https://transcare.ucsf.edu/hormonetherapy.
- ¹⁶ Romano, "The Singing Voice," 33.
- ¹⁷ Jack Turban, "What Is Gender Dysphoria?"
- ¹⁸ Richard Miller's *The Structure of Singing: System and Art in Vocal Technique* (New York: Schirmer, 1996), 117, 134-135.
- ¹⁹ These selections were chosen, in part, through consulting J. B. Watson's dissertation on highly-recommended

repertoire. J. B. Watson, Most Recommended Choral Music: A Survey of High School State Choral Festival Repertoire Lists. (Dissertation, 2016), 49.

- ²⁰ Lewis Lockwood, Noel O'Regan and Jessie Ann Owens, 2001. "Palestrina [Prenestino, etc.], Giovanni Pierluigi da ['Giannetto']." (*Grove Music Online*, 2001), doi: 10.1093/ gmo/9781561592630.article.20749
- ²¹ Dennis Shrock, *Choral Repertoire* (New York: Oxford University Press, 2009), 63.
- ²² Betsy Schwarm, "Ave Verum Corpus, K 618," Encyclopædia Britannica, inc., https://www.britannica.com/topic/Ave-Verum-Corpus-K-618.
- ²³ Huscher, Phillip. "Program Notes: Francis Poulenc, Gloria." (Chicago Symphony Orchestra), https://cso.org/ uploadedFiles/1_Tickets_and_Events/Program_Notes/ ProgramNotes_ Poulenc_Gloria.pdf.

²⁴ Shrock, Choral Repertoire, 760.

- ²⁵ For additional information on adolescent changing voices, see Rollo Dilworth, "Working with Male Adolescent Voices in the Choral Rehearsal: A Survey of Research-Based Strategies," *Choral Journal* 52, no. 9 (2012): 22–33.
- ²⁶ For insights and resources regarding inclusive choral environments in addition to those already discussed, the following resources are helpful places to start:
- Ari Agha, "Making Your Chorus Welcoming for Transgender Singers." Making Your Chorus Welcoming for Transgender Singers | Chorus America (December 30, 2017). https://www.chorusamerica.org/conductingperforming/making-your-chorus-welcoming-transgendersingers.
- Gayla Blaisdell, "Rehearsal Break: Fostering Inclusion: Unpacking Choral Dress Codes." *Choral Journal* 59, no. 1 (2018): 59–66.
- "FAQ/Other." Queering Choir. http://www.queeringchoir.com/ faqother.html.
- "Teaching Transgender Students in the Music Classroom." Blurring the Binary. https://blurringthebinary.com/ uniforms.

The Aging Voice: Challenges and Exercises

JENNIFER TROST

Jennifer Trost Professor of Music, Voice The Pennsylvania State University, School of Music, University Park, PA jlt29@psu.edu All her life, my great-aunt Eleanor loved to sing, especially in church choirs. However, I remember a story told about her last choral experience, which did not have a happy ending. She had moved to a new community and therefore to a new church and immediately joined the choir, as was her habit. Apparently after about a month or so, it was suggested to her that she not sing with the choir anymore. She was devastated, of course. I don't think she ever sang again after that. What a loss, both to her and to the church community.

Rather than pass judgement about the handling of that situation, I prefer to reflect on how it might have been avoided and turned into a teaching moment. What were the issues at stake? As an aging singer myself, I am quite aware of the forces at work that present challenges to singers "of a certain age." In this article, I would like to discuss those issues, their causes, and talk about solutions and vocal exercises meant to help those singers maintain or improve their aging voices. Through understanding the most prevalent conditions of the aging voice, conductors will be able to craft rehearsals that will both accommodate the special needs of this age group and promote vocal health and improved ability. The techniques and warm-up exercises provided here are meant to be of assistance.

The Causes and Effects of Aging on the Voice

There are many changes that occur normally in the aging voice. These are mainly physical, but there is also an effect on the emotional well-being of the singer, particularly if music has been a significant portion of that person's life or if self-identity is closely allied with the voice. Only recently has there been a dedicated effort to understand the changes associated with the aging voice.

Some of the more typical manifestations of normal aging include "loss of notes in the upper range, decreased agility, changes in tone color, loss of power, stiffness, slowed vibrato, difficulty with tuning, difficulties with both high and low range transitions, cracking, dry throat, and raspiness."¹ Robert Sataloff observed similar changes in the aging voice affecting both singing and speaking: "Typically, we are not surprised to hear breathiness, loss of range, change in the characteristics of vibrato, development of tremolo, loss of breath control, vocal fatigue, pitch inaccuracies, and other undesirable features in older singers."² It is important to note that these symptoms do not necessarily all happen within one individual but are among the most common difficulties faced by aging singers.

The term Presbyphonia encompasses these age-related changes to the voice, and while all of us experience the effects of aging, the time of onset and how it manifests itself and to what degree is an individual matter. Since singing is a physical activity, it is important that we exercise those muscles regularly and keep them in good condition (the "use it or lose it" idea). The common goal, of course, is to be aware of and accommodate the challenges associated with aging, thus allowing singers to enjoy a positive lifelong experience with their voices. As we age, our muscles lose strength and flexibility due to gradual shrinkage (atrophy), and the connective tissues become stiffer while the mucous membranes become thinner and drier. This affects the larynx, vocal folds, and the vocal mechanism in general. Dry vocal folds are less able to vibrate at a high rate and this affects the tone.³

When we age, there is a reduction in the number of tiny glands that produce mucus for the larynx, resulting in fewer secretions to support the 'veil of mucus' on the vocal folds. The vocal folds produce sound more easily when there is slippery mucus bathing them.⁴

In addition, maintaining an erect posture is challenging due to changes in the spine. If the posture becomes more collapsed, then the rib cage will not expand as it did before, causing reduced lung capacity and the need for more breaths or more time to take in a breath; the head and chin will move forward causing tension in the neck. Sometimes the voice quality is affected resulting in breathiness, or hoarseness, or roughness in the sound. Many aging singers experience vocal weakness and a diminishing ability to project. Sopranos and altos may feel that their voices become lower and heavier, and those used to singing bass and tenor often get higher and may display a "reedy" quality.

The British Voice Association has a helpful article by Sara Harris on *The Voice and Ageing*, which addresses the specific changes in the body and its effects on the voice. Below are some of the main points:

For cisgender men⁵—the voice will tend to rise after middle-age. The vocal folds become thinner and stiffer, and the edges will no longer be straight, hindering complete closure. The small gap will likely cause the voice to be weaker and breathier due to escaping air. The condition of "bowing vocal folds" is called "Presbylarynx" and is more common in aged cisgender men but can occur in older cisgender women. In addition, Presbylarynx may lead to instability in vocal pitch, leading to a yodel into falsetto or difficulty in singing at louder dynamics because it requires more physical effort.

For cisgender women—due to menopause there are hormonal changes in the body, which affect the vocal folds by causing them to thicken and become stiffer; the number of glands producing mucus to lubricate the cords are reduced causing dryness and the mucus itself becomes thicker and needs clearing. These two alterations to the vocal folds cause the voice to sound lower and create a rougher, breathier sound.⁶

Hormones

Why do hormones have such an effect on the vocal folds? Science tells us that there are hormone receptors on the vocal folds. There are more androgen receptors than estrogen receptors, and apparently there are no progesterone receptors on the vocal folds.⁷

Cisgender women experience these hormonal fluctuations and changes due to menopause or perimenopause (the transitional time preceding menopause). This is normal, and these occur at various ages. Bos, Bozeman, and Frazier-Neely indicate in their book, *Singing Through Change: Women's Voices in Midlife, Menopause, and Beyond,* that "The hormone-driven transformation of the voice from perimenopause to postmenopause takes place over time—up to 10 to 15 years—happening for most between the ages of 40 and 60."⁸

Karen Brunssen talks about the Senescent Singer in her book, *The Evolving Singing Voice: Changes Across the Lifespan*, and says that with menopause the estrogen levels decrease, and progesterone is no longer produced due to the absence of ovarian follicular activity.⁹ Barbara Fox DeMaio agrees and says that by the time a cisgender woman is fifty-five, there are no more follicles, meaning that there is a lack of progesterone. "Without progesterone, and with decreasing levels of estrogen, the antagonist receptors of the female hormones on the vocal folds and elsewhere cease to function." She goes on the say that the receptors do receive the male/androgen hormones through the sex hormone-binding properties of globulin, a small molecule.¹⁰

Brunssen also addresses the changes that cisgender men experience:

Beginning around the age of 20 to 30, testosterone levels in men begin to gradually decline. Andropause is a term associated with men who have symptoms due to low levels of testosterone. Although sometimes referred to as 'male menopause,' it is not equivalent to the sudden hormonal shift and change in hormonal balance that women experience. In men the loss of testosterone in later years has been associated with thinning vocal folds that may contribute to an increase in f0 and increased breathiness. (Brown, Brown, Morris, Hollien, & Howell, 1991)¹¹ F0 refers to the fundamental frequency that the vibrating vocal folds create, and it is often perceived as pitch.¹²

The cisgender female premenopausal estrogen balance can be restored by hormone replacement therapy (HRT). In addition to receiving supplemental estrogen, some cisgender women may also receive progesterone or progestin, but this may not be necessary if the person had a hysterectomy.¹³ It is interesting to note that adipose tissue (fat) will also serve as an alternate source of estrogen in the body.¹⁴ According to Martha Howe, "fat cells will metabolize the androgens ('male' hormones) to estrones ('female' hormones)."¹⁵ How to handle the hormonal effects of menopause is a subject to discuss with a physician, since there are varying opinions and risks are involved.

Hearing Loss

High-frequency hearing loss is something many of us experience with age; this is related to the ability to hear high-pitched sounds and is often caused by damage to the cochlear hair cells in your inner ear from aging or loud noise exposure. Apparently 14% of people under 65 experience high-frequency hearing loss and about 30% of those over the age of 65. By the time people reach the age of 75, almost 50% experience some sort of hearing loss. Age-related hearing loss is called Presbycusis.¹⁶ Of course, if the singer is not hearing well, the ability to match pitch may be affected.

If a singer has hearing-loss or difficulties with the voice, they should seek out a board-certified otolaryngologist. Many have specialties and some focus on singers and public speakers. They may even have voice-care professionals in related disciplines associated with their practices such as speech-language pathology, and those who work specifically with singers or actors

General Health and GERD

Ultimately it is the singer's responsibility to take care of their health and well-being. We all know the typical things to attend to: proper diet and weight, adequate hydration and sleep, daily exercise, avoiding smoking, and moderating alcohol consumption. Certain medications can also affect the voice. Many of us experience GERD (Gastroesophageal Reflux Disease), which allows stomach acid to rise into the esophagus, even up to the level of the vocal folds. According to Bos, Bozeman, and Frazier-Neely, "perimenopausal and postmenopausal women were nearly three times more likely to have reflux than premenopausal women. In general, singers may experience reflux more frequently due to the added pressure on the muscular valve at the top of the stomach when they sing."¹⁷ As we age, the lower esophageal sphincter (a circular band of muscle around the bottom of your esophagus) can weaken and allow this "backwash" to happen.¹⁸ This is experienced as "heartburn" and can be treated with medication and other life-style changes. It is important for us all to have access to excellent physicians and ENTs so that optimal physical form can be maintained.

Practical Exercises

Now that we know how aging can manifest itself in mature singers, we can turn our attention to assisting them in maintaining their voices and continuing to sing with joy and acceptance. Much of this can be accomplished at the start of the choral rehearsal through targeted warm-ups (or even pre-warm-ups done at home), but also through correct placement in the assignment of voice parts. It may be that a singer will need to be moved up or down in voice categories as the voice ages. It is important to stress to the singer that this is being done so that he or she can comfortably bring their best effort; it should never feel like a penalty or criticism. Remember that an aging voice tires more readily, so the amount of singing must be regulated to the individual needs. A variety of exercises will also help to "cross-train" the voice and build up skills and abilities necessary to fully participate in choral singing.

I prefer exercises that are simple and effective. Although there is the thought that warm-ups need to be varied to keep singers engaged, I think that having a consistent routine of familiar exercises, done in a consistent order, is helpful to aging singers. It allows them to concentrate on the proper technique without being overloaded with new information. There can be variety, but I recommend making small substitutions over time. Of course, many of us have our favorite "go-to" exercises and these can be done while being mindful of the challenges presented to the aging singer. Hopefully through regular repetition, the voice will strengthen and improve in all areas thanks to repeated use while practicing the "use it or lose it" principle.

Body Warm-ups

An ideal start to the choral rehearsal would be to do some stretches to limber up the body, develop physical awareness, and prepare for breathing exercises. This can be done as people arrive so that they are not simply waiting for the choral rehearsal to start. It's possible that some singers may not be able to do some of these exercises comfortably due to physical restrictions or balance problems. Doing these in a seated position is a good alternative. In general, it is important to be mindful that standing for long periods of time can be very tiring for your senior singers, so changes in position will alleviate that problem.

Some popular warm-up exercises include:

- Head rolls and/or shoulder rolls:
 - Head rolls: in an erect standing or seated position, gently and slowly move the head around in a circle; start in one direction and then later switch and do the opposite rotation. The chin will dip in front.
 - Shoulder rolls: these can be done with shoulders moving in parallel motion (either forwards or backwards); or can be done out-of-sync with one shoulder moving forward while the other moves backward.

• The rag doll where the singer bends over with bent knees and arms reaching for the ground and the head hanging loosely (let gravity do its work). This exercise can be done either standing or seated to accommodate balance issues. Sometimes in this bent position people become more aware of their breathing, especially noting expansion in the abdominal area and the small of the back. Once the optimum position has been held for a short time, the singer slowly rolls up, vertebra by vertebra, to an erect position, allowing the legs and thighs (or lower torso when seated) to do most of the work.

• A whole-body shake to get rid of tension would work nicely at this point.

• Have everyone reach for the sky and slowly bring their arms away from the body and down to their sides until the arms are hanging loosely (the middle finger of each hand will align with the side, vertical seam of the pants). The chest should not have moved from the upward reaching motion, and this maximum expansion and stretch should have been maintained during the lowering of the arms.

• To double check alignment, have everyone see if the following five points align: ankles, knees, hips, shoulders, and ears. This gives what some people call a "noble" posture.

Breathing Warm-ups

Remember that as we age, the cartilages of the ribs ossify, and lung tissue becomes less pliable so that the aged singer won't be able to get as much air into the lungs as they did when they were younger. It's also more difficult for them to maintain the amount of air pressure they need to sing loudly, especially for sustained amounts of time. The correct warm-up and technique will help, but they may simply need to breathe more often.¹⁹

James McKinney talks about the breathing process in his book *The Diagnosis and Correction of Vocal Faults* and stresses that "The primary muscle for bringing air into the body is the diaphragm. It is assisted by the external rib (intercostal) muscles, and by the relaxation of the upper abdomen."²⁰ It is important that the intake of air (inhalation) releases the jaw, opens and expands the throat, and slightly lifts the soft palate. McKinney indicates that one can imitate smelling a flower (nose breathing), imagining a partial yawn, or pretending to drink a glass of water.²¹ All of these ideas should help prepare the singer for inhalation and singing by causing expansion around the middle of the body due to the lowering of the diaphragm and the resulting displacement of the abdominal organs.

It is often helpful to have some tactile feedback while performing breathing exercises. McKinney recommends that the hands be placed flat around the front of the upper abdomen with the tips of the middle fingers touching just below the sternum (the epigastrium area) and with the thumbs on the ribs. When the singer inhales, the middle fingers pull apart, thanks to the expansion of the lower ribs. This position can also be reversed so that the fingers meet in the center of the back of the ribs. The singer should make a steady hiss and try to maintain the expansion of the ribs for as long as possible without straining and before the fingers come together again. This can be done gently or with more force and speed.²² This action duplicates what we do when singing, namely maintaining the suspension part of the breathing cycle, and controlling the use of air to fit the phrase; it also contributes to a feeling of legato. All of this is supported by the "noble" posture.

Straw Exercises and Semi-Occluded Exercises

The term "semi-occluded" simply means that the vocal tract is narrowed, in this case at the lips by using closed vowels (/u/ and /o/), certain consonants (/m/, /n/, /ŋ/, /v/, /z/, /ʒ/), lip trills and tongue trills, and straws. The use of semi-occluded vocalises increases the supraglottal and intraglottal pressures, causing greater efficiency and resonance in the singing mechanism.²³ In simple terms, the increase of air pressure in the oral cavity reflects back to the vocal folds and makes them work more efficiently. When a straw is used, it basically extends the vocal tract creating more pressure. This training will also have a positive effect in non-occluded singing.

The use of straws in vocal warm-ups has become prominent in recent years. Straws can be of various sizes and materials—resistance can be increased with a smaller diameter or a longer length of the straw. The singer can begin with a large diameter straw and progress to small diameter straws (like a stir stick). In consideration of the environment, I recommend avoiding non-biodegradable plastic straws and using either paper or metal straws instead. One can also substitute a paper cup with a small hole in the bottom and seal it around the mouth. It is important that the seal around the straw is complete so that no air escapes except through the straw; there should be no leakage from the mouth or nose.

It's easiest to start these straw exercises in the middle to the lower-middle of the range. See Exercise 1 on page 31. Within the scope of a third, a fifth, and later an octave (or even a greater span), the singer can hum through the straw on either a /m/ (voiced bilabial nasal) or /n/ (voiced alveolar nasal). A typical approach would be to slide or sing the individual pitches of the scale: 1-2-3-4-5-4-3-2-1 or 1-2-3-4-5-6-7-8-7-6-5-43-2-1. The straw can now be put aside, and these exercises can be followed by lip-trills or a /v/ sound (voiced labiodental fricative) which produce similar results.²⁴

Forward Vowels

The next logical progression would be to go to the use of closed, forward vowels such as /i/ or /e/ (forward vowels) and eventually alternate them with /u/ (a back vowel) singing them using the same scalar pattern mentioned above in the straw exercise. See Exercise 2. The /i/ vowel will establish the initial forward placement and then the remaining vowels can be "fed through" that spot using the vowel alignment exercise below. Once all five of the Italian vowels are aligned, the exercise can be expanded to include descending notes at the end (5-5-5-5-5-4-3-2-1).

The nice thing about these semi-occluded and vowel alignment exercises is that your choral singers can do them at home or in the car (without the straw) while traveling to rehearsal. Older voices tend to need more time to warm up and be ready to sing, so it's a good idea to have your singers come to rehearsal already warmed up as much as possible. In fact, your singers should be warming up and practicing most days, if only for a short time each day.

On-sets

These exercises help to coordinate the breath and eliminate breathy sounds. See Exercises 3 and 4. The on-set is just as important as the off-set and both should be "clean," without scooping, "h's," or other extraneous sounds. I always try to have singers avoid excess tension in the throat and have them imagine that the sound is originating as a pulse in the abdomen (a "belly bump") while feeling the sound forward and lifted. The staccato exercise gives the notes a shorter length and requires more control. I often tell singers to think of a chuckle or belly laugh. There may be a temptation to use more of a hard glottal approach, but the on-set should still be "soft" and not hammered.

Karen Brunssen describes the goal of on-set exercises as using:

a low, silent breath with the glottis fully opened for inhalation, followed by appropriate vocal fold positioning and clean, precise closure of the vocal folds for optimal vibration. Students may check the obliques on the sides of the waistline to feel the coordinated engagement (during phonation) and disengagement (when not phonating and/or inhaling) of these muscles of support.²⁵

Often having this type of hands-on approach will help singers make the necessary physical connection.

Messa di voce (Placing the voice)

These exercises help to develop control of the voice and contrast in dynamics. See Exercise 5. Choose pitches that lie in the comfortable middle of the voice to avoid excess tension. The singer can begin with a hum on a single, sustained tone and gently crescendo and decrescendo making sure the duration of both is equivalent (singers tend to shorten the decrescendo phase because it is more challenging). Brenda Smith in *Vibrato and the Older Singer* recommends trying a chewing motion while humming to make sure that the jaw is loose.²⁶ This exercise can move up or down by half steps.

Next, the singer can choose various vowels for this exercise and can add a triad that ascends and descends instead of singing on a single tone. I prefer using an /i/ vowel to keep the voice forward and then transitioning to an /a/ vowel on the fifth of the scale. This helps to keep the vowels aligned and avoids the /a/ vowel dropping back into the throat. It's important that the tip of the tongue remain touching the entire back of the lower front teeth (the central incisors) to help avoid tongue tension. Of course, the back of the tongue raises for the /i/ vowel and flattens for the /a/ vowel. Hopefully, the dynamic contrast is controlled from the support system and not the throat.

Agility

These exercises will help develop flexibility and may have a positive effect on vibrato. They can be done lightly to counteract the feeling of stiffness and heaviness that come with age while maintaining connection to support and vibrancy. Because these exercises cover more ground than the other exercises I've mentioned, they will also be useful in working through the passaggio and equalizing register shifts. Lip trills and semi-occluded vowels will be most helpful in Exercise 6, perhaps choosing the /i/ vowel for those singing higher ranges and the /e/ vowel



for those singing lower. The exercise can be expanded by adding other groups of notes either in front or afterwards, such as 1-2-3-4-5-4-3-2-1-2-3-4-5-6-7-8-9-8-7-6-5-4-3-2-1 and singing the entire exercise on one breath.

Additional Resource

For more information about understanding aging voices in the choral setting and gaining tools to help that population maintain their voices and encourage longevity, consult Victoria Meredith's book, *Sing Better as You Age.*²⁷ There are a number of helpful exercises, particularly in chapter 6 for vocal conditioning and in chapter 7 for specific vocal changes and challenges.

Conclusion

Mature singers can make a great contribution to the choral setting by offering a love of singing and dedication to the group, as well as years of experience and musicality. In return, they receive a strong sense of community and belonging, a feeling of contributing to the group, and continuing with an emotionally satisfying activity. By maintaining their voices, aging singers will contribute to their own overall wellness, both physically and emotionally. The choral conductor who is aware of the challenges and is willing to accommodate them will be doing these singers a great service by extending their ability to sing and giving the younger singers in the group a chance to be supportive and become more knowledgeable about the voice.

Author's note: Thanks to Phillip Torbert, who engraved the original figures.

NOTES

- ¹ Nancy Bos, Joanne Bozeman, and Cate Frazier-Neely, Singing Through Change: Women's Voices in Midlife, Menopause, and Beyond (Suquamish, WA: StudioBos Media, 2020), 45.
- ² Robert T. Sataloff and Karen M. Kost, "Presbylarynx: Anatomy/physiology, nonsurgical treatment, and surgery." *Operative Techniques in Otolaryngology - Head and*

Neck Surgery 31, no. 3 (2020): 211-222

- ³ "Staying Healthy: Aging Voice," Harvard Health Publishing, Harvard Medical School, September 1, 2013, https://www. health.harvard.edu/staying-healthy/aging-voice.
- ⁴Nancy Bos, Joanne Bozeman, and Cate Frazier-Neely, Singing Through Change, 116.
- ⁵ The term cisgender refers to a singer whose gender identity aligns with the sex assigned to them at birth. A discussion of the effects of aging on singers who do not identify with the sex assigned at birth is beyond the scope of this article. In addition, there is a lack of research on this topic and a need for such in the near future. The terms "male/ female" and "man/woman" are used in direct quotes from the original research.
- ⁶ Sara Harris, "The Voice and Ageing," *The British Voice Association*, accessed June 11, 2022. https://www.britishvoiceassociation.org.uk/voicecare_the-voice-and-ageing.htm.
- ⁷ Ch. Voelter, Norbert Kleinsasser, et al., "Detection of hormone receptors in the human vocal fold." European Archives of Oto-rhino-laryngology 265 no. 10 (2008): 1239. DOI: 10.1007/s00405-008-0632-x.
- ⁸ Bos, Bozeman, and Frazier-Neely, *Singing Through Change*, 20-21.
- ⁹ Karen Brunssen, *The Evolving Singing Voice: Changes Across the Lifespan* (San Diego: Plural Publishing, 2018), 210-211.
- ¹⁰ Barbara Fox DeMaio, "The Menopausal Voice—Singing Through the Storm," in *A User's Manual for the Aging Voice*, ed. Martha Howe (Oxford: Compton Publishing Ltd., 2020, 8.
- ¹¹ Brunssen, *The Evolving Singing Voice*, 210-211.
- ¹² Virginia Zamponi et al., "Effect of sex hormones on human voice physiology: from childhood to senescence." Hormones 20 no. 4 (2021): 691–696. https://doi. org/10.1007/s42000-021-00298-y
- ¹³ "Hormone therapy: Is it right for you?," Mayo Clinic Staff, June 3, 2022, https://www.mayoclinic.org/diseasesconditions/menopause/in-depth/hormone-therapy/ art-20046372 Accessed 6/27/22.
- ¹⁴ Adbul-Latif Hamdan et al., "Vocal Symptoms and Acoustic Findings in Menopausal Women in Comparison to Pre-menopause Women with Body Mass Index as a Confounding Variable." *Journal of Menopausal Medicine* 23 no. 2 (2017): 117-123. doi: 10.6118/jmm.2017.23.2.117.

¹⁶ Difficulty Hearing with Background Noise: Is it Hearing Loss?

¹⁵ Howe, A User's Manual for the Aging Voice, 12.

LACE: Listening and Communication Enhancement, accessed June 26, 2022, https://laceauditorytraining.com/difficulty-hearing-with-background-noise-is-it-hearing-loss/

¹⁷ Bos, Bozeman, and Frazier-Neely, Singing Through Change, 14.

¹⁸ "Gastroesophageal Reflux Disease (GERD)," Mayo Clinic Staff, accessed June 26, 2022, https://www.mayoclinic. org/diseases-conditions/gerd/symptoms-causes/syc-20361940

¹⁹ Bos, Bozeman, and Frazier-Neely, Singing Through Change, 114.

- ²⁰ James C. McKinney, The Diagnosis and Correction of Vocal Faults: a manual for teachers of singing and for choir directors, rev. ed. (Nashville, TN: Genovox Music Group, 1994), 47.
- ²¹ Ibid., 48-49.
- ²² Ibid., 51-52.
- ²³ Ingo Titze, "Introducing A Video for Using Straw

Phonation" *Journal of Singing* 66 no. 5 (May/June 2010): 559-560; Titze, Ingo. "titze-straw.mp2." December 10, 2009. Educational Video, 4:36. https://www.youtube. com/watch?v=asDg7T-WT-0

- ²⁴ "IPA Consonant List," University of Washington, accessed June 14, 2022, https://depts.washington.edu/lingsup/ ling200/conslist.php
- ²⁵ Brunssen, *The Evolving Singing Voice*, 295.
- ²⁶ Brenda Smith, "Vibrato and the Older Singer," in A User's Manual for the Aging Voice, ed. Martha Howe (Oxford: Compton Publishing Ltd., 2020), 95.
- ²⁷ Victoria Meredith, Sing Better as You Age: A Comprehensive Guide for Adult Choral Singers (Santa Barbara, CA: Santa Barbara Music Publishing, Incorporated, 2007).



View the full video replay by visiting https://acda.org/conferences/national-webinars

View a list of past *Choral Journal* articles on the aging voice on page 37.



Throughout 2021, ACDA hosted several national webinars. Topics featured career paths; advocacy; elementary, middle, and high school choirs; the aging voice; and church music. Read excerpts from the webinars related to K-12 choral teaching and choral advocacy in the August 2022 issue of *Choral Journal*.

Following is an excerpt from the webinar on the aging voice (length, 1:33:15). This transcript excerpt has been edited for ease of reading. View the full video replay by visiting https://acda.org/conferences/national-webinars.

Host: Terre Johnson, ACDA National R&R Coordinator for Lifelong Singing

Presentation #1

Karen Brunssen Co-chair of the Department of Music Performance at Northwestern University; Immediate Past President of NATS; Author of *The Evolving Singing Voice: Changes Across the LifeSpan*

Every age has its limitations, but there are no age limits for singing, so challenging yourself at every age is a good thing, including as older people. We know we're going to have less oxygenation going on, so okay, take more breaths. We know that our muscles lose some of their strength, so okay, challenge your support and do what you can. I know that my lungs and bronchial function have diminished, so I need more time to take a breath; so will your choristers. I know that we suffer some hearing loss that affects how we hear ourselves sing and our internal and external sense of sounds, so we need to concentrate a little bit more. Our registration narrows, and we can't go as high or we can't go as low. Our vibrato is a little slower; we just have to continue to make mindful efforts.

Everything we do in singing is going to be the interaction of respiration, vibration, and resonance, so first let's look at the breathing aspect of things. A young person's ribs can go down more and they can go up and out more. As we get older, we get sort of a barrel-chested kind of thing, and some people who were thinner when they were younger and think that they've gained a lot of weight maybe haven't necessarily, but we don't have quite the rotation possible with our ribs as the younger person does. I just had a sixty-year-old student who took a lesson with me, and at sixty years old his ribs are staying out more of the time. They don't go down as far, and so he thought he gained weight, and he was doing weird things singing because he was sort of flexing trying to look thin all the time, which was counterintuitive to the voice. I finally said, that has to do with bones. Your expectations have to be a bit different and understand that some of this has to do with the bones themselves just not wanting to stand tall.

We know that we lose muscle strength, and I now at sixty-seven really feel that, so when I support I feel it and when a muscle isn't as strong as it used to be or I'm trying to increase the strength of it I feel it, and so I have to become more mindful about the relaxation and the engagement of my muscles of support going deeper.

Every age has its limitations, but there are no age limits for singing.

The lungs themselves change too and they are tissue; they don't have their own innate muscles, they have the muscles around them that are causing the air to go out, but they do have elastin fibers and the elastin fibers aren't as elastic as we get older. There's collagen fibers in there too, and they sort of take over more, which means when we take a breath, our lungs have to recoil. They get kind of smooshed up and then they have to recoil, which takes a certain amount of time... that's a very simplistic explanation of all of that, but as we get older we have a lot more residual volume. You notice sometime around age fifty or so that you're singing along on a hymn, for instance, and you have to take an extra breath in a line. All right, take it, you're gonna need it, and you have to make the very best of what vou do have.

Here are a couple things that you could do. If you're
sitting in a chair right now, take your knuckles and put them in your sides, right in your sides, and dig in deep. There you go! You have just exercised those muscles, and just doing that is helpful. Also as you're sitting there we're going to think of a v to the pubic bone, which is way down, and if you just notice how that kind of tucks again, you have exercised a muscle. Just sit there and feel your rear end against the chair, and then when you take a breath, let it go. Nobody needs to know you're thinking about it while you're sitting there in choir, but you can go and you can feel it, and that tells you that you are doing some good. Then you can put your back against the chair and push real hard and do the same thing, and you will feel your back muscles. Then take the heel of your hand and put it on your pecs real hard, and you will even feel that those muscles engage a little bit. Just doing that, you have exercised those muscles and given awareness to it.

Presentation # 2 —

Michael O'Neal

Founder and Artistic Director of The Michael O'Neal Singers, and creator of The Michael O'Neal Singers ONLINE, a growing choral community that engages choral singers virtually via YouTube.

I conduct an adult community choir, and normally we're about 145 voices. It's a multi-generational group, and I'm a real believer in having multi-generational groups because we learn from each other. Younger singers bring energy and vitality and an enthusiasm for new experiences; our older singers bring life experience, singing experience, knowledge, and a desire to find meaning in the things they do in their activities. We encourage all of our singers to recognize that we're going to be able to learn from each other and become a better ensemble because of the diversity that we have in our ages.

I want to say a little about what we do in rehearsals that would especially assist the aging voice. Now, let me

just say that my rehearsals are very carefully planned with the attention to easing into things vocally. We usually incorporate a short warm-up maybe about five minutes at the beginning, but the first piece we rehearse is designed to sort of be an extension of that warm-up, whether something on breathing or resonance or vowel formation and unification. I'll make sure that the first piece we do will sort of carry on with that idea.

We have to adjust what the expectations of our voices will be as we get older. It's important to remind our singers as they age to follow a very healthy vocal practice regime.

I have a personal goal in every rehearsal to achieve for everyone and myself included what I call the five L's. These stand for Listen, Labor, Learn, Laugh, and Love. I would have preferred to have used the word "work" instead of labor, but of course I needed labor for alliteration. So, first we listen to the music, we listen to each other, I listen to the singers, hopefully the singers listen to me; there's listening going on. Next, we labor. We work together for a shared purpose, and in doing so that brings enormous satisfaction and a sense of accomplishment in the rehearsal time. We learn if we're listening and we're laboring. We're working listening, and working together will almost always lead to learning something new. We laugh. I've always believed that a rehearsal without some laughter is an opportunity lost. Life is short enough as it is, so let's not forget to laugh. Love is the final L. I think loving the music, loving each other-these things are essential attributes for a healthy chorus.

We have to adjust what the expectations of our voices will be as we get older. It's important to remind our singers as they age to follow a very healthy vocal practice regime. You can't drink too much water. If the person needs to get up and leave the rehearsal and go visit the restroom, do it then come back in and continue singing, but there is no reason we should not be drinking a lot of water. I think for lifelong singers, someone who has been singing all their life knows how it used to feel, and now it doesn't feel that way. They can't sing a phrase as long as they did before, so okay, take more breaths. They find that their range is not what it once was. They can't sing some of those high notes that they once did, and someone who was a soprano one might find that they're going to move to soprano two, and sometimes the voices move in the other direction.

I find a number of male voices lose some of their low notes, and their voices actually become a bit higher, so just be aware of that and help your singers understand that it is not a sign of defeat to move from soprano one to soprano two. It is an opportunity to once again have that level of satisfaction of knowing that you are really contributing not only to the choral sound, but you're also going to have a more pleasing vocal experience for yourself if you are singing where you need to be singing.

Next, I'm going to share a general run-through of the basic vocal techniques I employ with my singers; you can access these videos by going to the Michael O'Neill Singer's YouTube Channel and selecting Michael's Vocal Studio. That will bring up a playlist that includes all the videos; they are between eight and twelve minutes in length. https://www.youtube. com/c/MichaelONealSingers/playlists

Presentation #3

Matt Hill

ACDA National R&R Chair for Community Choirs; Director of Choral Activities at Peru State College, and the founder of Sing Omaha Inc., a nonprofit organization comprising ten choirs serving more than 400 singers.

The choral rehearsal as a corporate voice lesson is the fundamental way that I approach every rehearsal. We are teachers of singing whether that's happening one-on-one in a studio setting, in small groups, or in large ensembles. If we are cognizant of that, we benefit as a group, and we also have an opportunity to continue to grow our individual singers. With that in mind, it's okay for us to teach fundamental phonation concepts, and the ability to use other singers in the ensemble to model healthy, beautiful singing is a wonderful way for us to encourage healthy phonation and assimilation into an ensemble sound.

It's important for us to discuss in advance the tone color that we want for each piece. Some call for a warmer, darker sound; others for something a little more biting; some with a little more bright core in the middle. We talk about consonant placements both at the beginning and end as well as inner vocalic consonants, but I think giving the ensemble some descriptive adjectives to use as analogies helps them to mentally prepare for the kind of sound you're going to ask them to make.

When we're together I'm always conscientious about trying to make sure that we're warming up on unison exercises that get the voice going and that those exercises take us to and through passaggio differentiating between head voice and falsetto. That warm-up time is about setting the mindset that we use the voice differently for singing than we do for speaking is number one. Unison warm-ups are a really wonderful opportunity for us to engage our minds in using the singing voice, but I also am of the firm belief that the unison vocalist warm-up time is insufficient for the choral rehearsal. We spend the entire choral rehearsals singing in parts largely (unless you're a chant chorus). Our rehearsals allow for an opportunity to work dynamics and vowel unification in four parts, transposing up and down by half step or whole step, which trains the ear in a friendly and low pressure time, as opposed to when we're in the middle of trying to learn or prepare repertoire has an immediate applicable use as we move into the repertoire portion of the rehearsal.

I encourage you to go one step beyond the units and vocalizes, which are important as we prepare the voice for singing for the full rehearsal, and to have an intermediary step if you're not already and vocalize in parts. You can even use sections of your repertoire for that and sing on a neutral syllable if that's helpful, but again it gets the ear moving as well as the voice.

As a singer, be proud of the singer that you are and model that for your singers. It's important that they hear you, that they know that you are a singer too, and I always like to lean on individual singers or, for example, have my front-row altos turn around and sing to the second-row altos... I really like that our singers can learn by listening to each other. We save the voices of some of our singers if we're allowing individuals or small groups to sing and be tone models; it gives a mental rest and an opportunity to make some notes in the score. Not everybody has to sing the whole time, and it's okay to break out into little sections and have them do that.

We're not required to be expert vocal pedagogues in order to make an impact on the way that our singers are creating sound. While we certainly want to speak from a place of having been educated and being informed, it's not a requirement that you be an expert in the mechanism in order to speak intelligently about how to encourage folks to sing in a beautiful and healthy way...

I also think in some cases aging voices have determined that they are a voice part because that's what their elementary or middle school or high school choral director told them ten years ago or thirty years ago. They identify as a soprano and wouldn't dare consider ever being an alto and don't care for having been pigeonholed that way. I really love what Dr. O'Neill mentioned about making sure that they know it's okay and they've not been demoted in any way if you ask them to move from soprano one to soprano two either on a temporary basis for one section of a song or permanently for their vocal health and for the health of the ensemble. Again, it's important as we're asking sections to sing in other sections parts that we encourage that vowel modification, particularly as they ascend the scale. We are constantly drawing back to the vocal work that we've done at the beginning of the rehearsal, and singers are reminded about tools that they can practically apply in the art of music making that allows them to sing in a healthy way but also in a beautiful way.

After the presentations, the discussion continued with a QSA facilitated by the host. View the full webinar at https://acda.org/ conferences/national-webinars.

From the Archives!

Choral Journal and the Aging Voice

We recommend that readers interested in other *Choral Journal* articles related to the aging voice explore the following articles from the archives:

"Vocal Aging and its Medical Implications: What Choral Conductors Should Know. Part One: Anatomy and Vocal Aging, Childhood Through Adulthood," by R.T. Sataloff. October 1999, page 58. The author discusses the life cycle and its effect on the voice.

"Vocal Aging and its Medical Implications: What Choral Conductors Should Know. Part Two: Medical Intervention" by R. T. Sataloff. February 2000, page 57. Continued from Part 1 (Oct 1999).

"Working with the Senior Adult Choir: Strategies and Techniques for a Lifetime of Healthy Singing," by Abby Butler, Vicki A. Lind, and Kimberly VanWeelden. December 2002, page 61. A detailed discussion of proper vocal pedagogy for the conductor of a choir with aging singers.

"Enriching Choral Opportunities for Aging Voices," by Sarah Parks. June/July 2013, page 32. A discussion of some of the physiological and psychological effects of aging upon the singer, and ways in which the choral conductor can address those matters while working with a choir.

"One Voice, One Life: Many Changes throughout a Lifetime of Song," by Karen Brunssen. February 2017, page 43. The author examines the physiological factors associated with the aging voice.

"Passing the Torch: Igniting Senior Voices in Multigenerational Choirs," by Victoria Meredith. February 2017, page 6. The author discusses teaching methodologies for working with mature voices within choirs with singers of various ages.

"Never Too Old: Establishing an Intergenerational Choir for Transformational Learning through Singing," by Carol Beynon. February 2017, page 18. Development of a choir with singers of various ages is discussed.



SINGING AND ADOLESCENT MALES:

AN UPDATED LOOK AT "WHAT DO WE KNOW NOW?"

Patrick K. Freer

ingers' voices have always changed during adolescence. A growing research focus on male vocal development has, in turn, changed how music teachers work with males as they sing during adolescence. For example, in 2011, Patrick K. Freer and Antonis Ververis reported on more than seventy years of research and practice that could inform music teachers and choral conductors who work with adolescent males.¹ A number of related articles were published in the first ten years of the twenty-first century in Choral Journal and Music Educators Journal.² This article begins with a summary of that information, followed by a review of related literature published in the decade since 2011.

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Definition of Terms

Two of the most important foci of the most recent literature are the self-perceptions and recommendations of the singers themselves, and a growing awareness of issues and terms related to gender and sexuality. The terms and pronouns used by individuals to describe their gender identity and their bodies are important, and the associated vocabulary has shifted across time. Gender identity is not binary. The studies cited in this article rarely mention the gender identity of the participants. Indeed, making such assumptions about research participants is problematic and could violate ethics standards in research reporting. The terms "they," "their," "male," and "female" are

The terms "they," "their," "male," and "female" are used in this article. Direct quotations are repeated verbatim, including the use of "boy" or "his" as published in the original texts. The words "male" and "female" in this article reference birth-assigned sex as reflected in the definition provided by the Gender and Sexuality Campus Center of Michigan State University: "The designation that refers to a person's biological, morphological, hormonal, and genetic composition. One's sex is typically assigned at birth and classified as either male or female... Birth-assigned sex is often mistakenly confused with gender" (https://gscc.msu.edu/ education/glossary.html#birthassigned).

Changes During Pubertal Development

Much of present-day pedagogy for the adolescent male changing voice begins with the premise that teachers need to be knowledgeable about the male voice change, must be aware of related physical and psychological changes during pubertal development, and must be highly skilled musicians.³ This foundation was central to the 2011 article by Freer and Ververis. The authors concluded that, "Students, also, need to know about their changing voices so that they can understand the developing physiology and its impacts on their singing."⁴ Teachers could work toward this goal by reinforcing the basics of healthy vocal technique for adolescent male singers. Still, a team of researchers from Texas State University reported in a 2021 International Journal of Research in Choral Singing article that current choral music conductors "desired more information about the changing voice. They seemed to recognize that information was available, but, like their counterparts 20 years earlier, were challenged with the task of translating information into effective teaching strategies."⁵

The very notion of singing during the male adolescent voice change has historically been controversial, particularly before advances in scientific research capabilities in the middle of the twentieth century. Pedagogical and musical considerations developed through trial-and-error were replaced with precise guidelines reflecting new knowledge of the physiology of the voice change. In the United States, music teachers and choral directors used this information to develop techniques for teaching singing and conducting choral ensembles with males experiencing voice change. These pioneering music teachers included Duncan McKenzie, Irwin Cooper, Fredrick Swanson, and John Cooksey.⁶ Key points emerging from these efforts—and affirmed in scientific literature—included:

- The male adolescent vocal change is prompted by hormonal changes in the body that may begin as early as age nine and are associated with puberty.⁷
- During puberty, the male vocal folds increase in both length and thickness. The average increase in length of about ten millimeters lowers the range an octave or more.⁸
- The male voice change (the vocal fold lengthening) occurs in six stages, with lower ranges and tessituras in each succeeding stage.⁹ The six stages can be accommodated through the judicious choice of 3- and 4-part repertoire, though it is highly unlikely that all males in an ensemble can simultaneously sing the same vocal line with optimal efficiency and musicality. This author suggests that readers consult practical guidance by Don Collins, Emily Crocker, and Sally Herman; these works are research based and have stood the test of time.¹⁰
- Cooksey's research with thousands of individuals indicated that every male proceeds through all six stages of voice change, though not all at the same rate.

This results in groups of same-age males at different stages of voice change, particularly around ages twelve and thirteen. Teachers may not notice all stages in each singer since some of the progress occurs quickly and/or during breaks from singing (summer vacation, etc.).¹¹

- The composite unison range of any group of adolescent singers (male and female) is about a sixth, from G to E, in varying octaves according to voice "part." Unison singing by mixed-voicing ensembles of young adolescent singers is rarely possible, and multi-part repertoire must be sung instead.¹²
- Singing before the voice change helps to build muscular conditioning and sensory competencies that become useful for males as they sing through the voice change.¹³
- Such muscular conditioning can assist in coordination of the crycothyroid and thyroarytenoid muscles during adolescent growth phases. This may help minimize sudden shifts in muscular coordination that adolescent males experience as "voice cracks."¹⁴
- Once an adolescent male singer has progressed through Cooksey's six stages, their voice will stabilize and begin to take on the characteristic range of their eventual adult voice. Some males will have higher voices (tenors) than will others (baritones and basses). This "settling" of the voice occurs naturally during the years of high school and young adulthood.¹⁵

Special Focus Issues of the *Choral Journal*

The April and May 2012 issues of the *Choral Journal* dealt directly with issues affecting the male choral singer from adolescence through the early university years, or from about ages ten through twenty. The articles in these issues conveyed up-to-date knowledge about working with male adolescent singers. In the past decade, of course, our understanding of "male" choral singers has evolved and expanded to include issues of gender, sexuality, and consideration of adolescent singers receiving hormone therapy. Still, much of the information presented in the 2012 *Choral Journal* articles remains valid and relevant. This section reviews important points raised by the article authors. The articles are highly recommended reading material for new and experienced choral music teachers and conductors. Brief summaries of some of these articles follow in the next paragraphs.

Leon Thurman, an author of Bodymind and Voice: Foundations of Voice Education, reviewed medical and other scientific literature for areas of agreement and disagreement with common practice when working with adolescent male singers.¹⁶ Thurman provided foundational information for understanding the rationale behind the voice classification systems associated with Cooper and Cooksey, including Cooper's designation of the "cambiata" voice. By associating the voice change process with concurrent physical, cognitive, and psychological changes during adolescence, Thurman's article positioned the male changing voice as one factor within a complex process of maturation. This situates the music teacher's role as requiring responsiveness to each singer's individual needs. As Thurman wrote, males "sing when they can,"¹⁷ and teachers need to maintain each person's singing capacity and interest during adolescence. This begins with the teacher's own knowledge of the adolescent voice change, followed by the vocal musicianship commensurate with teaching those skills to the singers at all stages of vocal development.

Rollo Dilworth, composer, conductor, and professor at Temple University, presented a series of pedagogical strategies in ten categories: understanding the changing voice, assessing the voice, placement of the male adolescent singer in the choir, explaining voice change, classifying and labeling the adolescent male's voice, guiding general vocal production and development, developing vocalizes and warm-ups for the rehearsal, adjusting pitches and vocal lines in the choral score, incorporating analogy and movement into the rehearsal, and maintaining a healthy and productive rehearsal environment.¹⁸ For each category, Dilworth described the existing literature that informed his practical and detailed pedagogical suggestions. The article included excerpts from Dilworth's 2006 book of choral warmups for teaching vocal technique to adolescent male singers.¹⁹

The fundamental message of Dilworth's article was that teachers must approach the male changing voice through the reinforcement of vocal technique. This was echoed in articles by Drew Collins, Mark Lucas, and Jana Williams, who collectively offered specific examples of how experienced music teachers have successfully worked with adolescent male voices in classroom and rehearsal settings, and when selecting repertoire for choral ensembles.²⁰ Topics in these articles included appropriate genres of repertoire, optimal vowels for vocalizing with adolescent males (there was disagreement about whether it should be [u] or [i]), the teacher as vocal model, and how to create a positive learning environment in the classroom. One teacher interviewed for Collins's article commented on the importance of the teacher:

My relationships with different singers have strengthened because of showing care and concern for their changing voice and working with them throughout it, and also showing care and concern for them as people. I take interest in their activities, passions, hobbies, etc. Not just being their teacher goes a long way in building the bond of trust.²¹

Jana Williams, a prominent Georgia choral teacher, explored female-identifying choral directors and their experiences working with male singers in secondary school settings. Chief among these was creating a student-centered classroom where students learned how to use their developing voices, rather than a conductor-centered space where students were simply told what to do. Williams wrote in 2012:

Female chorus teachers should be knowledgeable and confident about the physiology of the male voice change or voice expansion. The female teacher should display confidence in her abilities and in the student's future success. Reassure young men that men's voices have been changing for thousands of years, and they will be comfortable in their singing voices soon.²² The emphasis on student knowledge, skill, and peer camaraderie was central to the special issue's article by Freer that correlated the adolescent male singing experience with sociological research about the years of young adolescence.²³ The reviewed research reinforced the importance of peer support, older male singing role models, acceptance of or challenges to masculine norms, and ways to identify and incorporate the new possibilities afforded by the male singer's adolescent development within our instruction.

It is important that male singers remain interested and engaged in singing during early adolescence, because "The collective research suggests that focus on individual skills and autonomy promotes a sense of competence that assists in the retention of boys already enrolled in a choral program."²⁴ Again, it is important to note that research participants referenced in these 2012 articles were likely assumed to identify as male rather than asked directly about their gender or identity expressions. Other articles in these *Choral Journal* special issues focused on older adolescent male singers during the transition from singing in high school to singing as freshmen and sophomores in college.

It is much easier to maintain an adolescent male's interest in singing than it is to convince them to begin singing during their voice change. Still, teachers can support insecure singers by emphasizing how the musical contributions of each singer impact the success of the entire ensemble. Similarly, teachers must resist "auditioning out" those male singers who have musical interest and ability yet are experiencing temporary difficulties due to the voice change. In these instances, the choral teacher must function as a voice teacher... laying the foundation for singing success as the voice maturation process continues.

The most recent demographic studies suggest that fewer than 10% of high school males participate in school music ensembles of any kind, with only about 4% singing in choral ensembles.²⁵ Even schools with large choral programs are home to many more males who don't sing in ensembles than those who do. This reality emphasizes the importance of elementary and middle school choral music programs that are grounded in vocal pedagogy addressing the specific needs of children and adolescents.

Recent Scientific and Medical Research about the Male Changing Voice

The individual characteristics of each adolescent's changing voice will greatly impact their musical experience and self-perception of singing skill. Though the chief characteristics of the male adolescent voice change have been well known to choral conductors since the mid-1970s,²⁶ research during the past decade has continued to offer guidance for music teachers when providing singing and choral instruction. Some of this research further establishes the basic processes of adolescence and male voice change. Two sub-topics have received specific attention during the past ten years: the timing of the onset of puberty and/or voice change, and the relationship between an adolescent male's body composition and their vocal development during adolescence.

Overview of Male Pubertal Voice Change

Research continues to clarify our understanding of the male voice change during adolescence. The research highlighted in the next sections of this article specifically focused on males with biological characteristics that typically enable the production of sperm. This research did not explicitly consider males who may have varied from those characteristics, or individuals who have received hormone therapies affecting vocal range and tessitura. Emerging research suggests that much of the information reviewed here also pertains to singers undergoing voice change as a manifestation of hormone therapy. Still, research is ongoing, and important nuances will be discovered. It does appear, though, that the best advice for choral teachers is to provide solid vocal pedagogy in response to the individual needs of each singer in their choir.

Recent medical research confirms that the male's changing voice is a response to the pubertal hormone development that begins typically between ages nine and fourteen.²⁷ The release of androgens prompts all manner of physical and sexual development, including characteristics that music teachers will readily observe.²⁸ Male pubertal development often includes the growth of facial hair, an increase in total body fat followed by a decrease in fat that accompanies an increase in physical height, an increase in muscle mass, and the

voice change itself. These changes occur in six stages, as identified by James Tanner in 1969.²⁹ John Cooksey's research during the following decades revealed six stages of male adolescent voice change paralleling the Tanner stages of pubertal development.³⁰ The lowering of the male voice is a secondary effect of changes—prompted by pubertal hormones—to the respiratory system, the vocal folds, and the apparatus of the vocal tract. Overall, adolescent male vocal mutation (voice change) progresses through three broad phases:

- 1) Pre-mutation period, where the voice quality becomes flat and occasionally hoarse and breathy;
- 2) Proper mutation period, characterized by uncertain intonation, sudden alterations in pitch, and sudden shifts into the emerging falsetto voice; and
- 3) Post-mutational period, marked by a gradual maturation of voice quality eventually reaching the typical adult voice timbre and range.³¹

The vocal tract evolves and changes during different segments of the human lifespan.³² The infant larynx is approximately one-third the size of an adult larynx; it grows somewhat during childhood, but the most significant growth occurs during adolescence. The perceptible onset of the voice change generally begins approximately two years after measurable increases in hormone levels.³³ The primary characteristics of this growth are detailed in many articles, books, and videos; the summary cited in reference 34 is recommended for its brevity and specific relevance to singing with adolescents.³⁴

For music teachers, it is important to know that the male voice change results in a lowering of the overall pitch by approximately one octave. This is audible both when adolescent males are singing and speaking.³⁵ There is growing evidence that a male's fundamental speaking pitch begins to descend before the pitches of the singing voice begin to descend, with a lowered speaking voice indicating that the singing voice is about to change.³⁶ The vast majority of males proceed through all stages of change before settling into their eventual "adult" ranges late in the high school or early college years. Therefore, in most cases, freshmen male singers should not be considered "basses" or "baritones" (despite the labels given to the vocal lines they sing), since their voices may more accurately be classified as "tenor" when they reach the junior or senior year of high school. The designations of "Soprano, Alto, Tenor, and Bass" are idiomatic of Western European choral traditions.³⁷ The terms began as ways to signify vocal lines in repertoire...not necessarily as labels for those who would sing them.³⁸ Teachers must help singers distinguish between their voice and the labels they see in choral repertoire.

The physical sensation of singing and the timbre of the lower adolescent voice are not comparable to those of adult male singers. Adolescent vocal development is a lengthy process, spanning the onset of voice change into young adulthood.³⁹ Of note to music teachers is that the process of male voice change is consistent from singer to singer, but neither the rate of change through the six stages nor the sensory experience of the voice change are the same for every singer. Attention to the individual male's changing voice is essential, particularly because the voice change occurs in tandem with other physical, psychological, and sociological developments typically associated with adolescence. It is beneficial to consider male pubertal development and the accompanying voice change for their combined musical, physical, and psychological benefits.⁴⁰

This is in opposition to a deficit model/perspective where the focus is on what the male singer can no longer do or sing. The perspective shifts from "you've lost your lovely high notes," or "this creates balance problems in my ensemble" to "look what your voice can do now!" and "there is so much repertoire I can explore with these newly changing voices!" Indeed, males who sing before and during the voice change have been shown to exhibit fewer voice disorders and greater vocal skills than males who do not sing as children and adolescents.⁴¹

Timing of Puberty and the Voice Change

There is some indication of a trend toward male puberty occurring at younger ages, with new research documenting pubertal onset as early as age seven, likely caused by changes in nutrition as well as chemicals in the environment.⁴² This early maturation is associated with negative long-term effects, such as increased occurrence of depression and anxiety, attention deficit disorder, risk-taking behavior, and obesity.43 There is evidence, however, that such early maturation may be advantageous during adolescence itself, particularly regarding psychosocial well-being.44 This may be because of societal affirmation of early-maturing males. In choral music situations, music teachers may view maturing males with lower pitch ranges as advantageous, vis-à-vis the ability to sing tenor and bass parts. Adults-including teachers-must not focus so much on early-maturing male singers that the late-maturing singers feel disadvantaged or disrespected.⁴⁵ It remains the case today that secondary choral music teachers can expect to work with male singers in all stages of voice change.46

Weight Gain and the Voice Change

The typical body weight of North American children and adolescents has increased during past decades, prompting a research focus regarding the effect of excess weight on pubertal development.⁴⁷ There are multiple relationships between weight, or Body-Mass Index (BMI), and the timing of the adolescent male voice change. Research suggests male children with substantially high levels of body fat can experience delayed puberty, particularly if the proportion of fat to lean body mass increased during prepubescence, or prior to the onset of puberty.⁴⁸ In contrast, puberty and the voice change appear likely to begin earlier in male children with a high BMI that reflects a more balanced ratio of fat to lean body mass than in those with low to normal BMI measurements.⁴⁹

Adolescent males tend to gain weight as part of pubertal development, typically in the transition between the Proper Mutational and Post Mutational periods (the second and third periods) described above. These males tend to sing voice parts typically classified as Baritone or Bass I, or what Cooksey identified as the fifth of six stages, which he named "Newvoice" or "Developing Baritone."⁵⁰ In his 2012 *Choral Journal* article, Thurman highlighted research detailing the relationship between this characteristic weight gain of late-adolescent males and the emergence of phonation difficulties on pitches near middle C, or C4. Research indicates that this phenomenon of "blank spots" in the singing range is temporary, with full access to the pitches returning as the voice change continues.⁵¹

Minnesota choral conductor David Jorlett developed a technique for working with adolescent males experiencing these phonational difficulties.⁵² Jorlett would have these specific male choristers sing with the choir, but "air sing" (analogous to playing "air guitar") on the affected pitches; the singers would engage the breath and vocal musculature, shape the vowels and consonants, audiate the pitch, and perform every aspect of the singing...except phonation itself. Then, phonation was reintroduced on these pitches as facility returned later in the maturation process, The idea was that the building of foundational vocal skills could continue, even when phonation itself could not. This, then, built on a philosophy of positivity, emphasizing what adolescent male singers could do rather than what they could not.

Recent Qualitative Research with Adolescent Males about Their Changing Voices

There is a growing body of research focused on learning about how males perceive their adolescent voices, the change process, and the associated experiences they have as singers. Recent narrative studies collectively indicate that adolescent males' motivation for continued singing activity results from their self-perceptions of musical autonomy and vocal skill within a network of peer social support.⁵³ It is important to note that most of the existing qualitative research with young adolescent male singers is silent on the issue of gender identification. This is an area where research is lacking, and future research is encouraged.

A 2021 study published in ACDA's International Journal of Research in Choral Singing emphasized the influence of peers and society as adolescent males made decisions to participate in music activity.⁵⁴ Singing and choral ensemble participation were deemed of lower social status than were activities involving musical instruments. Analysis indicated that these males perceived greater opportunities for both autonomy and collaboration in instrument-based musical activity than in singing-based activity. At the same time, the males did not reference the voice change itself as a factor in decisions to sing or to not sing. The teacher's awareness of and ability to work with the male adolescent changing voice can be considered parts of their professional knowledge. When the teacher lacks that knowledge and students are not instructed how to sing with their changing voices, then the young adolescent may simply lack the autonomy and skillset necessary for success in choral ensemble participation.

Across these qualitative studies, adolescent males emphasize the desire for high-quality music experiences as a driving force in their attraction to and persistence in choral singing. The emphasis here is that working through the male's changing voice process is a professional responsibility of the teacher, whereas a teacher's insufficient knowledge or musical ability signals to adolescent male students that their singing lacks value and worth. Additional supporting data has been offered in published research and research-to-practice articles from Austria, Colombia, Ecuador, Germany, Spain, Singapore, and Slovenia.⁵⁵

A review of related narrative research published though 2019 found that adolescent male singers offer views about multiple topics of interest to music teachers. These include the need for peer support, the attraction of singing as a social activity, the desire for vocal skill development, the need for targeted instruction during the voice change, the negative impact of public performance during the voice change, the need for older male role models, and the importance of interpersonal relationships with friends and teachers.⁵⁶ The review study also examined the comments for pedagogical, motivational, structural, and research implications.

Pedagogical implications addressed the need for the choral teacher to be a voice teacher, for the tessitura of repertoire to match the tessitura of the male singer's voice, for young males to be taught about their current and emerging voices, and for repertoire to be both accessible and musically rich. Motivational implications attended to males' desire for teachers to make clear applications of vocal techniques to all kinds of music, the need to teach young males about their coming voice change, the necessity of regarding singing as a skill that can be honed, the ability of the choral music classroom

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to be a safe space, and the strong desire to avoid embarrassment about the changing voice. Adolescent males in these studies highlighted the powerful influence of teachers on their self-perceptions of musical ability and skill, the desire to learn about the physical changes that cause the voice change, and the need for supportive singing environments regardless of gender identity.

Conclusion

Many of the topics surrounding the adolescent male changing voice remain as valid today as they were ten years ago-and even ten years before that. Overall, the past decade of research has confirmed and clarified what was either known or suggested in the literature through 2011. However, in the past decade, quantitative scientific research has confirmed the processes of the male voice change while yielding new details about the timing of puberty and the onset of vocal mutation. Additional research has examined the effect of a young male's weight and overall body composition on both pubertal timing and adolescent singing experiences. Meanwhile, related narrative research from many countries and cultures has both confirmed and clarified the perspectives of adolescent males about singing in and beyond school settings. Recognizing that there is clearly a need for research in areas related to singer gender identity, the collective quantitative and qualitative research base provides firm evidence that we know how the male voice changes and how young cisgender males are likely to respond to those changes. In turn, adolescent male singers wish to know about: (a) the physical and sensory changes they will experience as the voice changes, (b) the fundamentals of vocal technique that remain constant throughout after the voice change, and (c) the musical capabilities they will be afforded as their vocal maturity progresses. Choral music teachers can use this information as they develop curricula, choose choral repertoire, and select pedagogical strategies for working with adolescent males before, during, and after the voice change.

Ten Suggestions for Pedagogy

- 1) Choral teachers should be aware of the basic anatomy and physiology of the male adolescent voice change.
- 2) It is beneficial for children to sing before the onset of puberty; this lays the foundation for singing during and after the voice change. Singing instruction in elementary school is vital to the success of middle school choirs.
- 3) The male adolescent voice change may appear to occur quickly, but the emergence of lower pitches is just one element of change process. Voice change occurs at different ages in different males, spanning the elementary school through high school years.
- The male voice change occurs in stages characterized by gradually lowered pitches (range and tessitura). The vocal development stages occur in tandem with the stages of pubertal/sexual development.
- 5) Researchers have noted a relationship between body weight and the timing of puberty. It appears that excess body weight may delay the onset of puberty by as much as several years.
- 6) The vast majority of males proceed through all stages of voice change, settling into their final "voicing" during the late high school and early college years. Singers should not be labeled as "tenor" or "bass" (etc.) until the voice change has settled.
- 7) Adolescent males rarely report that they stopped singing because of the voice change. Rather, they stopped singing because they did not receive the information and musical instruction they needed about how to navigate and sing with their new vocal capabilities.
- 8) Adolescent males report that they desire high-quality music experiences, and that these experiences are a driving force in the attraction to and persistence in choral singing.

- 9) The ranges and tessituras of a choir's repertoire need to match the ranges and tessituras of the singers in the choir. Adolescent males report that a mismatch will cause them to quit singing in the choir.
- 10) Choral teachers need not be experts in vocal pedagogy before leading choirs with changing voices. Rather, they should be eager to learn and then share what their singers need to know, when they need to know it...everyone discovers together. One strategy might be to take voice lessons or sing in a choir led by a skilled pedagogue, relating what you learn as you grow more comfortable with your own singing skills.

NOTES

- ¹ Patrick K. Freer and Antonis Ververis, "Η μεταφώνηση των αγοριών και ηχορωδιακή μουσική εκπαίδευση στις ΗΠΑ [Methaphonisi and Choral Music Education in the United States: Research and Philosophical Perspectives]," ΜΟΥΣΙΚΟΠΑΙΔΑΓΩΓΙΚΑ [Musical Pedagogics] 9 (2011): 5-23.
- ² For several examples, see Patrick K. Freer, "Between Research and Practice: How Choral Music Loses Boys in the 'Middle,'" *Music Educators Journal* 94, no. 2 (November 2007): 28-34; David Friddle, "Changing Bodies, Changing Voices: A Brief Survey of the Literature and Methods of Working with Adolescent Changing Voices," *Choral Journal* 46, no. 6 (December 2005): 32-43; Henry Leck, "The Boy's Changing Expanding Voice: Take the High Road," *Choral Journal* 49, no. 11 (May 2009): 49-60.
- ³ Patrick K. Freer, "An Ethical Response to the 'Gender Trouble' in Choral Music," *Choral Journal* 60, no. 1 (August 2019): 22-31.
- ⁴ Freer and Ververis, "Methaphonisi," 6.
- ⁵ Janice N. Killian, John B. Wayman, and Patrick M. Antinone, "Choral Director's Self Report of Accommodations Made for Boys' Changing Voices: A Twenty-Year Replication," *International Journal of Research in Choral Singing* 9 (2021): 22.
- ⁶ Patrick K. Freer, "Foundations of the Boy's Expanding Voice: A Response to Henry Leck," *Choral Journal* 50,

no. 7 (2010): 29-35.

- ⁷ Logen Breehl and Omar Caban, Physiology, Puberty (Treasure Island, FL: StatPearls, 2021), https://www.ncbi. nlm.nih.gov/books/NBK534827/
- ⁸ Meddy Fouquet, et al., "Seven and Up: Individual Differences in Male Voice Fundamental Frequency Emerge Before Puberty and Remain Stable Throughout Adulthood," *Royal Society Open Science* 3, no. 10 (October 2016): 160395.
- ⁹ M. L. L. Harries, et al., "Changes in the Male Voice at Puberty," *Archives of Disease in Childhood* 77: 445-447 (December 1997).
- ¹⁰ Don L. Collins, *Teaching Choral Music* (Upper Saddle River, NJ: Prentice-Hall, 1999); Emily Crocker, "Selecting, Adapting, Writing, and Publishing Music for the Middle School Choir," *ChorTeach* 12, no. 2 (Winter 2020): 10-13; Sally Herman, *Building a Pyramid of Musicianship* (San Diego, CA: Kjos, 1988).
- ¹¹ John Cooksey, "Male Adolescent Transforming Voices: Voice Classification, Voice Skill Development, and Music Literature Selection," in *Bodymind & Voice: Foundations of Voice Education*, ed. Leon Thurman and Graham Welch (Iowa City, IA: National Center for Voice and Speech, 2000); Harries, et al., "Changes in the Male Voice"; Lindsay T. Hoyt, et al., "Timing of Puberty in Boys and Girls: Implications for Population Health," *SSM-Population Health* 10 (April 2020): 1-12, https://doi.org/10.1016/j. ssmph.2020.100549.
- ¹² Patrick Freer and Alfonso Elorriaga Llor, "Toward a Pedagogy Informed by Research About the Boy's Changing Voice," *Revista Española de Pedagogía*, 75, no. 268 (September-December 2017): 463-480. https://doi. org/10.22550/REP75-3-2017-01
- ¹³ Robert T. Sataloff and Karen M. Kost, "The Effects of Age on the Voice, Part 1," *Journal of Singing* 77, no. 1 (September-October, 2020): 63-70; Jenovora Williams, "The Implications of Intensive Singing Training on the Vocal Health and Development of Boy Choristers in an English Cathedral Choir" (PhD diss., University of London, 2010).
- ¹⁴ Irving M. Blatt, "Training Singing Children During the Phases of Voice Mutation," *Annals of Otology, Rhünology* & *Laryngology* 95, no. 5 (September 1983): 462-468; Sally Hook, "Vocal Agility in the Male Adolescent Changing Voice" (PhD diss, University of Missouri, 2005).

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- ¹⁵ Harry Hollien, "On Pubescent Voice Change in Males," *Journal of Voice* 26, no. 2 (March 2012): e29-e40. https:// doi.org/10.1016/j.jvoice.2011.01.007
- ¹⁶ Leon Thurman, "Boys' Changing Voices: What Do We Know Now?," *Choral Journal* 52, no. 9 (April 2012): 8-21.
 ¹⁷ Ibid., 19.
- ¹⁸ Rollo Dilworth, "Working with Male Adolescent Voices in the Choral Rehearsal: A Survey of Research-Based Strategies," *Choral Journal* 52, no. 9 (April 2012): 22-33.
- ¹⁹ Rollo Dilworth, Choir Builders: Fundamental Vocal Techniques for Classroom and General Use (Milwaukee, WI: Hal Leonard, 2006).
- ²⁰ Drew Collins, "Using Repertoire to Teach Vocal Pedagogy in All-Male Changing Voice Choirs: Conversations with Six Master Teachers," *Choral Journal* 52, no. 9 (April 2012): 34-41; Mark Lucas, "Real Men Sing...Choral Repertoire," *Choral Journal* 52, no. 9 (April 2012): 42-48; Jana Williams, "A Female Teacher's Perspective of Teaching Males in Middle and High School," *Choral Journal* 52, no. 10 (May 2012): 18-27.
- ²¹ Collins, "Using Repertoire," 41.
- ²² Williams, "Female Teacher's Perspective," 24.
- ²³ Patrick K. Freer, "The Successful Transition and Retention of Boys from Middle School to High School Choral Music," *Choral Journal* 52, no. 10 (May 2012): 8-17.
- ²⁴ Ibid., 16.
- ²⁵ Freer, "Foundations"; Leck, "Changing Expanding"; Thurman, "Boys' Changing Voices."
- ²⁶ Kenneth Elpus and Carlos R. Abril, "Who Enrolls in High School Music? A National Profile of U.S. Students, 2009-2013," *Journal of Research in Music Education* 67, no. 3 (October 2019): 323-338.
- ²⁷ Breehl and Caban, *Physiology, Puberty*; Ken K. Ong, David Bann, Andrew K. Wills, Kate Ward, Judith E. Adams, Rebecca Hardy, and Diana Kuh, "Timing of Voice Breaking in Males Associated with Growth and Weight Gain Across the Life Course," *The Journal of Clinical Endocrinology & Metabolism* 97, no, 8 (August 2012): 2844-2852.
- ²⁸ Diana Markova, et al., "Age- and Sex-Related Variations in Vocal-Tract Morphology and Voice Acoustics During Adolescence," *Hormones and Behavior* 81 (May 2016): 84-96.
- ²⁹ See Table #2 in Breehl and Caban, *Physiology, Puberty*; Mickey Emmanuel and Brooke R. Bokor, *Tanner Stages* (Treasure

Island, FL: StatPearls, 2021).

- ³⁰ Alexander S. Busch, et. al., "Voice Break in Boys—Temporal Relations with Other Pubertal Milestones and Likely Causal Effects of BMI," *Human Reproduction* 34, no. 8 (August 2019): 1514-1522; Thurman, "Boys' Changing Voices"; Patrick K. Freer, "The Adolescent Boy's Changing Voice: Implications for Singing and Choral Music Pedagogy," in *Singing with Children: International Perspectives*, ed. Johann van der Sandt (Lucca, IT: La Libera Musicale Italiana, 2020): 3-18.
- ³¹ Virginia Zamponi, et. al., "Effect of Sex Hormones on Human Voice Physiology: From Childhood to Senescence," *Hormones* 20 (2021): 691-696, https://doi. org/10.1007/s42000-021-00298-y.
- ³² Elaine T. Stathopoulos, Jessica E. Huber, and Joan E. Sussman, "Changes in Acoustic Characteristics of the voice Across the Life Span: Measures from Individuals 4-93 Years of Age," *Journal of Speech, Language, and Hearing Research* 54 (August 2011): 1011-1021.
- ³³ Busch et al., "Voice Break in Boys."
- ³⁴ Zamponi et al., "Effect of Sex Hormones."
- ³⁵ Thomas Berger, et al., "Speaking Voice in Children and Adolescents: Normative Data and Associations with BMI, Tanner Stage, and Singing Activity," *Journal of Voice* 33, no. 4 (July 2019): 580.e21-580.e30, accessed January 15, 2022; Marcin D. Bugdol et al., "Adolescent Age Estimation Using Voice Features," *Biomedizinische Technik* [*Biomedical Engineering*] 65, no. 4 (August 2020): 429–434; Markova, et al., "Age- and Sex-Related Variations."
- ³⁶ Berger, et al., "Speaking Voice in Children and Adolescents"; Fouquet, et al, "Seven and Up."
- ³⁷ Bonnie J. Blackburn, "On Compositional Process in the Fifteenth Century," *Journal of the American Musicological Society* 40, no. 2 (July 1987): 210-284.
- ³⁸ See, for example: David Fallows et al., "Tenor," in Grove Music Online, 2001. https://doi.org/10.1093/ gmo/9781561592630.article.27667
- ³⁹ Fouquet, et al., "Seven and Up."
- ⁴⁰ Fouquet, et al., "Seven and Up"; David A. Puts et. al., "Sexual Selection on Male Vocal Fundamental Frequency in Humans and Other Anthropoids," *Proceedings, Biological Sciences* 283, no. 1829 (April 2016), http://dx.doi. org/10.1098/rspb.2015.2830.
- ⁴¹ Busch, et al., "Voice Break in Boys."
- ⁴² Martin Ashley, "Trends in Young Male Puberty and the

Changing Voice: New Dilemmas for Choir Directors," *Choral Journal* 62, no. 1 (August 2021): 61-64; Yoon-Mi Hur, "Common Genetic Influences on Age at Pubertal Voice Change and BMI in Male Twins," *Twin Research and Human Genetics* 23, no. 4 (August 2020): 235-240, accessed January 15, 2022, https://doi.org/10.1017/thg.2020.65; Breehl and Caban, *Physiology, Puberty.*

- ⁴³ Hoyt, et al., "Timing of Puberty."
- ⁴⁴ Natasha Chaku, and Lindsay T. Hoyt, "Developmental Trajectories of Executive Functioning and Puberty in Boys and Girls," *Journal of Youth and Adolescence* 48, no. 7 (July 2019): 1365–1378.
- ⁴⁵ Patrick K. Freer, "Weightlifting, Singing, and Adolescent Boys," *Choral Journal* 52, no. 4 (November 2011): 32-41; Hoyt, et al., "Timing of Puberty."
- ⁴⁶ Ryan Austin Fisher, Nancy L. Summitt, and Ellen B. Koziel, "A Description of Middle School Male Singers' Voice Change and Voice Part Assignment," *Update: Applications* of Research in Music Education 40, no. 1 (October 2021): 45-53.
- ⁴⁷ Nichole Tyson, and Madelyn Frank, "Childhood and Adolescent Obesity Definitions as Related to BMI, Evaluation and Management Options? *Best Practice & Research: Clinical Obstetrics & Gynaecology*, 48 (April 2018): 158-164.
- ⁴⁸ Hoyt, et al., "Timing of Puberty"; Michaela Kleber, Alexandra Schartz, and Thomas Reinehr, "Obesity in Children and Adolescents: Relationship to Growth, Pubarche, Menarche, and Voice Break," *Journal of Pediatric Endocrinology & Metabolism* 24, nos. 3-4 (April 2011): 125-130, https://doi.org/10.1515/jpem.2011.089; Joyce M. Lee, et al., "Timing of Puberty in Overweight Versus Obese Boys," *Pediatrics* 137, no. 2 (February 2016): e20150164, https://doi.org/10.1542/peds.2015-0164.
- ⁴⁹ Busch, et al., "Voice Break in Boys"; Ong, et. al., "Timing of Voice Breaking."
- ⁵⁰ Thurman, "Boys' Changing Voices," 14.
- ⁵¹ Ibid., 14, 19.
- ⁵² This 1999 reference is included because there appears to be no other print mention of Jorlett's "air singing" technique. Patrick K. Freer, "A New 'Voice' for Changing Voices: David Jorlett," *Tempo* [New Jersey Music Educators Association] 53, no. 3 (March 1999): 10-12.
- ⁵³ See this article and the narrative research referenced therein: Patrick K. Freer, "The Changing Voices of Male

Choristers: An Enigma...to Them," *Music Education Research*, 18, no. 1 (2016): 74-90; Clare Hall, "Singing Gender and Class: Understanding Choirboys' Musical Habitus," in *Bourdieu and the Sociology of Music Education*, eds. Pamela Burnard and Ylva Hofvander Trulsson (New York, NY: Routledge, 2015): 43-60.

- ⁵⁴ Patrick K. Freer, "Growing the Population of Male Choral Singers: Boys Tell Us How" (research lecture, 11th World Symposium on Choral Music, International Federation for Choral Music, Barcelona, Spain. July 27, 2017).
- ⁵⁵ Patrick K. Freer and Markus Detterbeck, "Wenn die Stimme 'bricht': Der stimmwechsel bei Jugendlichen als Herausforderung im Musikunterricht [When the Voice Breaks. The Change of Voice Among Young People as a Challenge in Music Lessons]," Vorarlberg Singt 4-2019 (Winter 2019-2020): 32-40; Patrick K. Freer and Alfonso Elorriaga, "Toward a Pedagogy Informed by Research About the Boy's Changing Voice," Revista Española de Pedagogía 75, no. 268 (September 2017): 463-480, https:// doi.org/10.22550/REP75-3-2017-01; Patrick K. Freer, and Leonard Tan, "The Self-Perceptions of Young Men as Choral Singers in Singaporean Secondary Schools," Research Studies in Music Education 36, no. 2 (December 2014): 165-178; Marina Bizjak and Patrick K. Freer, "Do We Realize the Importance of Vocal Technique in Adolescence?," GLASBENOPEDAGOŠKI ZBORNIK /Music and Pedagogy Bulletin]: Akademije za glasbo v Ljubljani, 23, no. 1 (2016): 39-48; Patrick K. Freer, "Vocal Health During the Voice Change: Recollections and Recommendations of Collegiate Male Choral Singers," International Journal of Research in Choral Singing, no. 10 (2022): 181-196.
- ⁵⁶ Patrick K. Freer, "Adolescent Boys & Singing: A Meta-Review & Implications" (research presentation at the national conference of the National Association for Music Education, February 26, 2021).

Vocal Pedagogy in the Overlapping Rehearsal Contexts of Musical Theatre and Choral Music

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any secondary choral music educators have been asked to collaborate with their theatre colleagues to produce middle and high school musicals; some have even been asked to produce and direct the entire show. A conductor may find themself running auditions for the vocal and instrumental performers, coaching chorus vocals, accompanying rehearsals, and conducting performances. When unsure of next steps, a choral educator can rely on training in choral methodology and voice pedagogy to make sure there is a balance of the fun and excitement of musical theatre performance with vocal health, building on the pedagogical principles established in the choir program. In addition, the advice of mentors who have experience in both the choral music and musical theatre worlds can be priceless.

This article shares strategies from Catherine A. Walker, Associate Professor in the University of Michigan's Department of Musical Theatre, for applying voice pedagogy in the overlapping rehearsal contexts of choral music and musical theatre. This interview connects university and high school educators in meaningful and practical ways, and the rehearsal strategies outlined below may be of interest to those choral music educators who are involved in their school's musical productions.

I would like to talk about your perceptions of the role that vocal pedagogy plays in the musical theatre (MT) chorus rehearsal and the traditional choral classroom. First, when you think of these two contexts, what are the most apparent similarities and contrasts?

I can think of many similarities, starting with the importance of rhythmic integrity as associated with the need for kinesthetic strategies. One must internalize pulse and subdivision, and, dare I say, groove. Typically, we would associate the term groove with contemporary styles, but I would argue that the baroque era has a groove as well. It's just a different style and performance practice, and singers need to understand the groove as well as the rhythmic subdivision in all genres. Singers will frequently think, "I'm on a whole note, so I don't need to subdivide or count." They stop feeling the undergirding pulse and subdivision, and the groove essentially stops.

Students must identify the hierarchical feel of the rhythmic structure, the subdivision, and how to engage their body to internalize it. I maintain that a held note will sound and feel differently based on whether the singer is actively subdividing or not. There's something different about the energy within the note, the onset, the offset; everything about it has a different feel when the performer understands what's going on underneath. That's true for choral singing as well as musical theatre singing.

Are these things particularly important because we're singing as an ensemble in both contexts? Because if I were a soloist, I might back phrase? (Back-phrasing is a way for singers to create musical tension by delaying the delivery of the expected or written rhythm of the melody and lyric. Commonly used in contemporary, pop, and jazz singing)

No. It's just as important in solo singing. If I want to back phrase, I must understand the written rhythm as well as the harmonic movement. I say, "Snap to the grid first; lock it in." This means execute the exact rhythms first and then make interpretive choices. If I'm singing an ad lib verse (the MT version of a recitative), I'm in a declamatory style. I'm delivering a story and text; it's not about rigid rhythm. That being said, I would initially speak the rhythms rigidly as written, and then begin the process of making it feel more organic and speech-like. A singer must know where the harmonies change in order to effectively make these choices. When the singer surges, or relaxes, or back phrases, they must always know how it lines up with the rhythmic grid as well as the harmonic shifts in the accompaniment.

Could you speak more about the importance of rhythmic integrity when working with an accompanist?

There are times when the singer is leading the accompanist. The singer needs to be aware of their part and how it fits together with the accompaniment. The best way to figure this out is to sing what is on the page first. Singers need to learn how to lead an accompanist with their upbeat—give it space and breath as opposed to rushing—so the pianist or orchestral conductor can follow. In certain circumstances, the singer becomes a conductor for the accompanist. You have to know when you can eclipse (or shorten) a pickup note, or when you need to help the conductor or accompanist by taking time with the upbeat.

Can you explain this idea of the awareness of what other musicians are doing rhythmically? How does that affect my performance of a whole note?

Let's say that underneath the singer's whole note,

there's rhythmic diminution happening in the accompaniment, and it's compressing toward a cadential point. Whether there's a crescendo written or not, we should feel forward motion during that whole note because the cadential point is cycling up. We feel the tension building, and the singer will express that in the performance of the whole note. If the rhythmic structure is augmenting while waning in energy, the feeling of the energy fading will happen whether there's a diminuendo written or not. This awareness sharpens your musical acuity and more accurately reflects the composer's intent. The composer is telling you how to perform the whole note by virtue of the accompaniment. Are you feeling forward motion or a feeling of moving away from something? If you're static, that's also important. In that case, you may be laying a foundation for more interesting content that is happening elsewhere in another vocal line or in the orchestration. And so, the singer participates by understanding what's happening in the piece as a whole, not just the vocal part.

Is that what you mean when you say that you feel a difference when someone sings with rhythmic integrity?

Singers often operate in a bubble thinking, "Just don't listen to the accompaniment. Don't throw me off!" They don't understand that they're gaining information when they listen. It will make it easier in the long run and create a stronger musical performance. In a musicianship class, I recently asked, "What chord is the piano playing there?" Answer: D-major. Then I asked, "What note is in the voice part?" Students said, "An E," and I said, "Well, we should talk about that." It was in the song "I'll Be Here" from Ordinary Days. In the beginning, the singer reminisces about meeting and marrying her husband. Soon the song fast-forwards to a future wedding anniversary. He took the day off work so they could celebrate, but he needed to drop something off at his New York office...on September 11. The song slows, and the vocal line is singing a dissonant second. Why? Because we're building tension for the listener. Clearly, the listener isn't thinking, "Well, that's a ninth. I bet something's going to happen." They just hear it and intuitively respond: they recognize that a suspenseful moment is coming. So, if a singer understands what they're trying to express in relation to the rhythmic and harmonic vocabulary, they're participating in the moment that the composer and lyricist were creating. It's no accident that the melody was written on the ninth, and Adam Gwon, who happens to write his own lyrics, made that choice. Your job as a singer is to elevate the text and add emotional power to the moment.

Getting back to your original question, how do I feel the difference? An accompanist can feel when a singer is in the groove or whether they're floating above and approximating the feel. You can tell when they are listening to you; it's like having a conversation—an emotional and musical conversation between the singer and the accompanist. When that happens, you get very excited as an accompanist, and you play even more musically, and the singer is more musical too. It's an artistic loop.

What role does vocal pedagogy play, if any, in helping your students achieve that emotional result?

Let's use the same song as an example. As the singer, I'm going to get excited during the description of the wedding because it's an uplifting moment. This excitement is reflected by the accompaniment's imitation of a wedding band. My vocal quality would be full and strong, but then the mood changes completely when she loses her husband. How would my voice change if I were experiencing that emotional shift in life? It's the same! As a singer, one needs to find ways to express those emotions vocally, and that's where vocal pedagogy and technique come into play. If I sing with one vocal quality, it would be like speaking monochromatically; it's not expressive or interesting. Humans are dynamic and use a multitude of vocal colors in speech. We need to do the same when we sing, but over time, a false narrative developed that one singing color fits all.

Vocal pedagogy can help us apply multiple vocal colors to the above musical example. At the beginning of "I'll Be Here," when the romance is new and a bit fragile, one might use sob quality or thin folds with vibrato. Later, when "I'll be here" is sung, the relationship is more established. It's joyful, so the singer might choose a slightly thicker vocal quality, or recipe¹ (often referred to as a mix) for a fuller sound that reflects the emotional shift. That's where vocal pedagogy informs interpretation and performance. Now you understand the emotional journey; you're an actor who sings and not just a singer.

Can we apply changing vocal recipes to a choral ensemble?

Absolutely. Let's take the Holst *I Love My Love*. There are so many vocal recipes in that piece. It's very long with many contrasting sections. The beginning is grand, hymn-like: [singing in an operatic voice quality] "As I went walking..." Then, we hear the treble voices singing with a far off, flute-like sound [singing in a sob voice quality], "I love my love, I love my love." We understand images and colors, and can elicit a change in vocal recipe by simply giving the ensemble a different image. So I might say, "Sing like a hoot owl." I used that for many years. When the lower voices sing, I might have prompted them by asking them to channel their inner opera singer, prompting a robust, classical sound.

You used metaphors to prompt those contrasting vocal colors. How would you address those vocal recipes using vocal pedagogy? Let's use the Holst again.

It depends how much rehearsal time I have. How quickly do I need the result, and how teachable can this moment be? If there's very little time, I might choose the hoot owl prompt. If I had more time, I could explain the falsetto quality in more detail. For the lower voices to achieve a more operatic singing sound, I might say, "I want more vocal fold adduction or a slightly lower larynx position," instead of a quick opera prompt. If the lower voices are still not singing with a rich sound, I would have them alternate between singing in falsetto and in their normal range. The rapid shift between registers will facilitate anchoring and improve pharyngeal resonance.

When you say anchoring, you're talking about head and neck anchoring and pharyngeal widening?

Yes. They're both involved. In Estill training,² anchoring is another name for support. I might also ask younger students to kneel on one knee—a prompt that impacts pharyngeal resonance and releases tension in the pelvic floor. If I were speaking scientifically, I would ask for firm (not squeezing) vocal fold adduction and anchoring. Also, to elicit a move from vertical speech to a more romantic sound, I might say, "I love my love," [speaking in a matter-of-fact manner] and then "I love my love," [speaking in a sweet, romantic speech quality]. When a spoken difference is achieved, a bridge can be built to the desired singing voice quality.

What other similarities do you notice between choral music and musical theatre?

Intonation. Now, there are many ways to sing in tune, but in a choral ensemble, vibrato has the potential to obscure whether they're really singing in tune. If vibrato is, by definition, a pitch oscillation, and you're trying to tune one singer's oscillation to another's, the group may never be exactly in tune. So, I believe you must fine-tune a chord using straight-tone and then add spin, which for me is another term for vibrato. You can't really tune when you're constantly spinning or oscillating. If you're trying to get the overtones to ring, you'll also need to tune without vibrato. And if you're singing dense harmonies like Eric Whitaker or Morten Lauridsen, that sound can be facilitated by a thin fold, sob quality,³ or falsetto quality without vibrato.

First, line up the chord and make sure everyone can hear all parts; balance the voicing. If not, the beauty of the dissonance and tonal color will be lost. That works in choral music and musical theatre. I think of vibrato as a type of ornamentation. Just like riffing,⁴ vibrato can be added or eliminated depending on context. And by the way, I contend that riffing and vibrato are, for the most part, mutually exclusive and should not be used together. Most riffs are straight-tone, saving vibrato for the final note.

How might vocal pedagogy help with intonation?

It depends on why they're singing out of tune. Recently, I said to a particular student, "I don't think you're singing out-of-tune because you have a deficient ear. It may be your perception of that frequency." Let me explain what I mean. Some pianists don't realize it, but pianos are tuned a few cents sharp from about C5 and higher because we perceive that register as flat. If you tune a piano using an electronic tuner, many pianists will say the treble register sounds flat. This phenomenon is also true for other instruments in the extreme high range, such as violin. This singer happened to also be a violinist, and was unconsciously tuning her (vocal) treble register a bit sharp. She began practicing with an audio analyzer application, and her perception of in-tune singing changed. So, the question is, "Is it perceptual or technical?" Technically, you might discover that they're pushing their tongue down or that they're lacking stability. It's common for singers to sing under-pitch if they're eliminating vibrato by pressing the larynx down with the tongue. In that case, I would have them start singing with spin first and then eliminate the vibrato without pressing down on their larynx while adding a physical/kinesthetic gesture to the process, like pointing up with their finger.

How would you use vocal pedagogy to address onsets and offsets?

Let's take Leonard Cohen's "Hallelujah" for example. Although it's not a classical choral composition, it's applicable because "Hallelujah" is a word commonly sung in classical choral music. [Singing with an aspirate onset] "Hallelujah" in this case is sung with an audible "H," but in standard choral repertoire, it's most often sung with a silent "H." An authentic performance in both of these contexts is facilitated quite easily if the ensemble is trained in onsets and offsets. Simply instruct them to use an aspirate onset for the audible "H" in the Cohen and a soft glottal or smooth onset for the silent "H" in classical choral. It will be fixed instantly.

In the case of Dolly Parton's "I Will Always Love You," the beginning is quite low and very hard to hear. In this case, I suggest a breath-infused, speech quality with glottal onset and a lowered larynx. This will make the low beginning pitches more audible. By quantifying the onset on a scale of 1–10, your singers will quickly be able to nuance what they're doing, reduce vocal effort, and use rehearsal time more efficiently. What I mean here is, you might say, "Give me a 5 glottal, not a 2 glottal," and you will instantly change the result.

What are a few differences between choral and musical theatre?

In musical theatre, it's common to push or anticipate the beat as a matter of style. Consider the well-known George and Ira Gershwin song "I Got Rhythm." In the chorus, "I got rhythm, I got music, I got my man, who could ask for anything more," each note anticipates the beat and has that feeling of pushing the beat forward until the word "who." The chorus is actually written to reflect what I'm explaining: every note anticipates the beat slightly. In many cases, however, this would not be clearly notated and requires the music director or performer to understand the style. In the phrase "who could ask for anything more," the rhythm for "anything" is written as two even eighth-notes but should be swung; it's basically a quarter and eighth-note triplet.

These very subtle differences are key to authentic musical theatre performance practice. There's some evolution to this as we move through the twentieth century, but that's a topic beyond the scope of this interview. Suffice it to say, the message is the same. In many cases, the Gershwin rhythms need to be interpreted rather than strictly performed as written, unlike what we would do in the classic choral context. In classical music, eighth-notes would be evenly executed.

Besides rhythmic execution, what do you notice when classical choirs perform musical theatre repertoire and miss the mark stylistically?

Most choral ensembles use vibrato on every pitch when they sing MT repertoire, as they would with classical art song. They're often reluctant to use straighttone. Additionally, scooping or pitch bending would be frowned upon in most classical contexts but encouraged in musical theatre and pop/rock. Next, we'd discuss spoken treatment, the art of using a speech-like quality on a particular word or note within a sung phrase, something that would be anathema to classical interpretation but is standard fare for MT. Lastly, the verse requires conversational rhythm, using the spoken voice on pitch with slight adjustments to the rhythm toward an organic spoken or declamatory style. Using a conversational style will help the audience transition from the scene to the song. It feels like the character is having a musical conversation with the listener.

A great example would be the verse of "White Christmas" by Irving Berlin. If one sings exactly what's on the page, it feels stilted and unmusical. That's not how we talk, but if it's freed up and conversational, it takes on a different feel. That's really about style and pedagogy, and it requires the singer to find a spoken vocal recipe, eliminating vibrato. Developing the ability to nuance and curate every word and pitch, sometimes applying spoken treatment to just one word within a phrase, is a common requirement in musical theatre. Whereas if a choral ensemble were to sing Barber's "Sure on This Shining Night," we would not do that.

If I'm a choir director with little or no musical theatre experience, what MT styles or pieces should I begin with?

I suggest looking at choral selections from classic shows. Any Rodgers and Hammerstein or Lerner and Loewe shows have terrific options. You might suggest three or four pieces to your students and see what they prefer. When students are involved in choosing repertoire, it makes the process more collaborative.

What MT repertoire should choir directors avoid programming?

If it's driven by choreography and doesn't make sense standing still, it's not a great choice for a choral setting. For example, "I'm Not Sorry" from *Urinetown* wouldn't work well standing still; it just feels like there should be choreography. Another consideration is our current social climate. The content and source material (text and context) need to be viewed with sensitivity regarding DEIAB (Diversity, Equity, Inclusion, Accessibility, and Belonging). That's essential.

In the MT chorus rehearsal, what vocal concerns come up most?

In-tune, straight-tone singing: they either want to add vibrato or depress the larynx and sing flat. Also, most singers don't understand what articulation really means. They think about text but not about the delivery of the notes. I will frequently strip the text away and have them sing the articulation on neutral vowels.

You shared how attempts to sing without vibrato can lead to laryngeal lowering and sagging pitch. How would you help them?

You could begin by starting with vibrato and then going to straight tone. Another very simple strategy is to have them point up as they sing. That simple physical gesture will raise the pitch. Another strategy would be to relieve laryngeal pressure or weight. Have them siren on an [ŋ] as in the word "sing" without vibrato. This will lessen the weight and allow the larynx to move freely. A sob quality or thin folds can reduce vocal effort in rehearsal. Lastly, I would have them siren up to the pitch three times: (1) on an [ŋ] as in "sing," (2) the same note on [jer] as in "Yay," and (3) with a light glottal onset on the same pitch on [er] as in the letter "A."

In this scenario, we're decreasing volume not to mention the perceptual, auditory shift that comes from singing on $[\eta]$. Does that help them hear the pitch, or is that not really the problem? Is their approach to using their vocal mechanism just too heavy?

It depends. In group vocal technique, there's not a one-size-fits-all; everybody has a unique body and physiological organization. Everything you try is going to partially address the problem for some of the singers. So, maybe the first strategy helps three singers and two more with another strategy. Soon, you've helped many but not with the same, singular strategy. That's why teachers need a massive toolkit. New directors just need to start experimenting. Be creative and spontaneous. When a student understands what you're asking but doesn't know how to internalize it, try something new.

What's your next step in those cases? And it's important to remember that we're in a large group. What do you do when it's just one or two people within a large ensemble?

I'll emphasize the problem without singling anyone out. A soprano whose larynx is very high and super twangy can be problematic for intonation, balance, and blend. So, I might make it brighter for everybody by adding more twang. Then go the opposite direction and maybe change registers-you're training flexibility. I could celebrate the twang: "You have such a natural twang, and that's amazing! It's like really wonderful hot sauce, but we might be using too much hot sauce right now. I would like you to lower your twang number from an eight to a four." Find ways to quantify and start a conversation about celebrating differences instead of making it a problem. Quantifying with numbers will help you address individuals in a less personal way. You could say, "I would like a '5' from you and a '2' from you" and so on.

Could you talk about how your interest in vocal pedagogy and voice science research influenced your work with MT performance majors?

I began to realize that our students were training for an industry that didn't really exist anymore. In other words, their voice training was designed for the performance practice of a previous time in musical theatre. If we think of what some refer to as the Golden Age of Musical Theatre,⁵ cast sizes were large with a dancing chorus, a singing chorus, and principal roles—they were thought of as three distinct and mutually exclusive tracks. There were clear and distinct archetypes: character actors like Marcellus Washburn or Zaneeta Shinn in *The Music Man*; belting roles like Mama Rose in *Gypsy* or Reno Sweeney in *Anything Goes*; or leading (principal) roles or ingénue roles like Amalia in *She Loves Me* or Billy Crocker in *Anything Goes*. Until very recently, these archetypes were mutually exclusive; if you were *here*, you didn't go *there*. In order to function in today's industry, our graduates needed to be flexible, responsive, and perform eight shows a week in a sustainable way. We needed to be sure our training was in alignment with the industry demands. Broadway ensembles became smaller so dancers were expected to sing and singers were expected to dance. It became clear that we needed to expand our musical theatre voice curriculum to be inclusive of more vocal styles. That was my primary interest for investigating how voice science might help our MT voice curriculum evolve.

We know that classical musicals are still being produced in community and regional theatres; there are still Broadway revivals of classic shows. Could you give me an idea of what you mean when you say, "we were training for an industry that didn't exist anymore"?

There's less demand for classical musical theatre singing. There are still revivals of older shows and contemporary classical shows like *The Light in the Piazza* or *The Phantom of the Opera*, but there are fewer of them. In order to work steadily, today's performers need to be versatile. I've heard so many people say, "I'm not a belter," or "I'm a soprano," which is a rather narrow lane. I would suggest that you learn how to belt so you can widen your lane. You will have more opportunities if you can be flexible with your vocal colors. (*Note: See the article's conclusion for more information on teaching the belt voice quality safely*.)

Would you say that there are fewer vocal timbres or vocal recipes needed for classical musicals as compared to contemporary musical theatre?

Not really. The human voice is probably the most versatile and flexible instrument we have, and there are limitless choices and possibilities within every voice. We want singers to graduate with more vocal options and versatility. It's also important to realize that performers can (and should) access more than one vocal quality or recipe within a single song. Even if you are singing "T'll Know" from *Guys and Dolls*, you would treat the verse differently than the chorus. It's understanding that within a song, within a phrase, within a note, you can switch vocal qualities by changing the vocal recipe. If you're more facile, you'll have more variety, and you will be more interesting.

Do I think the number of vocal recipes required has changed over the years? Yes. In addition to the varied classical sounds that we hear from *She Loves Me* to *The Phantom of the Opera*, there is a vast array of contemporary techniques and colors that are new or newer to the genre. For example, if you're performing *Les Misérables*, you're going to use a brighter more contemporary resonance as well as conversational spoken treatment, lyricism, belting, and falsetto. *Les Mis* has it all! When you consider, Andrew Lloyd Webber, it's a specific style of contemporary classical MT singing that's very different from *Oklahoma!* So yes, there are some variations amongst the classics.

Again, it's being adaptive. If I have only one sound and it's not the one the music director wants, I may not get the job...unless I can adapt. Compare the role of Stephen Kodaly in *She Loves Me*: Jack Cassidy in the original Broadway production (1963), Howard McGillin (1993 revival), and finally, Gavin Creel (2016 revival). You will hear extremely different styles and interpretations, partially due to artistic differences, of course, but also because of the decade in which they were singing. *She Loves Me* is a clear example of the need to evolve and remain current.

Do you have any insights on why those three versions are so different?

In the beginning, musicals cast classically trained singers for the principal/ingénue roles. Many of the principal roles modeled a more classical approach and character roles sprang out of the broader dance hall and vaudeville traditions. No one was doing pop/rock musicals in the 1950s and early 1960s, right? In 1964, the British Invasion changed everything. In 1963, *She Loves Me* was modeled on a more traditional classical sound which co-existed with the warm, croony sounds of doo-wop. And then, The Beatles arrived! Doo wop was completely usurped by The Beatles getting off that plane. There was an explosion of pop/rock music from the mid 1960s through the 1970s like none that had been seen or likely will be seen again.

If you track popular music from the mid 1960s through 1980, there were a shocking number of styles available to the listener, which included Frank Sinatra all the way to Led Zeppelin. Top 40 music included folk music, country, pop, rock, R&B, and singer/songwriters like Carole King and Burt Bacharach whose careers were born in the Brill building. Take Hair, for example, written only four years after Fiddler on the Roof. There's an infusion of pop culture into musical theatre because musical theatre is, in fact, a reflection of popular music. In 1963, "Oh What a Beautiful Mornin"" was being played as pop music! All that changed, seemingly overnight. If you think of it simply as a cultural reflection, the change in musical theatre was dramatic and inextricably linked to what was going on in the commercial, popular music world.

You have mentioned you no longer use the term "legit." Why?

I'm passionate about eliminating this descriptor from our musical vocabulary. If I say something is legit, I'm implying that something else must be illegit. I'm implying that there's a gold standard and other things are less credible or less valued. So, let's say I'm in an audition, and I sing from a pop/rock show. Then somebody says, "Do you have anything legit in your book?" What does that say about what I just sang for you? Furthermore, legit implies Western European classical music-i.e., dominated by a Euro-centric point of view. It is neither inclusive nor reflective of the industry today. I think if you label Western-European music as legit, then you are saying everything else is illegit, and you are perpetuating an aesthetic bias that needs to be challenged. So, I correct its usage at every opportunity. I simply refer to the music as classical musical theatre or lyrical.

Let's turn our conversation toward what you've gained from working in both musical theatre and choral music education. You've lived in

both of these fields fairly equally. Have there been difficulties switching gears?

I think the challenges manifested in both directions. When I was interacting with my choral colleagues, I was aware of the aesthetic bias toward classical choral music, and so for a time, I flew under the radar. I don't think that's so common anymore. I also think that there are those in the musical theatre world who assume choral educators lack the ability to teach musical theatre performance practice. That's also an unfair assumption. There are many who have excellent interpretive skills in multiple performance genres. Because there are biases on both sides and because I used to live in both worlds, I would simply code switch.

If I was in the choral world, I would start talking in an informed way about my current choral projects or concerts, but I wouldn't talk about my musical theatre projects. In the musical theatre world, I consciously avoided telling people about my choral background. I felt ashamed of my educational background as opposed to a more prestigious performing background, which is kind of sad. That being said, during a recent rehearsal at Michigan, a colleague remarked, "I have never seen anybody teach like you!" They were commenting on the speed, efficiency, and the endless toolkit of strategies that come from working in public school music education for decades.

You said it was clear that curricular changes needed to be made if graduates were going to continue to be cast in principal roles. Even though you knew this kind of growth would be difficult, you did it anyway. That sounds like a very student-centered mindset.

I held true to what our students needed. Why did I do this? Was this my ego? No, I can tell you that for sure. I knew it could be a problem for me if I rocked the boat, but I focused on the students and the future of the department. Both students and faculty responded positively to the changes. It began a curricular evolution on the part of the entire department that has allowed our department to maintain relevance as a training institution for the field. Graduates are frequently cast right out of school for national tours as well as principal roles on Broadway. One of our recent graduates is currently playing Tina Turner on Broadway. She was twenty-three when she was cast! And now, we have musical theatre vocal specialists teaching our students. It was all worth it. This is a student-centered environment—a philosophy that's infused into the department's culture writ large.

Being able to function artistically in both choral and musical theatre contexts is highly dependent on understanding and applying the stylistic differences that we've discussed. And vocal pedagogy is an important part of our ability as performers and teachers to approach these style changes authentically. In other words, we can straddle musical theatre and classic choral contexts as performers and as teachers with the help of vocal pedagogy. Do you have any final thoughts?

When we speak, we are regularly shifting vocal qualities and colors. If we apply that same principle to singing, we will have a more responsive, versatile, and expressive voice. As we work to understand voice science and vocal pedagogy on a granular level, we don't share all we know with our students at the outset. We find skillful ways to deliver the information. Vocal pedagogy and voice science allow for a more dynamic approach to ensemble work. When you learn the nuances and subtleties of pedagogy, then you can switch styles skillfully and easily. You can sing anything—early music, Holst, musical theatre, and pop/rock—because you know how to make changes and adapt quickly. That's the benefit of an integrated approach to vocal pedagogy in both choral and musical theatre contexts.

Conclusion

Any conversation about teaching belt singing must include an integrated conversation addressing vocal health—a discussion that may be even more important when teaching young singers. This is a much longer discussion beyond the scope of this article, but here are some additional resources and guidance: Much of the research available falls into two categories. Some are qualitative studies describing the perceptions of adult singers who use the belt voice quality as well as the perceptions of industry professionals like musical theater casting agents and voice teachers who specialize in teaching this voice quality. Others are quantitative studies involving measures of acoustics, airflow, vocal fold mass, maximum flow declination rate, electroglottography, and more. These qualitative and quantitative studies may be useful to the secondary choral music educator in some respects, but the research is often limited by small sample sizes of adult (not adolescent) participants, and among this research, results vary greatly.

While most recognize belting as a distinct acoustical phenomenon, the physiological conditions differ from singer to singer. There are even fewer resources addressing how one might teach the belt voice quality to adolescent singers, and most are merely cautionary notices to proceed with great care—excellent advice but not very informative. For those who would like more information, see Robert Edwin's article, "Belt is Legit."⁶ (In making this recommendation, I acknowledge that this article's use of the term "legit" may be in tension with Catherine's concerns regarding the use of the term.) More resources are needed in this area, but readers might also be interested in Christopher Arneson's and Kirsten Brown's 2022 publication: *Musical Theater Vocal Pedagogy: The Art and Science.*⁷

The need for future research in this area must include practical guidance for the secondary choral music educators who are also music directing their school's musical theatre productions. The pedagogical overlap between these contexts may empower the choral music educator toward confidence as an MT music director and may inform the choirs' concert performances of MT repertoire. This overlap can create opportunities for growing enrollment as musical cast members who enjoyed their experience with the choral music educator enroll in choir, and choir students might find the confidence to audition for the musical knowing that their choral teacher is involved. You may also find, as I did, that reaching out to your mentors with experience in both contexts can help you design approaches that are uniquely suited to your students. In the myriad combinations of these music teaching roles, we hope that you enjoy these dual contexts. Good luck, and good singing!

NOTES

- ¹ A vocal recipe is the combination of structural choices required to make various vocal qualities or sounds. Jo Estill, *Estill Voice Training Level Two: Figure Combinations for Six Voice Qualities Workbook.* Estill Voice Training Systems International, 2005.
- ² Estill Voice Training combines explicit instruction with visual feedback, diagrams, video endoscopy of the vocal folds, auditory sound files, and kinesthetic exercises to maximize voice control. www.estillvoice.com/about/
- ³ Jo Estill described the sob quality as in the silent sobbing of an adult—not to be confused with the kind of crying that would constrict the larynx. Jo Estill, *Estill Voice Training Level Two: Figure Combinations for Six Voice Qualities Workbook.* Estill Voice Training Systems International, 2005.
- ⁴ At its most basic, riffing is a contemporary form of musical ornamentation. It is a stylistic melodic pattern added, usually on a single syllable, at a fast pace in an effort to add musical excitement and variation.
- ⁵ Catherine prefers to use the term jazz age and/or standard musical theatre.
- ⁶ Robert Edwin, "Belt is Legit," *Journal of Singing* 64, no. 2 (November/December 2007): 213–215.
- ⁷ Christopher Arneson and Kirsten Brown, *Musical Theater Vocal Pedagogy: The Art and Science*. Delaware, OH: Inside View Press, 2022.

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Brian Galante is Chair of the Department of Music and Director of Choral Studies at Pacific Lutheran University in Tacoma, WA. During his time at PLU, Galante has conducted Choir of the West, Chorale, University Singers

(SA), and Knights Chorus (TB), and taught undergraduate courses in vocal pedagogy, choral repertoire, and rehearsal.

Galante received the DMA degree in Choral Conducting from the University of North Texas, and MM and BME degrees from Louisiana State University. Previous choral appointments include Visiting Associate Director of Choral Studies at LSU; Doctoral Teaching Fellow at UNT; Director of Choral Music at Highland Park High School (Dallas, TX); and Director of Choirs at Episcopal High School (Baton Rouge, LA).

Choirs under Galante's direction have offered performances for the 2010 Washington Music Educators Association Conference; the 2011 Northwest MENC Conference; and 2012 and 2022 NW Region ACDA Conferences. He has conducted honor choirs at all levels, and led workshops on conducting pedagogy, voice science, and repertoire. Galante's compositions are published by Galante Music, Walton, and Colla Voce, and have been performed by choirs worldwide. His works have recorded for commercial release by Delos, Centaur Records, and MSR Classic. He is the recipient of multiple ASCAP Plus awards and a regular composer-in-residence for the Taylor Festival Choir (Charleston, SC).

Galante has previously served ACDA as president of Louisiana ACDA (2001-2003), on the National Technology Committee (2007-2011), Honor Choir Performance Site Chair (Oklahoma City, 2009), Northwestern Region Conference Program Chair (Seattle, 2010; Portland, 2018), Transportation Coordinator (Chicago, 2011), Associate Conference Chair (Dallas, 2013), and Northwestern Region President (2018-2020). He is also a member of the American Society for Composers, Authors, and Publishers (ASCAP), the National Collegiate Choral Organization (NCCO), and the Washington Music Educators Association.

A Message to Our Members

When I consider the impact that ACDA has had in my career, I am reminded immediately of the warmth and generosity of my mentors, the remarkable efforts of our leadership, at every level, and the opportunities that have allowed me to meet and develop friendships with so many colleagues. I am honored by the nomination to run for National President.

I firmly believe that ACDA is not an association for our members; it exists *of* our members. We do not provide mentors for early-career conductors: we are the mentors and partners of members who seek the same inspiration and connection that we experienced. And we are all the lifelong learners as we open our eyes and ears to new approaches, different opinions, and thought-provoking expectations.

This is a significant time for our association: proposed changes in the bylaws seek to produce a new responsive, relevant ACDA, and we are challenged to acknowledge our biases—personal and organizational—as we engage in meaningful conversations about racial, gender, and socio-economic diversity; repertoire and performance standards; and indeed, our own definitions of musical excellence and artistry.

As President, I will continue to encourage and expect a spirit of service and openness among all members. At the same time, I will work with the Executive Director and other leadership to identify short-term strategies that will stabilize our financial resources and engage in strategic planning and prioritization of resources to achieve our collective vision for the successful ACDA of tomorrow.

We cannot rely on our past successes—whether in education, performance, membership, or conferences—to justify our existence. We must continually seek ways to grow, to reevaluate, and, when appropriate, change our approach. This requires a time of introspection and frank conversation, and I look forward to that opportunity with you.



Pearl Shangkuan is a highly sought-after conductor, lecturer, and clinician who has led performances and workshops across six continents. Director of Choral Activities and Professor of Music at Calvin University in Grand

Rapids, Michigan, she is also the chorus director of the Grand Rapids Symphony, a Grammy-nominated professional orchestra. Recently appointed as the editor of Hinshaw Music, Shangkuan also has a signature choral series with earthsongs, and is the music editor of the Calvin Institute of Christian Worship choral series published by GIA.

In 2014, she was an invited guest lecturer at the World Symposium for Choral Music held in Seoul, South Korea. Dr. Shangkuan has served on the jury of several international choral competitions in Europe and Asia and has led conducting masterclasses for the ACDA national conference, Chorus America conferences, the University of Michigan and the University of Illinois Choral Conducting Symposium, among many institutions and organizations in the United States. She has conducted numerous all-state choirs, ACDA region honor choirs, and choral festivals nationally and internationally, and has headlined several ACDA state and other professional conferences. Upcoming engagements include conducting the SSAA honor choir at the ACDA National Conference, returning to conduct at Carnegie Hall, an international choral festival in Italy and other ACDA conference and festival engagements.

She serves on the Board of Directors of Chorus America and has served as president of the ACDA Central Region and Michigan ACDA. She has commissioned and premiered numerous choral works, and her choirs have performed at ACDA national, region, and state conferences. In 2020, she received a Calvin University Award for Excellence in Teaching and previously received the Grand Rapids YWCA Arts Tribute Award. In 2013, Michigan ACDA honored her with the Maynard Klein Choral Award for "artistic excellence and lifetime leadership in choral music."

A Message to Our Members

Six months after being sent home suddenly as everything shut down, singing a simple warm up at our first rehearsal back, albeit masked and distanced, caused our emotions to overflow. I asked my students to "click save" that moment; singing in a choir, something we took for granted at times, we now fully know and cherish as essential to the human spirit. We remembered that sense of loss only to regain a greater sense of joy of this most beautiful gift.

My vision thus begins with remembering, reflecting on, and encouraging us to continue to be guided by our shared core values and mission as music educators: to provide a safe, fair, nurturing environment for our students and singers as we share with them the relevant, life-giving art of choral singing. We have a profound opportunity to live out how a larger community with different perspectives can still listen to, learn from, and live with each other despite the prevalent tensions in our society and world. I would ask that we collectively "click save" memories of what binds us together.

Since I was completely blown away as a graduate student attending my first national conference, ACDA has been a lifeline for me. I have developed many deep friendships in ACDA over the years. Increasing membership is also vital to my vision. What an incredible resource ACDA can be for many others!

Recently I finally met in person a younger colleague who initially approached me through an ACDA mentorship initiative. We had Zoomed and emailed over these past two years. What a personal joy to have this opportunity to intentionally walk alongside a next generation conductor, something I believe must be an ongoing initiative in ACDA. Unity, recruitment, mentorship: all are possible through our collective efforts.

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CHORAL CONVERSATIONS

An Interview with Sharon A. Hansen

with Paul Thompson



Sharon A. Hansen is Emerita Professor and Director of Choral Activities at the University of Wisconsin-Milwaukee. She is the Founding

Editor of the Choral Journal article series "On the Voice." During her eighteen-year tenure with "On the Voice," Hansen passionately championed and advocated for the cause of voice education in choral and voice professional circles worldwide. Interested researchers should take note of her 2014 ACDA Monograph (No. 18), *The First Fifty Years: An Index of Voice-Related ACDA Convention Interest Sessions and Choral Journal Publications; Choral Textbooks;* and Teacher Preparation Statistics 1959-2009.¹

What is your voice background? How has it influenced your approach to conducting?

Since I was a small child, and all through my academic studies, I lived in two worlds-voice and piano-until my final specialization in choral conducting. I studied private piano and voice throughout three degrees; accompanied in numerous voice studios; and was a vocal Coaching and Accompanying (collaborative piano) minor. Professionally, I was a collaborative pianist for the Omaha Opera Company and the Nebraska Repertory Theatre, and I sang in semi-professional vocal ensembles. I understood that knowledge of voice was integral to my work as a choral conductor.

This vocal background, combined

with my experience with the overarching collaborative nature of singer and accompanist, greatly influenced my approach to conducting. Every element was colored by my knowledge of the voice, from walking out on stage to taking the podium, from alignment to breath, from gesture to storytelling to graciously including all collaborators on stage. You conduct differently if you are fully embodied as a singer, whether leading choruses or orchestras. (For a marvelous example, watch esteemed contralto-turned-conductor Natalie Stutzmann perform the Mozart Requiem with the Atlanta Symphony in March 2022.²) Collaboration lives at the heart of the singer/conductor: the singer/conductor's breath enlivens and inspires performers (inviting collaboration)-the singer/conduc-

CHORAL CONVERSATIONS

tor's alignment and gesture reflect healthy vocal production and desired sound—and the singer/conductor's entire being is immersed in the process of storytelling.

What was the impetus for founding the "On The Voice" article series in the *Choral Journal*?

Despite my background in voice, once I obtained my first academic position in the mid-eighties, I found myself in conflict with voice teacher colleagues for the first time. They assumed I knew little about the voice since I was merely a choral conductor. (Such long-held prejudice against choral conductors was widespread in the early days of the National Association of Teachers of Singing [NATS]). Because of this conflict, I needed to engage in post-doctoral work with nationally respected voice specialists and take further private voice lessons with my university voice colleagues to "prove" to them that I was "on their side" in teaching voice in the choral classroom. Furthermore, despite already some twenty years of teaching voice in the choral classroom, when I was recommended for entry into NATS in 1999, I received a letter from NATS granting me "institutional membership" (as if I were a library) because I was not a "voice teacher." After six months of providing additional information about my voice résumé, the Executive Board of NATS decided to grant me "full membership" in the summer of 2000. After considerable discussion at the Executive Board meeting that summer, NATS leadership agreed that it would be fruitful to have open discussions between voice teachers and choral directors.³

What challenges did you encounter with "On The Voice"?

I have been extremely fortunate to be invited to clinic in high school settings, adjudicate at choral contests, and conduct national, state, and regional festival and honor choirs. Early on, however, I quickly realized that my vocal background and experience were not the norm among the high school choral colleagues with whom I was working. Simultaneously, an explosion of scientific voice research in the fields of anatomy, physiology, acoustic physics, the neurosciences, medicine, and psychology was occurring. As a result, I became quite outspoken in the early to mid-nineties about the need for ACDA and its state and regional affiliates to provide better and more consistent information about teaching voice in the choral classroom. (I had been a member of the Editorial Board of ACDA's Choral Journal since 1993; as such, I had the perfect forum to raise the question.) In 1996, I proposed the idea that the Choral Journal print some regularly appearing information about topics including teaching voice in the choral classroom, vocal health, and general vocal physiology, among others. Unfortunately, my early appeals were met with considerable pushback from my colleagues on the Choral Journal Editorial Board. Finally, at

our board meeting in spring 1999, Wesley Coffman (1927–2009), then editor of the *Choral Journal*, approved a "column" on vocal concerns. Subsequently, I changed the "column" into an article series, naming it "On the Voice," both for its reference among voice teachers to efficient and healthy singing on the breath and for its implication that the articles within would be on subjects about voice.

What are some of your favorite or most impactful columns from your time editing "On The Voice"?

During the eighteen years of my editorship of "On the Voice" (1999-2017), seventy-one articles appeared in the article series. Choosing favorites among the excellent articles written by many distinguished colleagues is challenging. That said, I will name just a couple for their impact today:

• Thomas Cleveland and Mark Courey's April 2004 article, "An Examination of Sixty-four Voices of a Seventy-Voice Gospel Choir: Implications for Vocal Health," was an exceptional study of a choral art form not traditionally auditioned for and invited to ACDA stages in those days. The authors' pedigrees as Otolaryngology MDs gave this article substance. As ACDA looks ahead to bringing more diversity of sounds, colors, and ensembles to its family, articles such as this one remain especially relevant.⁴

• Founder and Artistic Director of

ROOMFUL OF TEETH Brad Wells's March 2006 article, "Belt Technique: Research, Acoustics, and Possible World Music Applications," is another outstanding example of an article that foreshadowed current trends in diversifying the choral canon.⁵

• Voice Professor Rebecca Sherburn's 2007 article "Straight Tone in the Choral Arts: A "Simple" Solution" is an easy-to-understand explanation of the acoustics of "straight tone" singing and why "simple tone" singing is a more vocally healthy solution.⁶

• "On the Voice" celebrated its tenth anniversary in 2008-2009 with the first and only *Choral Journal* focus issue entirely dedicated to the topics of voice and voice teaching.⁷ I solicited Drs. Ann Howard Jones, Richard Miller, Robert Sataloff, and Ingo Titze to submit articles for this issue.⁸ What a lineup of authors, and what wisdom they imparted!

What changes in trends or practices have you seen since you founded "On The Voice"? What do you do now to stay current with your understanding of the voice? Why is staying current with voice important to the choral conductor?

The knowledge base about voice, diverse singing traditions, repertoire, cultures, and authentic performance practice is exploding, so it is incumbent upon the choral conductor to stay current.⁹ Through professional memberships and endless reading, I stay current with new knowledge in all aspects of voice education. But reading has its challenges: I recently Googled "Learn to Sing" and found 301,000,000 results! So how does a person wade through the morass to find accurate, science-based information?

In my experience, trustworthy organizations like NATS or The Voice Foundation provide reliable voice information. For example, in conjunction with NATS, Matthew Hoch has edited the *So You Want to Sing* series. One noteworthy book addresses world singing styles using expert performers and singing teachers. All books in the series include online supplemental educational materials on the NATS website.¹⁰ NATS has produced a series of "NATSChats" accessible on YouTube. One of particular interest is the May 16, 2022, chat, "Black American Music Voice Pedagogy: What Voice Teachers Should Know," that featured expert teachers/singers/performers Alison Crockett (Shenandoah/CCM) and Dr. Trineice Robinson-Martin (Princeton). The two guest speakers spoke of the importance of understanding culturally responsive singing (appreciation v. appropriation). They emphasized the importance

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of being aware of authentic performance practice, not only related to the Western canon but also related to all world and American music (jazz, pop, gospel, soul, blues, R&B, country, rock, music theater, and so forth).¹¹

NATS also hosts VOCAPEDIA, an information database about singing and the science of voice, featuring audio, video, and text resources as they are currently accepted in the scientific community from authors who have demonstrated their expertise.¹²

The Voice Foundation website contains easily accessed articles,

media, and copies of the Foundation's Newsletter, "The Voice." A 2018 newsletter on transgender voice is particularly informative and is accompanied by a "terms" list for those helping transgender singers navigate their journey.¹³

Of course, ACDA members can keep current by reading voiceand performance practice-specific articles in the *Choral Journal*, such as ones found in "On the Voice," among others, and by attending voice- and performance practice-specific interest sessions at state, regional, and national conferences. As I wrote in a 2017 *Choral*



Journal article:

As the result of scientific innovations that allow doctors to view the vocal folds in motion, the teaching of voice has evolved from a system primarily based in imagery to one solidly based in science, changing dramatically the way that voice is taught in the choral classroom. Now in every classroom, where there is a computer, there is easy access to seeing video of the voice in motion, and to a greater understanding of the vocal mechanism.

Such a radical shift of knowledge about voice has never occurred in the history of the discipline. Belief systems are being shaken to their very core...however, choral directors need not be afraid.

Once, voice teaching in the choral classroom simply meant saying to your class, "Sing from your diaphragm." No one really knew what that meant, but we heard it from our teachers, so we said it to our students. Now it is different. Open a book. Go online and see the voice in action. Take a class.¹⁴

What tips do you have for conductors working with festival/ all-state choirs?

According to the article "Student Voice Use and Vocal Health During an All-State Chorus Event" by James F. Daugherty, Jeremy N. Manternach, and Kathy K. Price, singers indicated declining changes in five of seven voice health indicator statements and in self-perceptions of singing voice quality during their all-state event.¹⁵ This should be no surprise, since singers often are in rehearsals seven to nine hours a day for two to three days, if not more. It is commonly understood that prolonged voice use without adequate recovery time can contribute to vocal fatigue or voice disorders among persons of any age, much less adolescent high school students whose vocal anatomy is still "in process."

Choral singers (as well as conductors!) can experience significant vocal "dysfunctions" during prolonged festival chorus phonation. They may "oversing" because of the excitement of the festival chorus experience. They may become hoarse, experience vocal tiredness, feel throat pain, experience breathiness, and experience vocal dryness. They may strain to sing and sense that higher notes in their range are more difficult to sing. They may clear their throat or cough more often than usual and use undue effort to sing, among others.¹⁶ During a three-day all-state rehearsal/performance period, many, if not most, singers will experience a significant decline in vocal quality from day one to day three.¹⁷

None of us wants our singers to experience vocal distress or be unable to sing their final, much-anticipated concert. That said, what is to be done? I believe this question has a three-part solution, with event planners, guest conductors, and singers each playing a role.

1. Considerations for event planners should include (among others)¹⁸:

• *Student Preparation*: Individual student preparation is the single most crucial ingredient leading to the success of any festival or All-State event. *Not the conductor.*

• Audition requirements must be stringent and comprehensive; expect individual preparation and music memorized.

• Home choral directors: Prepare the singers so the guest conductor does not have to overwork the voices to present a reasonably expressive performance.

• Note checks must have consequences (sitting out of rehearsals, sending students home, placing unprepared students in a remedial classroom with volunteer choral director(s) who will assess student readiness, not singing the concert unless the singer shows prowess, and so forth).

• Schedule:

• If students are prepared, rehearsal time can be reduced (e.g., no prolonged "pounding of notes" necessary).

• Use of voices: It is not just

the amount of actual rehearsal time. Singers will use their voices constantly.

• Allow for sectionals early on.

• No extended rehearsal segments without a vocal rest break.

• Vocal rest: Schedule "vocal rest periods" where singers are in a controlled environment that allows for complete vocal rest (listening to a concert, attending an interest session, listening to a guest lecturer, having a group movie (or other quiet) activity instead of a dance or loud talent show (where students strain their voices to talk over loud music).

• Reasonable rehearsal hours: avoid 8 am rehearsals.

• Seating and riser arrangements in rehearsal hall(s) and performance venue(s):

> • Allow for adequate circumambient space both for rehearsal and performance. If placed close (often less than an inch) to other singers, individuals cannot hear themselves, so they tend to sing louder.

> • What kinds of chairs are used for prolonged sitting?

• Ensure adequate riser spacing on stage (e.g., 150 singers do not fit on risers made for 90).

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• Proactive Voice Care Education:

Vocal Health Lecture: Schedule an interest session on day one, led by a certified voice professional, to set standards for healthy vocal use. Some topics to consider may include adequate sleep; voice use outside rehearsals; nutritious eating; what to expect during days of prolonged vocal use; vocal dysfunction symptoms and what to do when symptoms are noticed, among others.

• Acoustics:

• Ensure good acoustics in the rehearsal and performance venues (gym, auditorium, conference room, church, hotel ballroom, and so forth.)

• Provide a wireless microphone for the conductor so students can hear, and the conductor does not have to strain.

2. Considerations for conductors should include (among others):

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• *Motivation*: The conductor's chief role is to bring motivation, inspiration, and extraordinary musicality to the singers and teachers.

• *Repertoire*: Music selection should include all difficulty levels. Be aware of how much time you will need to rehearse vocally-demanding repertoire.

• *Rest periods during rehearsal:* Give frequent breaks for silence/rest, or to allow singers to stand and stretch to revitalize body and mind. Encourage singers to hydrate with water and reward both inside and outside of rehearsal vocal conservation.¹⁹ Ideas for rest may include:

> • Singers spread out in the rehearsal hall, sitting or lying down, no voicing allowed, fifteen minutes.

> • Stop rehearsal for a "minibreak."

> • Present mini-lecture: give background information on the music or elaborate on some musical skill recently attempted.

• *Combine movement patterns:* Avoid sitting for prolonged periods. Sit, stand, walk, sway, bounce, change seating positions, face each other, and so forth.

• *Combine music learning strategies*: Avoid singing for unbroken periods. Use other strategies to learn the music.
• Have singers listen to another section sing, tap, audiate, clap, snap, march to rhythms, listen to a recording and write a comment about the performance that the conductor can read aloud, and so forth.

• Silent rehearsal is an excellent way to memorize.

• Encourage "defensive voice use" during rehearsals, soft talking, and lots of silence when not rehearsing. When observed, reward it with a compliment.²⁰

3. Considerations for singers should include (among others):

• *Hoarse*: If you have a hoarse voice, *do not sing*. Period.

• *Tired*: If you are tired but feel you must sing, do so softly and lightly with adequate support. Mouth words in strenuous passages.

• *Rest*: Rest your voice often. Less is more when it comes to vocal quality and longevity.

• *Water*: Drink a good amount of water to maintain vocal fold lubrication. "Pee pale."

• *You Are Responsible*: You and no one else is responsible for your voice's condition and quality. Take a professional attitude caring for your instrument.²¹

In short, every action taken by event planners, conductors, and singers should be considered with the vocal health of the chorister in mind. Stunning, life-changing performance starts and ends with healthy singers.



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How has your practice, intention, and choral engagement evolved/shifted during the COVID-19 pandemic? How do you experience yourself as an artist and the choral art form differently? (This was a question provided by the previous Choral Conversations interviewee.)

I will never forget the abject grief and exhaustion I saw in the eyes of my fellow choral colleagues in spring 2020. I will never forget the excruciating pain of canceled programs, tours, senior trips, musicals, graduations, all-state, and other honor choirs—all of which were greatly anticipated (some for years), both by teachers and by their students. I will never forget the sadness and powerlessness I felt when my own much-anticipated concerts and outside engagements were canceled. The choral sands cataclysmically shifted, and everything changed.

Not the least of the change was the new focus on technology. Suddenly, there was "Zoom Choir," and the choral conductor had to become an audio and video production wizard overnight! Sorely lacking in those early days of the pandemic



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It was heartbreaking to learn what my ensemble colleagues had to accomplish to make it to the end of spring 2020 and what a toll it took on their overall mental and physical health. Programs were utterly decimated without the bonding that occurs both within the ensemble classroom and through the vehicle of live performance. Student numbers plummeted. Then came 2021, with further program cancellations and class restrictions. Even professional performing organizations today have been hard-pressed to reach their pre-pandemic numbers. So, because of the pandemic, I will never experience myself as an artist-or the choral art form-the same. Because of the pandemic, I have come to see just how fragile our art form is. And how precious, therefore.

Please provide a question for the next Choral Conversations interviewee.

How do choirs reconnect with their audiences? "Heads down/no personal interaction" cell phone behaviors already were a problem pre-Covid, but pandemic isolation has significantly impacted present cultural behavior. How do choirs begin again telling compelling stories through choral music that will connect, engage, and inspire singers and audiences alike?

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Paul Thompson is assistant professor of music at Ripon College in Wisconsin. He holds a doctorate in choral conducting and literature from the University of Colorado Boulder, a master's in choral conducting from the University of Wisconsin-Milwaukee, and a bachelor's in voice from Marian University in Fond du Lac, Wisconsin.

NOTES

- ¹ Sharon A. Hansen, The First Fifty Years: An Index of Voice-Related ACDA Convention Interest Sessions and Choral Journal Publications; Choral Textbooks; and Teacher Preparation Statistics 1959-2009 (ACDA Monograph Series: No.18, 2014).
- ² Atlanta Symphony Orchestra, Nathalie Stutzmann, conductor. March 22, 2022. https://www.youtube.com/ watch?v=T4W-WsA_q5k. (begin at 36'12")
- ³ Personal email correspondence between the NATS National Office and Sharon Hansen, July 2000.
- ⁴ Thomas Cleveland, Ph.D. and Mark Courey, M.D., "An Examination of Sixty-four Voices of a Seventyvoice Gospel Choir: Implications for Vocal Health" (*Choral Journal*, vol. 44, no.9, April 2004).
- ⁵ Brad Wells and Lyell B. Clay, "Belt Technique: Research, Acoustics, and Possible World Music Applications." (*Choral Journal*, vol. 46, no. 9, March 2006).
- ⁶ Rebecca Sherburn, "Straight Tone in the Choral Arts: A "Simple" Solution (*Choral Journal*, vol. 47, no.8, February 2007).

⁷ A focus issue on the adolescent

changing voice, the sole voice topic that ACDA has broached with regularity over the years, appeared in 1987.

- ⁸ Ann Howard Jones, "Voice Training in the Choral Rehearsal"; Richard Miller, "Acknowledging an Indebtedness"; Robert Sataloff, "Arts Medicine: An Overview for Choir Conductors"; "and Ingo Titze, "Getting the Most from the Vocal Instrument in the Choral Setting." (Choral Journal Special Focus Issue "On The Voice," vol. 49, no. 5, November 2008. Sharon A. Hansen, Guest Editor).
- ⁹ For a complete discussion on this topic, see Karen Howard, "Knowledge Practices: Changing Perceptions and Pedagogies in Choral Music Education" (International Journal of Research in Choral Singing 2020, Vol. 8, no. 2).
- ¹⁰ Matthew Hoch, ed., So You Want to Sing World Music: A Guide for Performers. Rowman & Littlefield Publishers, October 2019. Visit www.nats.org to access style-specific exercises, audio and video files, and additional resources.
- ¹¹ "Black American Music Voice Pedagogy: What Voice Teachers Should Know." NATSChat, May 22, 2022. https://www.youtube. com/watch?v=tMHxFnf6eMU
- ¹² National Association of Teacher of Singing, http://www.vocapedia. info/.
- ¹³ The Voice Foundation. https:// voicefoundation.org; Newsletters: https://voicefoundation.org/ newsletters/; Transgender Voice: *The Voice*, vol. 23, no. 3 (2018): Christie Block, "Voice Care for the Transgender Speaker"; Loraine

Sims, "Is there a Transgender Voice Pedagogy? Taking the Gender out of Voice Classification." https://voicefoundation.org/wpcontent/uploads/2018/09/2018_ Vol23_Issue_3_Newsletter.pdf; Transgender Terms List: https:// voicefoundation.org/wp-content/ uploads/2018/09/Transgender-Terms.pdf

- ¹⁴ Sharon A. Hansen, "Singing in ACDA's First Fifty Years: Celebrating the 'On the Voice' Chai Anniversary (1999-2017)." (*Choral Journal*, vol. 57, no. 9, June/ July 2017).
- ¹⁵ James F. Daugherty, Jeremy N. Manternach, and Kathy K. Price, "Student Voice Use and Vocal Health During an All-State Chorus Event" (*Journal of Research in Music Education*, 58, no. 4, Jan 2011).
- ¹⁶ Daugherty et al. *Journal of Research in Music Education* (2011).
- ¹⁷ Judy Bowers and James F. Daugherty, "Self-Reported Student Vocal Use at a High School Summer Choral Camp" (*International Journal of Research in Choral Singing*, 3, no. 1, 2008).
- ¹⁸ For a complete discussion on this topic, see G. Dawn Harmon McCord, "Choral All-State Policies and Practices: A Survey-Based Analysis and Critique." (Doctoral diss., University of Georgia, 2003).
- ¹⁹ Leon Thurman, "Putting Horses Before Carts: When Choral Singing Hurts Voices" (*Choral Journal*, vol. 23, no.8, April 1983).

²¹ Ibid.

²⁰ Ibid.

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The *IJRCS* was founded in 2002 by editor James Daugherty and an international interest group composed of choral conductor-teachers and voice scientists, each of whom was an established researcher and an active choral musician. The *Journal* publishes one volume annually, with articles added as they are accepted throughout the year.

The editorial board welcomes manuscripts that reflect well-executed research employing quantitative, philosophical, historical, or qualitative methodologies. Reviews of empirical research, meta-analyses, etc. will also be considered for publication. Score studies, choral literature reviews, composer biographies, or purely anecdotal speculations will not be considered. View submission guidelines and the full archives at https:// acda.org/publications/international-journalof-research-in-choral-singing. For more information or to submit an article, email ijrcs@acda.org.

Following are the abstracts from the special collection of articles on vocal health, published as part of Volume 10 (Melissa Brunkan and Melissa Grady, guest co-editors). Foreword by James F. Daugherty, The University of Kansas (Emeritus). Articles are in order by author last name. View links to each article in Volume 10 here: https://acda.org/archives/4180

Key Changes: Choral Directors' Experiences with Gender-Inclusive Teaching

Dustin S. Cates, Boyer College of Music and Dance, Temple University

As adolescent gender identity has expanded to encompass non-binary forms of gender identity in contemporary social contexts, scholars in music education have begun to examine the music learning experiences of transgender students and the role of the music teacher in fostering an environment that is affirming to gender diversity. Anecdotal observations of choral

music practices in schools in the United States have indicated some changes occurring in the naming of ensembles, the categories used to describe voicing of choral music, the gender terminology used by choral directors during instruction, and program policies and procedures. The purpose of this study was to examine school choral directors' experiences with gender-inclusive instructional practices and their level of confidence in teaching transgender students. A survey consisting of 39 items including questions regarding experience teaching singers who identify as transgender, gender-inclusive instructional practices, and level of confidence in teaching students who identify as transgender was developed for this study. Participants were choral directors ($\mathcal{N} = 227$) with experience teaching in secondary schools in the United States. Results indicated that a majority of participants currently engaged in gender-inclusive teaching practices and had moderate confidence in the use of these approaches. Participants reported high confidence in the use of gender-inclusive language and low confidence regarding the impact of medical and non-medical interventions on the singing voice. Results also revealed that choral directors who engaged in formal training experiences reported higher levels of confidence in their ability to teach a singer who identified as transgender.

Teaching What We Were Taught: A Survey of Choral Music Educators on Vocal Health, Anatomy, and Pedagogy

Melissa L. Grady, The University of Kansas School of Music

Melissa C. Brunkan, University of Oregon School of Music and Dance

The purpose of this investigation was to assess if prior education influenced current teaching practices of choral music educators in terms of vocal health, anatomy, and pedagogy. We utilized a four-part online questionnaire to inquire about music educators' (a) personal experience in voice education and teaching/ conducting practice in (b) general vocal health, (c) vocal anatomy and function, and (d) healthy vocal pedagogy and perceived amount of rehearsal time spent on

these topics. All responses were disaggregated by years of teaching and types of choirs taught. In total, 56 choral teachers/conductors of 65 choirs comprised the results. We applied statistical analysis to determine the extent to which participants' prior education explained teaching behaviors. Two of the three regression analyses proved statistically significant. The non-significant results for the regression concerning the teaching of general voice health in the choral rehearsal illustrated the possibility that choral teacher/conductors spoke about vocal health in the rehearsal regardless of their personal education. The two statistically significant regressions alluded to a moderate correlation between the teacher/conductor's prior education and teaching of vocal anatomy and pedagogy in the choral rehearsal. Results are discussed in terms of teaching vocal health, anatomy, and pedagogy in the choral rehearsal, and ideas for future research.

Still singing after all these years – A Perceptual Study of Post-menopausal Singing Voice Behaviors with Implications for Singers, Voice Teachers, and Choral Conductors

Kathy Kessler Price, Westminster Choir College, Rider University

This study examined $\mathcal{N} = 23$ post-menopausal singers through a questionnaire that addressed twenty-four aspects of vocal behavior, hormone therapy use/nonuse, and typical singing mode, as well as other demographic information. It follows and was prompted by my 2010 doctoral dissertation, which examined N= 307 women's voices in pre-, peri-, and post-menopausal lifespan stages. The purpose of this study was to investigate perceived singing voice changes during post-menopause in cisgender women singers a decade or more after the menopausal event. Results described behaviors regarding voice function (loss of high range and loss of vocal stamina, difficulty in singing high and softly, and difficulty with onsets), vocal health (concerns included partial paralysis of the folds, reflux, hoarseness, and several respiratory ailments), and concerns/ rewards of singing during the post-menopausal hormonal stage of life as discussed by the participants in

narrative responses (52 discrete comments). Limitations of the study are stated. Pedagogical considerations include range and practice protocols and choral rehearsal techniques for promoting optimal vocal health for mature cisgender women singers.

Vocal Health During the Voice Change: Recollections and Recommendations of Collegiate Male Choral Singers Patrick K. Freer, Georgia State University

The purpose of this study was to gather the textual and visual narratives of undergraduate males about their singing experiences during the adolescent voice change. Analysis explored these students' reasons for participation (or not) in secondary choral music, their self-perceptions as singers, and of their vocal maturation process. Much current research focuses on the attrition of young males from school choral music education during the middle and high school years. One purpose of this study was to extend the population to collegiate-aged male singers, with a focus on factors related to vocal health. The forty-nine participants ranged in age from 17 to 35 and represented two university choral programs, one in the United States and one in Ecuador. Participants contributed through written questionnaires, individual interviews, and focus group discussions. Analysis highlighted six thematic categories concerning the role of peers, masculinity, standards of musical excellence, singing versus choral music, perceptions of the voice change, and the longitudinal singing experience of individual singers throughout the span of adolescence into young adulthood. This report focuses on issues related to participants' perceptions of the voice change, vocal health, and pedagogy. Forty-two of the participants (86%), unprompted, recommended that choral teachers of adolescent males offer instruction specific to vocal health and singing during the voice change.

"Is Something Wrong With My Daughter's Voice?" Parental Perceptions of the Female Adolescent Voice Change

Jamea J. Sale, School of Music, University of Kansas, Lawrence

Adolescent voice change is a developmentally uncertain time for singers when the vocal anatomy undergoes significant growth. Female singers experience a distinctive set of symptoms. Vocal tone that was previously clear and pure becomes breathy and, at times, thick, husky, and hoarse (Ingram & Rice, 1962; Sipley, 1993; Vennard, 1967). Voice ranges that initially widen during puberty temporarily narrow at the height of Female Adolescent Voice Change (FAVC) (Cyrier, 1981; Gackle, 1987, 2000a, 2000b, 2011; Huff-Gackle, 1985; Phillips, 1985; Sweet, 2015). As singing predictability and discomfort vary from day to day, so does the singing experience, leaving adolescent female vocalists to question their abilities (Gackle, 2011; Sweet, 2015). Pubertal adolescents report vocal fatigue, breathiness, and dryness despite taking measures to care for their voices (Bowers & Daugherty, 2008; Daugherty et al., 2011). During this period of change, parental support is vital to singer confidence, perseverance, and positive vocal self-identity. The purpose of this study was to examine parental perceptions of the FAVC before and after watching a three-minute educational video on the topic. Participants were parents (N = 54) of middle and high school female singers in two Midwest treble community choruses who responded to an online questionnaire. Queries explored parental perceptions of the female adolescent singing voice and their understanding of the voice change phenomena. Findings indicated that while they were attentive to their daughters' singing, parents did not possess knowledge of typical FAVC characteristics or accompanying singing difficulties. After a brief educational video, participants described gaining an explanation of their daughter's current voice concerns and a new understanding of developmentally appropriate FAVC singing skills. Parents reported a sense of preparedness and empathy for their daughter's voice change experience.

Undergraduate Singers' Voice Use During an Intensive Week of Choir and Musical Rehearsals: A Case Study

Matthew Schloneger, Division of Fine Arts, Friends University, Wichita

The purpose of this case study was to document undergraduate students' ($\mathcal{N} = 2$) voice use before, during, and after an intensive week of choral and musical theatre rehearsals through (a) acquired voice dosimeter data, (b) daily surveys, (c) participant activity logs, (d) 3 administrations of the Singing Voice Handicap Index (SVHI), and (e) administrations of the Keirsey Temperament Sorter. Two female students (pseudonyms Kathy and Melissa) wore dosimeters during waking hours for 9 days, including two baseline days prior to an intensive rehearsal week, a five day week in which they participated in a total of 39+ hours of choral and musical rehearsals, and two baseline days one week after the intensive period. Mean phonation time dose percentages (Dt) for both participants during the intensive week (Kathy 18.53%; Melissa 13.76%) exceeded mean Dts during pre and postbaseline days (6.94%; 10.86%). Likewise, mean daily distance doses (Dd) during the intensive week (Melissa 7,216m; Kathy 10,608m) exceeded mean daily Dds during the baseline periods (2,469m; 5,236m). Phonation doses were disaggregated by choir rehearsals, musical rehearsals, and non-rehearsal time. Daily surveys of vocal health evidenced declines in at least six of nine areas between Monday and Friday of the intensive week for both participants. However, SVHI results showed that Kathy, a self-described introvert, experienced an increase in perceived voice handicap between the pre-baseline period and the intensive week while Melissa, a self-described extrovert, perceived less voice handicap. Results and suggestions for further study are discussed in terms of voice use expectations for these participants and possible relationships among voice use, perceptions of fatigue, and personality traits.

Singing Scientifically: A Content Analysis of Choral Journal and Science-Based Discussion of the Voice

Andrew Schmidt, Georgia State University

The purpose of this investigation was to determine the number of voice-related articles published in *Choral Journal* that included scientifically researched, evidence-based knowledge. Understanding the voice directly impacts the overall vocal health of singers. A content analysis of *Choral Journal*, the flagship publication of the American Choral Director's Association, yielded 159 scientifically informed, voice-related articles published between 1959 and January 2022. The analysis demonstrated that authors employed three primary fields of science: physiology and anatomy, acoustics, and phonology. They used these areas to inform four broad categories of vocal pedagogy: resonance, diction, blend, and an uncoded category that included discussions of breath and body alignment. While rich in these types of articles early in its publishing history, *Choral Journal* editors shared continuously fewer scientifically informed, voice-related pedagogical articles decade over decade until a notable rebound in the 2000s.

The author concluded that more research in the areas of gender diversity, non-traditional vocal styles, and the explicit linkage between breath and body is needed. The author curated 52 previously published works for further reading as well as a QR link to all 159 articles analyzed. Revisiting this research may ameliorate potentially harmful misconceptions regarding the voice and singing as well as encourage further scientifically informed, evidence-based publications.

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the wound is the light is the place is

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- 4' 15". Three gentle lines of love, commissioned for a wedding anniversary. The piece is a canon: Choir II sings the same music as Choir I throughout the piece. The choirs should be separated physically. Much is sotto voce; choral soundscape. Final aleatoric section of variable length. Stunning. Excellent HS and above. (ProjectEncore.org/caroline-mallonee)

JESSICA RUDMAN

A Forest That Is a Desert

- SATB; a cappella; English (Kendra Preston Leonard)
- 12' 00". A setting of three poems written in memory of the poet's mother, reflecting on the mental effects of dementia, both on those who suffer and on their loved ones. Moving mix of solo and choral, tonal and aleatoric, rhythmic and soundscape writing. Powerful and worth the work for a skilled ensemble! (ProjectEncore.org/jessica-rudman)

JOHN MUEHLEISEN

The Soul's Expression

- SATB, div; S solo; a cappella; English (Elizabeth Barrett Browning)
- 2' 30". A power-packed expression of a individual's struggle to live out his/her life's purpose with full perspective of an infinite invisible reality. Replete with text painting. A highly skilled ensemble will find the mix of shifting meters—compound and simple; hemiolas within both—and dense chromaticism an exhilerating challenge! Worth it! (ProjectEncore.org/john-muehleisen)

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Choral Pianist: The Unspoken Co-Leader

by Jaime Namminga

"Watch me [the conductor], and you can't go wrong." Many singers have more than likely heard this phrase several times throughout their musical lives. It makes sense: if all the singers watch the conductor, the choir will be on the same page, singing their best together, making mistakes together, just being a choir together. Likewise, the choral pianist is expected to watch and be in sync with the conductor, and to offer musical support to the singers, whether that is playing parts or providing accompaniment. But the choral pianist also has a greater role-more than one of support, more than one of an accompanist-the pianist serves as co-leader with the conductor.

The intent of this article is to encourage conductors to recognize choral pianists as co-leaders. If the choir is a team, the conductor is the head coach, and the pianist is the assistant coach. The two work together to lead their team. In piano pedagogue Kughwa Lee's 2016 doctoral dissertation, she writes:

The choral conductor and choral pianist function as leaders—the conductor as the main teacher and the pianist as the teaching assistant. Conductors, choirs, and choral pianists have to collaborate together as a team to be successful.¹

Though this article refers to all choral pianists, most graduate-level and professional pianists already have the skill set, experience, and expertise to be co-leaders with conductors. Depending on skill level and musical maturity, high school and undergraduate pianists may or may not be ready for the responsibility of co-leaders at the piano. However, piano teachers and choral conductors should be training young and amateur pianists to take on the mindset and role of co-leaders as early in their careers as possible. The article includes suggestions for ways that conductors can help guide and encourage young pianists on their journey to co-leader.

What Are the Pianist's Co-Leader Attributes?

In recognizing choral pianists as co-leaders, conductors will identify the following main attributes: trustworthy, reliable, and musically influential. First, the choral pianist is a trustworthy colleague to the conductor. If the two are going to co-coach a team, it is important for them to establish a trusting relationship. The pianist is a positive contributor, never a threat. For example, if the conductor addresses aspects of the music, the pianist listens intently to reinforce what is being said and to set a positive example for the choir. Additionally, if the conductor makes a mistake, such as singing an incorrect starting pitch or miscuing the choir, the pianist responds with grace and humility rather than causing embarrassment. The choral pianist has the conductor's back, no matter what. Establishing a trusting relationship will likely lead to the conductor including the pianist in important decisions and welcoming their input when needed.

Second, the choral pianist is reliable with responsibilities at the piano, which vary according to the conductor's preferences. For example, some conductors may ask the pianist to assist with vocal warmups or to play parts on all pieces until the notes are learned well. Other conductors may prefer to lead warm-ups on their own and work mostly a cappella, asking the pianist to add the accompaniment later in the learning process. Depending on the availability and strengths of the singers, the pianist may also lead and/or play in sectionals. Whether in sectionals or full rehearsal, the pianist is reliable to sightread when necessary, play voice parts and accompaniment accurately, with expression, in sync with the timing and phrasing the conductor indicates, and with the appropriate amount of support, according to the size and vocal strength of the choir.

The choral pianist's reliability at the piano leads to the third attribute conductors will identify to recognize pianists as co-leaders: an ability to be musically influential. The choir watches the conductor, but the choir *listens* to the pianist. When the conductor asks for assistance with the voice parts, the choir listens to the pianist for the correct pitches and rhythms. When the conductor shows a *ritardando* leading up to the climactic fermata, the choir hears the pianist stretching out the subdivision underneath. When the conductor motions for a crescendo and accelerando within a phrase, the choir senses the pianist's energy and is inspired to join in the expression. Jenna Braaksma, in her article "The Choral Accompanist: A True Team Player," corroborates:

The pianist plays a leadership role when they contribute to the teaching of correct pitches, intervals and rhythms. From the piano, they can lead the choir to follow cues, dynamics and articulations, as well as give guidance in shaping their individual phrases.²

The choral pianist is well prepared, focused, intentional, expressive, and inspirational, helping the choir to achieve amazing musicality.

How Does the Pianist Acquire the Co-Leader Attributes?

Consider the connection between the three aforementioned attributes: trustworthy, reliable, and musically influential. The choral pianist acquires these attributes by *observing* and *listening*. The pianist observes the conductor to get to know their conducting style and tendencies and figures out how to best complement them. What are the conductor's priorities? What are their expectations of singers? On the first read-through of a new piece, does the conductor break it down by sections, stopping to cor-

rect missed notes and rhythms, or do they go for a full read-through, expecting a broad understanding of the overall musical map? How does the conductor cue the singers and pianist? Do they count off? Is the gesture coordinated with an in-tempo breath? During a piano interlude, does the conductor continue to control the pacing of the music, or do they give the pianist freedom to take over with their own musical expression? These are all examples of possible conductor tendencies the pianist observes to acquire the co-leader attributes.

The choral pianist listens closely to the conductor's instructions but also to the choir as they rehearse. Which sections of the music sound good already on the first read, and which need attention? Which voice parts are polished, and which struggle? The pianist listens so intently that they can almost read the conductor's mind. The pianist detects errors right along with the conductor and, therefore, can predict and anticipate the next rehearsal spot. Thus, they are ready to give starting pitches before being told a page and measure number. Lee also supports this idea when she says:

An important attribute of a good choral pianist is the ability to anticipate trouble spots for the choir, such as difficult leaps, voice crossings, and dissonant harmonies, and find ways to help. The choral pianist needs to listen to the chorus even while playing in order to understand problems that may disrupt a rehearsal.³

The choral pianist's strong observing and listening skills also enable the pianist to know, again without being asked, when to give part support, when to let the choir go a cappella, and even when to give hint pitches that are not written in. The choral pianist is a step ahead of the conductor whenever possible so that the conductor can focus all attention on the singers. The pianist's ability to be a step ahead saves the conductor time, leading to rehearsal efficiency in the moment and, in the end, a highly prepared and successful choir.

How Do Conductors Guide Young Pianists?

Several people impact young pianists on their journey to co-leadership, from family members who help to instill leadership and positive socialization qualities, to theory and ear training instructors who teach them to detect errors and read open-score harmony, to studio teachers who ensure they have the necessary technical and musical skill set. Though the responsibility lies on multiple shoulders, the following are a few points of guidance for conductors to mentor young pianists on their journey to co-leadership.

While it would seemingly make sense to simply encourage young pianists to consider the three co-leader attributes, these attributes take time and experience to be instilled in pianists and, therefore, it is best to give them specific actions they can take now to prepare them for what they may *become* later. First, communicate to them that being punctual for rehearsals, sectionals and performances is important for the time and learning efficiency of all involved. More importantly, punctuality demonstrates a positive example of prioritization and a shared commitment with the conductor.

Next, express that when they as



pianists are technically and musically prepared, they will be able to focus less on their own part and more on the conductor and singers. Emphasize that being prepared is not playing *perfectly*. For example, when playing voice parts, pianists need not play every note or rhythm exactly as written but rather, play the harmonic rhythm accurately and fluidly so that the singers may hear how their parts fit into the chord. A high level of preparation on the pianist's part will result in the singers learning faster and more efficiently.

Finally, conductors may communicate to young pianists the importance of being engaged 100% of rehearsal and performance time. This includes watching for the conductor's cuing style, movements and demonstrations, and listening intently to every instruction. By watching and listening to the conductor, pianists will learn to observe and listen to essential aspects of the choir, such as voice parts that are strong, those that need more assistance, voice blend, and balance. Being punctual, prepared, and engaged are all actions that young pianists can take on their journey to co-leadership.



The Common Phrase Revised

This article opened with the common phrase heard from conductors: "Watch me [the conductor], and you can't go wrong." With the idea of the pianist as co-leader in mind, I encourage conductors to revise the statement to: "Watch me, listen to the pianist, and you can't go wrong." Ultimately, the conductor recognizing the choral pianist as co-leader is not for the pianist-it is for the choir. The inclusion of the pianist in such a statement demonstrates to the choir the trust and reliability between conductor and pianist. Thus, the choir will have assurance that they are a team-in it together through the highs and lows, no matter what. The choir deserves a great conductor and a great pianist-a great coach and assistant coach—great co-leaders.

Jaime Namminga is assistant professor of music at Susquehanna University in Selinsgrove, PA.

NOTES

- ¹ Kughwa Lee, "Developing the Skills Necessary to Become an Effective Collaborative Choral Pianist," (doctoral diss., Texas Tech University, May 2016): 15, 19.
- ² Jenna Braaksma, "The Choral Accompanist: A True Team Player," *American Music Teacher* (Aug/Sep 2017): 24.
- ³ Lee, "Developing Skills," 29.

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