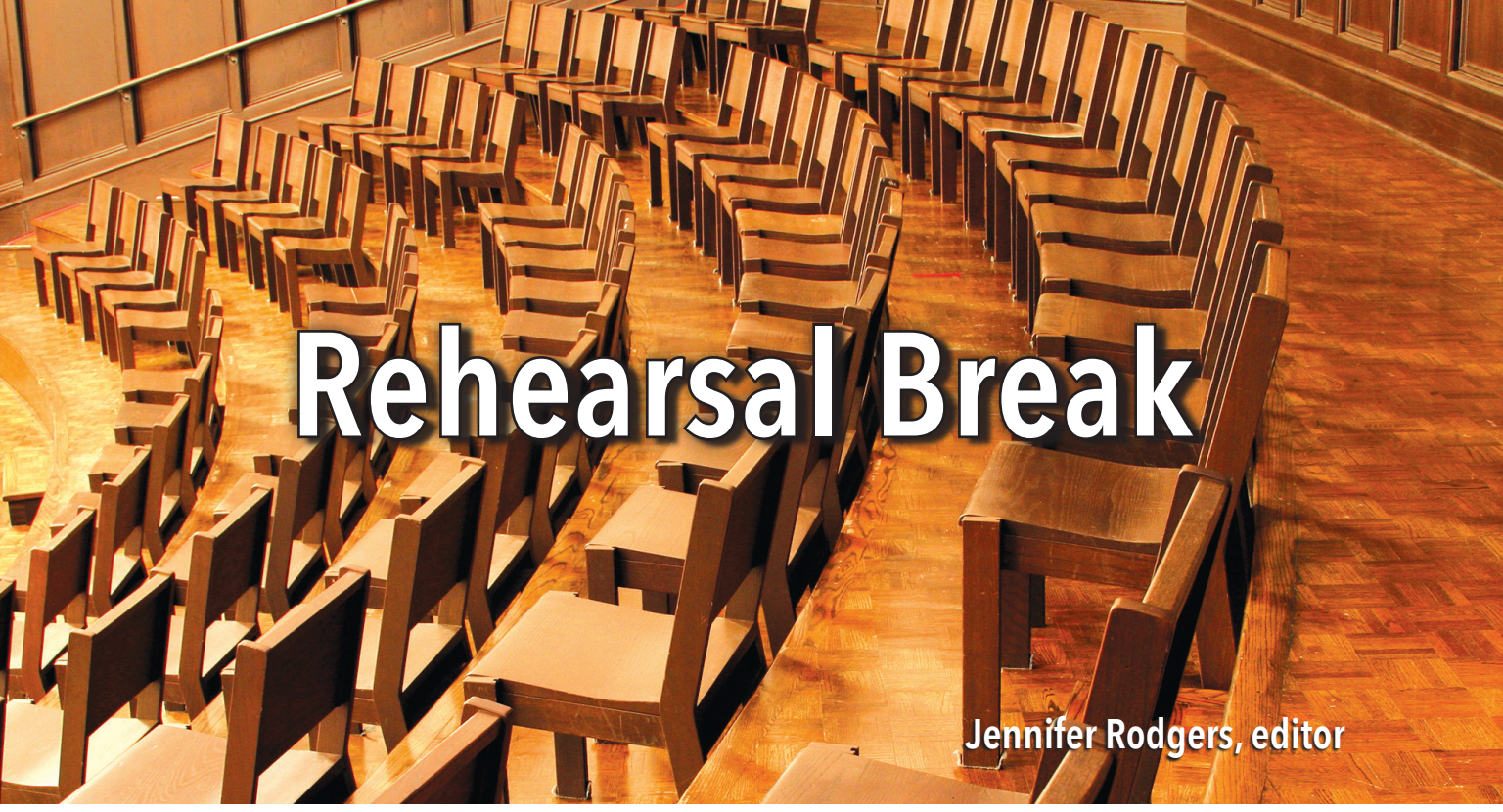

Rehearsal Break

Jennifer Rodgers, editor

Choral Singing in Tune

by Jameson Marvin

Column Editor's Note: *This Rehearsal Break article is the first in a three-part series on intonation from three different authors. Their approaches span from tuning practices and exercises in harmonic context to the detailed management of alternative tuning systems.*

Achieving good intonation might be the most elusive of all the challenges of the choral art. Learning notes, rhythms, dynamics, and phrasing can be achieved in a relatively straightforward manner, but singing in tune requires a particular consciousness each time. Singers might be able to do it once, but there is no guarantee they can do it again!

What is singing in tune? In this article, to sing in tune means to unify the pitch, bringing all voices into like frequencies and compatible timbres. In choral singing, this means that unified pitch depends upon matched vowels; thus, the vowels and the pitch must be tuned. Singing in tune requires good ears from conductors and singers and absolutely consistent choral reinforcement.

The process of teaching a choir how to sing in tune is essentially a circular one. The conductor measures the sound produced by the choir against their "mental-aural image" (the mind's ear), part of which includes the conductor's pitch standard, who feeds this information back to the choir, and the choir then reshapes the sound to the director's standard. As the process continues in rehearsal after rehearsal, inevitably the choir's sound and pitch standard begin to more clearly match the conductor's mental-aural image. Therefore, the responsibility for maintaining good pitch lies ultimately with the singers.

The Conductor's Ear and How to Listen

Communicating the mental-aural image to singers requires time, patience, discipline, and experience. Over time, a conductor's ears and the singers' ears become the channel through which all sound information is transferred. The ear is the yardstick—the "truth teller," the intermediary—that makes possible the conductor's capacity to realize their conception of the sound.

The better the conductor's ear, the more effective the conductor will be in attaining that mental-aural image. Every bit of information is gathered by the ear. The information received can be categorized into four

elements: duration, pitch, timbre, and intensity. Each musical element contributes to the composite picture of the whole. The conductor's ear has the capacity to hear all four elements at the same time. The mind has the ability to focus selectively on one element at a time and the capacity to assimilate information on all levels simultaneously.

Each rehearsal presents a fresh opportunity to expand the ear's capacity. Concentration is the key. Conductors who possess the capacity to concentrate reap the rewards of increased auditory perception and will be able to identify information related to pitch, duration, timbre, and intensity more quickly, plus expand to expressive elements of dynamics, phrasing, articulation, and linear direction. As the ear improves, the conductor's and the singers' abilities to evaluate this information will be greatly enhanced. This provides the conductors and the singers a tremendous amount of knowledge around which to improve consistently.

Turning the Dial: A Tool for Accurate Listening

Picture a dial. While the choir is singing, slowly turn the dial and focus your concentration on one element of music at a time. Spend considerable time listening to a single element—*pitch*, for example. While listening to pitch accuracy, you will also hear: *timbre* and *amplitude*; thus, *accuracy* will become accurate in listening to *intonation, balance, dynamics, articulation,* and *phrasing*. All of these characteristics may enter into your assessment of the choir's pitch.

Next, picture the dial and turn it to *timbre*. Vowels, color, sonority, and texture all are facets of timbre upon which to concentrate. Next, listen for *duration*. This is a complex activity, because duration will overlap with pitch, timbre, and intensity. Specific aspects of listening to duration will be inevitably linked to rhythmic accuracy, ensemble rhythm, tempo, metric structure, and the speed of harmonic rhythm. The expressive elements—dynamics, phrasing, articulation, rubato, and linear direction—will be served by duration and intensity.

Now, turn the dial to *intensity*. Dynamics and color may leap into your ear; balance considerations may become immediately apparent. One may focus on each of the expressive elements of music by using "the dial" and listening for separate elements such as articulation, phrasing, linear direction, or rubato. Intensity, however, serves dynamics, phrasing, and balance most substantially.

Turning the dial focuses the conductor's auditory concentration on one element at a time. The capacity to hear increases when the conductor's full energy is focused like a laser beam, with total concentration on each element, one by one. In this manner, and with repetition through rehearsals, a conductor can build an acute degree of auditory perception. Conductors can also learn to hear on more than one level at the same time and for longer periods, given accrued experience, sufficient aural aptitude, and the ability to concentrate.

One cannot listen too long, however, without forgetting what one has heard. "Click off" in the brain each element you would like to address as you measure the choir's sound against your mental-aural image. To avoid breaking the singers' concentration, do not stop to correct them until at least three or four specific "problems" have occurred. By vocal part, measure numbers, and beat—in that order—describe what you want (positive). Compare it verbally against what the choir did (negative) and describe what you want again (positive).

Over time, this sequence will provide the choir with positive incentives for change. If the "why" of what you want is clearly explained, you will have provided the choir with substantial positive imaging to accomplish your goals. This process enables the conductor to motivate the choir to give meaningful aural life to the written composition while upholding and realizing the composer's sound image. And always remember, while correcting specific aspects of a choir's rendition, it will be important to affirm other aspects of their rendition that you like. It is particularly important to point out positive changes as they develop the tuning response you are striving for.

One can listen horizontally or vertically. Both types of listening open conductors' ears to hearing duration, pitch, timbre, and intensity. Thoroughly preparing the score, and therefore your ear, serves as a memory bell throughout rehearsal. More importantly, it is the foundation upon which we organize the way we hear. In rehearsal over time, through listening, measuring

the choir's sound against the mental-aural image, and reshaping the sound, the choir's image of the sound grows closer to the conductor's mental-aural image. When the profound experience of "matching conceptualization" occurs, it results in what this author calls ensemble mastery.

Re-hear-sing

It is in rehearsal that each element of the conductor's preparation is drawn together. The conductor will have begun preparation by studying the score. Score study and stylistic insights will have stimulated the mental-aural image. The rehearsal provides the context in which to realize that image. Through the ear, the conductor measures the chorus' sound against their mental-aural image and then implements change. This is rehearsing (re-hear-sing).

In my experience, no aspect of the conductor's process will more directly affect the performance than the conductor's ability to rehearse. Without effective rehearsing, insights into the score will not be realized. No matter how much the conductor is able to hear, no matter how visionary the interpretation, no matter how highly communicative the conducting technique may be, the principal foundation upon which the actualization of the score rests is re-hear-sing.

Score Preparation

Score preparation is key to understanding the composer's mind's ear and the aural imagery of the text/music relationship. The principal elements of pitch, duration, timbre, and intensity have been placed in specific relationship to each other by the creator of the piece. And the interaction of these elements informs a conductor's foundational approach to rehearsing that piece. Through score analysis, a conductor will understand the composer's reasoning for their use of harmony, melody, rhythm, and texture and then develop gestures to highlight expressive nuances: dynamics, phrasing, articulation, rubato, and linear direction. This process directly impacts the development of the conductor's ear for each specific piece, allowing them to evaluate each principal element during rehearsal, achieving both good tuning and aural meaning.

Rehearsing in Stages

During rehearsals, think of learning each piece in three stages: preliminary, technical/learning, and final:

1. *Preliminary stage*, in which the conductor's musical gestures and the expressive qualities are first interpreted by the singers as they get to know a composition, to be studied later in more depth. This first stage opens a window of perception of why the composer set the text with those notes and rhythms, providing a more meaningful goal for learning notes.

2. *Technical stage*, in which the conductor helps the choir to sing the right notes at the right time, in tune, with matched vowels, in balance, rhythmically aligned, to develop ensemble. The technical stage represents about 70 percent of the work.

3. *Final stage*, in which the expressive qualities introduced in the preliminary stage are overlayed with ensemble development achieved in the technical stage. The inherent expressive qualities can now be fully developed at a more sophisticated level, integrating them with the foundation of ensemble pitch, rhythm, and balance.

There are many advantages to this three-stage approach:

1. Singers will have a meaningful musical context in which to place the technical work, and their motivation for learning the notes, rhythms, and texts with good pitch, pulse, and balance will be greatly enhanced.

2. In developing from the outset a musical understanding of the composer's gestures, the singers will be more inspired to serve both the technical demands of the composition and the conductor's methods for achieving them.

3. During the final stage, a higher level of attention can be paid to the expressive elements—the dynamics, phrasing, articulation, linear direction,

and rubato—that shape and give beauty and meaning to the composition.

Throughout the technical and musical stages, the conductor makes clear to the singers that they are expected to mark their parts. When a singer feels responsible for marking their part, the singer launches a learning process that empowers each singer with the knowledge and ability to effectively make *change*—the core of the rehearsal process.

In the technical work, separate words from music. Do this early in the rehearsal process, because text impinges upon pitch, duration, timbre, and intensity. The variety of vowels in words, placed in vertical and horizontal sonorities, does not offer a unified sound continuum in which to place an aural foundation for the acquisition of good pitch, ensemble-rhythm, and balance. Find the sound first and then the text through that sound.

Specifics for Rehearsing Intonation

There are many strategies related to attaining excellence in choral tuning. Primarily, these strategies are embedded with rehearsal techniques. A conductor must understand the relationship of pitch and tuning to other rehearsal elements, such as rhythm, tempo, and acoustics, as well as the importance of rehearsal sequence to developing good intonation. The sections below offer specific strategies in these areas.

Tuning Relationship to Rehearsal Sequence

Choral singers learn faulty pitch intonation and imprecise rhythmic habits at the initial sight-reading note-learning stages. Correct the pitch of the notes and rhythmic alignment throughout these early stages. It is during the early note-learning stages that associative pitch problems develop. They arise from the subtle ear/voice coordination required in "finding the right note." After learning the right note, a singer frequently fails to maintain the proper pitch of the note. When poor associative pitch habits continue, singers invariably and unconsciously perpetuate these habits long after the notes are learned. So, at the initial stages, correct the notes as well as the intonation of the notes.

Once the notes are well learned, have the choir sing them on a semi-staccato "doo." Insist on a pure "oo" vowel without the diphthong associations of words like "few" or "due." Think of the staccato as a very short sustain rather than a quick hitting attack (as this author calls it: "legato doo with space between notes"). Finally, in tune, together, and in balance, have the choir sing a true "legato doo." Once the sound and the expressive gestures over numerous rehearsals are heard on a beautiful, pure "legato doo," the foundation upon which the text can be placed will be set. This, in tune, produces a unified sound-image greatly improving ensemble intonation, rhythm, and balance.

Tuning Relationship to Rhythm and Pulse

Achieving ensemble rhythm is an essential part of a conductor's focus on tuning, as it will be the foundation upon which the ensemble places pitch, balance, timbre, intensity, and the expressive elements. There are a number of techniques that can help sensitize singers to ensemble rhythm, and developing a unanimous group pulse is key. Here is one exercise for developing a shared pulse in an ensemble that is evoked through feeling silence together:

- Sing the first six bars of "My Country Tis of Thee" at a typical modest tempo and showing the pulse of three beats per bar: "My country tis of thee, sweet land of liberty, of thee I sing."
- Ask the singers to face away from each other and, on your cue, silently hearing that melody and text on that same pulse, sing only the last word ("Sing") loudly when they arrive at it.
- There will likely be many different endings. Have a laugh, then repeat until enough individuals have felt an aligned pulse.
- Sing the melody together and see if the ensemble's rhythm has improved. Most likely it has!

This is a general technique to help to sensitize singers to ensemble pulse; however, overlaying the text will impact that shared pulse considerably. Energy and

concentration must be directed toward ensuring the accuracy of ensemble rhythm when text is sung. Consonants take time. They affect vertical and horizontal alignment. Be alert to the fact that ensemble rhythm may slow down when singing with text.

Tuning Relationship to Tempo

1. Do not allow singers to "mix functions" between pitch and tempo. For example, the functions of slowing down or singing a *diminuendo* contains an associative tendency: *flatting.* Counteract these tendencies by separating those functions. For example: sing a diminuendo while sharping the pitch or speed up the tempo during a diminuendo. Remind singers of these associative tendencies in rehearsal.

2. Avoid singing at extreme dynamic ranges until notes and rhythms are secure. Very soft dynamics require focused breath control and often invite flat pitch; loud dynamics sung for considerable time invite vocal forcing and fatigue. Rehearse at a comfortable level; I prefer *mf*. Later, incorporate the proper dynamics.

3. After the notes and gestures are well learned, if pitch problems persist, transpose the key a half-step up or down. This procedure modifies the physiological association of how the notes felt in the voice when sung in the original key. This technique counteracts many of the "associative pitch" problems that have accrued over time.

Tuning Relationship to Key and Acoustics

1. F major frequently goes flat when continuously used. After the fundamental stages of learning are complete, in *a cappella* compositions change the key to F♯ or E depending upon vocal balance and color considerations. The key of C major often flats; change to C♯ or B; compositions in B♭ can flat. Change the key to B or A. The associative minor keys of d, a, and g often goes flat. Change to the minor keys of c♯, a♯, f♯.

2. At the initial rehearsal, centrally placing the piano might facilitate quicker note learning; however, as soon as possible, wean singers from piano dependence. The sound of the piano greatly affects the ability of singers and conductors to accurately hear intonation, rhythm, balance, and diction. When a piano doubles all parts, singers tend not to listen to each other's parts.

3. The piano is tuned to equal temperament to accommodate the "Pythagorean flaw." The Pythagorean flaw is a term this author uses for a natural acoustical phenomenon: an irreconcilable "flaw" in acoustics. It is measured by the audible pitch difference between an "E" (for example), the overtone produced by the fundamental pitch "C" at the frequency ratio of 5:4, that produces a pure major 3rd in the air. Listen for that pure E!

4. Singers often tire or lose concentration in rehearsals, and energy is the key to good pitch production. Stand up, move around, exercise, be humorous, offer consistent positive support and enthusiasm; take a break!

5. Rehearse in rooms that have clear, non-reverberant acoustics yet reasonable room ambience. Avoid low ceilings, acoustical tiles, rugs, curtains, and low-roofed acoustical shells.

6. Singers often hear best when placed facing each other. They especially hear well in horseshoe standing positions that create an "acoustical cup" to resonate the choral sound. This is particularly important when singing in difficult acoustical situations (such as outdoors or in heavily carpeted rooms).

7. To attain a high degree of clarity when standing or sitting in horseshoe positions, it will be very important to have considerable space, about one arm-length, between singers.

8. Acoustical shells are especially helpful in projecting the sound of large choirs in large concert halls.

Placing the choir in an "acoustical cup" with singers an arm-length apart with or without acoustical shells considerably aids choral resonance in most concert halls.

9. Sit and stand in positions that allow each singer to take responsibility for their own pitch, rhythm, and balance without interference from another singer of the same vocal part. In rehearsals and concerts, try singing in mixed quartets, for example STAB or BATS. These positions help the acquisition of good individual intonation and independent rhythmic security.

Summary of the Rehearsal Philosophies

Rehearsing at the highest levels of the choral art is a vastly complex and rewarding process. There is something uncanny about the essence of the rehearsal process, the ability to develop in choral singers a technical and musical concept of the score that matches that of the conductor's mental-aural image. Developing matching conceptualizations is inevitably inspiring, perhaps fundamentally spiritual. How does the conductor draw the choral singers toward the compelling image they envision? Through creating a unanimous vision of it: *a unity of ensemble.*

This unity is evident when a choir sings in tune. It is relatively easy to learn notes on a page, but singing in tune requires responsibility and dedication on the part of the conductor and the singers working together. While disagreement concerning details of interpretation and differences of opinion regarding sound ideals are as common as conductors are different, few musicians or knowledgeable listeners fail to recognize an outstanding performance when they hear one.

An outstanding performance communicates. It enriches lives and rejuvenates spirits. Good rehearsals do the same thing. How can rehearsals best serve music's ultimate value? By focusing the energy of singers on the inherent elements of music that, when revealed, give meaning to its structure and order as it develops in time. In the process of unifying the elements of music, we create ensemble unity in *duration, pitch, timbre,* and *intensity.* When the choir attains "ideal" ensemble unity, it clarifies the form, the function, and the design of the sound continuum of the music. It reveals the music's total structure, reinforcing meaning and enhancing its capacity to communicate. And, finally, it is through meaningful communication that we realize music's profound capacity to inspire. Following this rehearsal philosophy results in what this author considers *a mastery of choral ensemble.* Each rehearsal is an opportunity to expand (and improve) the ear's capacity for focusing our "dial." As we concentrate on single elements discussed in this article such as dynamics, phrasing, texture, and balance, we practice building auditory concentration, which, in turn, expands our ability to achieve good intonation.

It is important to point out that all of the principles upon which effective rehearsals are based require two essential ingredients: energy and desire. The quality of the energy that the conductor gives to the singers will be the primary motivator that stimulates them to implement the conductor's ideas. The conductor who is motivated by the quality of the music, by the conceptual vision of it, and by the joy received in realizing the conception cannot help but project positive energy. Enthusiasm, encouragement, patience, humor, and positive reinforcement will serve the conductor well, as choral singers are engaged in the rehearsal process. The joy that students experience in singing with inspired conductors is transformed into a collective energy that creates a unanimous desire for a unity of ensemble. CJ

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