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From the Editor

Looking Back, Reaching Forward

Mark Nabholz

THE CHORAL SCHOLAR & AMERICAN CHORAL REVIEW
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"To be ignorant of what occurred before you were born is to remain perpetually a child. For what is the worth of a human life unless it is woven into the life of our ancestors by the records of history?"
—Marcus Tullius Cicero, 106–43 BC

With this issue, the NCCO receives custodianship of two of the longest-running choral research publications in the United States: the *American Choral Review*, and *Research Memorandum Series*. You will see from our new masthead that *The Choral Scholar* and *American Choral Review* are merged into one publication. Acknowledging our indebtedness for nearly six decades of sterling choral scholarship, this first issue of *The Choral Scholar & American Choral Review* is published under the numbering system of that venerable antecedent publication: Volume 58, Number. 3.

There will be other substantive modifications as these streams converge:

- The entire *ACR* archive, from its first issue in 1958 including 37 years with Alfred Mann at the helm, will soon be freely available on the NCCO website. Open access to this wealth of choral research will benefit the profession world-wide.
- The *Research Memorandum Series* has served well as a bibliographic source since January 1959 as a cooperative venture between the American Choral Foundation and the ACDA. It now is refitted to become an annual collecting point for dissertation and thesis abstracts on topics in choral music, published in one digital volume annually. In time The *Research Memorandum Series* archive will also be freely available at *ncco-usa.org*.

I am sobered by the responsibility of following in the steps of the previous editors of the *ACR*, Alfred Mann (1961–98), William Weinert (1999–2011), James John (2011–17), and Timothy Newton (2017–20); and those who have so capably preceded me as editor of *The Choral Scholar*, founding editor David Schildkret (2009–10), Dennis Shrock (2010–11), Sean Michael Burton (2014–19) and, in the interim prior to my appointment, Elizabeth Swanson.

With Alfred Mann at the helm, Bach is understandably writ large throughout the annals of the *American Choral Review*. His memorable collaboration with Don Neuen and the Eastman Chorale in preparation of the *B-Minor Mass* was profoundly formative during my time as a graduate conductor at the Eastman School in the late 80s. In this issue we reflect on the legacy of the publications founded by Margaret Hillis and the American Choral Foundation, and feature two articles about contemporary works that draw sustenance from compositional practices of the past, specifically the influence of J. S. Bach. Under the same cover, readers will find a significant article on injury prevention for conductors that will likely impact the way we teach and practice our craft in the future.

Looking back, reaching forward.

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A Legacy Continues

Cheryl Frazes Hill

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The NCCO has recently taken up the mantle of an important project: carrying on the work begun by Dr. Margaret Hillis and Dr. Alfred Mann. NCCO will be making available two choral research publications developed by both Hillis and Mann, during the formative years of the choral profession. *The American Choral Review* and *Research Memorandum Series* were first created by the renowned conductor and Founder/Director of the Chicago Symphony Chorus, Margaret Hillis. Less well known about Margaret Hillis was her establishment of the American Choral Foundation in 1954, an organization whose mission it was to promote quality choral performances throughout the United States. The American Choral Foundation (1954) predated the American Choral Directors Association (1959) and was in fact the first organization of its kind to foster support during the nascent period of the choral profession. Hillis understood, through her own struggles as a young choral conductor during the 1950s, the challenges one faced in accessing quality repertoire and support materials. Through the establishment of her Foundation, Hillis aimed to resolve these issues. In 1956, under the auspices of the Foundation, Hillis formed an Association of Choral Conductors as a result of thousands of requests the Foundation had received from choral conductors nationwide for advice, assistance, and guidance on an array of subjects within the choral field.

Hillis developed three divisions within her Foundation, one of which included a Research and Publications Division, established in 1956. This division was designed to provide Association members access to information on performance practice and scholarly guidance in pedagogical, historical, and analytical approaches to choral repertoire. One of several ways Hillis advanced this information was through a quarterly publication, known then as the *Bulletin of the American Concert Choir and Choral Foundation Inc*, first distributed in June, 1958. An additional publication, entitled *Research Memorandum Series*, was launched in January, 1959.

Topics of early *Bulletin* publications included articles such as "The Choirmaster and the Renaissance Choral Repertory" by Noah Greenberg, Music Director of Pro Musica, (October 1959), "Music and Worship in the Liberal Church," by Robert Shaw (June 1961), "Recollections of Paul Hindemith," by Bernard Heiden, Indiana University, (April 1964), "A Preface to Monteverdi's *Orfeo*," by Denis Stevens, Columbia University, (Summer 1967), along with interviews, book reviews, special issue collections, composer monographs, studies of music periods, studies in choral techniques, essays, and many other features remaining relevant and valuable today. The *Memorandum Series* provided members with information on recommended editions,

selective listings of various choral works by genre, composer, or era, guides to recordings, and other helpful lists. Examples of topics covered in the *Research Memoranda* included listings of "Choral Music of Beethoven," by Elliot Forbes (January 1962), "Recommended Editions of Choral Works," by Alice Parker (December 1959), "Music for Chorus Without Tenors," by Richard McChesney (October 1968), "Bibliography of Choral Music for Three-part Male Chorus," by Leonard Van Camp, and "Writings on the Choral Music of Johannes Brahms" (September 1985), among many other topics remaining timely today.

The strength of these publications rested upon the quality of the editorial staff. After several years of oversight by the Foundation's first administrative director Milton Goldin, who served as editor of the *Bulletin*, it was taken over by esteemed musicologist Dr. Alfred Mann in 1961. Shortly thereafter, the name of the *Bulletin* was changed to the *American Choral Review* and remained under Mann's brilliant guidance for 37 years. Unfortunately, maintaining and distributing the beautifully bound Review on a quarterly basis, along with six yearly publications of the *Memorandum Series* became financially prohibitive for Hillis's American Choral Foundation to sustain.

In 1985, Hillis passed the Service Division (including the Research and Publications of the Foundation) on to the Association of Professional Vocal Ensembles, which would soon become Chorus America.

By 1991, both publications appeared as part of *The Voice of Chorus America*. For many years thereafter, Chorus America has made back issues of the publications available upon request of choral researchers, who have continued to take advantage of this superb scholarly collection. Recently, Chorus America decided to discontinue oversight of the *American Choral Review* and *Memorandum Series*, and now NCCO has stepped forward to assume this task. These invaluable resources provide a glimpse into the history and development of the choral profession. NCCO will be providing a searchable Digital Archive of this treasured collection, a tremendous resource for our scholarly work. These materials will be accessible in the months to come, thanks to those at NCCO who stepped forward to carry on the legacy set forth by Margaret Hillis and Alfred Mann, both of whom devoted their lives to these scholarly contributions, along with those editors of both publications who continued their work. It is fitting that NCCO has taken up this cause!

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October 15, 2020

NCCO Executive Board
c/o Dr. Mark Nabholz
Mississippi College
200 S. Washington Street
Clinton, MS 39056

Dear Executive Board:

On behalf of the Board of Directors and Staff of Chorus America, we write to express our appreciation to the National Collegiate Choral Organization (NCCO) for taking on the publication of the *American Choral Review (ACR)* and the *Research Memorandum Series (RMS)*.

Since their founding in the late 1950's and early 1960's under the auspices of The American Choral Foundation, these two biannual journals have been vital research tools for the choral field. Chorus America has been honored to publish the journals since 1985. Shaped by decades of volunteer leadership, the *ACR* and *RMS* have explored choral repertoire, issues of performance practice, and bibliographic resources, introducing new research and work to conductors and scholars throughout North America and beyond.

As an organization with expertise in scholarly research that serves the specific needs of university and collegiate conductors, choral faculty, and music students, NCCO is an ideal steward to further this legacy. We are especially grateful that NCCO's plans include making digital searchable archives of the *ACR* and *RMS* freely available to the public so that the journals' many years of scholarship and research can be a resource for all.

We offer our deepest thanks to the Executive Board and leadership of NCCO for your vision and dedication to our field, and look forward to a bright future of the *ACR* and *RMS*.

With gratitude,

Brian Newhouse
Chair, Board of Directors

Catherine Dehoney
President and CEO

American Choral Review
Journal of The American Choral Foundation, published by Chorus America | Timothy Newton, Editor

October 18, 2020

NCCO Executive Board
c/o Dr. Mark Nabholz
Mississippi College
200 S. Washington Street
Clinton, MS 39056

When Alfred Mann founded the *Review* in 1961, it filled a void in the field of choral music research, along with literature review, and intriguing concert reports from several cities. William Weinert served the journal so well for more than a decade, followed by James John until 2017, alongside editorial board members especially David DeVenney and Michael Alan Anderson. In just over a half century, the dissemination of research and the sprouting of internet conduits have increased to the point where I believe consolidation makes perfect sense.

As a founding Associate Editor of *The Choral Scholar*, I am delighted to see these fine research journals co-exist. I am delighted by the exposure both will receive through the diligent of work of the NCCO's editorial team, and for the new searchable digital archive of The *American Choral Review* that will prove a useful tool for any researcher of choral music. I wish Mark Nabholz and the editorial board, both present and future, a strong legacy built upon the heritage of Professor Mann and the others before me.

Timothy Newton
Editor, *American Choral Review,* 2017–2020

Injury Prevention for Conductors:
Risk Factors, Exercise Interventions, and Ergonomic and Curricular Recommendations

Caron Daley, Greg Marchetti, and Matthew Ruane

Abstract

Although conductors are professional movers, injury prevention for conductors is largely unexplored in empirical studies of musician injury and pedagogical literature. Several unique factors may increase a conductor's risk for playing-related musculoskeletal disease, including the facilitative nature of the conducting instrument, the need for adaptable movement patterns, and the environmental and occupational stresses inherent in the role. Preventing conductor injury begins with increased somatic awareness of the body and attention to postural alignment and stability. Conductors are advised to develop increased upper body fitness, and five representative stretching and strengthening exercises are described and illustrated. Ergonomic considerations are also essential, including placement of the music stand and podium, choice of standing or sitting posture while conducting, and use of appropriate eyewear and footwear. Conductor educators are encouraged to take a frontline stance on injury prevention at all levels of instruction. This includes a greater emphasis on embodied learning, gestural practice habits, and self-care/body-conditioning for a career as a professional mover.

The conductor is a conspicuous figure in music. As a professional mover, teacher, researcher, psychologist, and arts advocate, a conductor displays myriad musical and non-musical competencies in what Demaree and Moses call an "intricate vocation."[1] Although archetypical concepts of a music conductor reveal a degree of gender and racial homogeneity, the role of a conductor is rapidly embracing new definitions and expressions. The complexities of the craft of conducting have likewise been demystified. Historically considered to be unteachable, courses in conducting are now an integral component of undergraduate music curricula and amply described in textbooks and instructional materials.[2,3] Currently, pre- and in-service conductor training is widely available in the United States, with programs tailored to all levels of and types of conducting.

[1] Robert Demaree and Don Moses, *The Complete Conductor: A Comprehensive Resource for the Professional Conductor of the Twenty-First Century* (Englewood Cliffs: Prentice Hall, 1995), 2.

[2] National Association of Schools of Music Handbook, 2019–20, 102.

[3] Alan Lee Baker, "Creating Conductors: An Analysis of Conducting Pedagogy in American Higher Education" (PhD diss., Stanford University, 1992), 22, ProQuest Dissertations & Theses Global.

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One dimension of conducting that needs more focused attention in education and training is injury prevention.[4] Repetitive bodily movement places conductors, as well as all musicians, at risk for injury. The cognitive and psychological stressors inherent in the role may compound the effects of dysfunctional movement patterns and postures, increasing the risk of injury. The role of a conductor, traditionally framed as decision-maker or "knower," may actually prevent a conductor from admitting to a physical concern or from seeking additional education or training in the vital subject of injury prevention. Traditional approaches to conductor education may likewise be a contributing factor. With an emphasis on learning via technical or pictorial description, observation of other conductors, and apprenticeship under a master conductor, conductor education has historically favored a disembodied approach to an embodied art form.

How then can a conductor prepare for a professional mover role in a holistic and healthy fashion, balancing the physical and mental demands of the profession? The purpose of this article is to:

(1) provide an overview of general risk factors for musicians and unique risk factors for conductors,

(2) review common injuries or other physical issues evident in conductors,

(3) introduce a sample set of preventive exercises to develop upper body muscular flexibility and strength in conductors,

(4) make recommendations regarding the ergonomics of rehearsal and performance, and

(5) advocate for the inclusion of injury prevention education in all levels of conducting instruction.

[4] Robert Sataloff, "Arts Medicine: An Overview for Choir Conductors," *Choral Journal* 49, no. 5 (Nov 2008): 31.

Risk Factors Playing-Related Injuries

The term injury is used to describe the application of energy (amount, duration, and frequency) to a body tissue that exceeds its physiological tolerance and capacity to resist the energy input, impairing normal function. Injuries that most commonly affect music performers are caused by prolonged exposure to the gradual effects of repetitive activities. The term "playing-related musculoskeletal disorder" (PRMD) was proposed by Zaza to describe any health condition where pain and other symptoms present a barrier to playing or performing at the performer's accustomed level.[5] Pain or other symptoms such as muscular weakness and sensations of numbness/tingling can indicate impairment of muscle tissues, joints, nerves, blood vessels, or any combination of these structures.[6] Combined estimates suggest that upwards of 50% of performers will sustain a PRMD at some point in their career,[7,8] with women at higher risk for PRMDs than men.[9]

In injury epidemiology, the term risk factor is applied to any characteristic associated with an increased likelihood of creating injury occurrence. Typically, risk factors are classified into two categories: modifiable risk factors and nonmodifiable risk factors. In both categories, a risk may be intrinsic to the person (e.g., body-

[5] Christine Zaza, "An Operational Definition of Musicians' Pain Problems [abstract]," in *Abstracts: 8th World Congress on Pain (International Association for the Study of Pain)* (Seattle: IASP Press, 1996): 69.

[6] Christine Zaza and Vernon T. Farwell, "Musicians Playing-related Musculoskeletal Disorders. An Examination of Risk Factors," *American Journal of Industrial Medicine* 32, no. 3 (1997): 292.

[7] Zaza, "An Operational", 292.

[8] P.T. Schaeffer and J. Speier J, "Common Medical Problems of Instrumental Athletes," *Current Sports Medicine Reports*, 11, no. 6 (2012): 316.

[9] Laura M. Kok, Bionka M. A. Huisstede, Veronique M. A. Voorn, Jan W. Schoones and Rob G. H. H. Nelissen, "The Occurrence of Musculoskeletal Complaints Among Professional Musicians: A Systematic Review," *International Archives of Occupational and Environmental Health* 89, no. 3 (April 2016): 377.

related) or extrinsic in the environment (e.g., venue or instrument).[10] Surveys of the general community of musicians and in those seen in health care settings have identified factors that can contribute to the development of PRMDs. The factors predisposing musicians to injury are similar to other occupational groups: (1) factors related to a person's body (age, body build, level of fitness and rehabilitation of previous injuries), (2) factors related to the physical act of playing or singing (quality of the instrument, musical technique, and practice habits) and (3) factors related to the performing environment (playing-related or personal stress and occupational demands).[11] In interpreting risk factors, associations (or correlations) are not synonymous with causation. For example, while injury is not correlated to age alone, an increased likelihood of injury due to other age-related factors can be identified; factors such as years of playing, level of fitness, or other age-related conditions (e.g. osteoarthritis).

Research studies involving instrumentalists reveal the nature and prevalence of PRMDs in specific musician groups. Most studies report that string playing of shoulder-mounted instruments poses the most significant risk, with upper arm, shoulder and neck pain complaints being the most prevalently reported conditions.[12] Shoulder, arm, wrist, and hand pain complaints predominate among players of other instruments.[13,14] The general population of performers and teachers report upper/lower back and neck pains, considered by many to be a natural consequence of the rigors of practice and performance.[15] While significant clinical conditions such as inflamed muscles/tendons, ligament sprain, nerve compression, and focal neurological conditions do present in performers, the most common complaints observed in musicians seen for clinical care involve widespread pain throughout the upper extremity region.[16]

As pain due to overuse is a common diagnosis in many forms of PRMD, a full description of the complexity and interaction among risk factors is beyond the scope of this article. However, it can be noted that it is not difficult to envision when considering the multiplicity of personal, performance-related, and environmental factors confronting musicians, the likelihood that pain can become a common reality in the pursuit of artistic excellence and economic stability. The performer may also come to view pain as a natural consequence of high-level performance, especially in the early stages of injury. As a result, the performer may be motivated to push the tissue tolerance limits in practice, rehearsal, and performance without allowing adequate time for recovery. This behavioral drive can serve as a foundation for conditions that will eventually prevent a performer from making music at the accustomed level of artistic quality.

Unique Risk Factors for A Conductor

The occurrence of PRMDs among singers and conductors is less reported compared to instrumentalists, leading to inadequate data

[10] National Association of Schools of Music and Performing Arts Medical Association, *Basic Information on Neuromusculoskeletal and Vocal Health Information and Recommendations for Administrators and Faculty in Schools of Music* (2014): II–11.

[11] Richard Norris, *The Musician's Survival Manual: A Guide to Preventing and Treating Injuries in Instrumentalists* (St. Louis, MMB, 1993), 2–6.

[12] Patricia Blanco-Pineiro P, M. Pino Diaz-Pereria M and Aurora Martinez, "Musicians, postural quality and musculoskeletal health: A literature review," *Journal of Bodywork and Movement Therapies* 21, no. 1 (January 2017) (2017), 161–163.

[13] Blanco-Pineiro, "Musicians", 161–163.

[14] Frederico Barreto Kochem and Silva Julio Guilherme, "Prevalence of Playing-related Musculoskeletal Disorders in String Players: A Systematic Review," *Journal of Manipulative and Physiological Therapeutics* 41, no. 6 (2018): 546.

[15] Cecilia Wahlström Edling and Anncristine Fjellman-Wiklund, "Musculoskeletal disorders and asymmetric playing postures of the upper extremity and back in music teachers: A pilot study," *Medical Problems of Performing Artists* 24, no. 3 (September 2009): 115.

[16] Christopher B. Wynn Parry and Raoul Tubiana, "Dystonia", in *The Musicians Hand: A Clinical Guide*, ed. Ian Winspur and Christopher B. Wynn Parry (London: Martin Dunitz, 1998): 5.

regarding the nature of the injury in these groups. Brandfonbrener suggests that conductors may be susceptible to musculoskeletal injury involving the back, neck, and shoulders, as well as possible injuries associated with misuse of the baton.[17] Kella suggests that specific conducting activities, such as strongly accented marcato conducting or slow conducting with an overabundance of muscular tension, could lead to muscular overuse. When gesturing, conductors should always use the rebound of the beat to dispel physical tension, counteracting the possible damaging effects of excessive kinetic force.[18] Several common podium habits may also be to blame, including a forward-leaning posture, twisting the upper body without moving the lower body, locking the knees, raising the shoulders, excessive flexion of the joints, and vocal misuse. The intensity of a conductor's performance, as well as hectic travel schedules that do not allow for physical rest, may also serve to create uniquely "tension-inducing lifestyles."[19]

Revisiting the nature of the conducting instrument underscores a plan for prevention and intervention. Musicians typically begin their conducting study after gaining proficiency in instrumental or vocal performance. As such, conducting is considered a secondary instrument and technique generally acquired as an adult. Conducting requires a new set of physical and aural proficiencies that relate only tangentially to instrumental and vocal techniques. Even though most emerging conductors have performed in an ensemble led by a conductor, their knowledge and experience of conducting is rarely firsthand. For some students, prior experiences in athletics, martial arts, or dance provide a foundation for conducting movements, while for others, conducting instruction is an initial experience in coordinated body movement. This new physical education requires addressing preexisting dysfunctional movement patterns, structural issues in posture, and perception of body image—factors that may slow conducting learning. Identifying these types of limiting factors may be beyond the scope of the course or the conductor-educator's comfort level and expertise—a rationale for an interdisciplinary approach to conductor well-being.

In addition to acquiring new technical skills, conducting involves learning other skills such as leadership, making decisions about the score, diagnosing errors in rehearsal, and planning a rehearsal sequence. For many emerging conductors, these new and broad-reaching skills can introduce anxiety. The public nature of practicing conducting puts the individual conductor's personality and body shape fully on display. The stress only intensifies when a podium experience (a public demonstration of a conductor's emerging skill set) is evaluated and graded.[20] These stressors can compound as a conductor moves into dress rehearsal and performance, where a new venue, different acoustics, the positioning of performers, and ensemble collaborations may result in the need for a conductor to use movement patterns that are reactionary to the new environment.

It is also important to consider the facilitative nature of the conductor's body. Unlike instrumentalists, a conductor does not hold or touch a physical object (other than a baton). The conductor does not emit sounds, but rather uses arm and body movements to evoke sounds from others. For this reason, a conductor engages in "free" versus "fixed" use of the extremities. Free extremity use can make regulation of muscle activity more challenging and highly variable.[21]

[17] Alice Brandfonbrener, "The Etiologies of Medical Problems in Performing Artists in Performing Arts Medicine," in *Performing Arts Medicina*, ed. Robert T. Sataloff (San Diego: Singular, 1999), 40–41.

[18] Kella, "Medicine", 60.

[19] Brandfonbrener, "Etiologies", 40–41.

[20] Baker, "Creating Conductors", 18.

[21] Federicko Pozzi, Hillary A. Plummer, Natalia Sanchez, Yunai Lee, I and Lori A. Michener, "Electromyography Activation of Shoulder and Trunk Muscles is Greater During Closed Chain Compared to Open Chain Exercises," *Journal of Electromyography and Kinesiology* (in press).

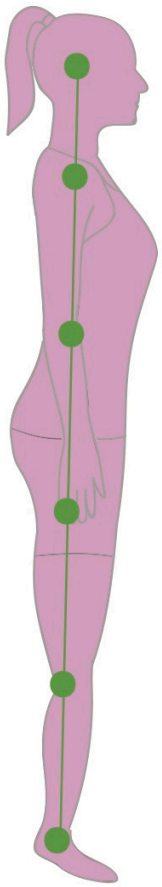
In order to acquire the skilled, controlled movements required in conducting, there must be an interaction between stored physical memories and real-time consciousness of movement. An instrumentalist relies on previously-stored movements learned through repetition on any given instrument. As these movements are refined and improved, less physical effort is required. On the contrary, a conductor relies less heavily on stored movements, reacting to changes in the ensemble's performance to dictate gesturing. A conductor can self-monitor movement through listening to the ensemble and regulating the somatic sensations of the moving body, which requires a strong integration of body and mind. A conductor, unaware of his/her movements, can compromise communication with other musicians or subconsciously model postures and movements that can produce harmful effects on ensemble members.

Common Physical Issues in Conductors
Postural Alignment

Injury prevention begins with an understanding of postural alignment. The term postural alignment refers to the total coordination of all joints of the body while assuming any position. Optimal postural alignment provides the foundation for the performer to remain stable and balanced while executing the required movements, expending minimal energy and stress on body structures (joints, muscles, and supporting tissues). Postural stability and balance with minimal muscular effort afford two benefits: (1) a stable foundation allowing the arms to smoothly perform the varied and repeated complex upper body motions required for conducting for the duration of a performance, and (2) flexibility to move smoothly and adjust efficiently in response to changing aural and physical stimuli. Postural alignment for effective conducting requires the ability to execute a variety of smoothly coordinated upper body movements while maintaining stability throughout the trunk and legs to balance the body's weight.

Standing static posture is generally defined by vertical alignment of the ears, shoulder, hips, and ankles, with weight equally supported by the feet (Figure 1). The anatomical landmarks in Figure 1 denote typical neutral standing postural alignment and should be considered a reference point. Variations in neutral static postural are common between individuals and do not necessarily indicate a source of conducting-related dysfunction. These variations can be caused by many factors: body type, joint flexibility, muscle compensations, and existing health conditions. While it is during conducting movements (i.e. dynamic postures) that problems can be realized, alterations in static postural alignment may be indicative of potential sources of dysfunctional movement throughout the upper body and spine.

Figure 1: Typical Alignment



Two common variations in postural alignment can be observed in a conductor: lordosis (excessive low back curvature) and kyphosis (excessive forward mid-back curvature). Figure 2a illustrates lordotic posture, an excessive backward curvature in the lumbar spine, with a compensatory curve in the upper back and neck. This posture can promote the development of areas of alternating excessive tension and laxity throughout the spine. The second postural variation (Figure 2b), illustrates reduced trunk stability, a flattened lumbar spine, and excessive thoracic kyphosis. The head and shoulders are positioned forward and downward in both variations, resulting in reduced foundational arm stability, creating possible muscle overuse. Over time, pain throughout the upper body and shoulder joint dysfunction can further impair a conductor's ability to execute smooth and varied movements needed to guide musical performance.

A key element of a conductor's dynamic posture relates to the sense of sight. Constantly alternating eye contact between an ensemble and a score is accomplished by head, shoulder, and upper body movements. The musical score is generally positioned low in the visual field, while the performers are generally positioned at eye-level or above. The varied head and neck movements of a conductor, if performed on a faulty postural base or with a persistent forward head (Figure 2b) can result in a cyclical pattern of pain and movement compensation. This may be manifested most significantly in the upper back and scapula muscles, as they must work harder to provide stability in increasingly dysfunctional positions.

Injury Prevention Exercises: Postural Alignment, Stretching and Strengthening

The following exercise suggestions have been selected by the authors to address strength and flexibility deficits that can affect a conductor's upper-body posture. Completing regular strengthening and stretching exercises enables a conductor to maintain optimal alignment and

Figures 2a and 2b: Common Postural Variations

posture on the podium, putting less stress on vulnerable anatomical structures. All exercise, set, repetition, and resistance guidelines presented are suggestions. Prior to starting this or any exercise regimen, a discussion with a physician, physical therapist, or other healthcare professional is advised.

Stretching routines aid a conductor in increasing muscle length and joint range of motion and promoting smoothly coordinated movement. Not all types of stretches are equal in outcome. Static stretching or holding a position in which a stretch can be "felt" for a set amount of time, will result in an increase in joint range of motion. Importantly, research has shown that static stretches immediately preceding a physical activity, such as conducting, can temporarily decrease muscle performance. Dynamic stretches, by contrast, are carried out by slowly moving back and forth through a joint's range of motion, and do not decrease muscle performance. In fact, some research has found that muscular performance is slightly increased following dynamic stretching. Additionally, blood flow to involved muscles is increased, resulting in greater oxygen transfer.[22] Thus, dynamic stretching should be performed prior to rehearsal and performance, while static stretching should only be completed on non-rehearsal and non-performance days or after completing rehearsals and/or performances.[23,24] Joint range of motion improves immediately following stretching, with a permanent improvement appearing three to four weeks after a regular stretching is established (at least 2–3 times per week). All stretches should be performed so that tightness or minor discomfort is felt, although care should be taken to avoid stretching to the point of pain.[25]

Shoulder Raising and Lowering with Coordinated Breathing

This first exercise strengthens back musculature to help hold the scapulae in an ideal position. During conducting, the scapula must remain stable in order to support arm movements. Paradoxically, at the same time, the scapula must be allowed to freely move against the back in a well-coordinated movement with the arm, especially when the arm is elevated above shoulder level. This exercise also cues proper upper body posture, avoiding a biomechanically-harmful "rounded shoulder" position because the anterior chest muscles are stretched during the elevation phase of the exercise. Additionally, the coordinated breathing aspect of this exercise can promote relaxation prior to a performance. This exercise is demonstrated in Figures 3a and 3b with a resistance band but can be performed without one as well. Both variations are described below.

- Begin with the neck bent forward, shoulders rotated inward, forearms crossed, palms facing the floor, and hands held in fists resting on the front of the hip bones (Figure 3a).
- Inhale deeply, lift and uncross arms, rotate shoulders outwards, turn palms to face behind the body, open fists, and extend neck upward until facing forward (Figure 3b).
- Pull shoulder blades towards each other and down.
- Hold this pose and inhale.
- Next, exhale, returning to the starting position at a controlled speed.

[22] David G. Behm, Anthony J. Blazevich, Anthony D. Kay, and Malachy McHugh, "Acute Effects of Muscle Stretching on Physical Performance, Range of Motion, and Injury Incidence in Healthy Active Individuals: A Systematic Review," *Applied Physiology, Nutrition, and Metabolism* 41, no. 1 (2016): 1–11.

[23] Riebe, *American College*, 169.

[24] Phil Page, "Current Concepts in Muscle Stretching for Exercise and Rehabilitation," *International Journal of Sports Physical Therapy* 7, no. 1 (2012): 110.

[25] Deborah Riebe, Jonathan K. Ehrman, Gary Liguori, and Meir Magal, *American College of Sports Medicine's Guidelines for Exercise Testing and Prescription* (Philadelphia: Wolters Kluwer, 2018): 170.

- A resistance band can be used to make this exercise more challenging. Hold the resistance band in the palms of both hands with as little slack as possible to allow for full movement through the exercise (Figures 3a and 3b).
- Perform 2–3 times per week. Each repetition should take 5–8 seconds.
- Complete 10 repetitions total, stretching to the point of feeling tightness or mild discomfort.

Doorway Chest Stretch

Rounded shoulder posture can increase the likelihood of shoulder injury.[26] One purported cause of rounded shoulder posture is a characteristic pattern of shortened chest and shoulder muscles and weakened neck and mid-back musculature that leads to postural dysfunction.[27] The muscles of the anterior chest are commonly shortened in individuals displaying this pattern. Stretching anterior chest structures and strengthening back and scapular musculature can aid in maintaining optimal upper body posture.

Developing muscular endurance should be prioritized because the act of conducting involves prolonged episodes of repetitive movement. A higher repetition of low resistance strengthening exercises has been shown to produce the most significant improvements in achieving increased muscle endurance. Muscle strengthening exercises improve posture, promote smoothly coordinated movement, correct imbalances in muscle strength, and increase muscular endurance.

Figures 3a and 3b: Shoulder Raising and Lowering with Coordinated Breathing

[26] Omid Alizadehkhaiyat, Margaret M. Roebuck, Ahmed T. Makki, and Simon P. Frostick, "Postural Alterations in Patients with Subacromial Impingement Syndrome," *International Journal of Sports Physical Therapy*, 12, no. 7 (2017): 1111.

[27] Eun-Kyung Kim and Jin Seop Kim, "Correlation Between Rounded Shoulder Posture, Neck Disability Indices, and Degree of Forward Head Posture," *Journal of Physical Therapy Science* 28, no. 10 (2016): 2929.

Perform each of these exercises 2–3 times on non-performance days of the week, completing 2 sets of 10 repetitions with a 2-minute rest in between sets. Strengthening workouts should be a minimum of 48-hours apart. In addition, strengthening workouts should not be performed on the same day as a performance to avoid muscular fatigue.

Chest Stretch Exercise

- Stand at an open doorframe.
- Extend upper arms out to the side and parallel to the floor, with both elbows flexed to 90° and forearms resting vertically on the doorframe (palms touching the frame). The elbows should be slightly below the level of the shoulders.
- With arms anchored on the frame, step into the doorway with the right leg. The stretch should be felt across the front of the chest.
- Stretch to the point of feeling resistance. This should not be painful.
- On performance days, perform dynamically, slowly moving through the range of motion, stopping at the end for 1–2 seconds before returning to the starting position. Each repetition should take 5–8 seconds. Complete 10 repetitions total.
- On non-performance days, hold the stretch for 20 seconds for 3 repetitions (total 60 seconds). Repeat with the left leg stepping into the doorway, alternating leading leg between repetitions (Figure 4a and 4b).

Figures 4a and 4b: Doorway Chest Stretch

As the act of conducting involves prolonged episodes of repetitive movement, developing muscular endurance should also be prioritized. To achieve increased muscle endurance, higher repetition of low-resistance strengthening exercises has been shown to produce the most significant improvements. Muscle strengthening exercises improve posture, promote smoothly-coordinated movement, correct imbalances in muscle strength, and increase muscular endurance. Perform each of these exercises 2–3 times on non-performance days of the week, completing 2 sets of 10 repetitions with a 2-minute rest in between sets. Strengthening workouts should be a minimum of 48-hours apart. In addition, strengthening workouts should not be performed on the same day as a performance, to avoid muscular fatigue.

Isometric Internal and External Shoulder Rotation

The muscles of the rotator cuff function to hold the humeral head (the ball of the bone in the upper arm) against the joint surface of the scapula during active shoulder movement. When these muscles are weak, the humeral head can be pulled upwards by the deltoid muscle, impinging on tissues that lie between the humeral head and acromion (the roof of the shoulder complex). The muscles of the rotator cuff also act as internal and external rotators of the shoulder. Strengthening the rotator cuff musculature through resisted internal and external rotation training will improve their overall function during overhead activities, including any conducting gestures that rise above the head.

This first variation works to strengthen shoulder internal rotation.

- Bend the right elbow to 90° and position it so that it is touching the side of the torso.
- Place the right palm on a wall or other sturdy surface. The forearm should be perpendicular to your chest.
- Next, attempt to rotate the right hand in towards the belly button. The wall will provide enough resistance so that the right forearm does not shift.
- The right elbow should remain in its starting position throughout this exercise.
- Hold the muscle contraction for 5 seconds. Repeat on the left side.

This second variation will strengthen shoulder external rotation.

- Begin with the right arm in the same starting position as with internal rotation but reposition so that the wall is providing resistance to the outside of the right hand.
- To perform the exercise, rotate the right forearm away from the torso and into the wall. Again, the wall should prevent your forearm from moving; the focus is on contracting the muscles.
- Hold for 5 seconds.
- Repeat on the left side (Figure 5a and 5b).

Figures 5a and 5b shown on next page.

Figures 5a and 5b: Isometric Internal and External Shoulder Rotation

Wing-arm Breathing with Scapular Retractions

This exercise serves three purposes. First, it strengthens the upper back muscles, which hold the scapulae in ideal posture to decrease the likelihood of shoulder injury resulting from upper extremity activity. Second, it stretches the muscles of the anterior chest, which can become tight secondary to sustaining a nonoptimal posture in which the thoracic spine is excessively curved forward. Finally, the encouragement of slow, deep breathing can help to decrease stress.

- Begin standing with both arms resting at either side.
- Bend elbows to 90° and turn both palms, so they face upwards.
- Inhale deeply, rotating both forearms outward from the torso. The elbows should remain in their starting position, in contact with the torso.
- While inhaling, focus on using the muscles in the upper back to pull both shoulder blades together. Hold this position until ready to exhale.
- Upon exhaling, slowly return to the starting position (Figures 6a, b, c, and d).

A resistance band can be used to provide resistance to make this exercise more challenging. Hold the resistance band in the palms of the hands, with as little slack as possible to allow for full movement through the exercise.

Figures 6a, 6b, 6c, and 6d shown on next page.

Figures 6a and 6b: Wing-arm Breathing with Scapular Retractions

Figures 6c and 6d: Wing-arm Breathing with Scapular Retractions

Chin Tucks

This exercise works to strengthen the intrinsic muscles of the anterior neck, which can help to hold the head in optimal posture. The head is fairly heavy, at up to 1/7 of the total body weight. When the head is leaning forward, the neck and upper back musculature are placed under significant stress compared with a neutral head position.[28] This can lead to the unfavorable postures that increase the likelihood of shoulder injury given the motions in conducting. The muscles at the posterior neck are also stretched when performing this exercise, increasing their available range of motion.

- Rest the dominant hand on the chin to begin the exercise, applying no force.
- Without moving the hand, pull the head directly backward. To keep the head moving straight back and not pivoting up or down, focus the eyes on a spot on the wall, which is at eye-level. The desired sensation is a contraction of the muscles on the front of your neck and a stretch in the back of the neck.
- Hold this position for 3–5 seconds, and then relax slowly back to the starting position (Figure 7a and 7b).

Ergonomic Considerations of Rehearsal and Performance

A comprehensive musculoskeletal wellness program addresses the ergonomic factors that can impact conducting. Prior to leading rehearsals, conductors should complete a physical warm-up. Conductors are well-versed in the use of warm-ups for singers but may be less familiar with the notion of warming-up the body for conducting. After a dynamic warm-up, rehearsals should be structured with less physically demanding pieces toward the beginning, progressing to

Figures 7a and 7b: Chin Tucks

[28] Kim, "Correlation", 2929.

more challenging work at the mid-point of the rehearsal. Rehearsal breaks should be implemented before the onset of any physical discomfort. A conductor is well-served to observe the temporal relationship between conducting and the onset of any discomfort and attempt to structure breaks to keep discomfort at bay.

To minimize physical disruption to conducting activities, a conductor may find it beneficial to proactively plan adjunct activities such as page-turning. Sudden and rapid changes in movement patterns can increase stress and discomfort. The potential for injury can also increase during preparation for events such as recitals, concerts, or tours. These changes in workload and associated psychological demands can create rapid increases in length, complexity, and effort on the podium. In these cases, a conductor should increase rehearsal frequency rather than duration, and take frequent breaks.

Returning to Conducting After Injury

The following suggestions are meant to serve as general principles for post-injury return to full conducting function, and with optimal individualized guidance from an injury management professional to prevent re-injury.

Rest and Assessment

Essential to injury recovery from a conducting injury is rest and an assessment of symptoms and overall factors by a healthcare professional. If any nonconducting activities appear to be contributing factors to the injury, these activities should be avoided until symptoms disappear. In order to return to the podium, a conductor should focus on identifying the exact practice interval (time and effort) that allows the body to remain symptom-free. The next stage would be to introduce a gradual increase in exertional effort within that same time period. The final stage would be to gradually increase the duration of performance sessions (e.g., 20–30 minute increase per week) with a constant vigilance for symptom provocation. A conductor may also need to revisit conducting techniques, with a focus on reducing overly large and energetic gesturing.[29]

Line of Sight

In the rehearsal setting, a conductor's posture will be affected by the configurations of the rehearsal space, such as the placement of the music stand, conducting stool, podium, and ensemble. Ideal positioning of the music stand will allow a conductor to view the music at eye-level, but this would severely limit communication with the ensemble. Head, neck, and upper back postures will be driven by the need to alternately look at both the score and the ensemble. Positioning the stand as high as possible in the lower half of the field of vision will support a more neutral upper body position, thus freeing arm movement. To accomplish this, a conductor should position the stand further away from the body, to lessen the angle while looking at the score. If a conductor uses visual correction, positioning the stand at a height that optimizes the corrective prescription parameters will help, but conductors should also consider having dedicated eyewear for conducting activities. If it is within the artistic practice of the conductor, memorizing the score can facilitate upright posture and optimal communication with the ensemble.

[29] Kella, "Medicine", 54.

Sitting or Standing

Conductors should also weigh their choice of sitting versus standing while conducting. Standing allows for optimal breath function, compared to sitting.[30] Static standing postures will result in prolonged contraction of leg muscles, reducing blood flow. Muscle contractions help maintain blood supply to working muscles, reduce fatigue, and prevent the natural tendency for fluid to accumulate in the lower leg due to the effects of gravity. When a conductor must stand for a prolonged period of time, a well-balanced posture should be maintained as well as alternating between equal weight distribution and gentle weight shifting. Fatigue from prolonged standing can also be lessened by comfortable footwear that provides pressure reduction either in the soles or with the use of supplemental insoles. If a conductor rehearses in a consistent rehearsal space, the addition of pressure-reducing matting can improve the hardness of existing flooring surfaces. These mats allow for a gentle weight shift under the feet when standing in one place, creating alternative muscle activity to reduce fatigue and facilitate a blood flow return to the leg. Walking breaks can also be used to reduce the effect of prolonged muscle use in standing. If seated postures afford more comfort, conductors should choose adjustable-height seating options to vary their posture. Kella warns against "stool tilt" for conductors, a position with one leg on the ground and one leg wrapped around a stool rung. This tilting of the pelvis can result in asymmetry in the spine and back strain.[31]

Medical Management

Finally, it should be recognized that when injury symptoms become a problem, a conductor should seek interdisciplinary medical management with physicians and other personnel familiar with performance injuries, including referrals to service providers such as physical therapists. These professionals can provide individualized rehabilitation interventions to guide a conductor's return to optimal performance and help maintain that level of function upon recovery. Many programs housed in academic institutions have health and rehabilitation services that can provide such expert guidance and be integrated into music program curricula.

Curricular Recommendations for Educators of Conducting Students

A critical function of conductor education is to prepare conductors for the physical and mental demands of conducting, including the development of anatomical or somatic awareness and self-care/body conditioning for a career as a professional mover. While instrumental performers may receive formal instruction on injury awareness and prevention strategies in academic settings, the same cannot be said of educators of conducting students and their students. Injury prevention principles should be integrated early in conductor training as a part of skill development. The dynamic and changing stressors of a conductor's career (new jobs or ensembles, changing demands in repertoire) and the body's aging over time suggest that injury prevention must be an ongoing focus for a conductor.

Like other studio music teachers, conductor educators can play a front-line role in preventing performance injury. In studio, class, and podium settings, conductor educators should take every opportunity to draw attention to the embodied nature of the conducting instrument. Guiding students to sense how a movement feels, rather than how it looks, can increase internal awareness

[30] Shikma Katz, Nissim Arish, Ariel Rokach, Yacov Zaltzman, and Marcus Esher-Lee, "The Effect of Body Position on Pulmonary Function: A Systematic Review," *Pulmonary Medicine* 18, (2018): 170.

[31] Kella, "Medicine", 59.

and regulation of movement. Educators should also carefully evaluate their own bodies, including physique, history of injury, recurring problems with posture or tension, and gestural movement patterns. Injury can result when a conducting teacher imposes certain movement patterns on a conducting student, regardless of the student's physique or bodily experience (prior injuries, prior movement experiences, or body image). Additionally, conducting students may appropriate gestures from teachers that do not fit their bodies. In the event a student encounters discomfort or other difficulty executing conducting movements, it may be prudent to seek consultation with a provider familiar with posture/movement-based problems in performers.

A recent surge of interest in somatic pedagogies and movement methodologies in conducting education has drawn greater awareness of the interrelationship between the body and sound. Movement methodologies prioritize a conductor's somatic perspective, teaching body awareness before movement patterning to help conductors become "informed movers."[32] Tools such as the Swiss Exercise Ball may help conductors to combine somatic awareness with the body's movement through space, a type of awareness described as "kinclusive."[33] Pedagogies such as The Alexander Technique, Body Mapping, Feldenkrais Method®, Laban Movement Theory, Tai Chi, and Dalcroze Eurhythmics may aid in the development of expressivity for conducting, an aspect of a conductor's education that textbooks often fail to develop.[34] While these approaches are widely referenced in recent literature, it remains unclear how extensively these methods are currently integrated into practice by conductors and conductor educators, and what specific conducting functions they serve to develop.[35]

In addition to increased somatic awareness, a conducting student will benefit from healthy practice habits throughout the entirety of a conductor's process—from score study to performance. Score study—the stage in which a conductor prepares to conduct—is typically considered an analytical activity, involving visual analysis and score marking, playing and singing of parts, and background study. A conductor's movement expression, or gesture, is typically considered to be the outcome of that score preparation process. When a conductor waits to practice gesturing movements until rehearsal, the extemporaneous movement patterns may be less than physically optimal. A conductor needs practice skills for performance too, where flexible gesturing allows conductors to adapt to changing aural and environmental stimuli.

Dalcroze Eurhythmics has been proposed as a tool for merging a conductor's study of the music with their awareness of body movement.[36] Dalcroze games, such as stepping to the pulse of the music or travelling through space to show the shape of a phrase, may help to solidify a conductor's musical interpretation. Externalizing the music through whole-body movement also aids in the development of inner hearing of the music.[37] Dalcroze techniques integrate improvisation, a tool that Spaulding suggests can break habits of tension accrued through intense study of a score.[38]

[32] Lisa Billingham, *The Complete Conductor's Guide to Laban Movement Theory* (Chicago: GIA Publications, 2009), xvi.

[33] James Jordan, *Learn Conducting Technique with the Swiss Exercise Ball: Developing Kinclusive Conducting Awareness* (Chicago: GIA Publications, 2002), 23.

[34] Andrew Mathers, "How Theories of Expressive Movement and Non-Verbal Communication Can Enhance Expressive Conducting at All Levels of Entering Behaviour" (PhD diss., Monash University, 2008), 18, ProQuest Dissertations & Theses Global.

[35] Alan J. Gumm and Katherine L. Simon, "Investigation of the Effects of Movement Methods on Functions of Conducting," *Symposium on Music Teacher Education: Research Presentation* (September 2011), 3.

[36] Caron Daley, "Generating Gestures: Using Dalcroze Eurhythmics to Prepare to Conduct," In *The Choral Conductor's Companion*, ed. Brian J. Winnie. (Delray Beach: Meredith Music Publications, 2020).

[37] Caron Daley, "Reimagining Conductor Score Study through the Principles of Emile Jaques-Dalcroze's Eurhythmics," *Choral Journal 58, no. 8* (March 2018): 23.

[38] Crispin Spaulding, "Before Pathology: Prevention for Performing Artists", *Medical Problems of Performing Artists* 3, no. 4 (December 1988): 138.

Baker agrees that improvisation invites conductors out of their musical and physical comfort zones and halts "Immediate Results Syndrome", a desire to achieve a correct outcome on the first try.[39]

An improvisation exercise such conducting a passage three different ways can free the student from a strict musical and movement interpretation of the music, thereby reducing physical and mental tension.

Inclusion of body-based learning in the conducting curriculum is essential, but more than this, ongoing continuing education in body mechanics, stretching, and wellness are needed. Principles of healthy lifestyle and maintenance of overall aerobic and musculoskeletal fitness are also essential to the preparation for and continuation of a career in conducting. More specifically, conductors are well-advised to focus on upper body strength and flexibility for optimal body usage on the podium. In preparation for more intensive conducting schedules or extended works of repertoire, conductors should incorporate practice and rehearsal schedules that build endurance and stamina. Conductor educators should likewise introduce conducting concepts as if teaching a new sport, scaffolding learning and performance experiences to promote physical and mental health.

Injury Prevention Advocacy for the Conducting Professional

A conductor's gestures are ideally the result of a deep integration of mind and body, representative of a conductor's intellectual and artistic impulses, and free from physical hindrance or concern. Several unique risk factors may make conductors more susceptible to injury. These include the facilitative nature of the conducting instrument, the lack of practiced movement patterns, and the environmental and occupational stresses inherent in the role.

A distinct lack of available research on conductor injury prevention suggests that the field has yet to address the issue fully. More research and advocacy are needed. First, empirical research investigating the incidence and type of injuries sustained by conductors at all levels will provide a clearer picture of the issue. Second, prioritizing pedagogical materials and course designs that address injury prevention and body awareness early and often will facilitate a broad awareness of the topic and make an impact on future practice and teaching. Third, advocating for injury prevention as foundational to the body of skills needed for successful conducting among service organizations and accrediting bodies will ensure that injury prevention is thoroughly addressed.

The conducting profession is singular in its demands on the musician. As the profession grows in scope and popularity, an opportunity for conversation about injury prevention exists in diverse domains. The identification of unique risk factors for conductor injury has the potential to guide individual conductors and teachers of conducting in their methods and performance. Implementing appropriate exercise and ergonomic interventions will make a conductor physically prepared and mentally focused with an increased ability to dedicate their energies to delivering optimal musical rehearsals and performances. Inclusion of injury prevention at all levels of conductor education will ensure a healthy future path for the profession.

[39] Baker, "Creating Conductors", 97.

BIBLIOGRAPHY

Ackermann, Bronwen, Driscoll, Timothy R and Kenny, Diana Theodora. "Musculoskeletal Pain and Injury in Professional Orchestral Musicians in Australia." *Medical Problems of Performing Artists* 27, no. 4 (December 2012): 181–187.

Alizadehkhaiyat, Omid, Margaret M. Roebuck, Ahmed T. Makki, and Simon P. Frostick. "Postural Alterations in Patients with Subacromial Impingement Syndrome." *International Journal of Sports Physical Therapy* 12, no. 7 (2012): 1111–1120.

Baker, Alan Lee. "Creating Conductors: An Analysis of Conducting Pedagogy in American Higher Education." PhD diss., Stanford University, 1992. ProQuest Dissertations & Theses Global.

Behm, David G., Anthony J. Blazevich, Anthony D. Kay, and Malachy McHugh. "Acute Effects of Muscle Stretching on Physical Performance, Range of Motion, and Injury Incidence in Healthy Active Individuals: A Systematic Review." *Applied Physiology, Nutrition, and Metabolism* 41, no. 1 (2016): 1–11.

Blanco-Pineiro, Patricia M., Pino Diaz-Pereria M., and Aurora Martinez. "Musicians, Postural Quality and Musculoskeletal Health: A Literature Review." *Journal of Bodywork and Movement Therapies* 21, no. 1 (January 2017): 157–172.

Brandfonbrener, Alice. "The Etiologies of Medical Problems in Performing Artists in Performing Arts Medicine." In *Performing Arts Medicine*, edited by Robert T. Sataloff, 19–45. San Diego: Singular, 1999.

Daley, Caron. "Generating Gestures: Using Dalcroze Eurhythmics to Prepare to Conduct," In *The Choral Conductor's Companion*, ed. Brian J. Winnie. (Delray Beach: Meredith Music Publications, In press).

Daley, Caron. "Reimagining Conductor Score Study through the Principles of Emile Jaques-Dalcroze's Eurhythmics," *Choral Journal* 58, no. 8 (March 2018): 18–26.

Demaree, Robert, and Don Moses, *The Complete Conductor: A Comprehensive Resource for the Professional Conductor of the Twenty-First Century*. Englewood Cliffs: Prentice Hall, 1995.

Edling, Cecilia Wahlström and Anncristine Fjellman-Wiklund. "Musculoskeletal Disorders and Asymmetric Playing Postures of the Upper Extremity and Back in Music Teachers: A Pilot Study." *Medical Problems of Performing Artists* 24, no. 3 (September 2009): 113–118.

Gumm, Alan J. and Katherine L. Simon. "Investigation of the Effects of Movement Methods on Functions of Conducting," *Symposium on Music Teacher Education: Research Presentation* (September 2011).

Katz, Shikma, Nissim Arish, Ariel Rokach, Yacov Zaltzman, and Marcus Esher-Lee. "The Effect of Body Position on Pulmonary Function: A Systematic Review." *Pulmonary Medicine* 18, (2018): 159–177.

Kella, John J. "Medicine in the Service of Music; Health and Injury on the Podium." *Journal of the Conductor's Guild* 12, no. 1 (1992): 51–64.

Khaiyat, Omid, Margaret M. Roebuck, Ahmed T. Makki, and Simon P. Frostick. "Postural Alterations in Patients with Subacromial Impingement Syndrome." *International Journal of Sports Physical Therapy* 12, no. 7 (2012): 1111–1120.

Kim, Eun-Kyung and Jin Seop Kim. "Correlation Between Rounded Shoulder Posture, Neck Disability Indices, and Degree of Forward Head Posture." *Journal of Physical Therapy Science* 28, no. 10 (2016): 2929–2932.

Kochem, Frederico Barreto and Silva Julio Guilherme. "Prevalence of Playing-related Musculoskeletal Disorders in String Players: A Systematic Review." *Journal of Manipulative and Physiological Therapeutics* 41, no. 6 (2018): 540–549.

Kok, Laura M., Bionka M. Huisstede, A., Veronique M. Voorn, A., Jan W. Schoones, and Rob G. H. H. Nelissen. "The Occurrence of Musculoskeletal Complaints among Professional Musicians: A Systematic Review." *International Archives of Occupational and Environmental Health* 89, no. 3 (April 2016): 373–396.

Lederman, Richard J. "Neuromuscular and Musculoskeletal Problems in Instrumental Musicians." *Muscle Nerve* 27 (2003): 549–561.

National Association of Schools of Music Handbook, 2019–20.

National Association of Schools of Music and Performing Arts Medical Association, *Basic Information on Neuromusculoskeletal and Vocal Health Information and Recommendations for Administrators and Faculty in Schools of Music*, 2014.

Page, Phil. "Current Concepts in Muscle Stretching for Exercise and Rehabilitation." *International Journal of Sports Physical Therapy* 7, no. 1 (2012): 109–119.

Pozzi, Federicko, Hillary A. Plummer, Natalia Sanchez, Yunai I. Lee, and Lori A. Michener, "Electromyography Activation of Shoulder and Trunk Muscles is Greater During Closed Chain Compared to Open Chain Exercises." *Journal of Electromyography and Kinesiology* (in press).

Riebe, Deborah, Jonathan K. Ehrman, Gary Liguori, and Meir Magal. *The American College of Sports Medicine's Guidelines for Exercise Testing and Prescription*. Philadelphia: Wolters Kluwer, 2018.

Sataloff, Robert. "Arts Medicine: An Overview for Choir Conductors," *Choral Journal* 49, no. 5 (November 2008): 24–33.

Schaeffer, Paul T. and Jennine Speier. "Common Medical Problems of Instrumental Athletes." *Current Sports Medicine Reports* 11, no. 6 (2012): 316–322.

Spaulding, Crispin. "Before Pathology: Prevention for Performing Artists." *Medical Problems of Performing Artists* 3, no. 4 (December 1988): 135–139.

Wynn Parry, Christopher B. and Raoul Tubiana. "Dystonia." In *The Musicians Hand: A Clinical Guide*, edited by Ian Winspur and Christopher B. Wynn Parry, 161–167. London: Martin Dunitz, 1998.

Zaza, Christine. "Playing-Related Musculoskeletal Disorders in Musicians: A Systematic Review of Incidence and Prevalence." *Canadian Medical Association Journal* 158, no. 8 (April 1998): 1019–1025.

Zaza, Christine. "An Operational Definition of Musicians' Pain Problems [abstract]." In *Abstracts: 8th World Congress on Pain (International Association for the Study of Pain)*. Seattle: IASP Press, 1996.

Zaza, Christine and Vernon T. Farwell. "Musicians Playing-related Musculoskeletal Disorders. An Examination of Risk Factors." *American Journal of Industrial Medicine* 32, no. 3 (1997): 292–300.

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Drawing The Line:
Caroline Shaw's Use of Baroque Dance Forms in *Partita for 8 Voices*

Joshua Harper

Abstract

In 2013, at just thirty years old, Caroline Shaw became the youngest winner of the Pulitzer Prize for music for her *Partita for 8 Voices*. Outside of the Baroque dance titles "Allemande," "Sarabande," "Courante," and "Passacaglia," the composer gives little other information as to how these dance forms are incorporated into the work. What characteristics did she draw from these dances and the music that accompanied them? Why would a composer in the twenty-first century draw upon forms codified in the sixteenth century to write a new work that sounds nothing like the Baroque forms? This article focuses on the old worlds in which Shaw takes root. It also examines how the salient style features of the dance grow or are manipulated in the first two movements, "Allemande" and "Sarabande," and illuminates these characteristics within Caroline Shaw's prize-winning work.

The connections between Caroline Shaw's *Partita for 8 Voices* and dance suites from the Baroque era may seem distant upon first glance, but in fact the commonalities are direct and intentional. In her Pulitzer winning composition, Shaw uses the centuries old dance forms as the structure and backbone of her remarkable and unique writing. Much like garden follies, the fake ancient ruins found in many gardens, give structure to the new growth, *Partita for 8 Voices* pays homage to the past while being entirely new.

In April 2013 outside of Williamsburg in Brooklyn, composer Caroline Adelaide Shaw received a phone call that would change her life. Shaw had won the Pulitzer Prize for Music for her composition *Partita for 8 Voices*. At just thirty years of age, she became the youngest winner in the Prize's history. Shaw's past musical experiences allowed her to draw parallels from these events and compose one of the most unique and inventive pieces in the modern-day repertoire. *Partita for 8 Voices* tells the story of Caroline Shaw.

On the inside cover of the score Shaw describes the basic architecture and material for the work: "*Partita* is a simple piece. Born of a love of surface and structure, of the human voice, of dancing and tired ligaments, of music, and of our basic desire to draw a line from one point to another." The 2013 Pulitzer Prize committee described *Partita*

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as "A highly polished and inventive a cappella work uniquely embracing speech, whispers, sighs, murmurs, wordless melodies and novel vocal effects."[1] Although the jury and the composer describe the piece in different ways, they both seem to agree on one central detail: the piece embraces a variety of influences. The title *Partita* originated in the Baroque period, and the names of the movements,—"Allemande," "Sarabande," "Courante," and "Passacaglia"—are the names of Baroque dance forms. Her interest in older forms originated with experiences during her year abroad following her graduation from Rice with her bachelor's degree in the Spring of 2004. Shaw was awarded the Watson Fellowship and decided to postpone graduate school, instead taking time to travel abroad.

Shaw lived in Paris and visited a variety of gardens including French formal gardens, English landscape gardens, and Italian Renaissance gardens. While doing a lot of "walking, thinking, and meeting people,"[2] she was also composing, allowing the architecture of those gardens and her experiences with friends to permeate her compositional style. Shaw's was particularly intrigued by the structures known as follies, a feature of English landscape gardens. She describes follies as "fragments of a castle, a construct of something that wasn't there before but a wistful longing of another time. It's just there in the garden off in the distance on a hill, a fragment of a castle—a fake ruin."[3] Shaw parallels this type of artifact in her music, stating that she "puts in references to a music of another time."[4] The connection of old and new worlds evolved into one of the defining features of Shaw's compositional style:

> The follies encapsulate nostalgia—a memory of something past in a little building off in the distance. My music is different from that. Instead, pieces such as *Gustav le Grey* and *To the Hands* nest older music inside of something else. I think making a garden is like making a piece of music: you place memories and design the space as you want it.[5]

Making A Garden: The Creation of Partita for 8 Voices

After her time abroad, Shaw moved to New York City where she began to freelance with multiple instrumental and vocal ensembles. One of the groups she was successfully selected in to was the newly formed vocal octet Roomful of Teeth. The ensemble was founded and is directed by Brad Wells. Wells describes the ensemble as a "vocal project dedicated to reimagining the expressive potential of the human voice."[6] In June of 2009, the newly formed ensemble traveled to the Massachusetts Museum of Contemporary Art (Mass MoCA) for a three-week residency in North Adams, Massachusetts. Wells invited vocal experts from around the world to teach singing techniques not traditionally heard in the Western vocal canon. In order to incorporate these techniques into music that would be performed at the end of the residency, composers were invited to the workshops and members of the ensemble were invited to contribute compositions or improvisational designs as well.

This invitation inspired Shaw to compose "Passacaglia," which became the first movement of *Partita* to be composed. During rehearsal breaks she would "walk around the galleries, listening

[1] http://www.pulitzer.org/winners/caroline-shaw.

[2] Nadia Sirota and Caroline Shaw, "Caroline Shaw Lives Life Beautifully," Meet The Composer, WQXR, podcast audio, September 30, 2014, http://www.wqxr.org/#!/story/meet-composer-caroline-shaw-show/.

[3] Ibid.

[4] Ibid.

[5] Caroline Shaw and Joshua Harper, Personal conversation with the composer, January 10, 2019.

[6] http://www.roomfulofteeth.org/roomful/. Accessed 24 April 2018.

to what was around [her]; listening to what was on the walls."[7] She would write late at night in Wells's studio at Williams College, where Wells is on faculty, before waking up to go to the next Roomful rehearsal.[8] Shaw derived much of the text for her work from the paintings of visual artist Sol LeWitt, whose wall drawings encompass three floors in the massive space at Mass MoCA in the exhibition titled *Sol LeWitt: A Wall Drawing Retrospective*.[9] Shaw had encountered LeWitt's work before, at the installation of his drawings in the Yale University Art Gallery, while pursuing her M.M. in Violin Performance at Yale.

LeWitt's unusual approach to his artistic process is a major influence on Shaw's composition. In the exhibition pamphlet from the Mass MoCA exhibit, Jock Reynolds describes LeWitt's unusual methodology:

> Although LeWitt executed this first wall drawing in his own hand, he quickly realized that others could participate in the making of such drawings, just as musicians are guided by composers' scores to give direction to their individual, ensemble, or orchestral performances.[10]

LeWitt's creative process consists of devising a set of instructions. Assistant visual artists then carry out these instructions to render the works of art, usually large-scale wall drawings. The instructions are typically brief and minimalistic. At the same time, the instructions display rigor, structure, clarity, and precision.

Shaw says, "I saw LeWitt's work, which I felt was talking and representing chaos, with all these little words written on the wall. I thought to myself, 'this sounds like music to me, it sounds like chaotic conversation.' In his paintings, you see the serene, bright, lovely wall of color, but behind that color there are all these technical directions, there's craft behind it."[11] LeWitt's instructions are one of the sources for the text of the work. In the score, Shaw states, "the occasional spoken and sung text pulls from wall drawing directions of Sol LeWitt, square dance calls, found phrases from an urban environment, and original writing by the composer."[12] Shaw was drawn primarily to LeWitt's early period: "I was drawn to his early work because of his use of pencil. I particularly loved how he used the pencil and you could see the instructions for Wall Drawing 305."[13] A set of LeWitt's instructions appears in "Passacaglia," the movement Shaw previously wrote in 2009. In the later addition to *Partita*, "Allemande," Shaw makes the greatest use of LeWitt's writing, employing six sets of wall drawing instructions from his early period as sources for the text. Shaw's encounter with these influences, at Mass MoCA in the summer of 2009, lit a spark that would only grow with each successive summer spent in North Adams with Roomful of Teeth.

In the fall of 2009, Shaw applied to Princeton University's doctoral program in order to pursue composition more seriously. She lived in New York City while pursuing her degree, continuing her work as a singer and violinist, joining the New York-based Red Light New Music ensemble as a violinist. During the 2010–2011 academic year, she rediscovered the Bach solo violin partitas that she had studied during her undergraduate years, and was reinvigorated by their sense of structure and style. During her return to Mass MoCA in

[7] Shaw and Harper, Personal conversation, January 10, 2019.

[8] Anastasia Tsioulcas, "Caroline Shaw, 30, Wins Pulitzer For Music," *Deceptive Cadence* from NPR Classical, April 15, 2013, http://www.npr.org/sections/deceptivecadence/2013/04/15/177348405/caroline-shaw-30-wins-pulitzer-for-music.

[9] https://massmoca.org/sol-lewitt/

[10] Jock Reynolds, *Sol Lewitt: A Wall Drawing Retrospective*, North Adams: MASS MoCA, November 2008.

[11] Caroline Shaw and Joshua Harper, Personal conversation with the composer, October 17, 2017.

[12] Shaw, *Partita for 8 Voices*.

[13] Shaw and Harper, Personal conversation, January 10, 2019.

the summer of 2010, she wrote "Courante,"[14] the second movement to be composed, but the third movement of her suite. With Roomful of Teeth back at Mass MoCA in the summer of 2011, Shaw composed both "Allemande" and "Sarabande." At that point, the four separate pieces had not been performed as a single suite. Shaw said she did not want to take up twenty-five minutes of music on a program, as she felt that might be rude.[15] Although the idea to bring the four movements together began percolating in 2010 during the composition of "Courante," she was not convinced of their formal unity as a suite until 2011.[16] Shaw entertained the idea of recording small "Gigues" during 2012 to add between the movements, but eventually decided that they did not fit the rest of the piece.[17]

The four movements were recorded and released on the group's first CD, "Roomful of Teeth," on October 30, 2012. When she realized that composers may self-submit a piece for the Pulitzer Prize in Music, she decided to submit *Partita for 8 Voices*,[18] mainly to gain exposure for Roomful of Teeth.[19] The work won the prize in 2013.

Character and Style in Baroque Dance Forms

Partita is complex. Identifying its many influences and how they grow like planted seeds throughout each movement demands analysis. The movements of *Partita* pay "sensitive homage to the Baroque dance suite."[20] What stylistic features did Shaw draw from these dances and their music? What characteristics in the Bach solo partitas influenced the work?

Because the partitas of Bach occupy a culminative apex for the partita as a musical form, they provide a helpful comparison to partitas written both before and after (such as Caroline Shaw's) particularly where we can observe points of broad similarity. Shaw herself has said:

> *Partita for 8 Voices* is more tied to dance and dancers than it is to Bach necessarily. It is tied to the ideas of tension and release, but Bach is definitely in the background too—Bach is deeply within my bones.[21]

Shaw was intimately familiar with Bach's *Partita in D-Minor*, BWV 1004. She played the first four movements (all but the "Chaconne") on her senior recital at Rice University. This piece had a substantial impact on her life, not only as a solo violinist, but also as a composer. While she found herself pulled between the musical worlds of the Baroque era and today, there was something about Bach's second *Partita* that has stayed with the composer and influenced her writing:

> My *Partita* parallels more closely with Bach's *Partita in D-minor*, even on a basic level with regard to dances used and number of movements. The D-minor partita is just one of the most gorgeous things ever written. I love the "Allemande" of it so much because it's just a single line. There are no chords, no harmony, and I love that [Bach] said "No, I'm just going to write this weird, solo violin

[14] Ibid.

[15] Shaw and Harper, Personal conversation, January 10, 2019.

[16] Shaw and Harper, Personal conversation, October 17, 2017.

[17] Ibid.

[18] "Music composed by U.S. citizens and premiered in the United States during 2018, in a concert or on a recording, is eligible. After submitting information and payment online, send one (1) recording and score (if available) to address below." - http://bdmentrysite.pulitzer.org/.

[19] Sirota, "Caroline Shaw Lives Life Beautifully."

[20] Anthony Tommasini, "The Pulitzer Prize Was Nice and All, but a Work Is Finally Fully Heard Caroline Shaw's 'Partita' Has Premiere by Roomful of Teeth," *The New York Times*, November 5, 2013.

[21] Shaw and Harper, Personal conversation with the composer, October 17, 2017.

> 'Allemande,'" which is not what you're supposed to do. Instead, he chose the form of a suite as a way to have a lot of fun writing music. At the same time, he made something so deeply profound in the "Chaconne." But even with the "Sarabande"…his "Sarabande" is one of the most beautiful things written ever also. There's a simplicity in that project, a small celebration of music in the solo violin and cello suites that is something I've always admired.[22]

During Bach's time, musicians in Germany and Vienna were absorbing a multitude of outside influences. The rise in virtuosic violin performance which developed in Italy during the early seventeenth century spread quickly to Germany.[23] This Italianate style was combined with the dance music of the French courts, which also found its way to Germany during the seventeenth century. This became known as the German-mixed style,[24] which fueled virtuosic writing by German composers during the early Baroque era. This, in turn, led to the decline of clearly delineated features of the dance genres during the early seventeenth century. Although many features of the dance were carried over from the French courts to Germany, the choreography did not follow to the same extent.

Italian violinists moved to what is now modern-day Germany during Bach's lifetime, and French musicians came to teach dance and dance music to people at the Viennese courts. Sonatas by Italians such as Dario Castello were composed in short phrases, whereas French music of the time was composed in longer phrases, often overlapping with subsequent melodies. In the 1620s, the primary genre of French solo instrumental music began to emerge—the suite. These suites quickly became the standard form for solo instrumental writing, consisting of an unmeasured or semi-measured prelude, allemande, courante, and sarabande. German composers combined these geographical influences and used the stylistic features of the music as they saw fit. The performance was now more determined by the soloist and the composer's interpretation of the form than it was about accompanying social dances. The noticeable characteristics of style in all the dance forms of the time became more amorphous in the hands of composers writing with this mindset.

J.S. Bach's *Partita in D-minor* is a primary example of a composer incorporating characteristics of older dances and updating them.[25] Acknowledging the influence of these characteristics allows us a more focused lens to analyze partitas by composers after Bach. The dance forms evolved in the years leading up to Bach's composition and continued to develop after they were completed. Using influences from France, Italy, and Germany, Bach expanded upon these forms in new ways. The virtuosity of his writing for the solo instrument was a new evolution for the genre, but one that would become associated with the genre as it continued to develop. The dance characteristics of old partitas go far beyond rhythm, meter, or the first few bars of each movement that many scholars say define each movement. Instead, Bach continues to dance throughout, hopping and skipping, celebrating simple melodies, and composing music that would influence composers for years to come. Shaw was inspired by Bach's celebrations, and in turn, creates her own celebrations. Combining the salient features of each dance with her own musical surroundings, Shaw possessed all the seeds necessary to plant her own formal garden.

[22] Shaw and Harper, Personal conversation with the composer, January 10, 2019.

[23] David Ledbetter, *Unaccompanied Bach: Performing the Solo Works*, New Haven: Yale University Press, 2009, 18.

[24] Ibid., 64.

[25] Score: https://imslp.simssa.ca/files/imglnks/usimg/b/b0/IMSLP497336-PMLP244087-bachNBAVI,1partitaIIBWV1004.pdf

Analysis of Partita for 8 Voices*: Allemande*

Allemande	Shaw	Bach
Meter	4/4	4/4
Tempo	Q=130	Unlisted (often c. q=55-60)
Tonal Center	G	D
Movement in Partita	First	First

The first movement sets the musical landscape for the suite. As the allemande was often used to open dance suites in the Baroque eras, Shaw chose to begin her suite this way, even though it was the last movement of the suite that she composed. This decision meant that Shaw was able to look at the three original movements and organize her "Allemande" as a catalogue of techniques, a blueprint for the suite. Shaw's "Allemande" deconstructs many characteristics of the Baroque form, while still leaving some remnants behind. She states that "'Allemande' was written as a way to hint at 'Passacaglia'."[26] *Partita* as a whole includes influences derived from the Baroque dance forms, creative use of text, and the use of extended vocal techniques, including organic and almost chaotic material drawn from the environments that surrounded the composer both leading up to and during the writing of *Partita*. All of these characteristics are introduced in "Allemande."

Renaissance dance master Cesare Negri describes the rhythmic pulse of the allemande dance form as "short-short-long," a rhythmic ratio which can be written as (1:1:2). This rhythmic cell became commonly associated with the Renaissance and Baroque allemandes and permeated the form well into the nineteenth century. Composers often use the short note (or notes) as an anacrusic device to begin the movement, a feature particularly characteristic of French allemandes. This opening rhythmic gesture became a defining feature of many allemandes, including the allemande in Bach's BWV 1004. After "nesting herself within allemandes of the past,"[27] Shaw then chose to transform the ratio, shortening the pickup notes and following them with a much longer note. The opening sequence on the text "to the side" is defined by two sixteenth notes as a pickup to bar one, whose downbeat is a quarter note.[28] This rhythmic gesture is repeated four times by other voices in order to cement the ratio in the listener's ear.

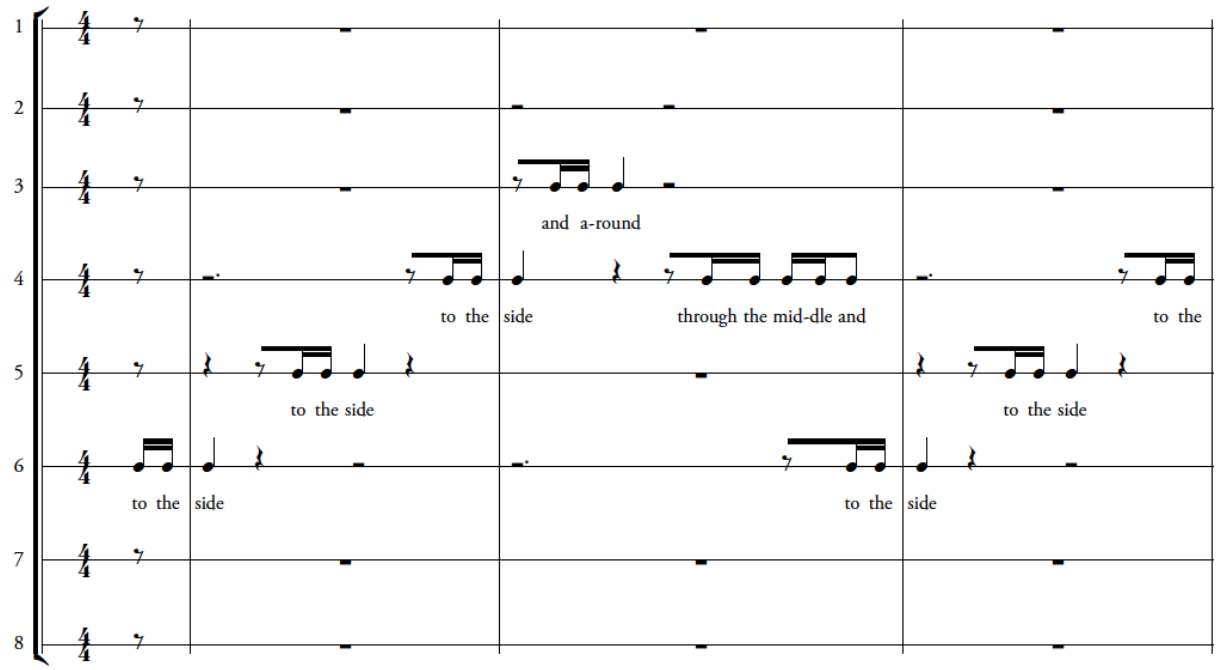
Figures 1 and 2 shown on next page.

[26] Shaw and Harper, Personal conversation with the composer, January 10, 2019.

[27] Ibid.

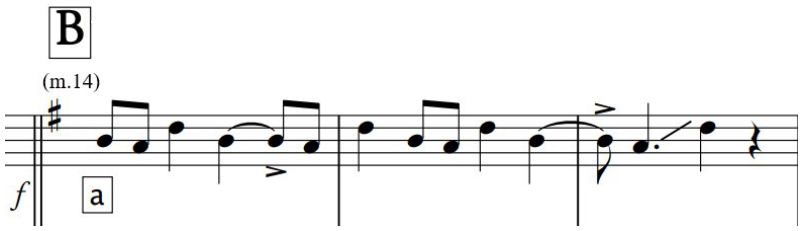
[28] In an early manuscript version of the piece, Shaw notated this downbeat as an eighth note, maintaining Negri's rhythmic idea. Although the most recent version of *Partita* has the downbeat as a quarter note, Roomful of Teeth's recording reflects the original eighth note version.

Figure 1. mm. 1–3 from "Allemande," Caroline Shaw, Partita for 8 Voices*, 2014, unpublished manuscript*



At letter B in m. 14, Shaw then expands the ratio from sixteenths to eighths, followed by a quarter (1:1:2). As the previous measures were completely spoken, this pentatonic melody is the first sung material presented by Shaw. The rhythmic pattern is sung homophonically by all eight voices in parallel thirds. Shaw has used the rhythmic ratio in an augmented form to create the primary theme for what I call the First Strain (mm. 1–54).

Figure 2. Voice 1, m. 14 from "Allemande," Caroline Shaw, Partita for 8 Voices



After moving from the first theme to the secondary theme, whose material is largely based upon traditional Inuit throat games in m. 32, Shaw again expands the rhythmic relationship at letter E. Although the harmony is consistent with the opening theme (oscillating between vi, V, and I in G major), the rhythm is augmented yet again: quarter note, quarter note, half note. This new rhythmic idea closes the First Strain, leading into the Second Strain at m. 55, which departs from this ratio relationship (see graphs at the end of article for better overarching visual representation of the movements). However, at the recapitulation of the theme beginning at letter J, the opening sixteenth/quarter idea returns with vigor (Figure 3). Not only are we able to discover a distinct parallel in this short-short-long ratio to allemandes of the past, it also reveals how Shaw manipulates this idea to work for her own unique sound world. It is in these moments that we find Shaw "nesting," but now with her utterly new and fresh voice at the same time. The rhythmic idea which began as short *pas de gauche* hops has now transformed into material for the primary theme of Shaw's first movement.

Figure 3. mm. 82–84 from "Allemande," Caroline Shaw, Partita for 8 Voices

Shaw's "Allemande" deconstructs many characteristics of the Baroque form, while still leaving some remnants behind. Baroque allemandes were two or three strains; Shaw's contains two primary strains followed by a coda. Shaw also uses a lively duple meter, 4/4 time, and uses extended vocal techniques in place of the ornaments found in Baroque dance suites. Allemandes of the Renaissance and Baroque eras were typically marked *moderato*, but Shaw's is a bit faster than this (quarter note=130). About this, Shaw says: "'Allemande' is somewhat fast, in four, and kind of square, but not all allemandes are in four."[29] In thinking about geographical influences of the dance, the choreographed slides in Renaissance forms can be seen in the notated musical slides and stretches that Shaw often calls for in the movement (including mm. 16, 20, 27, and 39). Shaw also begins the opening of her "Allemande" with spoken text, which permeates the rest of the movement. Allemandes in their original dance form included time and space for conversation—dialogue between guests and dancers.[30] Although this is certainly a new variety of dialogue, prescribed by the composer, the comparison is worth mentioning.

As quoted earlier, the texts in *Partita* come from a variety of sources: "wall drawing directions of Sol LeWitt, square dance calls, found phrases from an urban environment, and original writing by the composer."[31] "Allemande" includes texts from each of these, the only movement of the suite to employ all of them: LeWitt Wall Drawings Nos. 154, 159, 164, 289, 381 and 419, allemande square dance calls, a line from T.S. Eliot's "Burnt Norton" (section V), International Phonetic Alphabet vowel sounds, and original text by Shaw, influenced by the cultural environments surrounding her in New York City and North Adams.

[29] Shaw and Harper, Personal conversation with the composer, October 17, 2017.

[30] See Mather: *Dance Rhythms of the French Baroque*

[31] Shaw, *Partita for 8 Voices*, 2014 (manuscript).

Using parallel words and phrases as a doorway, she traverses time and links worlds that otherwise would not be associated with one another. One example is the pairing of square dance calls and Sol LeWitt's wall drawings. In the same way that a square dance caller directs the shape of the dance, Sol LeWitt provides instructions for visual artists to carry out his Wall Drawings. Shaw was heavily influenced by LeWitt, and wanted to parallel the Renaissance forms with another dance form—square dancing—and then mirror these instructions in her own musical writing. Shaw describes her use of the two texts in "Allemande," stating:

> With square dance calls, the caller yells out these patterns, designing fun things for people to do, using words in this technical way. Square dance calls have this super bright delivery which I also wanted to reflect in the piece. I thought these calls were such a cool parallel with the Sol LeWitt concept of writing directions for a painting. I'm not a choreographer, but I would love to create this swirl of people that suddenly comes together.[32]

The line of text in the square dance call is "to the side and around through the middle and to the side," as organized by Shaw. Using the word "middle" as a doorway, she pivots to LeWitt's texts for Wall Drawing 104: "through the mid-point of the line drawn from the left side." This phrase also incorporates the use of directional cues such as "left" and "right" commonly found in Renaissance dance manuals. In doing so, she joins two artistic directions which have no relationship on the surface, but work together when heard in her piece.

Another example can be discovered in the analogous use of two words in the opening measures. Shaw first begins with the broken phrase "side and around" taken from common square

[32] Shaw and Harper, Personal conversation, October 17, 2017.

dance calls.[33] She then uses this word to parallel the phonetic syntax of the word "allemande" and oscillates between the two (emphasizing "and around") quickly, which results in the two phrases sounding almost identical. This fast juxtaposition can become confusing for the listener, which is precisely Shaw's intent as her music swirls through the text into the opening theme.

"The detail of the pattern is movement" is from T.S. Eliot's "Burnt Norton," V, l. 162. Shaw introduces the words in m. 55 of "Allemande." She explains how she became enamored of this line:

> There is a band called Pattern Is Movement based in Philadelphia, and I followed them on Twitter. I became obsessed with their music. The guy who leads that band, whose Twitter handle is @bearbait, retweeted someone, #thedetailofthepatternismovement, and I had to know what this beautiful, evocative quote was. When I saw the fragment of the poem it hit a strange nerve. I then went back and read the true poem "Burnt Norton" and found it so perplexing and compelling and confusing and beautiful. From there it just lived in my mind. When it occurs in the piece, it is really just meant to depict the sense of when a specific phrase is recurring in your mind and you are trying to create something at the same time. I love how it encourages me to listen more closely, to try and find some detail or some pattern in something—you'll start to find it all over the place in nature and in music.[34]

Shaw decides to use this textual challenge in *Partita* along with two new parallel texts in the Second Strain, beginning m. 63 at letter H (Figure 4). Shaw introduces a new line of text, "Find a way," which is first sung by voice 8. Then, in m. 66, Shaw introduces another line of text in voices 1 and 2, "Fall away." These two lines surround the Eliot text. Both the parallel phrases as well as the Eliot poetic challenge allow Shaw to create a textual world which yearns for something more. This yearning becomes more evident when "find a way" expands to "find a way back home," which then leads to the recapitulation of the first theme at m. 82. This juxtaposition of disparate, yet similar-sounding sources, is part of the inventiveness the Pulitzer Prize committee cited in awarding the prize.

Figure 4 shown on next page.

[33] Although not cited as a definitive source for Shaw, one resource which has many of these calls can be found in: Margot Gunzenhauser, *The Square Dance and Contra Dance Handbook: Calls, Dance Movements, Music, Glossary, Bibliography, Discography, and Directories*. Jefferson, N.C.: McFarland & Co., 1996.

[34] Shaw and Harper, Personal conversation, October 17, 2017.

Figure 4. mm. 62–67 from "Allemande," Caroline Shaw, Partita for 8 Voices

Just as Bach pushed the boundaries of the musical form in his solo *Partita*, Shaw explores these possibilities by bringing in new voices and textures to broaden her own work. One of the most interesting parallels is the use of multiple styles and influences within the pieces. Cultural and national influences from France, Italy, and Germany influenced Bach's Partita. Likewise, Shaw uses vocal techniques not typically found in the traditional, canonic Western styles of singing. The most notable and often used techniques include Inuit throat singing, Korean P'ansori, Georgian pitch stretching, Mongolian Tuvan vocal practices, and yodeling. Shaw develops her own notation to describe these practices, and includes a guide at the opening of the score which she labels "a few notes on the less-usual notes…"[35] (Figure 5). The many text sources can also be seen as another layer of influence derived from a variety of places and times. "Allemande" is the only movement which includes every single one of these extended vocal techniques (the other movements typically use just one or two). Here in "Allemande," Shaw presents us with the complete aural palette necessary to understand and engage with *Partita*.

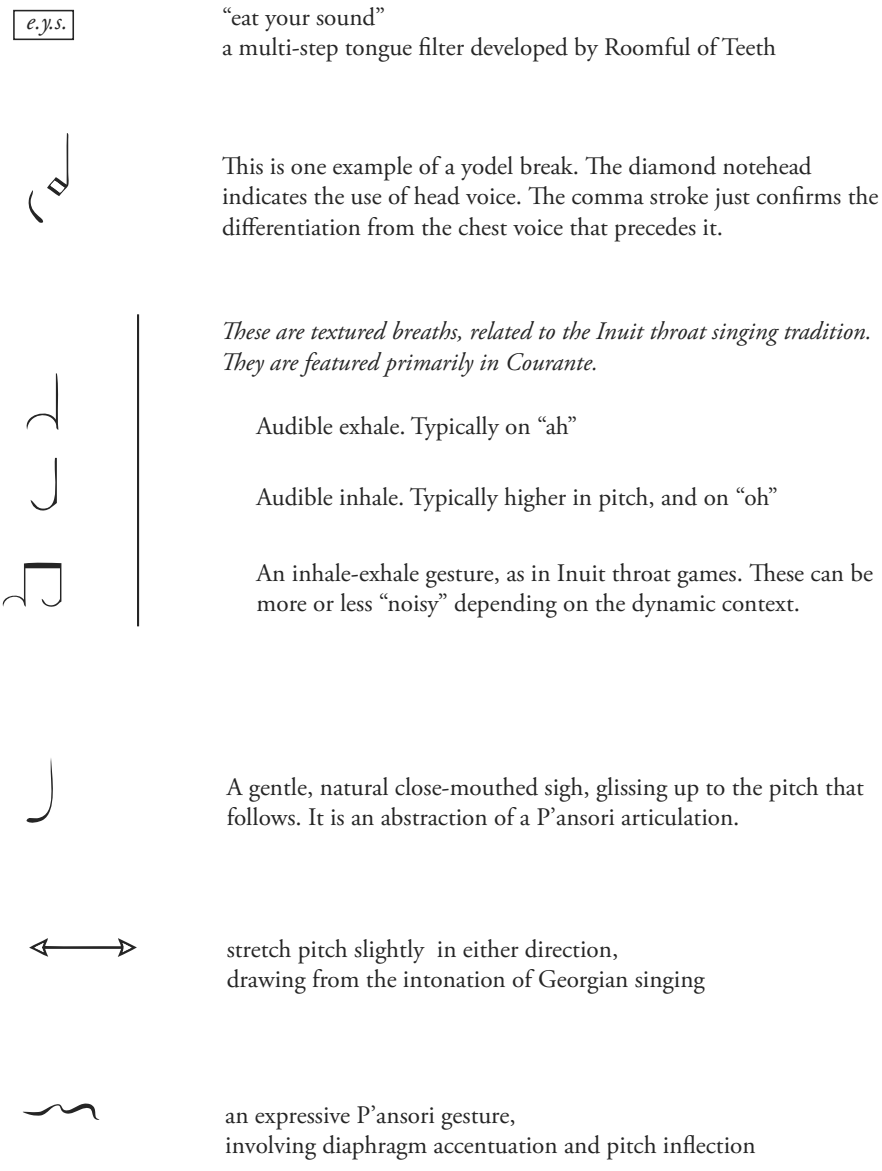
It is impossible to continue this article without acknowledging the controversy that continues to surround *Partita for 8 Voices* and its incorporation of vocal techniques derived from other cultures. In October 2019, performer Tanya Tagaq accused Roomful of Teeth on Twitter of appropriation for its use of Inuit throat singing techniques and both Shaw and the ensemble's failure to acknowledge their techniques' origins appropriately. In a public statement issued on October 22, 2020, Brad Wells and Caroline Shaw both addressed these accusations, stating that they would immediately "credit their teachers and coaches more explicitly in public and in print" and "find opportunities to amplify and support performing artists of katajjaq, and other indigenous musicians, with whom they work, in concrete and monetary ways" amongst

[35] See Figure 5.

other initiatives.[36] Shaw's score is intentionally not made publicly available due to the fact that she continues to make edits to the piece. One would expect that many of these issues of appropriation will be addressed should a score be widely published one day.

The distinct influence of Bach in Shaw's "Allemande" can also be seen in the use of rhythmic, textual, and harmonic sequences. Bach opens his Allemande with basic rhythmic motives (such as a dotted eighth followed by sixteenth and sequential sixteenths) and develops and expands them throughout the movement. Shaw, too, uses ideas from her first few measures, both in the opening section of overlapping spoken text, as well as the rhythmic ratios previously discussed. Bach finds new sequences in the First Strain with which to "have fun," developing thematic and rhythmic material as he progresses.

Figure 5. "A few notes on the less-usual notes..." from Caroline Shaw, Partita for 8 Voices



[36] https://www.scribd.com/document/431605620/Public-Statement

One example of this can be seen in mm. 11–15, where Bach introduces thirty-second notes in order to heighten the rhythmic motion, leading into the final cadence of the First Strain. Shaw's "Allemande" is built around developing rhythmic motives as well. Alongside the previously mentioned rhythmic figure, Shaw's other thematic ideas can be discovered in the introduction of the Inuit throat games (which become further developed in "Courante"), as well as the use of an improvisatory gesture of free oscillation between two pitches. Shaw begins this gesture in the Second Strain, mm. 55–56, and then further develops this idea in mm. 90–95, where both the fourth and eighth voices expand the melodic range of this "noodle-chant"[37] idea. Shaw takes this motif and transforms it into the material found in the coda (mm. 102–105), making what was once a simple dyad into a Mixolydian scale.

Bach relies heavily on dominant chords to signify important events, particularly when the chord functions as a dominant seventh. Bach also withholds specific notes of the diatonic scale in order to present them only when he needs to catch the listener's attention, not just to signify the conclusion of specific melodic material. Examples include the G♯ in m. 7 of Bach's "Allemande" and the E♭, which does not appear until m. 18 in the Second Strain (representing the Neapolitan sixth, in particular, in m. 31). Shaw does this as well in her Second Strain, with the notable use of D♯ in m. 96 and B♮ found in free m. 102, signaling the modulation to B major (used as a common tone modulation) in m. 103.

Both Bach and Shaw create tension to build climatic moments. Bach builds tension towards structural cadences using harmony and register. For example, leading up to the final cadence in the First Strain, Bach builds up to a high B♭ in m. 13, which is the highest note heard so far inthe piece. Three notes later, this music moves a half-step higher to a B♮ in m. 14. By the end of the measure, Bach writes a D♮, the highest note played in the entire movement. Although Bach rarely indicates dynamics in his work, there is a natural crescendo through these measures, which the listener perceives organically, aiding in this structural understanding of the piece. Similarly, Shaw uses range, crescendo, and textual overlap to signify important moments. One of the most climactic events in the piece happens at letter B, where the first sung chord occurs. Shaw begins a crescendo in m. 12, adding a new voice at each eighth-note pulse. This confluence of overlapping speaking, also marked "ALL CRESCENDO," leads to the forte entrance at m. 14. In mm. 78–82, a change in vowel along with a crescendo brings about the most fulfilling climax of the piece, the return of the First Strain's material at letter J. This climax is sustained by the gradual ascent of register in voice 2, up to an A5 (also the highest note in the movement).

One of the final overarching ideas in *Partita for 8 Voices* that Shaw first presents and hints at in "Allemande" is her desire to "organize chaos." When I asked her about how the piece represents the world around her and her past experiences, Shaw responded:

> In writing *Partita*, I was asking myself "how do you create the sound within your head and put it on the page and make it happen outside yourself?" Everything you're taking in, visual stimulus, people, internet, conversation, talking…how do you encapsulate that, and then make something totally nonverbal out of it?[38]

Shaw also drew chaotic inspiration from Sol LeWitt and how he organized chaos in his works:

[37] Shaw and Harper, Personal conversation, October 17, 2017.

[38] Shaw and Harper, Personal conversation, January 10, 2019.

> I saw LeWitt's work, which I felt was talking and representing chaos, with all these little words written on the wall. I thought to myself, "this sounds like music to me; it sounds like chaotic conversation." In his paintings, you see the serene, bright, lovely wall of color, but behind that color there are all these technical directions. There's craft behind it. With "Allemande," I was trying to think of Sol LeWitt and different aspects of his work that I would present in each movement.[39]

There are a few ways Shaw does this in "Allemande." The movement begins with apparently chaotic material that gradually becomes more organized: spoken texts overlap in an unintelligible combination of instructions that eventually organize into concrete harmonies. The First Strain contains mostly phrases of six to seven measures. In the Second Strain, Shaw rounds these phrases out to eight measures. Despite these rounded phrase lengths, Shaw juxtaposes this organization with more overlapping texts and rhythms—some spoken, some sung. This momentary "organization" of congruent phrases then falls back into the asymmetrical lines at the recapitulation in m. 82, returning to the most electrifying sounds, albeit with inconsistent measure lengths.

The closing harmonic sequences can also be heard as chaotic or, more precisely, unexpected. The harmony proceeds to unrelated key areas by moving through unusual chord progressions that resolve unexpectedly and beautifully. The first major harmonic shift, from G-major to B♭-major in mm. 96–102, occurs via a circle of fifths progression, a harmonic trademark of Shaw's. Near the end of the section, she breaks the sequence by pivoting via a third, rather than the fifth. Shaw moves from an A-minor chord (supertonic, first inversion) to F-major, a sonority that captures the listener by surprise because of the extensive use of F♯ in the work up to this point. Shaw uses the third of the chord to pivot, rather than the fifth that she has used previously. This F-major chord becomes the dominant of the new tonality, B♭-major. This type of modulation occurs elsewhere in *Partita*, as well as some of her other pieces, including T*o The Hands, Fly Away I*, and *Music in Common Time*. These moments seem harmonically unstable, yet when the music arrives at the B♭-major cadence in m. 102, there is a feeling that the quick, unexpected journey has led exactly to where the music was headed all along. The chaos has been contained.

Shaw's catalogue of techniques sets the stage for the three movements that follow. Although the listener may not foresee exactly how Shaw will employ these techniques in the rest of the work, the unique sound world of each movement has been prepared. "Allemande" is the perfect prelude to Shaw's suite, unveiling the musical landscape of the work as a whole.

Sarabande	**Shaw**	**Bach**
Meter	3/4	3/4
Tempo	Q=54	Unlisted (often c. q=45-50)
Tonal Center	B	D
Movement in Partita	Second	Third

Shaw composed "Sarabande" alongside "Allemande" in the summer of 2011. When she was deciding in 2012 how to arrange the four movements into the suite that we now know as Partita for 8 voices, she chose "Sarabande" as the second movement, despite the historical precedent of following the opening allemande with a courante (the structure in BWV 1004).

[39] Shaw and Harper, Personal conversation, October 17, 2017.

When I asked the composer why "Sarabande" came second in her suite, she explained:

> When I was writing the piece (Sarabande), I didn't know I was writing *Partita*. I just made a decision in my head when putting the pieces into an order that it felt too soon for "Courante," because "Courante" is kind of a monster. It felt like "Sarabande" was this gentle thing that should happen after Allemande. I didn't care if it matched the order of the Baroque suite.[40]

The sarabande of the seventeenth century was meant to be a physical expression of passion and intimacy between two people.[41] Throughout the sixteenth century and into the Baroque era, the provocative and scandalous characteristics of the old dance transformed into an intimate portrait of personal sorrow. The Sarabande in BWV 1004 is an excellent example of this new genre-defining characteristic. Shaw continues her deconstruction of the Baroque forms in her own "Sarabande," referencing many characteristics of Bach's movement while offering something new. Describing her "Sarabande," Shaw said: "It's not a scholarly study on the sarabande, but more a modern commentary on the sarabande."[42] This "modern commentary" manifests itself in three ways: first, in the dialogue between the two sets of voices; second, in the rhythmic and metrical influences of the Baroque dance form paired with diatonic scales not typically found in dances of that period; and third, in the use of global vocal techniques, most notably Korean P'ansori singing. Having introduced these features in "Allemande," "Sarabande" explores these features more deeply within a Baroque structure.

The Renaissance sarabande represented a passionate and heated exchange between two people, while Bach's "Sarabande" is the outcry of one individual. Shaw brings back the idea of two people interacting, representing them by the two groups of four voices. Although Shaw labels these voices by number rather than by voice type, she lists the vocal quality required of each singer:

> Voices are indicated 1 through 8—essentially SSAATTBB. In the original Roomful of Teeth configuration, 1–4 were women and 5–8 were men. The top two and bottom two voices are specialists in the extreme upper and lower ranges. The middle four tend to be wide-ranging and flexible—or in soccer terms, sweepers.[43]

The two sets of four voices are similar in registral and timbral setup, where voices 1 and 5 are high, 4 and 8 are low, and 2–3 and 6–7 are necessary to provide a wide range of vocal qualities. Shaw also introduces the two clearly delineated sets of voices in clear quartets, making no mistake that each group represents a specific entity.

Structurally there are two sections, A and B, followed by a twelve-measure return of the opening material, or A'. Bach's "Sarabande" also comprises two sections followed by a brief coda. The A section, sung by voices 1–4, is almost completely homophonic. The opening of the piece is firmly in B-minor, beginning with a i-vi-v-i progression (added ninths, sevenths, and a suspension give the tonal progression a more modern sound). The next chords lead by circle of fifths to the minor Neapolitan chord (C-minor), which then goes directly back to the tonic, B-minor, without resolving to the expected dominant chord. The exploration of B-major comes to define the first set of voices characteristically, forging a new musical identity

[40] Shaw and Harper, Personal conversation, January 10, 2019.

[41] Mather, Betty Bang and Karns, Dean M. Dance Rhythms of the French Baroque: A Handbook for Performance. Bloomington, Indiana University Press, 1987, 26.

[42] Shaw and Harper, Personal conversation, January 10, 2019.

[43] Shaw, *Partita for 8 Voices*, 2014 (manuscript).

for the first person represented by voices 1–4 in the movement. Shaw stays in this harmonic landscape for the first few chords (G♯-minor nine, F♯-minor nine, G♯-minor seven, and then back to B-major in root position) before rotating via a circle of fifths in the second phrase (mm. 5–8). She then moves away from this tonal center, making the B-major root position triad act as the five of E-major followed by E-major, A-major seven, D-minor, G-minor nine for the first three bars of the third phrase (mm. 9–13), coming to somewhat of a half cadence on the minor Neapolitan chord, C-minor, before returning to B-major. These two progressions appear three more times in the movement, but with rhythmic variations and added pedal tones (Figure 6).

In the B section, which begins at letter B, the second set of voices join with their own unique musical identity (Figure 7). The A section is in $\frac{3}{4}$ time, as was typical for sarabandes of old, but the B section is where Shaw adds her "something new" to the musical folly. The B section's measures are unmetered, taken completely out of time. Immediately, this dissolution of consistent pulse begins to unsettle the listener, incorporating a new characteristic to define the second set of voices away from the old dance forms. The second set of voices sing mostly in unison stepwise figures, reflecting the "noodle-chant" found earlier in "Allemande." The line begins almost as if it is a line of chant, but then a solo voice embellishes the unison melody, creating a heterophonic texture. Later, Shaw adds more voices to the chant line, beginning in what I label as m. 25a. The melody oscillates between B-major and A-Lydian scales, then B-major and D-Lydian scales. These melodies are intertwined with the harmonic progression from the A section. The A♮ and D♮ in the second group of voices give the chords a different color, illustrating the effect of the second person, represented by voices 5–8.

Figure 6. mm. 1–17 from "Sarabande," Caroline Shaw, Partita for 8 Voices

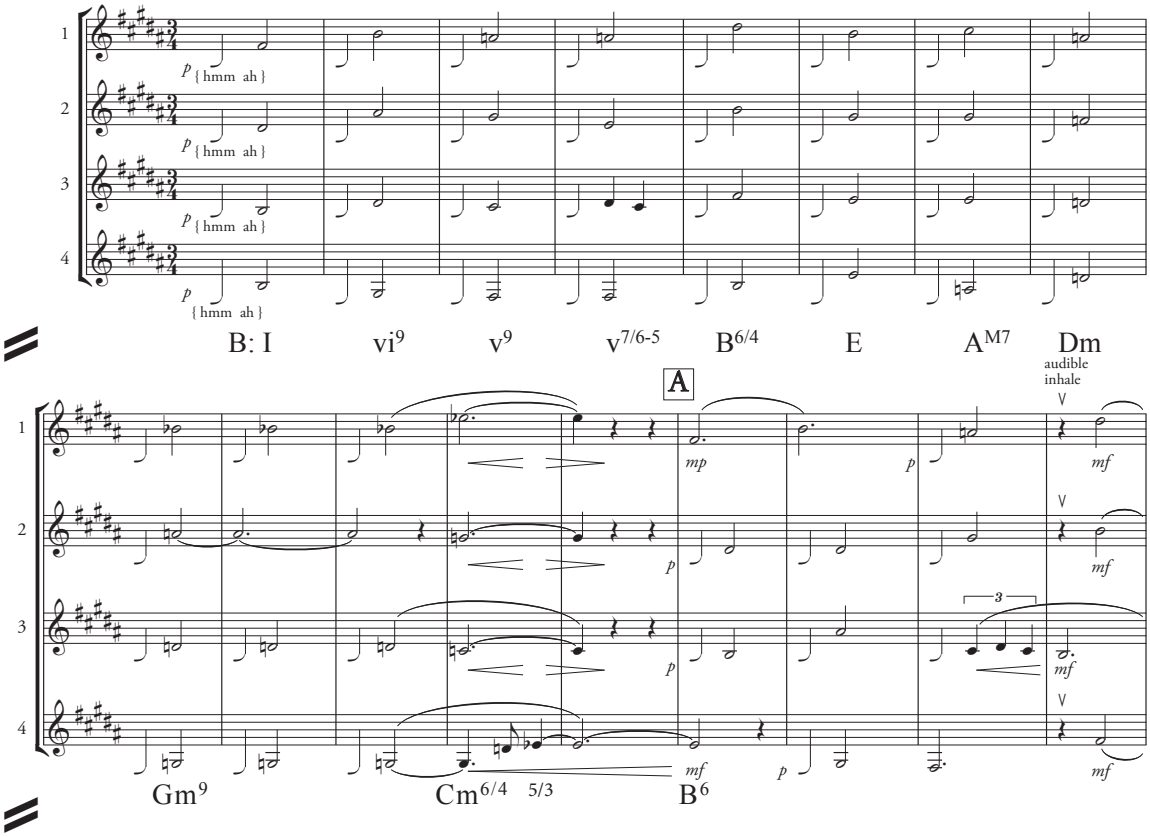
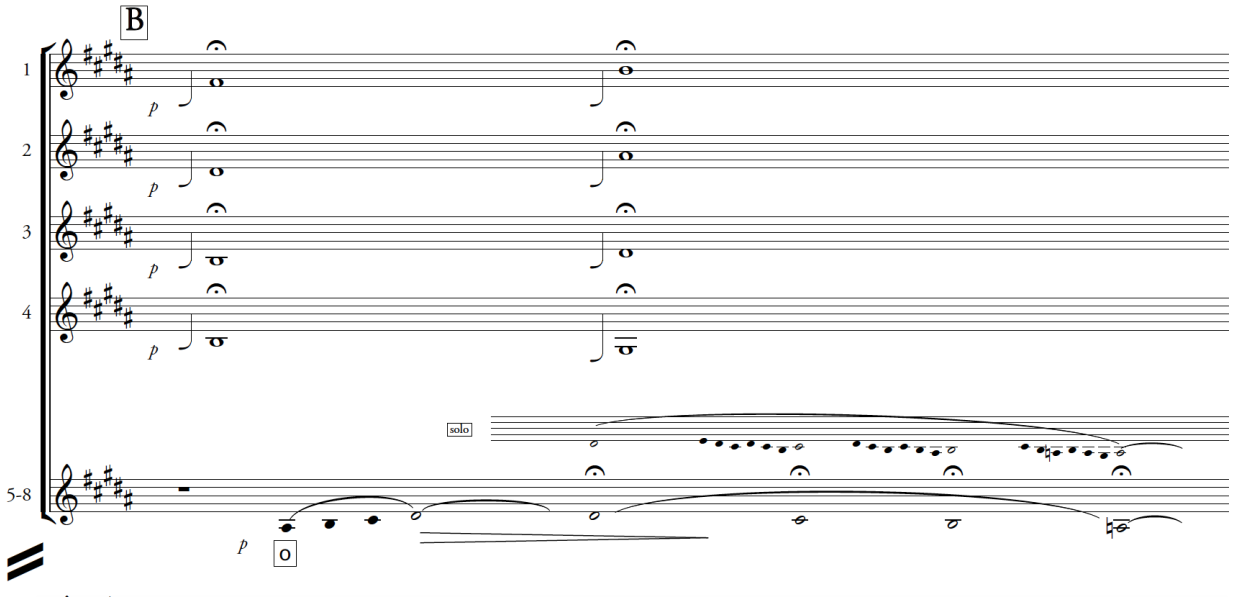


Figure 7. m. 25 from "Sarabande," Caroline Shaw, Partita for 8 Voices



The climax of the piece comes at m. 25b (Figure 8). Voices 5–8 move to the highest pitch yet, A♯5, marked *fortissimo*. This is a particular challenge for voices 7 and 8, specialists in low ranges. In their recording of the work, Roomful of Teeth use Georgian belting for this passage, though it is not specified in the score. In the "notes on the score" that precede the piece, Shaw encourages other singers to follow the practice of adding sonorities that are not explicitly indicated:

> The 2012 recording by Roomful of Teeth can be considered an essential part of the score. Many sounds and gestures cannot be notated in a conventional way, and the composer encourages drawing on a variety of sources available with today's technology to realize this piece with other ensembles in the future. However, no single document should ever be treated as ultimately prescriptive. Be free, and live life fully.[44]

Figure 8. m. 25b from "Sarabande," Caroline Shaw, Partita for 8 Voices

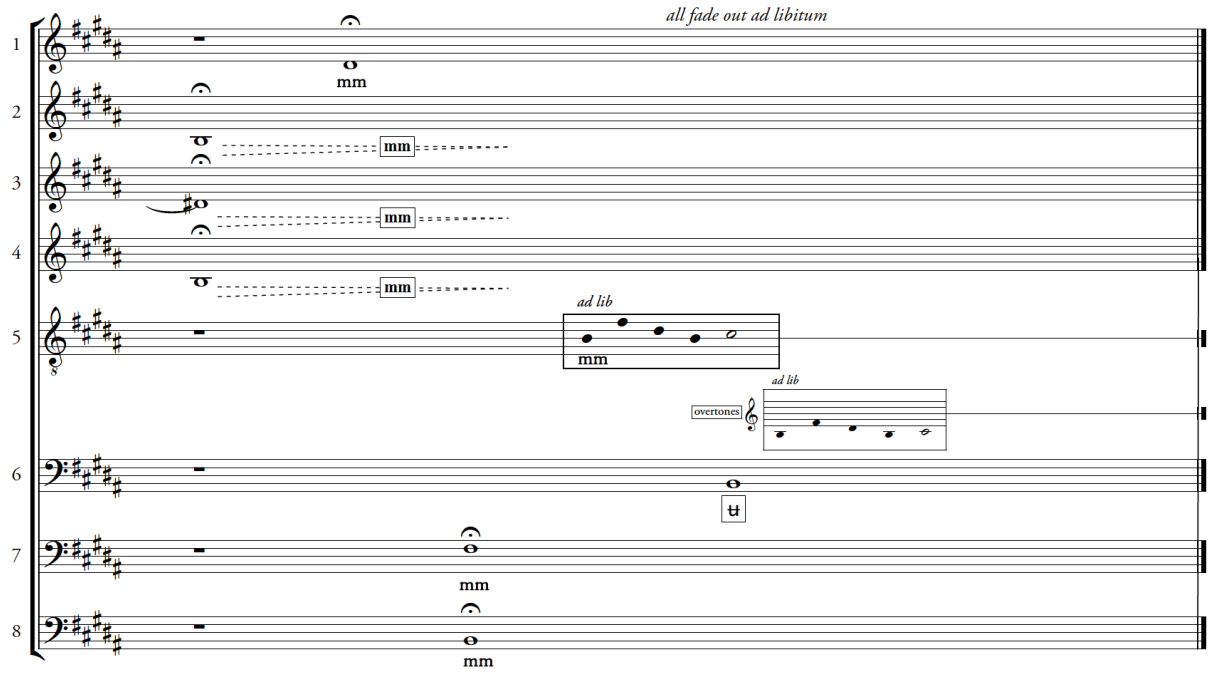
[44] Ibid.

After voices 5–8 sing passionately, they slowly meld into the continuing harmonic sequence of voices 1–4, morphing back to $\frac{3}{4}$ time. Voices 5–8 arriving on F♮, below the E♭-major chord in voices 1–4. The return to the A section material begins almost identically to the opening of the piece, with the second phrase having a faster harmonic rhythm than in the previous iteration. After the first phrase of four chords, there is a bar of silence. The silence is deafening, especially in contrast to the sonority of the B section. This is a moment of silent emotion; grief, pain, anguish, or longing.

The final measure is once again unmetered, with voices 1–4 and 7–8 sustaining a B-major chord while voices 5 and 6 continue to meander, noodling *ad libitum* in overtones influenced by Tuvan throat singing practices. Voices 7–8 eventually arrive at C♯, ending the piece on a B-major chord with an added second, which colors and perhaps somewhat weakens the sense of rest in the final cadence in m. 45 (Figure 9).

Another piece of the past Shaw incorporates is her use of rhythm and metric accent. One of the defining features of Renaissance and Baroque sarabandes was the heavy accent on beat two of each measure in $\frac{3}{4}$ time. This was due to the rhythmic pattern that was often seen in the first bar: quarter, dotted quarter, eighth. Shaw follows both this rhythmic and metric accent as well. Her "Sarabande" is in $\frac{3}{4}$ time with the accent on beat two in each bar. In thinking about the emphasis of the downbeat in "Allemande," it is worth noting that here in the second movement of *Partita*, the emphasis is now placed on the second beat. In an early draft of the work, Shaw notated the first measure's rhythm as quarter, dotted quarter, eighth. In the final version of the score, she changed this to a quarter note followed by a half note. However, on Roomful of Teeth's recording, the singers lift for an eighth rest between each bar, retaining the traditional sarabande rhythm. When asked about this rhythmic gesture, Shaw responded:

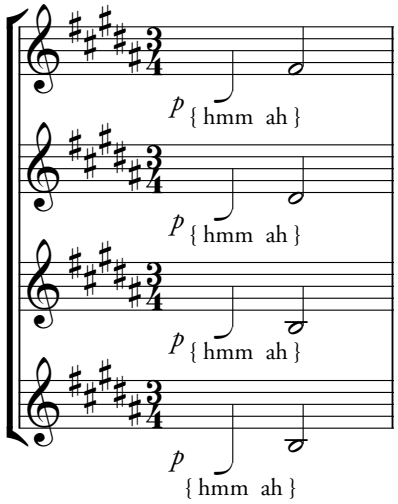
Figure 9. m. 45 from "Sarabande," Caroline Shaw, Partita for 8 Voices



> In the Renaissance dances, the second beat is wider. Some of the most fancy footwork happens on the second beat. I was playing with the idea of something melting or dripping into the second beat, which is where all the content is in the bar.[45]

This "melting…into the second beat" is achieved by the use of what Shaw calls a "closed mouth sigh—an abstraction of 'P'ansori'."[46] Brad Wells describes the vocal technique: "...we were studying Korean P'ansori, which is sort of a high blues that uses vibrato in a very particular way."[47] Shaw developed notation to represent this sound, a symbol closely resembling an unpitched quarter note. This closed-mouth, unpitched sigh is represented in the text as { hmm } with the singers opening to { ah } on the pitched second beat (Figure 10). The vocal slide from closed mouth to open mouth creates a natural crescendo, further emphasizing the accent on beat two.

Figure 10. m. 1 from "Sarabande," Caroline Shaw, Partita for 8 Voices



Shaw's "Sarabande" is geographically influenced by the Korean P'ansori, Georgian belting, and Tuvan throat singing practices. Unlike the traditional iterations of these vocal practices, there is no text in Shaw's "Sarabande." Instead, she focuses on the different vocal colors which can be obtained by the change or shift in the vowel sounds of the human voice:

> The consideration of vowels was what I was most concerned with (opposed to the throat singing or belting)—cultivating the vowel and finding the particular colors by shaping the mouth, shaping the mouth in not the "right" way.[48]

Shaw draws upon the raw, evocative and stirring power of the human voice to convey her personal expression. There is a coarse, unbridled emotion in the B section as it rises to the climactic A♯5. Even in the recording, it is imperfect: the sounds produced by the four singers are not as clean and polished as they are throughout the rest of the piece. Although not Shaw's direct intention, one could speculate that the A section is depicting the French style dance and its "choreographies," which reveal a dance that seemed calm and sometimes tender, but ordered, balanced and sustained.[49] The B section, then, would be depicting the improvisatory and free characteristics of the original Spanish dance.

Both Shaw and her inspiration, Bach, make prominent use of Neapolitan harmony in their sarabandes. One of the most notable is the use of the Neapolitan chord in Shaw's "Sarabande," and how Bach uses the Neapolitan harmony differently in BWV 1004. As he does in the allemande in BWV 1004, Bach withholds specific pitches and chords in the sarabande. Their eventual appearance builds a sense of arrival at key points in the

[45] Shaw and Harper, Personal conversation, January 10, 2019.

[46] For more information on Korean P'ansori, see: Hae-kyung Um, "New 'P'ansori' in Twenty-first-century Korea: Creative Dialectics of Tradition and Modernity," *Asian Theatre Journal* 25, no. 1, 2008, 24–57.

[47] Peter Matthews, *Coffee Conversation: Roomful of Teeth's Brad Wells*, January 2, 2014, https://www.feastofmusic.com/feast_of_music/2014/01/coffee-conversation-with-roomful-of-teeths-brad-wells.html, accessed March 25, 2019.

[48] Shaw and Harper, Personal conversation, January 10, 2019.

[49] Meredith Ellis Little and Natalie Jenne, *Dance and the Music of J. S. Bach*, Bloomington and Indianapolis, IN: Indiana University Press, 1991, 93.

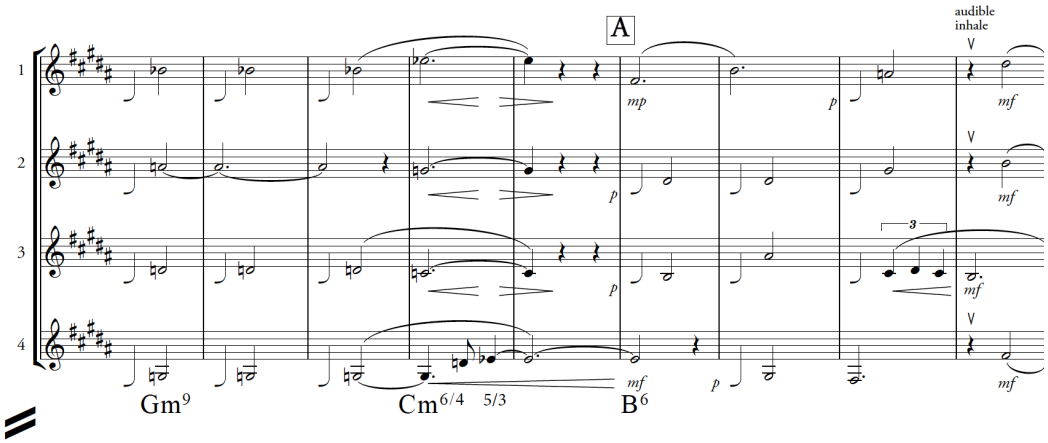
structure in order to grab the listener's attention with the idea that something important is about to occur. One of these moments takes place in the second section of the sarabande, in measures 21–24. The movement is in D-minor, with a brief modulation to the subdominant, G-minor. Bach begins working his way back towards D-minor and solidifies this return with a harmonic drive to the cadence via the use of E♭-major (♭II) in m. 22. Although we have heard the E♭ pitch before in this movement, it is here that we find the first E♭-major chord, followed by C♯-diminished seventh chord, before resolving downwards into D-minor where Bach ends the phrase.

Shaw also makes use of the Neapolitan, although she decides on the minor ♭ii quality as opposed to the major ♭II quality (Figure 11). In her harmonic sequence of ten chords, Shaw delays the use of this specific harmony until the final chord, using it as the cadential figure before returning to B-major. In Western functional harmony, the ♭II6 chord is typically found as part of a cadence, usually resolving to the dominant or a chord based on the leading tone, which in turn leads to the tonic. Bach follows the ♭II with the leading-tone chord before resolving to D-minor. While Bach reserves the Neapolitan for a crucial cadence near the end of the movement, Shaw uses it early and makes it crucial to the harmonic language of the movement. Shaw then exploits the enharmonic relationship of the E♭ and the D♯, the third of the tonic chord, B major to pivot back to the tonic. In pivoting on the third after six prior pivots via the circle of fifth relationships, Shaw expands the signature harmonic progression first heard in "Allemande."

Both Bach and Shaw use the sarabande dance genre and its unique rhythmic qualities as a vehicle to express a greater depth of human emotion. Besides the emphasis on beat two, one of the most interesting and deeply expressive moments in Bach's "Sarabande" occurs in mm. 22–25. David Ledbetter comments on Bach's use of unexpected reversals and leaps in the second half of m. 22:

> The jagged figurations in bars 22–3 and elsewhere [in BWV 1004, "Sarabande"] are of a type used in the Baroque period to represent tortured anguish: Monteverdi, in the madrigal 'Mentre vaga Angioletta' from his eighth Book (Venice 1638) goes through a useful catalogue of such affective *figurae*, using this sort to demonstrate the words 'ritori giri' (twisted turns).

Figure 11. mm. 9–14 from "Sarabande," Caroline Shaw, Partita for 8 Voices



> The *petite reprise* from the second-time bar reinforces the effect in a continuous sixteenth-note division.[50]

This disruption in musical style is notable in Bach's "Sarabande," as the melodic contour becomes disjunct and broken by a wide compass of intervallic interjections. Shaw also disrupts her "Sarabande" rhythmically with the introduction of the second set of voices. The phrases in the A section are mostly 4-bar phrases, although occasionally Shaw speeds up or slows down the harmonic rhythm, moving the sequences to 5 or 3 bars in length. Bach's "Sarabande" is mostly in 2- and 4-bar phrases. In Shaw's B section, meter and bar lines are completely eliminated, and the improvisatory melody from the second group of voices disrupts the prior order and metric pulse. Shaw marks the tempo as quarter note=54, which is very similar to the tempo that many performers take Bach's "Sarabande," quarter note=48.[51] Where Bach agitates his rhythm, Shaw relaxes hers, disrupting the steady, sequential pulse of the previous section. Shaw's own musical disturbance can be found in her incorporation of range and vowel color, leading to the climax in bar 25b.

The chant-like passages are notated with small, black, stemless note-heads, leaving the execution of the rhythm to the discretion of the performers. The final note-heads in the line are left open (white notes) to represent a moment of sustained pitch. Therefore, the exact "melody" is somewhat difficult to discern. The only melodic certainties lie in the fact that these passages outline both major and Lydian scales. Ledbetter also comments on how Bach uses these "lighter and freer values:"

> In spite of elaboration, the sarabande's decorative level of note value is still the eighth-note, with sixteenths and 32nds as progressively lighter and freer values. Standard French inequality would be quite out of place, but eighths do need a feeling of on-beats and off-beats, particularly after a dot…Sensitive rhythmic placing of decorative note values is all-important for the maturity of expression latent in this piece.[52]

Both Bach and Shaw utilize these free improvisatory gestures to reflect back to the Spanish Renaissance dance form, tying all three sarabandes together with similar intentions, styles, and expressions, while still creating an atmosphere that is simultaneously new and refreshing.

Watching a garden grow is one of the most satisfying parts of the gardening process. "Allemande" and "Sarabande" are composed and grown from the original seeds sown in "Courante" and "Passacaglia." Incorporating rhythmic and harmonic elements from Bach's Violin Partita, Shaw produced her own unique and inventive work, growing the seeds in her own creative and original manner.

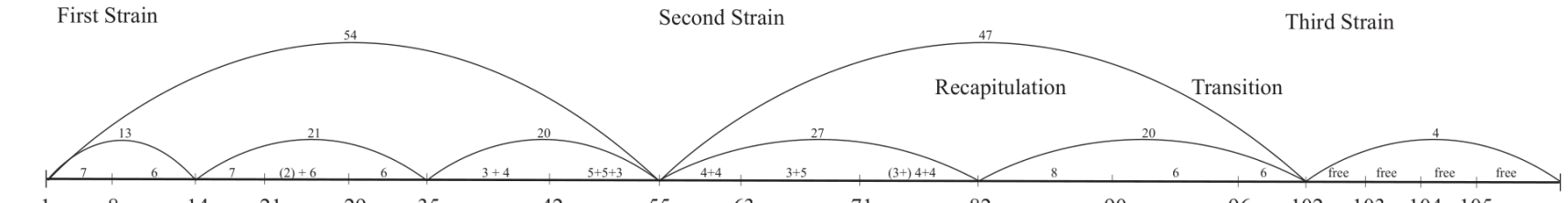
[50] Ledbetter, *Unaccompanied Bach*, 135.

[51] Jaap Schröder, *Bach's Solo Violin Works: A Performer's Guide*, New Haven: Yale University Press, 2007, 123.

[52] Ledbetter, *Unaccompanied Bach*, 135.

Caroline Shaw
Partita for 8 Voices

I: Allemande



Text: Allemande [a] SLWD: [ɐ] [ɑ] [o] #thedetailofthe [ɔ] [ɐ] [o] mm [Ü] Far and near
Square Dance Call 381 patternismovement are all around
(SLWD 164) 419 toward you
154
164 Find away back home
159 Fall a-way
289 Time and time again

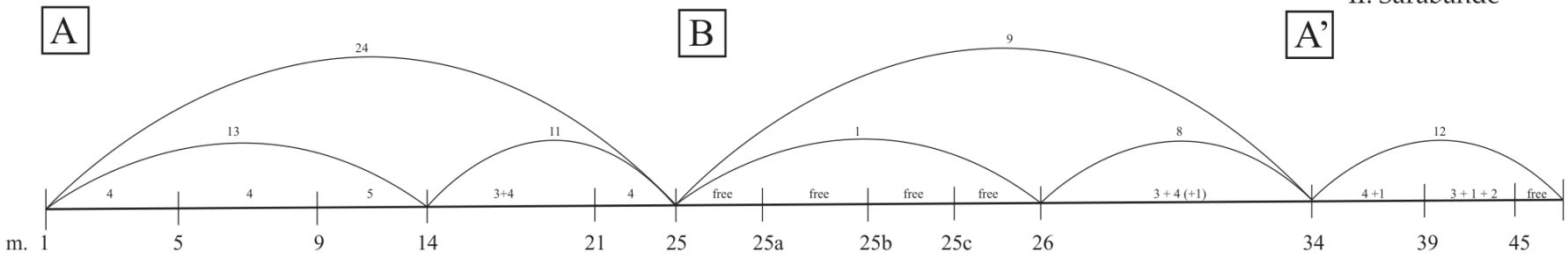
4/4

stretch pitch in either direction *inhale-exhale gesture* *P'ansori gesture* *xöömei* *three stretches*

Graph by Joshua Harper

Partita for 8 Voices

II: Sarabande



A B C

B: I vi^{9} v^{9} v$^{6-5}$ B$^{6/4}$ E A^{M7} Dm Gm^{9} Cm I^{6} - sequence repeats

I - sequence repeats

bIII bvi9 bii^{7} I vi^{9} v^{9} v$^{6-5}$ B$^{6/4}$ E A^{M7} Dm Gm$^{9-8}$ Cm I^{6}

B-major A-Lydian B-major D-Lydian

homophonic
voices 1-4

homphonic
voices 1-4
unison chant
+ voices 5-8

homophonic
voices 1-4
displaced homophony
voices 5-8

homophonic
voices 1-4
- voices 5-8

+ 5 - 6
overtone chant
+ 7-8
B5

p *mp* *p* *ff* *p* *all fade out ad libitum*

Text:
1 -4: { hmm ah }
5 - 8:

{ hmm ah }
[o] [ɐ]

mm
[ʉ]
mm

$\frac{3}{4}$ ♩ *closed mouth sigh, glissing up to pitch that follows. Abstraction of a P'ansori articulation*

FREE

$\frac{3}{4}$ ♩

Graph by Joshua Harper

BIBLIOGRAPHY

Gunzenhauser, Margot. *The Square Dance and Contra Dance Handbook: Calls, Dance Movements, Music, Glossary, Bibliography, Discography, and Directories*. Jefferson, N.C.: McFarland & Co., 1996.

Harper, Joshua. *Caroline Shaw's Use of Renaissance and Baroque Dance Forms In Her Partita for 8 Voices*. Indiana University, 2020, http://hdl.handle.net/2022/25335.

Hilton, Wendy. *Dance and Music of Court and Theater: Selected Writings of Wendy Hilton*. Stuyvesant, NY: Pendragon Press, 1997.

Ledbetter, David. *Unaccompanied Bach: Performing the Solo Works*. New Haven, Yale University Press, 2009.

Little, Meredith Ellis and Natalie Jenne. *Dance and the Music of J. S. Bach*. Bloomington and Indianapolis, IN, Indiana University Press, 1991.

Matthews, Peter. *Coffee Conversation: Roomful of Teeth's Brad Wells*. January 2, 2014, https://www.feastofmusic com/feast_of_music/2014/01/coffee-conversation-with-roomful-of-teeths-brad-wells.html, accessed March 25, 2019.

Mather, Betty Bang and Karns, Dean M. *Dance Rhythms of the French Baroque: A Handbook for Performance*. Bloomington, Indiana University Press, 1987.

Negri, Cesare. *Le Gratie D'amore: A Facsimile of the 1602 Edition*. New York: Broude, 1969.

Pulitzer Prize for Music: http://www.pulitzer.org/winners/caroline-shaw.

Qureshi, Rifat J.. *The Influence of Baroque Dance In the Performance of Johann Sebastian Bach's Six Suites a Violoncello Senzo Basso*. Thesis (D.M.A.)—Rice University, 1994.

Roomful of Teeth Website. http://www.roomfulofteeth.org/roomful/. Accessed April 24, 2018.

Reynolds, Jock. *Sol Lewitt: A Wall Drawing Retrospective*. North Adams: MASS MoCA, November 2008.

Schröder, Jaap. *Bach's Solo Violin Works: A Performer's Guide*. New Haven, Yale University Press, 2007.

Shaw, Caroline. *Partita for 8 Voices* (manuscript). Caroline Shaw Editions (unpublished), 2014.

Shaw, Caroline and Joshua Harper. Personal conversation with the composer, October 17, 2017.

—. Personal conversation with the composer, January 10, 2019.

Shaw, Caroline and Nadia Sirota. "Caroline Shaw Lives Life Beautifully." Produced by New Sounds WQXR. *Meet The Composer*. September 30, 2014. Podcast, MP3 audio, 58:00. http://www.wqxr.org/#!/story/meet-composer-caroline-shaw-show/.

Tommasini, Anthony. "The Pulitzer Prize Was Nice and All, but a Work Is Finally Fully Heard: Caroline Shaw's 'Partita' Has Premiere by Roomful of Teeth" *The New York Times*. November 5, 2013. Accessed April 24, 2018.

Tsioulcas, Anastasia. "Caroline Shaw, 30, Wins Pulitzer For Music." *Deceptive Cadence* from NPR Classical. April 15, 2013. Accessed April 24, 2018.

Um, Hae-kyung, "New 'P'ansori' in Twenty-first-century Korea: Creative Dialectics of Tradition and Modernity," *Asian Theatre Journal* 25, no. 1, 2008, 24-57.

TCS
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The Music of Johann Sebastian Bach as a Western Influence on Steve Reich's *Tehillim*

Brandon Hollihan

Abstract

While the majority of musical influences for Steve Reich's compositions come from non-Western cultures, he states consistently, both in interviews and in writing, how the music of Johann Sebastian Bach also serves as an avenue for inspiration. In particular, Bach's Easter cantata *Christ lag in Todesbanden* provides Reich with a portion of the schematic for the creation of his 1981 breakthrough chamber orchestral-vocal composition, *Tehillim*. These include a "stealing" of imitative counterpoint from *Christ lag in Todesbanden*'s second verse, "Den Tod niemand zwingen kunnt," as well as the types of wind instruments Bach used to double the voices in a later version of the cantata. Beyond the influences stated by Reich, there are similarities in the vocal employment on the word "Hallelujah" in each work, and a connection in how each composer uses the string section to imitate motion initially found in the voices. This article surveys each work and provides examples of the ways that Reich imitates Bach, both consciously and perhaps coincidentally, and highlights the significance of Reich taking interest in a Western music culture for his own work.

Tehillim, the eclectic chamber orchestral-vocal work written by Steve Reich in 1981, represented a shift in compositional style away from the short repeating patterns, for which Reich gained notoriety in such works as *Music for 18 Musicians, Music for a Large Ensemble* and *Eight Lines*, toward longer melodic lines that still maintain high levels of repetition. These pieces also preserved Reich's phasing technique,[1] which is perhaps best associated with his earliest works, including *It's Gonna Rain* and *Piano Phase*. *Tehillim* is also significant because it represents Reich's first text setting and the first occasion his music requires a conductor in performance.

In surveying Reich's compositions up until the beginning of the 1980's, we witness the composer harnessing inspiration from a variety of non-Western musical influences. He has written profusely about his compositional life and chronicled his journeys to Africa to study Ghanaian drumming,[2] Israel for studying Hebrew

[1] Phasing technique, as popularized by Reich, Brian Eno, and others, juxtaposes the same pattern in two voices, with one voice moving slightly faster than the other to generate new melodic and rhythmic ideas.

[2] K. Robert Schwarz, "Music as a Gradual Process, Part II," *Perspectives of New Music* 20 No 1/2 (Autumn, 1981–Summer, 1982), 230.

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cantillation,[3] and his studies in Balinese gamelan at institutions in Seattle and Berkeley, California.[4] As we observe all three of these influences at work in *Tehillim*, there still remains another source to which Reich directs us. That source is Johann Sebastian Bach, and in particular his Easter cantata, BWV 4 *Christ lag in Todesbanden*. Bach's presence is a striking contrast from the aforementioned non-Western cultures that have an imprint on *Tehillim's* construction, but Reich "never fails to remind us that Bach was a formative influence on his music."[5]

My interest in reviewing the musical influences of *Tehillim* stems from an interview Reich gave to the Miller Theatre at Columbia University.[6] In addition to the online interview, Reich participated in pre-concert discussion about his music, which was followed with a performance by the contemporary music group Ensemble Signal, under the direction of Brad Lubman, pairing *Christ lag in Todesbanden* with *Tehillim*. In the interview, Reich connects *Tehillim* with Bach by saying that *Tehillim*'s form is like that of a cantata: "If you had to say, 'What form does *Tehillim* sort of appear to be in,' given the traditional voices at the time, well it's like a cantata," he says. "It's not a chorus, it's solo voices and it's a small instrumental grouping. Now it's exactly what you find in the Bach."[7] On its own, this quotation might be challenged, because Bach's music could employ more than one voice per vocal part for his cantatas, but the similarities between *Tehillim* and that of a Bach cantata are important, given the use of scripture as a textual source and a division of the text into four distinct movements. This article surveys the structures of both works and demonstrates the ways in which Bach's cantata serves Tehillim as a uniquely Western influence.

The Background of BWV 4, Christ Lag in Todesbanden

There is not an exact date for the completion and debut of *Christ lag in Todesbanden*. As quoted in the Norton Critical Score of this work, Alfred Dürr writes that the cantata may have been written in "1708 or a little later [but] before 1714,"[8] due to the lack of an "Italian-born recitative style" or da capo aria forms, which Bach began using in 1714.[9] Robin Leaver goes so far as to suggest that the cantata was first performed on Easter Day in 1706, while Bach was the organist in Arnstadt. He also writes that Bach may have performed the cantata at St. Blasius Church in Mühlhausen while testing the restored organ there.[10] There is a general consensus that BWV 4 was performed in Leipzig on Easter in 1724 or 1725,[11] and that the cantata's "earliest source is a set of Leipzig performing parts, which dates from 1724 and 1725."[12] Dürr's preface to the Bärenreiter score states that "the wind parts for zink[13] and three trombones were not added until 1725."[14]

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[3] Steve Reich, "Hebrew Cantillation as an Influence on Composition (1982)," 107.

[4] Michael Tenzer, "That's All It Does: Steve Reich and Balinese Gamelan," in *Rethinking Reich*, ed. Sumanth Gopinath and Pwyll ap Siôn (Oxford, UK: Oxford University Press, 2019), 305.

[5] Kheng Keow Koay, "Baroque Minimalism in John Adams's *Violin Concerto," Tempo* 66 No 260 (April 2012), 23.

[6] YouTube video posted by Miller Theatre. "Steve Reich on Tehillim + Bach." Published April 21, 2014. Total duration: 6:11. https://www.youtube.com/watch?v=creTXfBzjBg&t=171s.

[7] Miller Theatre interview.

[8] Gerhard Herz, *Johann Sebastian Bach: Cantata No. 4 Christ lag in Todesbanden: An Authoritative Score*, New York: W.W. Norton & Company, Inc., 1967, 22.

[9] Ibid, 22.

[10] Robin Leaver, *The Routledge Research Companion to Johann Sebastian Bach*, New York: Routledge, 2017, 490.

[11] Ibid, 503, 507.

[12] Alfred Dürr, "Church Cantatas: Advent-Trinity," in *The Cantatas of J.S. Bach* (New York: Oxford University Press, 1992), 264.

[13] "Zink" is German for cornet, which "was mainly used from the end of the 15th century to the end of the 17th, but continued its use, mostly by town musicians, until the late 18th century and occasionally even into the 19th." ("Cornet," Anthon Baines, revised by Bruce Dickey, Grove Music Online, accessed October 2, 2019.)

[14] Dürr, 264.

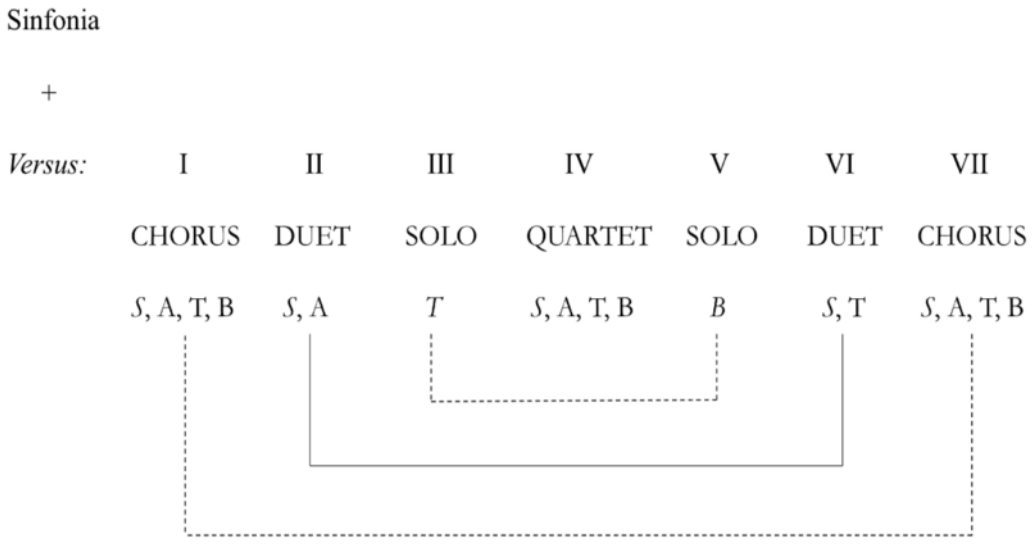
The text springs directly from Martin Luther's 1524 Easter hymn of the same name, which is based upon the Latin sequence "Victimae paschali laudes" (To the Paschal victim"), and draws inspiration from the hymn "Christ ist erstanden."[15] The cantata consists of eight movements: an opening sinfonia followed by the seven verses of the chorale. Only three of the verses (numbers one, four, and seven) utilize all four SATB voicings, including "Wir essen und leben wohl," set in a closing chorale fashion. Dürr identifies a symmetrical layout of the cantata's verses as follows:[16]

One sees the idea of musical symmetry with regard to the three choral movements, which act as the structural pillars of the cantata. The fourth verse, "Es war ein wunderlicher Krieg" ("It was a strange battle"), serves as a nexus, lacking a partnering. In the Norton score, Gerhard Herz provides a diagram:[17]

Figure 1

1	2	3	4	5	6	7
chorus	duet	solo	chorus	solo	duet	chorus

Figure 2



The *cantus firmus*-carrying voices are indicated by italics.

[15] Ibid, 264.

[16] Herz, 135.

[17] Ibid, 85. This is a graphic reproduction of Herz's diagram found in the Norton score.

Herz's distinction of the fourth movement being sung by a quartet might connect with Joshua Rifkin's argument of what truly constitutes a "chorus" for Bach's music, as he writes that "before 1750 in particular, musicians regularly used the word 'chorus' to describe a group of solo singers."[18] This argument also connects with Reich's observation from the Miller Theatre interview of this cantata consisting of not a true chorus but instead solo voices. Of course, a possible counterargument is Herz's identification of choral movements to open and close the cantata—namely the singing of the choral hymn's final verse in the seventh movement.

The Background of Tehillim

Tehillim was commissioned jointly by the South German Radio, Stuttgart (SDR), the West German Radio, Cologne (WDR), and the Rothko Chapel of Houston, Texas, with further support by Betty Freeman, the Rockefeller Foundation, and The Memorial Foundation for Jewish Culture.[19] The South German Radio Orchestra, conducted by Peter Eötvös, premiered *Tehillim*'s first two movements in Stuttgart in 1981, and the world premiere of the finished work was given at the West German Radio in Cologne by Steve Reich and Musicians (sometimes credited as the Steve Reich Ensemble), conducted by George Manahan.[20] The orchestral version premiered with the New York Philharmonic in 1982 and was conducted by Zubin Mehta.[21]

Reich's cantata consists of four separate movements, labeled Parts I, II, III, and IV in the score, with a typical performance time lasting a little over half an hour. A breakthrough in the trajectory of Reich's compositional style, *Tehillim* is the first work in which "voices previously approached as instrumental parts, are given texts and treated as true vocal soloists."[22] The Hebrew Psalms serve as the text source, with each of the four movements utilizing two or three verses. Reich is keen to contrast the emotional affect in each movement. For example, Part I quotes Psalm 19: "The heavens declare the glory of G-d, the sky tells of His handiwork. Day to day pours forth speech, night to night reveals knowledge."[23] Many composers have set this text to music—including, most famously, Johann Sebastian Bach, Franz Joseph Haydn and Heinrich Schütz—and Reich uses it to create a driving and energetic pulse from the beginning of the work. In contrast, Part III is a setting of Psalm 16: "With the merciful You are merciful, with the upright You are upright."[24] The text is painted in a more introspective light, with imitative counterpoint and intervallic discourse.

In addition to the four solo voices, the ensemble consists of strings,[25] two clarinets, oboe, English horn,[26] six percussionists, flute, piccolo, and two electronic organs or digital synthesizers. In Reich's earlier compositions, such as *Drumming* or *Music for 18 Musicians*, a conductor is not necessary as the players rely on musical cues for transitions. Reich details this performance aspect found in Music for 18 Musicians: "Changes from one section to the next, as well as changes within each section, are cued by the metallophone, whose patterns are played once only to call for

[18] Joshua Rifkin, "Bach's Chorus: A Preliminary Report," *The Musical Times* 123 No. 1677 (November 1982): 747.

[19] Steve Reich, "Tehillim (1981)," in *Writings on Music 1965–2000*, ed. Paul Hiller (Oxford, UK: Oxford University Press, 2002), 104.

[20] Ibid, 104.

[21] Steve Reich, *Tehillim*, (New York: Boosey and Hawkes, 1981), foreword.

[22] Alan Pierson, "Performance Practice in the Music of Steve Reich" (DMA diss., Eastman School of Music, 2006), 9.

[23] Reich, score foreword.

[24] Ibid.

[25] The number of string players depends on whether one performs the ensemble or orchestral version of the work. The ensemble version calls for one or two players per part (with the exception of only one double bass), whereas the orchestral setting has a 6-6-4-4-1 arrangement. Reich prefers the ensemble version and encourages using two players per part for first and second violins, violas and cellos, as it provides "some heft to the strings while keeping them completely agile." (Email to the author, July 9, 2019.)

[26] The score also lists an optional part for bassoon.

movements to the next bar—much as in a Balinese Gamelan a drummer will audibly call for changes of pattern, or as the master drummer will call for changes of pattern in West African music."[27]

The need for a conductor for *Tehillim*, however, arose as the result of mixed and asymmetrical meters. The eighth-note serves as the main subdivision, while the time signature frequently shifts from 4/8, 5/8, 6/8 and other meters (Figure 3).

The time signatures displayed in Figure 3 are representative of *Tehillim*'s overall metric complexity. In Parts II and IV, the melodic lines for the singers become more complex and drawn out, resulting in such meters as 12/18 or 17/18[28] (Figure 4).

Figure 3

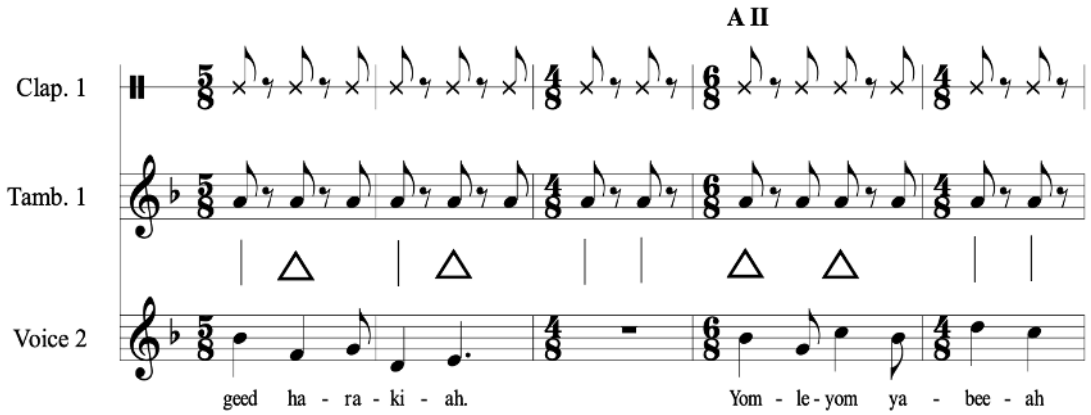
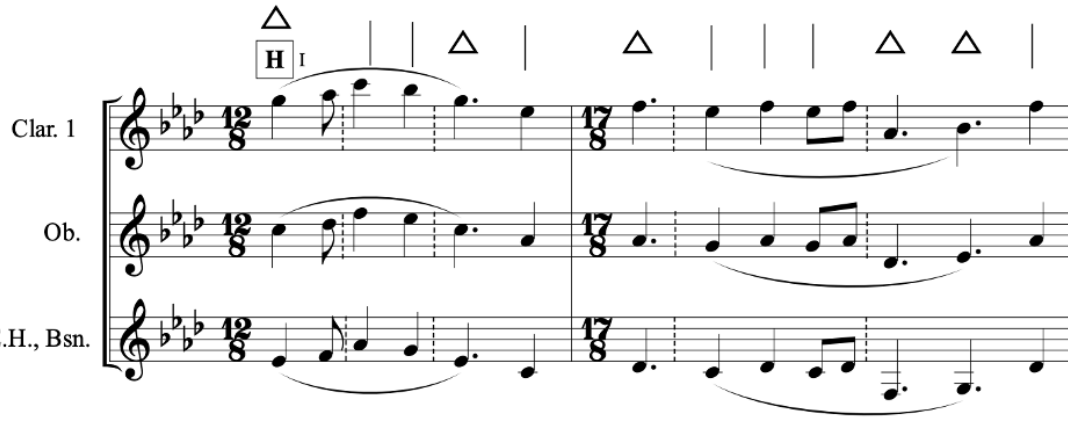


Figure 4



[27] Steve Reich, "Music for 18 Musicians (1976)," in *Writings on Music 1965-2000*, ed. Paul Hillier (Oxford, UK: Oxford University Press, 2002), 87.

[28] As will be discussed in greater detail, the wind instruments also double the voices; in this example, the first clarinet, oboe and English horn double voice 4 (high soprano), voice 2 (lyric soprano) and voice 3 (alto).

The eighth note provides a consistent pulse in these compound meters, and Reich helpfully divides the measures into smaller groupings so that the conductor does not need to employ unwieldly patterns. In an email response to the question of conducting, Reich wrote that his ensemble did not use a conductor until *Tehillim* because "the constantly changing meters [of *Tehillim*] demanded we have a conductor."[29]

Hebrew cantillation had an important impact on *Tehillim*'s melodic patterns. Reich traveled to Israel in 1977 in an effort to rediscover his Jewish faith.[30] His studies included an examination of the *ta'amim*, which are accents in Hebrew that have three primary functions: showing the accented syllable in the text, serving as punctuation markings for the texts, and serving as the musical notation for the chanting of the Hebrew biblical text.[31]

Reich did not base the phrases of *Tehillim* on pre-existing melodies, but instead freely composed the lines in his own style. He cites the theological scholar William Wickes' notion that "a musical value of the accents for the three Poetical Books (Job, Proverbs, and Psalms), is altogether lost."[32] Therefore, Reich "decided to choose Psalm texts that attracted [him] and then feel [sic] free to *compose* a setting for them without the constrictions of a living oral tradition over 2,000 years old to either imitate or ignore."[33] Finally, he also connects his study of cantillation with the gamelan gambang (a wooden xylophone-like instrument) as the two driving forces behind the composition of significantly longer melodic patterns.

[29] Steve Reich, email to the author, July 8, 2019.

[30] Steve Reich, "Hebrew Cantillation as an Influence on Composition (1982)," 107.

[31] Ibid, 108.

[32] Ibid, 118.

[33] Ibid, 118.

The Influence of Christ Lag in Todesbanden *Upon* Tehillim

Reich has explained how *Christ lag in Todesbanden* partners so effectively with *Tehillim*, relating the fact that Bach not only doubles the voices as a form of support, but that the types of doublings are just as important. He notes that Part I of *Tehillim* always doubles the singers' voices with first and second clarinets, but the beginning of Part II involves voices being doubled with oboe and English horn. Reich also states the importance of timbre in an interview with the Miller Theatre: "Nobody's come on stage but obviously we've got different singers; we don't have different singers, we have different doublings."[34]

As an example, Reich cites the types of instruments Bach uses to double voices in *Christ lag in Todesbanden*—in this case, the zink and trombones. Reich noted the "certain quality" a Baroque trumpet had upon doubling a voice:

> That led to my considering that in the first part of *Tehillim* it would be a clarinet double, and then the second section it would immediately switch to…the oboe and English horn doubling the voices, which changes the character of the voice, even though it's the same singers."[35]

In a separate interview, Reich calls this method of changing doubling instruments a "steal" from Bach, creating what his producer dubs a "voicestrument" effect that comes across as "another kind of singing" for the listener.[36]

[34] Miller Theatre interview.

[35] Bruce Duffie, "Composer Steve Reich: Two Conversations with Bruce Duffie," accessed January 4, 2020, http://www.bruceduffie.com/reich.html.

[36] Rebecca Kim, "From New York to Vermont: Conversation with Steve Reich," *Current Musicology* 67/68 (Fall 1999), 351.

We also observe another method of doubling voices in *Christ lag in Todesbanden*'s opening verse. The cantata's original instrumentation at its debut in Mühlhausen was two violins, two violas, and continuo. The strings provide the doublings in lieu of brass instruments. Figure 5 displays the first viola doubling the alto line, the second viola doubling the tenor line, and the continuo doubling the bass line in the first verse.

In the original setting of the cantata, only the soprano voice lacks a doubling. However, they sing the melody of the Lutheran hymn, functioning as the *cantus firmus*, while the lower three voices function in a more contrapuntal fashion.

In an email response to questions about Bach's influence, Reich confirmed that the second verse of *Christ lag in Todesbanden*, "Den Tod niemand zwingen kunnt" ("No man could conquer death"), provided him with a compositional foundation for Part III:

> In Versus 2, the duet between the soprano and alto on the phrase 'Den Tod'—'Den Tod'…is a 'call and response' found in other cantatas. This one particularly appealed to me and inspired the 3rd movement of *Tehillim*, a call and response between soprano 4 and clarinet and soprano 2 with oboe, on the text: [Imchahsíd, tichahsáhd], etc.[37]

Reich's use of "call and response" is peculiar in that he applies it to different forms of imitation that are more precisely identified in Western music theory, such as antiphonal exchanges, and even free imitation or strict canons. Reich's labeling of Bach's compositional tool as "call and response" can be better understood as imitative counterpoint as Bach employs the technique.

In "Den Tod niemand zwingen kunnt," Bach centers the soprano and alto solo voices around an interval of a third (Figure 6), in the imitative manner that influenced Reich.

Figure 5

[37] Steve Reich, email to the author, July 8, 2019.

Figure 6

While the Lutheran melody remains with the soprano voice (Figure 7), combining the vocal lines reveals the complete melodic phrase.

Bach creates an appealing sonority in this phrase by maintaining an interval of a minor third between the voices, shown in the fourth and fifth measures in Figure 7. This is achieved through a series of suspensions in the alto voice, with a repeated "ti" to "do" motion in the closing three measures of this example. In *Tehillim*, Reich employs a similar intervallic discourse, at the distance of a perfect fifth, between voices 4 and 2 at the beginning of Part III:

Figures 7 and 8

In this opening sequence, voice 4's opening interval of an ascending major second is followed by a descending perfect fourth (B-natural to C-sharp to G-sharp). Voice 2 responds in the third measure with its own major second followed by perfect fourth motion (E-natural to F-sharp to C-sharp). Reich imitates Bach's "Den Tod" opening motive by utilizing a similar intervallic movement between each voice in their opening measures. As shown in Figure 9 with voices combined, this perfect fourth motion ceases in the fifth measure. Still, the texture remains imitative and the tessituras of each voice are similar to those in Bach's setting.

Text Painting

Text painting is another predominantly Western technique that Reich utilizes in *Tehillim*, which we clearly experience with his setting of "Imchasid tichahsáhd" ("With the merciful You are merciful") at the beginning of Part III. The final portion of this text, "Vaimeekáysh, titpahtál" ("And with the perverse You are subtle"), concludes with voice 4 and the first clarinet sustaining a G-natural (a diminished fifth above a pulsating C- sharp played by the marimba). This interval places emphasis on the Hebrew word meaning "perverse."

Figure 9

Figure 10

Musicologist K. Robert Schwarz, who wrote extensively on several minimalist composers including Reich, Terry Riley, Philip Glass and La Monte Young, describes this moment as a "lovely touch of tone painting," which "results in both a tritone with the C sharp of the marimba/ vibraphone 1, and a dissonance with the G sharp of marimba/vibraphone 2."[38] Another example of text painting is seen in Part IV, where Reich adds, for the first and only time, piccolo, flute, and crotales to the instrumental ensemble, reflective of the text: "Hallelúhu baminim vaugáv…Hallelúhu batziltzláy taruáh." ("Praise Him with strings and winds…Praise Him with clanging cymbals"). These examples demonstrate Reich's broadening inclusion of Western musical text painting, adding to the non-Western musical techniques on which he based most of his previous compositions.

At one point in the Miller Theatre interview, Reich says, "When you steal, you steal from the best," while holding up the Norton critical score of *Christ lag in Todesbanden*. While he speaks to the influence of Bach's imitative counterpoint, similar imitation is found in the string writing. The first movement of *Christ lag in Todesbanden* is a Sinfonia with no voices. The strings function in a manner identical to the soprano and alto soloists in "Den Tod niemand zwingen kunnt" (Figure 11).

In measures 3 and 4, the first violin reiterates the B-natural to A-sharp intervallic movement that begins the Lutheran hymn, and which is related to the soprano soloist's "Den Tod" motive in the second verse. The rest of the strings respond to the first violin in the same way the alto soloist responds to the soprano, although the pitch movement is not identical. Reich's string writing provides a similar imitation of the voices in Part III (Figure 12).

Figure 11

[38] Schwarz, "Music as a Gradual Process, Part II," 273.

Figure 12

In this particular passage (Figure 12), the singers and winds sustain a C-sharp minor sonority with a sustained D-sharp. The strings move independently of each other, starting with the viola and cello and then progressing to contrabass and eventually first violin, imitating the counterpoint of the singers shown in figures 8 and 9.

There may be yet another point of inspiration for Reich in Christ lag in Todesbanden: Bach's employment of "Hallelujah" at the close of each verse. With the exception of the final verse chorale, the word treatment is contrapuntal, imitative, or melismatic, depending on the number of voices involved.

The opening titular verse of *Christ lag in Todesbanden* concludes with an *alla breve* treatment on the word "Hallelujah," in which the instruments provide doubling support for the chorus.

Figure 13

The sopranos are now doubled by the first and second violins. The first and second violas continue doubling the altos and tenors respectively, and the continuo buttresses the basses. The highly imitative setting on the word "Hallelujah," combined with an accelerated tempo, increases the overall energy and excitement of the movement.

By comparison, Reich's psalm choice for Part IV of *Tehillim*—"Hallelúhu batóf umachól" ("Praise Him with drums and dance")—is also a fervent statement of praise. In the B section of this final movement, Reich phases the voices via the "Hallelúhu batóf umachol" text, doubled by the electronic organs (Figure 14).

It is difficult to avoid the similarities in how Bach and Reich set "Hallelujah" and "Hallelúhu," given the doubling support and imitative, polyphonic texture in each work. Reich distinguishes himself from Bach by relying on phasing instead of imitative counterpoint, yet the outcome from using phasing is comparable with Bach's setting in the creation of a polyphonic vocal atmosphere.

Tehillim's conclusion is set on the word "Haleluyáh" as opposed to "Hallelúhu," and is treated as a coda to Part IV. Reich acknowledged his interest in setting this word to music:

> There's a coda on 'Hallelujah,' which is the text that's been set more than any

Figure 14

> other in the history of Western music. It's deliriously overjoyed and it refers to 'tóf u-ma-chól,' drums and winds, which is precisely what I was using in the piece. It was too good to miss.[39]

Unlike "Hallelúhu," which Reich has earlier set in both homophonic and canonical styles, the closing "Haleluyáh" utilizes a more homophonic texture (Figure 15).

In Figure 15, the percussionists continue a phasing sequence, emphasizing the eighth note pulse. This emphasizes the continuous, non-rubato nature of the music, and also acts as a metronome for other musical forces. It is also interesting to observe that while Reich's writing is largely homophonic, he returns to his "call and response" idea from Part III, as voices 2 and 3 appear to respond to the initial statement of voices 4 and 1.

While the music of J.S. Bach influenced *Tehillim*'s compositional structure, it must be remembered that the majority of the work derives from non-Western influences. Ghanaian drumming techniques create a perpetual state of flow. The melodies spring from the composer's studies of gamelan and Hebrew cantillation, although Reich acknowledged that the melodies can be viewed from a Western perspective as well, in spite of his well-known aversion to melody:

> When I was first working on it my wife [video artist Beryl Korot] said to me, 'You're actually singing! You're singing melodies!' It was the first time I wrote melodies in that sense…*Tehillim* is melody in a *recognizable* way in Western traditional terms, and that was the break.[40]

The connection to Western music is most clear in Part III's dialogue between the voices on "Imchasid tichahsáhd." This movement not only uses the framework of imitative counterpoint provided by Bach in "Den Tod niemand zwingen kunnt," but exhibits further Western influences in the use of text painting. Earlier Reich works, such as *Music*

[39] Kim, 351.

[40] Kim, 353.

Figure 15

for 18 Musicians and *Drumming*, include singers, but only use neutral syllables concurrent with the short repetitions of other instruments in the ensemble. These repeated fragments are melodic, but *Tehillim*'s text requires longer melodic lines to carry an entire thought. Reich then either repeats, phases, or elongates these melodies, imprinting the music with his trademark of minimalist compositional techniques.

Tehillim is a landmark contemporary work that continues to influence subsequent minimalist and post-minimalist composers. It remains a fresh and exciting venture in the realm of vocal and instrumental music and, much like the music of Bach, provides substantial challenges for its performers, and unique interpretations of Biblical passages that never fail to find an audience.

BIBLIOGRAPHY

Duffie, Bruce. "Composer Steve Reich: Two Conversations with Bruce Duffie." Accessed January 4, 2020. http://www.bruceduffie.com/reich.html.

Dürr, Alfred. *The Cantatas of J.S. Bach: With Their Librettos in German-English Parallel Text*. New York: Oxford University Press, 1992.

Herz, Gerhard. *Johann Sebastian Bach: Cantata No. 4 Christ Lag in Todesbanden: An Authoritative Score*. New York: W.W. Norton & Company, Inc., 1967.

Kim, Rebecca. "From New York to Vermont: Conversation with Steve Reich." *Current Musicology* (Fall–Winter 1999): 345-366.

Koay, Kheng Keow. "Baroque Minimalism in John Adams' *Violin Concerto." Tempo* 66 No. 260 (April, 2012): 23-33.

Leaver, Robin. *The Routledge Research Companion to Johann Sebastian Bach*. New York: Routledge, 2017. Miller Theatre. "Reich and Bach." Accessed September 25, 2019.

Pierson, Alan. "Performance Practice in the Music of Steve Reich." DMA Diss., Eastman School of Music, 2006.

Reich, Steve. "Hebrew Cantillation as an Influence on Composition (1982)." In *Writings on Music*, edited by Paul Hillier. Oxford, United Kingdom: Oxford University Press, 2004. Oxford Scholarship Online.

_____, Steve. "Music for 18 Musicians (1976)." In *Writings on Music*, edited by Paul Hillier. Oxford, United Kingdom: Oxford University Press, 2004. Oxford Scholarship Online.

_____, Steve. *Tehillim*. New York: Hendon Music, Boosey & Hawkes, 1994.

_____, Steve. "Tehillim (1981)." In *Writings on Music*, edited by Paul Hillier. Oxford, United Kingdom: Oxford University Press, 2004. Oxford Scholarship Online.

Rifkin, Joshua. "Bach's Chorus: A Preliminary Report." *The Musical Times* 123 No. 1677 (Nov. 1982): 747–751 & 753–754.

Schwarz, K. Robert. *Minimalists*. London: Phaidon Press Limited, 1996.

_____. "Music as a Gradual Process, Part II." *Perspectives of New Music* 20 No. 1/2 (Autumn 1981-Summer 1982): 225–286.

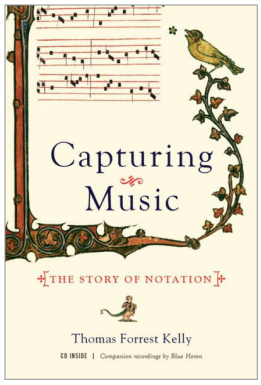
Schweitzer, Vivian. "Composers Converse Across Centuries." *New York Times*, May 19, 2014. https://www nytimes.com/2014/05/20/arts/music/steve-reichs-tehillim-meets-bach-at-miller theater.html.

"Steve Reich on Tehillim + Bach." YouTube Video. 6:11. Posted by "Miller Theatre" April 21, 2014. https://www youtube.com/watch?v=creTXfBzjBg&t=171s.

Tenzer, Michael. "That's All It Does: Steve Reich and Balinese Gamelan." In *Rethinking Reich*, edited by Sumanth Gopinath and Pwyll ap Siôn. Oxford, United Kingdom: Oxford University Press, 2019.

Book Reviews

Andrew Crow, editor



Capturing Music: The Story of Notation
Thomas Forrest Kelly
W.W. Norton & Company, 2015
238 pages (plus compact disc), $45.00, hardcover
ISBN: 978-0-393-06496-4

As the choral field examines current and historical practice regarding the representation of cultures, traditions, and matters of inclusion within the artform, investing time in the potentially esoteric field of notation as it evolved in Medieval Europe may seem trivial. However, this provocative volume invites deep questions and provides unsuspected insights specifically relevant to present questions. If we consider notated music a signifier of the Western or European tradition, examining the period when music left the realm of oral transmission for the legacy of literacy focuses attention on a moment that separated one path from another. Thomas Forrest Kelly leads the reader methodically through pivotal moments and manuscripts in the development of notation, but opens the door to wider philosophical pondering.

As Kelly reveals the first steps toward capturing sound in symbol, he also enumerates some facets of music that were lost in the process. His language sounds quite current when he writes that the emergent system of notation "chooses to privilege" some aspects of music and "literally marginalize[s] others" (3–4). For example, since timbre was not included in the notation, the character of the desired sound is not recorded. However, Kelly points out that some earlier systems of notation were designed to show "how to sing the song, not what the song is" (12).

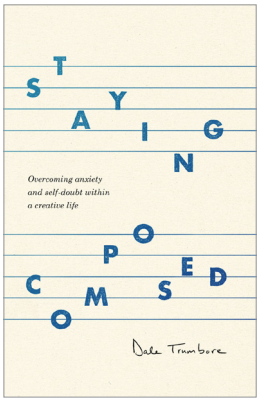
In addition to a vivid presentation of the historical narrative, Kelly offers a fascinating philosophical approach, citing figures such as St. Isidore of Seville and St. Augustine. The latter is quoted in a detailed description of time perception that mirrors my own experience of time on the conductor's podium. Elsewhere, Kelly muses that "the magic of music, in a way, is in its ephemeral quality: if you're not here, you can't hear it" (10). Connecting the fourteenth century with our own, Kelly notes,

> It is fitting in a way that the century of plague, schism, and war should bring about something so lasting in the service of art. It is perhaps in times of stress that the arts and sciences have their strongest effect…Both Machaut and Vitry were diplomats, politicians, clergymen, poets, and composers. Perhaps if more politicians were to practice the arts of lyric poetry and music, we might create a more beautiful world (175).

The book's core traces first the development of notation conventions for pitch and then the more arduous path for a codified system to indicate rhythm. Along the way, we learn about music's relationship to mathematics, medieval philosophy, and the development of the motet. The journey is accompanied by interesting sidebars and gorgeous reproductions of relevant manuscripts. By way of confession, I normally gloss over such insertions, but Kelly even managed to get this reviewer to examine the plates with genuine interest and to listen to them performed; the accompanying compact disc features customized examples recorded by the vocal ensemble Blue Heron. Indeed, the book itself is a pleasing, sensuous experience with high quality paper, vibrant images, and thoughtful design. At some level, the book seems to target a lay audience, though one would imagine that there is a slim market for this content. Yet Kelly does not patronize that potential audience. For any conductor who rarely gives professional attention to music before Josquin, Kelly's patient and relevant descriptions of terminology and genres provided a welcome refresher and, perhaps, clarifies some esoteric terms and historical figures from the dusty past of an undergraduate music history survey.

Kelly concludes with some musings about the durability of this now-familiar notational style compared side-by-side with more recent technologies for recording and transporting sound, from wax cylinders to mp3 files. Even still, he notes our age-old reliance on memory and improvisation. Neither textbook nor encyclopedia, *Capturing Music* offers a rare gift: to consider the current musical moment through the lens of changes that impacted the artform almost a millennium ago.

—Andrew Crow



Staying Composed: Overcoming Anxiety and Self-doubt Within a Creative Life
Dale Trumbore
Self-published, Monee, Illinois, 2019
199 pages, $16.00 paperback
ISBN: 978-1-09-724864-3

One might expect a book written by an up-and-coming contemporary choral composer to address compositional techniques, or perhaps tips to successfully navigate the world of grants and commissions, but this book applies much more broadly. Its title does not mislead: this book is about overcoming anxiety in the creative arts. In forty-two short chapters averaging from three to five pages each, *Staying Composed* provides an informal summation of the wisdom that Dale Trumbore has accumulated from her research and life experience.

Trumbore's steady stream of sage advice is relevant for composers, conductors, writers, and artists of all types who deal with anxiety and self-doubt¬. Thus, most artists and musicians could benefit from reading this; it's surely a prudent investment. Trumbore writes in a conversational, familiar style; her honesty, vulnerability, and transparency are refreshing and endearing.

Trumbore candidly discusses her failures in various chapters. For example, she tried duplicating original compositional successes, but the imitations were no longer original. She also addresses her own self-sabotaging propensity to procrastinate. Much of her advice is contextual, and requires a certain amount of discernment to apply. Some things just take time to marinate, such as big projects that cannot be rushed or the quality suffers. Other things you can do right now, and should.

While a few of her suggestions may strike some as touchy-feely, (e.g. "how do I want to feel while in the process of composing this work?" [36 and 151]), much of her advice is eminently practical. This includes proactive steps that one can take when feeling stalled out, or building space around deadlines, leaving time for unexpected events before, and some down-time after completing a major project. Trumbore suggests productive use of non-creative time for other tasks: business emails, reconnecting with choral contacts, or housework.

Some of Trumbore's advice might apply most specifically to composers. For example, she suggests that one's best creative work currently may be only a stepping stone, a prototype for even better creative work in the future (44-45). Elsewhere, Trumbore recommends that touching base with works in progress every day, even if only briefly, makes the ice much easier to break than after an extended break in order to keep them in active memory (18-19). But much of her advice can easily be applied to conductors. As artists, we should trust our instincts—if something feels wrong about a commission or project, this is not likely to be the last time we feel that way. (She quotes the Buddhist proverb, "as in the beginning, so in the middle, so at the end"[109]). Careers are built on a consistent body of work. One can mitigate professional jealousy by asking questions that address the root of that insecurity: self-doubt statements such as, "Why does she get so many more performances than I do?" can become, "What can I do to secure more performances for my work?" and "Their website looks so much better than mine" turns into "What concrete improvements to my website could I complete this weekend?" And finally, "don't ever save good ideas for later—trust that your creative spring will continue to flow; you will continue to produce new ideas in the future."

Trumbore's advice is sometimes pithy but never trite. The best solutions are often the simplest. Know yourself, listen to your own body, and be familiar with your own creative process. Be kind, and forgiving to yourself: "You don't need to deserve a break in order to take one," she writes, "but after you've completed a big project, you've definitely earned one" (164–165). And finally, an insight with which conductors can definitely resonate: a single composition [or concert], however great, is not a success—you are the success, in that you get to share your inner vision and creative inspirations with the world, doing what you love to create beauty and art that will potentially have unforeseen and long-lasting ripple effects.

While no one can write a book wherein all of the content will apply to every NCCO reader, Trumbore's precepts are applicable to anyone working in the creative arts, not just composers specifically. Conductors also can benefit from her excellent advice. Trumbore should be commended for this contribution to artists' mental health in an important field too frequently left unaddressed.

—Vaughn Roste

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Recording Reviews

Jace Saplan, editor

David Lang: love fail
Lorelei Ensemble
Beth Willer, conductor
Cantaloupe Music,
CA21158 (2020; 50'00")

David Lang's stunning version for treble voices of *love fail* is brought to life by the uncompromising and attentive performance of Beth Willer and the Lorelei Ensemble. The American composer and *Bang on a Can* co-founder originally wrote the fifteen-part meditation on the timeless love story of Tristan and Isolde for the Anonymous 4 in 2012 and arranged it for the nine-member Lorelei Ensemble to premiere in 2016.

Throughout the fifty-minute piece, Lang weaves together his text after the retellings of the Tristan myth by Marie de France, Gottfried von Strassburg, Béroul, Thomas of Britain, and Richard Wagner intermingled with micro-fictions by contemporary author Lydia Davis. Lang shares, "I thought I might learn something about love if I could explore this in a piece, putting details abstracted from many different retellings of Tristan and Isolde next to texts that are more modern, more recognizable to us, more real."[1] He distills centuries of retellings of the great love story and yokes them with the present day. Lang also removed time markers and names, instead using "he" and "she", which creates an intimate and self-reflective nature.

Musically, Lang also cuts between the ancient and modern, invoking plainsong alongside modern harmonies, languid lines, and frequent pauses.

One of the most striking elements of the work is Lang's refusal to luxuriate in the moment. There is nothing extra, nothing extraneous, and yet, each section is deeply captivating—hitting the listener in the chest with a directness and authenticity infrequently achieved: "My music never has anything in it that says: 'This moment is really gorgeous. Let's luxuriate in it,'" Lang shared. "Excitement is not the most important thing to me, and neither is beauty."[2]

Lorelei's interpretation is mature and embodied, clearly conveying their emotional investment, time with, and connection to the work. Beth Willer affirmed, "We have an affinity for David's music, and have been performing it since our early years together as an ensemble. This piece is particularly striking—David's brilliant use of silence and direct delivery of text, the intimacy and immediacy of Lydia Davis' poetry, the ancient tale of accidental and all-encompassing love—

[1] love fail program note by the composer, https://davidlangmusic.com/music/love-fail.

[2] David Lang as quoted in the New York Times New York edition, Section AR, Page 11 on Dec. 2, 2012 with the headline: Keeping the Magic Without the Thunder.

THE CHORAL SCHOLAR & AMERICAN CHORAL REVIEW
The Online Journal of the National Collegiate Choral Organization
VOLUME 58 | NUMBER 3 | FALL 2020

it draws you in, and it's gripping."[3] The group's commitment is evident in their intoxicating command of the work, as well as their refined attention to detail.

From the first movement *he was and she was*, which portrays "he" in canonic, halting entrances, and "she" in homophonic pristine simplicity, the ensemble melds the long lush lines of rich harmony with a purity and depth of tone that seems to fit Lang's intent perfectly. It is also refreshing to notice the way in which the vocalists' diverse color pallet and expressive choices mirror his undramatic yet emotionally engaged compositional style. The ensemble's unification of tone and pristine intonation allows the text to move to the foreground, commanding the ear to focus on the story as opposed to the technique.

There is also a repetitive meditative affect present throughout the work that lulls the listener into a deeply contemplative space. The longest of the fifteen total movements is *the wood and the vine*, which serve as a metaphor for the complexity of intertwining lovers. The piece is reminiscent of a narrator accompanied by the Greek chorus and begins; "now I'll tell you a story, that is also the truth." It opens to a powerful delivery of the duality of hope and despair, and also references Marie de France's version of Tristan, where he carves a message into a stick for Isolde to find and interpret.

Finally, it is paramount to note that the engineering of this recording highlights the unique compositional elements of *love fail* as well as the technical artistry of Lorelei. In comparison to the quite dry, direct sound presented in other notable recordings (which admittedly are both of the original quartet version of the piece), the balance created here is an even blend between a more wet cathedral sound and one in which each individual singer can be heard. The result is not only incredibly flattering to the voice, but presents an even perspective that captures the depth, unification, and balance of ensemble. Notably, the reverberation at phrase ends is greatly curbed to almost nothing, shining momentary spotlights on the breathtaking moments of silence throughout.

Beyond the innate musical value, Willer and Lorelei's recording provides the choral art, but possibly even more important is the greater societal impact of a recording such as this by a treble-voiced ensemble. Lorelei's mission includes their commitment to "...bring works to life that point toward a 'new normal' for vocal artists, and women in music,"[4] and that is exactly what this project achieves.

The elevation and advancement of treble and/or women's voices can only happen when groups such as Lorelei commit to a level of craft that elevates the standard for which others strive, and do so in a manner that inspires, uplifts, and empowers. This stunning album reaffirms Beth Willer's leadership and Lorelei's place as such an ensemble, paving the way for others to follow.

Gratitude during this moment in history is essential. The choral profession would be remiss not to express appreciation for both David Lang's exquisite composition of *love fail*, and for the stunning work of a conductor and ensemble dedicated to such interpretive artistry and a truly wholehearted expression of love.

—Corie Brown

[3] Beth Willer as quoted in the June 2020 press release for the album, https://static1.squarespace.com/static/51db1481e4b0912307922a77/t/5ef67d1898fcd2344dbc562d/1593212185098/Lorelei_LangLoveFail_CantaloupeJune2020.pdf.

[4] https://www.loreleiensemble.com/ensemble

Cyrillus Kreek. The Suspended Harp of Babel
Vox Clamantis
Jaan-Eik Tulve, conductor
ECM Records
ECM4819041
(2020; 67'01")

Cyrillus Kreek (1889–1962) is best known in the international choral world for his two Psalm settings, *Taaveti laul nr. 1 Õnnis on inimene* [Blessed is the Man] and *nr. 104 Kilda mu hing Issandat* [Bless the Lord, My Soul]. Although Kreek studied at the St. Petersburg Conservatory, he had great interest in the folk music of his homeland of Estonia and began collecting folk songs from around the country. Because of this work, he is considered one of the influencers in the creation of the Estonian nationalistic music style.

The Suspended Harp of Babel allows listeners to explore more deeply the intermingled traditions of Estonian folk and sacred songs that represent the Estonian nationalistic style. This recording showcases a wonderful balance of four psalm settings (*Taaveti laulud*, Psalms of David) written from 1923–1944, four sacred folk tunes from 1917–1919, and four additional forms, including traditional Orthodox vespers and a presentation of the traditional Estonian folk form of regilaul intertwined with the Orthodox vespers. All of these pieces are connected beautifully with introductions and interludes composed by Marco Ambrosini and played on the kannel, a traditional Estonian zither, and the Swedish nyckelharpa, a keyed fiddle used extensively in folk music. Kreek's connection to the Swedish folk traditions stems from time he spent in the Estonian Swedish villages while he was collecting folk incipits. Incorporating the nyckelharpa is a beautiful way to honor that connection.

The album is artistically constructed with great attention to the order and flow of the compositions, creating an overall feeling of a "folk liturgical event." This order introduces the listener to the three distinct forms of the compositions and then allows the listener to reflect on the similarities and differences as those forms alternate between the tracks.

Grammy-winning Vox Clamantis, founded in 1996, is one of the premiere Estonian choral ensembles. They are known for their clear, full and balanced ensemble sound, and they execute all of these qualities through this recording. Their vocal sensitivity and flexibility are highlighted as they move from lyric folk song melodic lines to beautiful and lush chordal movement in the orthodox vespers and hymn-like portions. Known for their love and interpretation of Gregorian chant and the music of Arvo Pärt, they transfer those skills and focus beautifully to their thoughtful and sincere interpretation of these pieces by Cyrillus Kreek.

Jacob's Dream / Orthodox Vespers: Proemial Psalm [Jakobi unenägu/Algulaul] encapsulates the true spirit of the album with the interweaving of the call and response form of the Estonian regilaul (this one is from the Kanepi parish of southeastern Estonia), the free improvisation by both the kannel and nyckelharpa, and the haunting traditional chant and response of the Orthodox Vespers Proemial Psalm.

The sacred folk tunes presented have a beautiful comfort in their hymn-like form, but also incorporate folk performance practice elements that create an ethereal experience traversing the sacred and the secular. In *From Heaven Above to Earth I Come* [Ma tulen taevast ülevalt], the juxtaposition of the chorale-like hymn form

with the improvisation of the nyckelharpa is an celestial mixture of sounds: a Renaissance-like viol reflection coupled with traditional Lutheran hymns wrapped together with a slightly raw folk timbre. It is as if the performance spans centuries all within a few minutes.

The juxtaposition of folk and sacred comes to the forefront again in *Awake My Heart* [Mu süda, ärka üles], where lively and energetic interludes by the kannel, nyckelharpa, and percussion are interspersed with the sacred folk tune in a traditional chorale arrangement and verses sung by a cantor, representing a pseudo regilaul leader in this amalgam of the folk and sacred.

This recording is an excellent entry point to the creative world of Cyrillus Kreek, as access to many of Kreek's compositions has been challenging in the past for conductors outside of the Baltic region. For more information on Kreek and his compositions, the Estonian Music Information Centre (emic.ee) has created a wonderful database of his works that includes a short biography, listing of his compositions and reference information for where the manuscripts are held, what recordings are available, and how to purchase his scores.

—Heather MacLaughlin Garbes

Sing About It
Tonality
Alexander Lloyd Blake, director
B07N416K1J
(2020; 60'09")

Shortly after their inception in 2016, LA-based professional choir Tonality elected to focus on presenting concerts and events that feature a diverse array of music centered around underrepresented topics in choral music. Recent concerts have focused on issues of social justice, homelessness, refugees, and more. In 2018 Tonality presented a concert called *Democracy in Action* where, in addition to performing many of the songs that appear on *Sing About It*, they helped concertgoers register to vote. In 2020, they were honored with the Chorus America/ASCAP Award for Adventurous Programming, and their innovative 2020–2021 virtual season features premieres of virtual recordings coupled with Q&A sessions with composers.

Sing About It is Tonality's first album, and true to their mission, features a diverse array of music performed beautifully around the aforementioned themes. Dr. Alexander Lloyd Blake, the Founder, Executive Director, and Artistic Director, skillfully draws a variety of genre-authentic and -appropriate tone colors and expressions out of his singers. Tonality sounds just as authentic performing vocal jazz (*Democracy*) as they do performing modern classical choral works (*No More!, Seven Last Words of the Unarmed*) and pop (*True Colors*). The album appropriately opens with an extended pop-folk influenced riff in Moira Smiley's "Sing About It."

The work of LA-based composers Dr. Zanaida Robles and Shawn Kirchner features heavily on *Sing About It*. Robles' "Can You See" is a dense,

polyphonic reworking and reimagining of portions of "The Star-Spangled Banner" juxtaposed with other texts like "love is love." Tonality's performance is compelling and urgent—their aggressive, dynamic, and full-throated approach to the dissonant final phrase "and the home of the brave," is bone chilling. Kirchner's *Eye for Eye* features a Ghandi-inspired text written in response to the 2016 Pulse nightclub shooting in Orlando and is sung with a beautiful simplicity of tone and an unrushed tempo.

The recording also features three movements of Joel Thompson's *Seven Last Words of the Unarmed*. This work is sadly as relevant today as it was when it was completed in 2015, and Tonality provides an expressive interpretation of the piece. The third movement, "Amadou Diallo," is particularly heart-wrenching, featuring an exquisite and artful tenor solo.

One of the highlights of the album is *True Colors*, written by Billy Steinberg and Tom Kelly, made famous by Cyndi Lauper, and arranged for Tonality by Saunder Choi. Featuring well-tuned and expressive extended harmonies and a complex and intriguing reimagining of the form of the original song, Tonality's performance draws out the cleverest elements of Choi's arrangement.

Sing About It is beautifully conceived, sung, and executed. For directors, it provides a high-quality catalogue of music by living composers that speaks to the issues our singers face and grapple with in their daily lives. For all, it is a timely and important statement about what choral music can be in the 21st century.

—Alexander Schumacker

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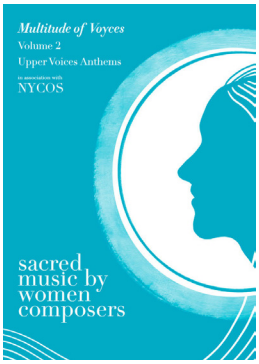
Choral Reviews

John C. Hughes, editor



Multitude of Voyces Sacred Music by Women Composers, Volume 2: Upper Voices Anthems
Louise Stewart, ed. (2020)
SSAA, div., various accompaniments
Texts: English, French, Latin, and Welsh
Stainer & Bell, ISBN: 9781916216419
160 pages, £14.99, softcover

Driven by the mission to support under-represented groups through music, Multitude of Voyces has published its second anthology of sacred music by women composers. The aim of this series is to celebrate the contributions of women composers in church music by making their work visible and readily available for all types of choral ensembles. Volume 2 consists of twenty-four anthems exclusively for upper voices. Most songs are written for SA or SSA voicings, but the collection ranges from unison to six-part *divisi* making the anthology useful for treble choirs of all ages and abilities.

The majority of composers in this second volume are living and working today as composers and conductors in the United Kingdom where this series is published, although Italian (Carlotta Ferrari, Angelina Figus, and Bianca Maria Furgeri) and American (Linda Kachelmeier) composers are included. Amongst the sixteen contemporary composers, most are not yet familiar names to this American reviewer, making this series a much-needed introduction to several women composers writing for upper voices today. From a historical perspective, there are eight songs including several works by Hildegard von Bingen (1098–1179), Clara Schumann (1819–96), Lili Boulanger (1893–1918), and Rebecca Clarke (1886–1979). One would expect a collection for treble choirs to include well-known composers such as these; however, many more gifted women have been ignored and forgotten in favor of the systematic privilege given male composers. Resources like this continue to challenge this practice by making the contributions of historical and contemporary women composers more readily accessible to those selecting music to be performed today.

As expected of an anthology for upper voices, this volume includes a diverse collection of music suitable for children and youth choirs to adults. The level of difficulty and styles range from straight-forward unison pieces to more complex works appropriate for church and concert performances. For example, Amy Bebbington's *I Sing of a Maiden* is an interesting partner song with contemporary harmonies and irregular time signatures using an ancient fifteenth-century English text that will appeal to singers young and old. Developing choirs will enjoy learning Clara Schumann's *Let Earth's Wide Circle Round*, the simple melodies of Julia Perry's *How Beautiful*

are the Feet and Morfydd Owen's *He Prayeth Best Who Loveth Best*, and the two-part, chant-based *Ubi Caritas* by Roxanna Panufnik utilizing both Latin and English. More accomplished choirs will appreciate Rebecca Clarke's *Ave Maria* with its chromaticism and unique harmonic setting, Linda Kachelmeier's melismatic *O vis eternitatis*, the six-part sustained and luscious *Car auprès de toi* by Ninfea Cruttwell-Reade, and the dissonant harmonies and intricate rhythms of Judith Bingham's *Les Saintes Maries de la Mer*.

The sacred texts included in the collection are not surprisingly comprised mostly of traditional Latin service texts (such as *Hodie Christus natus est, Pie Jesu* from the requiem Mass, and the Marian antiphon *Regina Caeli*) and biblical texts (including Psalm 23, Song of Solomon, and Isaiah 52:7). There are four settings of texts by the twelfth-century mystic and poet Hildegard von Bingen including Carlotta Ferrari's *Nos sumus in mundo* and *Quasi aurora*, and Hildegard's own antiphon, *O virtus Sapientie*. Julian of Norwich (1342–c.1416) is also well represented with three settings of texts from her *Revelations of Divine Love*. Conceived as companion pieces, Carol J. Jones' *All Shall be Well* with Julian of Norwich's text and Olivia Sparkhall's *Lux Aeterna* from the Requiem Mass are excellent examples of music bringing ancient texts to life as the composers have "attempted to reimagine the sounds associated with Julian's fourteenth-century voice in the twenty-first century" (Olivia Sparkhall, p. 160). Most of the songs are in English or Latin, but there are several pieces in French. Grace Williams's *Psalm 150* can be sung in English or Welsh as it was originally composed. One last interesting text to note is Joanna Forbes L'Estrange's gospel setting and adaptation of novelist Jane Austen's (1775–1817) eventide prayer: "Give us grace, Almighty Father, so to pray, as to deserve to be heard this and every day, to address thee with our hearts as we sing this with our lips."

The majority of songs in this collection are to be performed unaccompanied, but several can be accompanied by organ and piano. Interestingly, five of the selections are written for choir with harp. This can be useful for conductors with a strong harpist available or looking to program several songs with harp accompaniment together in a single concert. The piano is indicated as an alternative to harp on four of the five songs; however, as is often the case, the harp seems to be the preferred idiom in each of these works.

There are several important resources offered in this anthology including brief biographical entries on each of the composers and commentaries on each piece. The commentaries are especially useful in understanding the background and text of each song and offer insights into the compositional approach taken by the composer. Conductors will appreciate this information as they select music and prepare for performances. Text translations are also included in the commentary section. One of the editors and contributing composers, Olivia Sparkhall, has created a useful website including YouTube performances of many of the pieces: *https://oliviasparkhall.wixsite.com/sparkhallo/single-post/2020/04/08/New-Sacred-Music-Anthology*. Because concerts were canceled or postponed in the spring of 2020 when this anthology was released, it is presumed more videos will be added once choirs can once again safely perform. A Spotify playlist of some of the recorded songs also exists *https://open.spotify.com/playlist/6DSQKPdDj5sAYHdBTRxMy2?si=y2Ebb2loTpec_AUTfwllOQ*.

This second volume of twenty-four sacred anthems for upper voices by women composers adds to the twenty-two songs included in the first volume for SATB voices. Multitude of Voyces is currently seeking submissions for its next volume to include music for the Advent, Christmas, and Epiphany season for all choral voicings: *https://www.multitudeofvoyces.co.uk/*.

— Michael Zemek

Composers included in *Multitude of Voyces' Anthology of Sacred Music by Women Composers, Volume 2: Upper Voices Anthems:*

Amby Bebbington (b. 1975)
Judith Bingham (b. 1952)
Lili Boulanger (1893–1918)
Hilary Campbell (b. 1983)
Rebecca Clarke (1886–1979)
Carlotta Ferrari (b. 1975)
Angelina Figus (b. 1957)
Joanna Forbes L'Estrange (b. 1971)
Bianca Maria Furgeri (b. 1935)
Margie Harrison (b. 1955)
Hildegard von Bingen (1098–1179)
Carol J. Jones (b. 1993)
Linda Kachelmeier (b. 1965)
Caroline Lesemann-Elliott (b. 1996)
Sarah MacDonald (b. 1968)
Gemma McGregor (b. 1965)
Morfydd Owen (1891–1918)
Roxanna Panufnik (b. 1968)
Julia Perry (1924–1979)
Elizabeth Poston (1905–1987)
Ninfea Cruttwell-Reade (b. 1989)
Clara Schumann (1819–1896)
Olivia Sparkhall (b. 1976)
Grace Williams (1906–1977)

Works for the Virtual Age

Uncertainty appears to be the only certainty of the 2020–21 academic year. As we embark on new paths, questions abound: What does instruction look like? How does one lead choral ensembles when singing may be one of the most dangerous activities? How long will this go on? Information and best practices seem to change by the minute.

COVID-19 has forced musicians to be creative and innovative in many ways. As a result, genuine opportunities exist within the present challenges. I imagine many of us are putting together virtual choirs, which are satisfying because they mimic live performance. Conductors may also consider the following works by Jocelyn Hagen, Timothy C. Takach, and Dale Trumbore, all of which were written since March specifically for virtual music making.

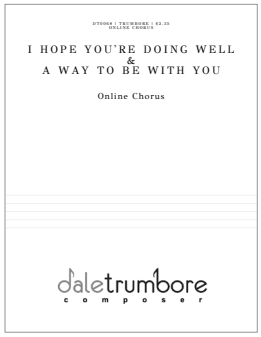
The pandemic is not going away anytime soon, but nothing can weaken the power and beauty of singing together. I hope you peruse these scores and wish you the best of luck navigating the challenges ahead.

Build the Sky (2020)
Jocelyn Hagen (b. 1980) and Timothy C. Takach (b. 1978)
3-part round
(c. 2:00)
Text by Julia Klatt Singer; in English
Graphite Publishing: *https://graphitepublishing.com/product/build-the-sky/*
Recording by Nation (Hagen and Takach): *https://graphitepublishing.com/product/build-the-sky/*

Jocelyn Hagen and Timothy C. Takach co-wrote this fun, folksy setting of an optimistic poem by Julia Klatt Singer. The text speaks of the special kind of togetherness that communal singing engenders: "Your voice and mine braided and bound/Here, together, all along." Although it may not be possible for singers to be physically together, this composition affirms that distance cannot break those bonds.

It may have been tempting to write a somber piece, given the dark, uncertain times our country is enduring. On the contrary, Hagen and Takach offer an upbeat piece that is full of hope. Set in 3/4, the lilting meter and pop inflections recall the stylings of The Wailin' Jennys, as well as Nation, the composers' vocal band.

Because no choir is presently operating as normal—regardless of whether they meet virtually or in-person (at a distance or in reduced numbers)—Hagen and Takach wisely designed *Build the Sky* to be flexible. The piece would work well under any circumstance. It is a three-part round with an optional descant and two optional codas (one for equal voices and one for mixed voices). When rehearsals and concerts do eventually resume, conductors may consider using this piece for their first meeting. It is always important to make music as soon as possible on that first day, and a round is a great way to do so. Hagen's and Tackach's piece allows singers of all levels to move past notes and rhythms quickly. After all this time without singing, why not get to the best part of choir right away?



I Hope You're Doing Well & A Way to Be With You (2020)
Dale Trumbore (b. 1987)
Online chorus; flexible voicing
(c. 5:00)
Two movements: *I Hope You're Doing Well* & *A Way to Be With You*
Texts by Dale Trumbore; in English
Graphite Publishing: *https://graphitepublishing.com/product/i-hope-youre-doing-well-a-way-to-be-with-you/*

Virtual choirs are certainly in vogue right now, but what about pieces written intentionally to be performed in separate spaces over the internet? In March, Dale Trumbore composed two such works for "online chorus." She also supplied the pieces' texts, which are warm expressions of well wishes during a time of staying home and socially distant. In her performance notes, Trumbore states that conductors should also sing, which further creates a sense of unity. Rather than fight the laws of physics that prevent multiple streams of audio transmitted over the internet from syncing, Trumbore embraces the limitations of the present reality. She leaves a great deal of discretion to performers: both movements can be performed or just one; if performing both, there is not a prescribed order; the tempo is free, and the voices do not need to be synchronous; when two pitches are notated, singers are encouraged to choose either one or move between them. The open-ended nature of these pieces works musically and offers real pedagogical benefits. Specifically, singers' performances are not dictated by the composer or conductor. Rather, each singer's own discretion is paramount; every choir member is empowered to play an independent, active role in the music making.

I Hope You're Doing Well is a sweet and sincere piece. The long, meter-less phrases recall chant and are to be intoned at each performer's own pace with a bell-like quality. The vocal parts are mostly in unison and do not need to line up; however, there is a fermata toward the end, at which point the singers hold their note until everyone has arrived and the conductor releases. Harmonically, the piece is centered on C, which lends itself to learning on solfège. This can be hugely beneficial for students learning remotely who may not have access to a keyboard instrument. Yet, the piece is not simple. Some tricky intervals occur frequently, particularly an ascending augmented fourth from F to B and chromatic alternations of Ab and Bb. These instances add melodic interest and enough of a challenge without being insurmountable.

The other piece in this set, *A Way to Be With You*, has more elements: it is metered; frequently has more than one pitch occurring simultaneously, and has two short solo passages. The melody is hauntingly beautiful, in large part due to mode mixture. Like *I Hope You're Doing Well*, this piece centers on C, and E-flats, A-flats, and B-flats add harmonic color. Trumbore uses syncopated

rhythms to capture the text's prosody well. While *A Way to Be With You* is more complex than its partner, it is not overly difficult to learn and perform in insolation.

In these two pieces, Trumbore nails a brand new genre: music for online chorus. Prior to COVID-19, she assumedly never dreamed of writing such pieces. *I Hope You're Doing Well* and *A Way to Be With You* avoid the potential pitfall of triteness and instead demonstrate the sincerity and craft for which Trumbore is known.

— John C. Hughes

TCS
ACR

The Authors

Corie Brown is assistant professor of choral music education at San José State University. Prior to graduate studies at the University of Colorado Boulder and University of Oregon, Dr. Brown taught in Colombia with the Fundación Nacional Batuta. She is active nationally and internationally as a clinician and guest conductor, most recently with the Kula Kākoʻo Virtual Choral Conducting Institute in Hawai'i, the Virtual Festival Coral de Santander, and Festival Mar de Voces in Colombia.

Andrew Crow is director of choral activities at Ball State University where he leads ensembles, teaches conducting, and mentors students in the graduate program. He has contributed scholarship on topics such as intonation, score study, and rehearsal technique. Crow is also an experienced singer, orchestral conductor, and piano technician. Dr. Crow is an associate editor of *The Choral Scholar & American Choral Review*.

Caron Daley is director of choral activities and ensembles coordinator at the Mary Pappert School of Music at Duquesne University in Pittsburgh, PA. Choirs under her direction have performed across the Northeast, including an invited performance at the 2019 National Collegiate Choral Organization Conference. Caron's research explores embodiment in choral learning through the lens of Dalcroze Eurhythmics. She is published in *Anacrusis, Canadian Music Educator, Research Memorandum Series* of Chorus America, *Teaching Music through Performance in Choir Vol. 4 and Vol. 5, Choral Journal*, and upcoming in *Journal of Singing*. Caron currently serves as president of the American Choral Directors Association of Pennsylvania.

Heather McLaughlin Garbes is affiliate assistant professor in the University of Washington, where she is the curator of the Baltic Choral Library. Dr. MacLaughlin Garbes co-authored the chapter "Baltic Languages: Latvian, Lithuanian and Estonian" in *The Use of the International Phonetic Alphabet in the Choral Rehearsal*, (Scarecrow Press, 2012). She is artistic director for the West Coast Estonian Days Song Festival (2022) and also currently conducts the Finnish Choral Society.

Joshua Harper is Director of Choral Activities at Yavapai College in Prescott, Arizona. He will join the Arizona Philharmonic as Guest Conductor for their 2021 season. His scholarly edition of Franz Schubert's "Die Einsiedelei" is published by Colla Voce Music LLC. He holds the D.Mus. in Choral Conducting from the Jacobs School of Music, Indiana University.

Cheryl Frazes Hill is director of choral activities at Roosevelt University's Chicago College of Performing Arts, since 2002. During her years of teaching, she has earned numerous awards, including the Illinois Governor's Award, the Northwestern University Alumni Merit Award, the Outstanding Teaching Award from the University of Chicago, and the Roosevelt University Presidential Award for Social Justice. Frazes Hill is currently completing a biography on the life of Margaret Hillis, with the anticipated publication date October, 2021, and has served on the National Board for NCCO since 2018.

Brandon Hollihan is associate faculty at Bethel University and Indiana University-South Bend, and music director at First United Methodist Church in downtown South Bend. A recent graduate of the Sacred Music Program at the University of Notre Dame, Dr. Hollihan also holds dual Master's degrees in voice and choral conducting from The Ohio State University and a BA in voice from Notre Dame.

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Greg Marchetti is an associate professor in the Department of Physical Therapy at Duquesne University. He holds a Master of Science from the School of Health and Rehabilitation Sciences at the University of Pittsburgh and a Ph.D. in epidemiology with an emphasis in non-communicable disease from the Graduate School of Public Health at the University of Pittsburgh. Greg has conducted research, published and presented nationally and internationally on the disorders of balance, mild traumatic head injury, chronic disease, pain management, and ergonomics/occupational injuries including those in performance musicians. As a certified professional ergonomist, Greg also works through ErgoSmart Consulting to evaluate workplaces and help industry fit work tasks to human capabilities in the interest of preventing injuries improving comfort and increasing productivity.

After teaching university for seventeen years, **Vaughn Roste** is currently workshopping a stage play entitled *Gesualdo*. His first book, *The Xenophobe's Guide to the Canadians*, was published by Oval Books in 2003. He recently optioned his first screenplay, *Oradour*, which is targeted to reach theatres in the summer of 2023.

Matthew Ruane is a physical therapist and recent graduate of Duquesne University's Doctor of Physical Therapy program. He currently practices in an outpatient orthopedic PT clinic in Pittsburgh, PA. His clinical interests include treating repetitive use injuries of the upper extremities and vestibular rehabilitation. In his free time, he enjoys playing guitar and piano and spending time with family and friends.

Alexander Schumacker is director of choral activities at Hawai'i Pacific University where he conducts the International Vocal Ensemble and Chorale. Alec presently serves as vice president of the ACDA Hawai'i Chapter and on the national board of the NCCO. An award-winning composer and arranger, Alec's choral music is published by Alliance Music Publications, earthsongs, and World Projects.

Michael Zemek is professor and coordinator of music education at Augustana College, Rock Island, IL, where he conducts several choirs, teaches music methods and conducting courses, and supervises music education students. He also serves as the Director of Music Ministries at Gloria Dei Lutheran Church in Iowa City, IA.