

The Voice Somatics Integration Lab:
Developing Kinesthetic Connections Through Voice and Movement

by

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ABSTRACT

Derived from the Greek word *soma*, meaning body, somatics is a field of movement methodologies designed to promote a greater sense of physical self-awareness through kinesthetic learning. Gaga Movement Language and Bartenieff Fundamentals, two methodologies based on somatic principles, offer unique processes to develop an individual's movement vocabulary. By synthesizing Gaga Movement Language and Bartenieff Fundamentals with vocal pedagogy and vocal repertoire, singers can develop a kinesthetic awareness of their vocal technique that informs their artistic expression, movement vocabulary, and performance ability.

This paper presents a model for a Voice Somatics Integration Lab (VSI Lab), geared toward voice performance majors and designed to bridge the gap between Gaga Movement Language, Bartenieff Fundamentals, and vocal pedagogy. The course will culminate in a performance of a song or aria that students have selected, staged, and choreographed in accordance with the lab curriculum, along with a brief three-to-five-minute presentation detailing their choreographic process. Complete with a detailed syllabus and lesson plans, the course will use movement philosophies and techniques to guide each student in developing their pieces. Ultimately, the VSI Lab will assist singers in more effectively blending the physical demands of staging and choreography with their singing technique and artistry.

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CHAPTER 1

INTRODUCTION

Overview

When Lincoln Center interviewed musician, dancer, and multimedia artist Steven Reker about his work combining music with movement for their American Songbook Series, Reker noted that for him, music is not necessarily about “what it sounds like, but what it feels like. When I sing, I’m not concerned as much about what’s coming out of my throat, but the way my throat makes the rest of my body feel.”¹ Reker’s approach to his voice and body is a direct reflection of the inherent relationship between body and voice.

For classically trained singers, an important component of achieving artistic and technical mastery is an understanding of how one’s voice relates to his/her body. As opera continues to develop and evolve as an art form, this understanding becomes even more critical. An increasing number of opera companies are producing works with staging that places challenging physical demands on singers. The English National Opera’s 2018 production of *Iolanthe*, choreographed by Lizzie Gee, had singers doing specific ballet steps with “enthusiastic precision”² with choreography harking back “to the fairy scenes of classically Romantic ballets, including *Giselle*,”³ while requiring baritone Marcus Farnsworth to do lifts and choreographed partner work. In the

¹ People Get Ready’s Steven Reker, Lincoln Center, accessed October 14, 2020, <https://youtu.be/xVsXnGomZ9U>.

² Macaulay, Alastair. “It’s Starting to Look a Lot Like Choreography on Opera Singers,” *New York Times*, Nov. 16, 2018, <https://www.nytimes.com/2018/11/16/arts/dance/opera-choreography.html>.

³ Macaulay, “Choreography on Opera Singers.”

Metropolitan Opera's production of Nico Muhly's *Marnie*, choreographed by Lynne Page, the title character is lifted into the air and followed around by "four look-alike silent Marnies...moving like the troubled heroine's echoes or auras."⁴ As New York Times columnist Alastair Macaulay put it, "When singers prove skilled in movement, the physical side of opera becomes related to choreography: It connects humans to music terms of space, time and meaning. This side of opera keeps growing in sophistication."⁵

Given these current developments in opera productions, it is critical that opera singers learn to engage their entire bodies to produce the most technically efficient and artistically effective performances. And yet, how is this full-body engagement best accomplished? Finding answers to this question prompted my interest in fusing singing with dance and movement, and ultimately led me to design this course and write this paper.

Background

Though I did not realize it at the time, my first classical music experiences also coincided with an introduction to modern dance and multidisciplinary work. In elementary school, my parents enrolled my siblings and me in school orchestra and private music lessons. Thanks to a combination of PBS and my brother's love for the cello, my family soon discovered Yo-Yo Ma and *Inspired by Bach*, a documentary series featuring Yo-Yo Ma's collaborations with different artists for each of J.S. Bach's unaccompanied cello suites. As a child, I was enraptured by Yo-Yo Ma playing Bach's

⁴ Macaulay, "Choreography on Opera Singers."

⁵ Ibid.

Suite No. 3 as dancers ran down stairs and rolled on the floor, moving in ways I had never seen before. I remember being fascinated by the Renaissance-style tunic dresses worn by all the dancers (including the men, which was quite interesting to a young girl growing up in a conservative Nebraska suburb), and by the larger-than-life personality of the choreographer, Mark Morris. This introduction to Yo-Yo Ma and Mr. Morris's renown company, Mark Morris Dance Group, was my first experience of music and dance becoming one entity, sparking an interest in both that has continued to this day.

As a freshman undergraduate voice student, I struggled at length to “be engaged” in my singing, as my teacher at the time would say. On an intellectual level, I thought I understood that engagement meant that I was not working hard enough physically. From the physiological perspective, I struggled to take the directive “be engaged” and channel that into efficient breath support and vocal technique. In the second semester of my freshman year, I took my first modern dance class, where I had the opportunity to work with professional dance companies through master classes and university residencies. During one such residency, one of the dancers espoused the importance of being physically engaged as a performer, rhetorically asking, “Have you ever seen a floppy ballerina? I don't think so.” This moment proved itself to be pivotal in my artistic development; from a completely different artistic discipline and perspective came the exact same directive that I was hearing in my weekly voice lessons. I was struggling vocally not because I was not practicing or working hard, but because I was not physically in tune to how my body moved in relation to my voice. I was indeed a floppy ballerina, and as a result, I was a floppy singer. More importantly, “be engaged”

was a directive to an entire class of dancers, not simply to me. Being physically engaged was not my problem alone, but rather part of a much broader problem impacting multiple students across multiple art forms. We were trying so hard to do our best, and yet for all our effort, we were not truly connected to how our bodies were functioning.

In addition to this “floppy ballerina” lightbulb moment, I began singing in Chamber Singers with Dr. Therees Hibbard, the Associate Director of Choral Activities. A leading expert in using movement as a pedagogical tool in choral rehearsals, Dr. Hibbard always incorporated movement in her vocal warm-ups and rehearsals. With my fellow choir members, I remember how Dr. Hibbard would have us swing our arms in circles while sliding through scales, sing numeric patterns while shifting our weight from left to right, and march in time to drumming while singing vocalises. Dr. Hibbard’s approach to singing resulted in some of the most joyful and expressive musical experiences I had as a student. Her methods also affirmed my “floppy ballerina” theories, furthering my interest in marrying movement with vocal technique in opera. Armed with determination and a hint of stubbornness, I set out to find answers on how dance and movement could go beyond making opera singers move well by also helping them sing well. What requisite skills were needed to tackle complex staging and choreography without interfering with vocal technique? What dance techniques and skills can singers develop to enhance vocal technique and artistry? Furthermore, how can movement be taught to help aspiring opera singers develop the knowledge and skills necessary to effectively use movement, choreography, and staging to not only inform but also enhance their vocal technique and artistry?

Hypothesis and Methods

The solution I propose in this paper is to teach movement and dance through a combination of vocal pedagogy and somatic movement practices. Somatics refers to a field of movement methods combining physical motion with a kinesthetic awareness of body movement, intention, and the surrounding environment. The term kinesthetic refers to the “perception and memory of motion, position, and motor coordination”⁶ as a sense alongside touch, taste, smell, hearing, or sight. The kinesthetic sense perceives motion not as a singular movement, but as a combination of the feeling of movement in motion, and the relationship of movement to the rest of the human body and its surroundings. When kinesthetic awareness is synthesized with certain somatic practices, singers can begin to develop a more complete understanding of their vocal technique, artistic expression, and performance ability.

In this paper, I make the case that by studying two specific somatic practices, Gaga Movement Language and Bartenieff Fundamentals, singers can begin to develop a more complete understanding of their vocal technique, artistic expression, and performance ability. Below follows my analysis, syllabus, and lessons plans for a Voice Somatics Integration Lab, or VSI Lab, a creative course designed for vocal performance majors to integrate vocal pedagogy with dance and movement through Gaga Movement Language and Bartenieff Fundamentals. Through the VSI Lab, students will be introduced to these two contrasting somatic methodologies and will use the movements and techniques of both to better understand singing from a kinesthetic perspective. As the

⁶ Fitt, Sally Sevey, *Dance Kinesiology* (Boston: Schirmeer, 1996), 303-304.

VSI Lab progresses, students will translate the skills they learn through Gaga Movement Language and Bartenieff Fundamentals into their own movement vocabulary relevant to their body type and technical approach to vocal repertoire to develop a more complete artistic voice.

CHAPTER 2

THE PRINCIPLES OF SOMATICS

Defining Somatics

Derived from the Greek word *soma*, or body, the term somatics was first coined by movement theorist Thomas Hanna in 1976, and refers to “bodily based access to information about the whole system and its interactive patterns.”⁷ Somatics is a field of movement methodologies, including Alexander Technique, Feldenkrais, Laban Movement Analysis, Pilates, and yoga, that synthesize physical motion with a kinesthetic awareness of how the body is moving through the spaces it occupies. Somatics help one’s understanding of how their movement patterns relate to their thoughts, intentions, and their surrounding environment. Somatics encompasses a wide array of movement practices that encourage “easeful, mindful, and efficiency of motion which simultaneously promotes health, balance, and achievement of one’s potential.”⁸

Somatics can be closely tied to sensory experiences based in learning through feeling, also known as kinesthetic learning. Learning through feeling is an integral aspect of how human beings process information, for which evidence can be found in observing behavior of infants. Before learning to speak, understand language, or read instructions, infants first begin learning through feeling sensations and responding directly to their surrounding environment. An infant does not learn to crawl by reading a how-to manual. Rather, through trial and error, an infant slowly begins to synthesize what parts of their body must be activated with how those body parts must be activated. Because human

⁷ Fitt, Sally Sevey, *Dance Kinesiology* (Boston: Schirmeer, 1996), 303-304.

⁸ Fitt, *Dance Kinesiology*, 303-304.

beings are “relatively free from the determination of genetically-fixed behavior patterns,”⁹ and can therefore modify their behavior patterns, somatic practices allow “learning to determine the inter-relational process”¹⁰ for development of both mind and body by way of physical actions and sensations.

Somatics encompasses more than physical awareness; it also develops mind and body awareness as a synergistic whole. Awareness is “consciousness together with a realization of what is happening within it or of what is going on within ourselves while we are conscious.”¹¹ Somatics seeks to connect this consciousness to physical movement and to the world around oneself. When one understands how and why their body operates, it becomes more possible for one to take the ownership to change and improve sensory and motor learning patterns. Physical therapist and dancer Dr. Diane Woodruff witnessed this in her patients, as she documents in *Bartenieff Fundamentals: A Somatic Approach to Movement Rehabilitation*:

“To educate the soma is to bring all human powers to bear upon the process of change with the recognition of the impact of the client’s personal, cultural, and world environment...Somatic change is a dynamic, individual, two-way process supported by one’s powers of adaptability: the ability of each person to learn, to change and to grow.”¹²

Somatics are often closely associated with dance, but the benefits of studying somatic movement practices are not exclusive to dancers. The degree to which the human voice functions is a direct extension of how the rest of the human body functions. Somatics and

⁹ Dianne Leah Woodruff, "Bartenieff Fundamentals (Tm): A Somatic Approach to Movement Rehabilitation," (PhD diss., The Union Institute, 1992), 3.

¹⁰ Woodruff, "Bartenieff Fundamentals (Tm)," 3.

¹¹ Feldenkrais, Moshe, *Awareness Through Movement* (New York: Harper Collins, 1990), 50.

¹² Woodruff, "Bartenieff Fundamentals(Tm)," 4.

movement techniques used by dancers are practical pathways for singers to develop a deeper awareness of their own bodies. Simply put, somatic methods can help singers to know “oneself from the inside out.”¹³

The Relationship Between Dance and Singing

There are many music pedagogues, including Emile Jaques Dalcroze and Timothy Caldwell, who have incorporated somatic practices and movement with singing and vocal technique. Dr. Therees Hibbard, currently an Associate Professor of Music at St. Olaf College, has built on their methods to pioneer her own movement-based pedagogy for choral conductors and singers that she refers to as BodySinging. Her interest in fusing these disciplines together began at a young age during a musical theater program where, in the interest of saving time, vocal and physical warm-ups were combined into one single warm-up. Dr. Hibbard recalls the following discoveries in “Building Body-Voices: Developing Moving Musicians in Choral Rehearsals:”

“A significant moment of insight came when we all realized we sang stronger, clearer, more musically, and more in-tune when we used our whole bodies as we sang. In the same regard, our dance steps improved in precision and phrasing when coupled both with the rhythm of the diction and breath of the phrase of the song. The art of dancing while singing gave a strength of breath to our singing and a rhythm to our dancing that we had not felt as strongly when doing either of these things in isolation.”¹⁴

¹³ Fitt, *Dance Kinesiology*, 303-304.

¹⁴ Hibbard, Therees Tkach, "Building Body-Voices: Developing Moving Musicians in Choral Rehearsals." *Choral Journal* 53, no. 7 (February 2013): 43.

Dr. Hibbard makes a strong case for using movement as a vehicle for elevating vocal technique and artistry. Given the success of her methods in choral music, Dr. Hibbard's pedagogical approaches can also be applied directly to singing operatic repertoire.

While dance and singing are separate disciplines, they are strikingly similar in that the technical and artistic abilities, for both are completely dependent on physical skills. Sally Sevey Fitt's description of a dancer in *Dance Kinesiology*, a primary resource for university dance programs, could easily be the definition of an opera singer:

“The dancer, in effect, must build and tune his or her instrument (the body) before a truly elegant performance can be achieved. Unfortunately, most dancers are not provided with perfect raw materials. One leg may be longer than the other, the spine may exhibit an abnormal curve, or the foot may provide an uneven base of support for balance... Yet the dancer has no choice: one body per dancer is the allotment.”¹⁵

When the words *singing* and *singer* are substituted for dance and dancer, the accuracy of the description is striking:

“The (*singer*), in effect, must build and tune his or her instrument (the body) before a truly elegant performance can be achieved. Unfortunately, most (*singers*) are not provided with perfect raw materials. One leg may be longer than the other (*influencing alignment of key structures such as the pelvis and spine*), the spine may exhibit an abnormal curve (*impacting a singer's ability to maintain optimal alignment for optimal breath support*), or the foot may provide an uneven base of support for balance (*also influencing alignment of the pelvis and spine, and impacting a singer's ability to develop and trust their breath support*)... Yet the (*singer*) has no choice: one body per (*singer*) is the allotment.”

There is no Stradivarius factory or violin shop where singers go to obtain an upgraded larynx, just as there is no shop for dancers to swap limbs out for a new pelvis or a new leg. Dancers and singers rely completely on the bodies to create their art. Analyzing dance and movement technique has the potential to have wide reaching effects on the

¹⁵ Fitt, *Dance Kinesiology*, 2.

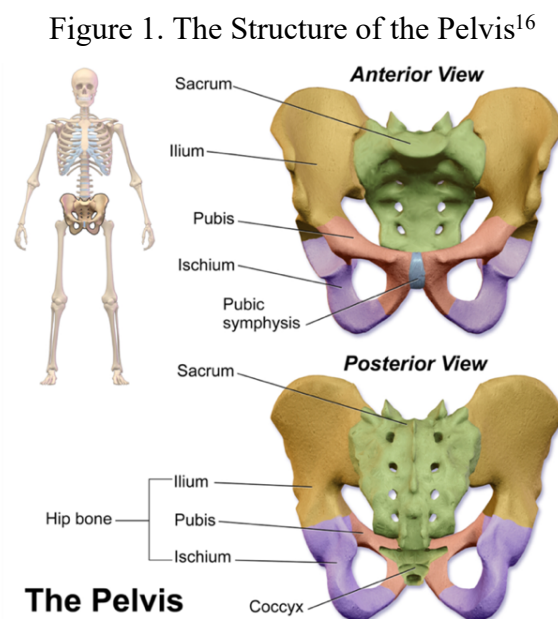
ways in which singers approach their singing technique. One method of exploring these effects is to look at the anatomical structures integral to successful dance technique. In doing so, parallels between movement and singing techniques begin to emerge.

CHAPTER 3

ANATOMY, MOVEMENT, AND VOICE

The Structure of the Pelvis

Like singers, dancers spend countless hours training their bodies to efficiently execute complicated movement. Understanding the structures and musculature that make up the pelvis and pelvic floor is critical for a dancer's approach to mastering technique, strengthening key muscle groups, and minimizing the risk of injury. While a singer's training does not traditionally include the physical intensity of a dancer's training, the same anatomical structures can help singers better understand how to more skillfully activate their abdominal muscles for breathing. In addition, understanding the relationship between the pelvic and abdominal muscles can help young singers merge movement and choreography with breath support and singing technique.



¹⁶“The Bones of the Pelvis,” Lyman Human Anatomy and Physiology Lab (BSB 141), accessed September 21, 2020, <https://courses.lumenlearning.com/ap1x94x1/chapter/the-pelvis/>.

The bones of the pelvis serve as “the attachment points for the lower extremities and as a girdle for the contents of the abdomen” and consist of the sacrum, coccyx, and the right and left ox coxae, or right and left hip bones.¹⁷ Figure 1 illustrates how both right and left ox coxae are made up of 3 parts: the ilium, the ischium, and the pubis. As shown in Figure 1, the pelvis is a bowl-like three-dimensional shape, with “the sacrum forming the back of the bowl, the ilium forming the sides, the ischium forming the bottom, and the pubis forming the anterior portion (which is much lower than the back and sides)...the whole pelvis moves as a unit with the fulcrum for movements being the sacrococcygeal lumbar joint and the hip joints.”¹⁸ In essence, the pelvis is the meeting point where the lower and upper extremities meet and intersect, and is the base of support for the abdominal muscles and spinal column.

Two important bony landmarks on the top crest of the ilium are the anterior superior iliac spine and the posterior superior iliac spine. The pubis symphysis joins the right and left pubis bones together. Both the anterior and posterior superior iliac spines, as well as the pubis symphysis, are key landmarks for identifying and correcting pelvic alignment to better support one’s spinal column and optimize range of motion throughout the human body.

Because multiple abdominal muscles have attachment points to the anterior and posterior superior iliac spines, singers already utilize the pelvis to some degree when singing. In addition, a singer’s alignment and posture will influence the degree of mobility they have through their pelvis and spinal column, which in turn will influence

¹⁷ McCoy, Scott, *Your Voice: An Inside View* (Princeton: Inside View, 2004), 84.

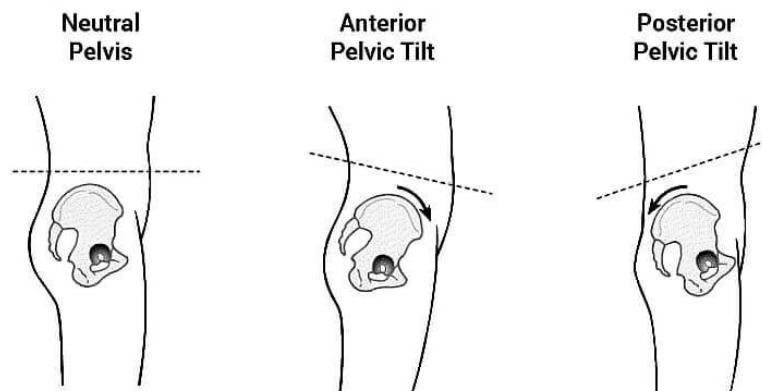
¹⁸ Fitt, *Dance Kinesiology*, 55.

how they activate their abdominal muscles. Understanding the pelvis and pelvic muscles in relation to the abdominal “core” and to the spine gives singers a more complete picture of the scale and scope of their instrument.

Alignment of the Pelvis

Pelvic alignment can be analyzed from the front or the side. To determine alignment from the front, one can check that the distance from the anterior and superior iliac spines to the floor is the same for both the left and right hip bones. It is common for one leg to be slightly longer than the other, resulting in one side of the pelvis sitting slightly higher than the other side. As demonstrated in Figure 2, analyzing pelvic alignment from the side is dependent on using the following bony landmarks as markers: the anterior superior iliac spine, the posterior superior iliac spine, and the pubis symphysis. The anterior superior iliac spine and pubis symphysis should be in the same frontal plane, while the anterior superior iliac spine and the posterior superior iliac spine should be on the same transverse plane.

Figure 2. Alignment of the Pelvis ¹⁹



¹⁹Fitt, *Dance Kinesiology*, 59.

Finding ideal pelvic alignment helps maximize range of motion in both the hip joints and the lumbar spine. A severe anterior tilt puts excess pressure on the lumbar spine, resulting in excessive strain on surrounding muscles integral to a singer's breath support, such as the quadratus lumborum. Conversely, the posterior tilt demonstrated in Figure 2 forces the lumbar spine out of its natural curve and results in a compressed range of mobility at the hip joints and abdominal muscles with an attachment at the top rim of the pelvis. By using anatomical landmarks to find a neutral pelvic alignment, movement through the abdominal muscles and spinal column can be optimized for singing and breath support.

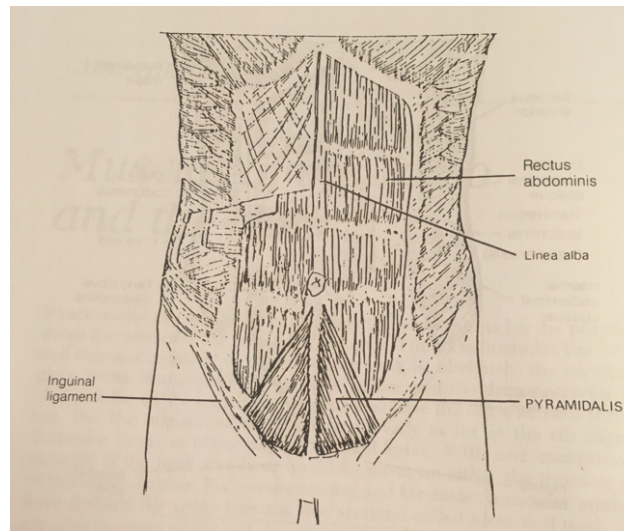
Key Muscles of the Pelvis

The pelvis is not a self-contained structure; many of its muscles have one or both attachments outside of the pelvis in the abdominals, the ribs, the spinal column, and the upper leg. Muscles with at least one attachment in the pelvis or the lumbar spine include: the pyramidalis, iliopsoas, external oblique muscles, internal oblique muscles, transverse abdominus, and the quadratus lumborum. For singers, this is important as they engage the external and internal obliques, transverse abdominus, and quadratus lumborum to slow down and optimize the exhalation process and build consistent breath support. While the pyramidalis and psoas muscles do not play as active roles in building one's breath support technique, they influence alignment of the pelvis in relation to the spine and abdominals, and can help singers better engage the proper muscles for breathing.

The Pyramidalis

The *pyramidalis* is an abdominal muscle with an attachment at the linea alba, and another attachment at the pubis. The *pyramidalis* may not be as frequently discussed as other abdominal muscles, but it can play a critical role in helping achieve better efficiency in movement. As shown in Figure 3 below, the pyramidalis's inferior attachment points are at the inguinal ligament (or the front rim) of the pelvis. As evidenced by its attachment points, engaging the *pyramidalis* impacts both abdominal and pelvic movement:

Figure 3. The Pyramidalis²⁰



“When (the *pyramidalis*) is discussed (which is seldom), the action is usually recorded as “tightening the linea alba.” However, if it can pull down on the linea alba, it can also pull up on the front rim of the pelvis. When strength and muscle tone are built in this muscle it is thought that it can assist in the stabilization of the front rim of the pelvis without activating so much of the abdominal wall. This allows for greater freedom of movement (less “lockjaw”) while still stabilizing the front of the pelvis to make hip flexor contraction more efficient.”²¹

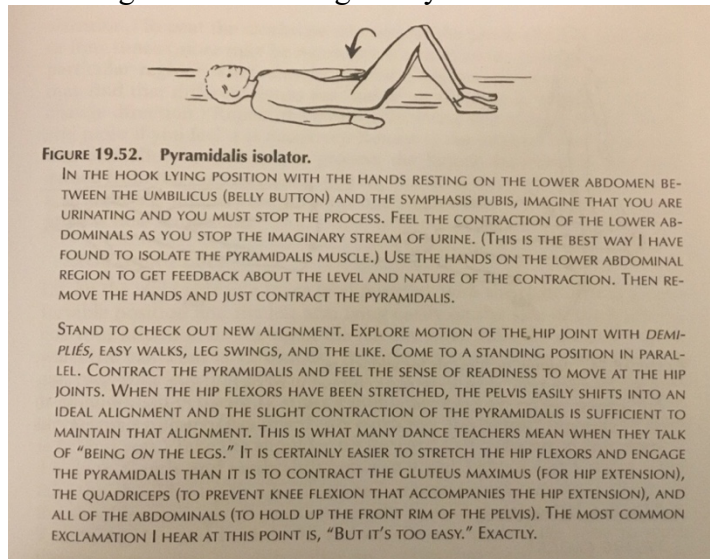
²⁰ Fitt, *Dance Kinesiology*, 168.

²¹ *Ibid*, 181.

Activating the pyramidalis stabilizes the front of the pelvis with less activation throughout the abdominal wall. For a singer who over-activates the muscles of the abdominal wall to engage their breath support, activation of the pyramidalis may take the burden off the overworked muscles and redistribute that engagement more evenly throughout the abdominals. This redistribution can help a singer better understand how the abdominal muscles used for breathing are not separate entities from the pelvis. Rather, the pelvis provides the structural and muscular base from which a singer can engage their abdominal muscles for breathing.

In addition, activating the pyramidalis muscle allows for more freedom of movement in the hip joints, aiding singers in mastering complex staging and movement without hindering breath support. Figure 4 details one exercise that can be integrated with movement and breath support to assist singers in activating the pyramidalis, particularly when paired with movements from the Bartenieff Fundamentals that will be analyzed in Chapter 5 and in the Voice Somatics Integration Lab course materials.

Figure 4. Activating the Pyramidalis Isolator²²



As will be discussed in Chapter 5, one of the foundational movements in the Bartenieff Fundamentals is known as the Thigh Lift, where flexion of the inguinal area (the top front rim of the pelvis) combined with an exhalation will activate the pyramidalis muscle. The resulting muscle engagement strengthens the pyramidalis in tandem with a slow exhalation similar to the breath support needed for singing. While often overlooked, the pyramidalis can play a pivotal role in helping both singers and dancers achieve maximum efficiency in their physical practice.

The Psoas Minor, Psoas Major, and Iliacus

The psoas minor, psoas major, and iliacus are commonly referred to as the "psoas" or the "iliopsoas" muscle. While referring to this area as one entity is common, it is important to note that the iliopsoas is a combination of these three muscles.

²² Fitt, *Dance Kinesiology*, 427.

Figure 5. The Psoas Minor, Psoas Major, and Iliacus²³

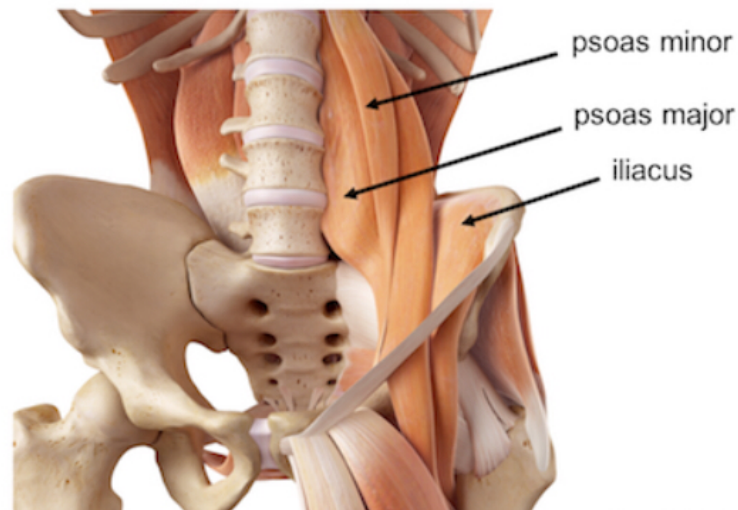


Figure 5 illustrates how the iliopsoas connects the lumbar spine, the pelvis, and hip joint, making it one of the most complicated muscle groups in the human body. Understanding the iliopsoas's relationship to other muscle groups can help singers find improved body alignment as these muscles help stabilize the spine and hip joints, decreasing excess tension in the hips, pelvic muscles, abdominals, and lower back.

The relationship of the iliopsoas to the pelvis and spine can be demonstrated by tensing and relaxing these muscles in a seated position. In a standing position, the psoas muscles “pull the lumbar spine forward while the upper spine remains stable.”²⁴ However, in a seated position, particularly when attempting to maintain alignment, “stabilization of the pelvis by contraction of the abdominals and pyramidalis is necessary,”²⁵ which results in a slight flexion at the hip. To find ideal alignment when

²³ “Pelvis Hip Anatomy,” Lex Medicus Anatomy, accessed September 21, 2020, <https://anatomy.lexmedicus.com.au/collection/pelvis-hip>.

²⁴ Fitt, *Dance Kinesiology*, 181.

²⁵ *Ibid*, 181.

seated, flexion at the hip must be relaxed enough to relieve the psoas muscles from becoming overworked. The ratio of contraction versus release sensations in the abdominals, pyramidalis, and the lumbar spinal region must be experimented with to find one's optimal seated alignment and muscle engagement. Finding this optimal alignment and engagement can provide useful feedback for singers during opera staging rehearsals and performances. Rarely will a singer remain standing in one place for the duration of an opera, and often the characters will be seated for dramatic purposes as outlined in the staging. Scenes such as the Act II Letter Scene in Mark Adamo's *Little Women* and the aria "Dearest Mama," from *The Ballad of Baby Doe* are often staged with the characters seated. When a singer cannot find a comfortable seated position that does not hinder breath support, the musical and technical demands of the music are likely to be compromised. By using somatic practices and dance techniques to increase body awareness of muscles such as the iliopsoas, singers will have the awareness to better pinpoint and address alignment issues.

The External and Internal Oblique Muscles

Figure 6.
The *External Oblique Muscles*²⁶

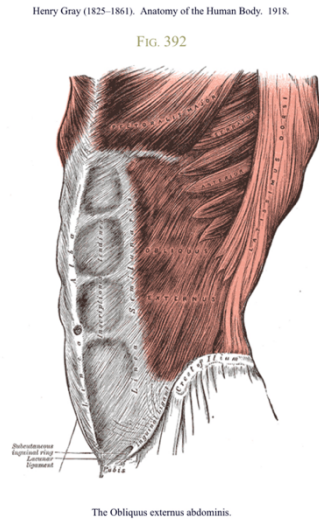
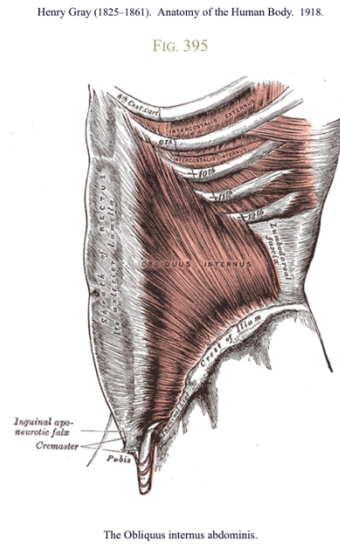


Figure 7.
The *Internal Oblique Muscles*²⁷



The external and internal oblique muscles are used in breathing and in maintaining a consistent breath support. The external oblique muscles cover the largest surface area of all the abdominal muscles. The external oblique muscles insert into the iliac crest of the pelvis, or the top crest of the ilium part of the pelvis, and the internal oblique muscles attach at the iliac crest and inguinal ligament, a ligament that runs from the pubic bone to the iliac crest (Figure 7).

A misalignment or strain of the pelvic muscles influences how efficiently both sets of oblique muscles function. An extreme anterior pelvic tilt will result in prolonged compression of the oblique muscles; an extreme posterior pelvic tilt will result in the obliques being “stretched” for long periods of time with few opportunities to relax. Given

²⁶ “Anatomy of the Human Body,” Gray’s *Anatomy of the Human Body*, accessed October 2, 2020, <https://www.bartleby.com/107/illus392.html>.

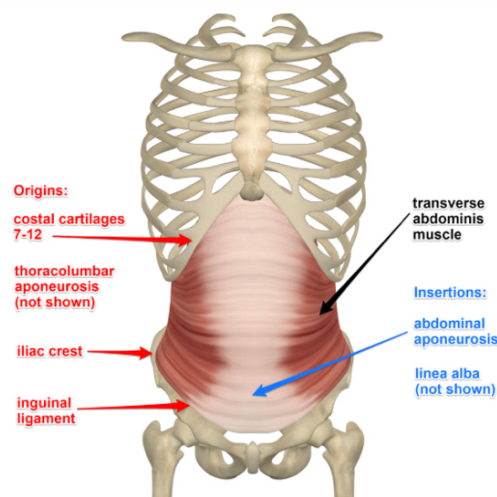
²⁷ *Anatomy of the Human Body*,” Gray’s *Anatomy of the Human Body*, accessed October 2, 2020, <https://www.bartleby.com/107/illus395.html>.

that the external and internal obliques play important roles in inspiration and expiration, pelvic alignment and optimal engagement of the obliques are closely related. Tight psoas muscles will force the obliques to over-engage in order to stabilize the upper body and spine; the additional muscular force results in less freedom on movement during inspiration and expiration. Ultimately, finding each individual singer’s ideal pelvic alignment allows the singer to more consistently engage these muscles for breath support.

The Transverse Abdominus

The transverse abdominus is the deepest of the abdominal muscles, wrapping horizontally around the anterior part of the abdomen between the ribs and the pelvis. Like the external and internal obliques, the transverse abdominus attaches at the ribs, but has inferior attachments on the iliac crest and inguinal ligament, or the top rim of the front of the pelvis (Figure 8):

Figure 8. The Transverse Abdominus²⁸



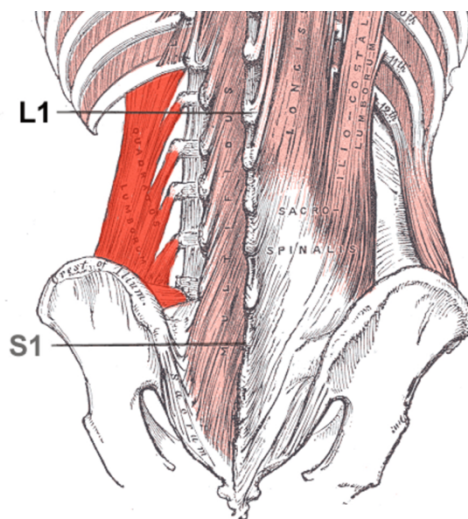
²⁸ “Transverse Abdominus Muscle,” Yoganatomy, accessed November 12, 2020, <https://www.yoganatomy.com/transverse-abdominis-muscle/>.

The transverse abdominus acts as a stabilizer muscle, and can greatly influence a singer's ability to smoothly manage their exhalation consistently over a long period of time.²⁹ One goal of the somatic movement methods to be discussed in Chapters 4 and 5 is connecting to a sense of deep core engagement without becoming tight or constricted. For singers, activating the transverse abdominus efficiently is one of many benefits of merging movement with breath support and vocal pedagogy.

The Quadratus Lumborum

The quadratus lumborum is a set of paired stabilizer muscles that, like the transverse abdominus, can assist singers in the process of exhalation. The quadratus lumborum's superior attachment points are at the most inferior ribs and lumbar spine, while the inferior attachment points are at the top rim of the iliac crest (Figure 9).

Figure 9. The Quadratus Lumborum³⁰



²⁹ McCoy, *Your Voice: An Inside View*, 91.

³⁰ "Quadratus Lumborum," *Physio-pedia*, accessed November 12, 2020, https://www.physio-pedia.com/Quadratus_Lumborum.

As a result of their attachments at the ribs, spine, and pelvis, the quadratus lumborum “also serve an important postural function, stabilizing the lower back.”³¹

Finding one’s ideal pelvic alignment helps the quadratus lumborum assist with breath support while also relieving excess pressure from the spine and lower back. When a singer understands how the quadratus lumborum relate to the pelvic structure as a base of support, they are more likely to engage the quadratus lumborum and related muscles effectively for breath management.

Integrating Anatomy and Movement with Singing

As Dr. Scott McCoy notes in *Your Voice: An Inside View*, the central pivot point for bending forward and back rests in the pelvis and hips, noting that “many singers and teacher use breathing exercises that include bending over to increase awareness of abdominal motion during respiration. If the instruction or intent is to bend from the waist, this exercise compresses the abdominal area and may actually inhibit free breathing.

If, however, the singer bends forward from the hips, the spine and abdomen are lengthened and released, making the exercise much more effective.”³² This concept may be raised in a vocal pedagogy class, but somatic practices and movement are more effective vehicles to help young singers access that range of motion.

At first glance, it may appear that the muscles dancers engage on a regular basis would not pertain to young singers. Why should an undergraduate vocal performance major care about the attachment points of the psoas minor, or the functions of the

³¹ McCoy, *Your Voice: An Inside View*, 93.

³² Ibid, 84.

pyramidalis? These systems do not directly impact the larynx, but they do impact the human body. Not having a basic understanding of the pelvic structure and musculature as it relates to the abdominal cavity means a singer has fewer tools in their artistic toolbox upon which to draw. How a singer relates to these muscles and structures either helps them function at their best or will work against them. Helping singers think critically early in their development concerning the relationship between form and function is essential in understanding how their bodies-their singing instruments-effectively operate.

CHAPTER 4

GAGA MOVEMENT LANGUAGE AND SINGERS

Defining Gaga

The term Gaga refers to the movement language developed by Ohad Naharin during his 1990-2018 tenure as Artistic Director for the Batsheva Dance Company in Tel Aviv, Israel. Using Batsheva's company classes as a creative laboratory, Naharin officially named his movement philosophies "Gaga" in 2003. Gaga has yet to influence vocal pedagogy and music education to the extent of other somatic methods such as Alexander Technique or yoga; however, Gaga "is a somatic practice; namely, its inquiry is based on awareness of physical experience, rather than "ideal forms" that conduct its technique."³³ Rather than replace more commonly used somatic practices, Gaga Movement Language is a unique approach that can encourage improvisation, expand a singer's movement vocabulary, and bring a sense of joy and pleasure to movement and choreography.

Instead of a set vocabulary of movements, Gaga offers an improvisational "framework for users to connect to their bodies and imaginations, experience physical sensations, improve their flexibility and stamina, exercise their agility and explosive power, and enjoy the pleasure of movement in a welcoming, accepting atmosphere."³⁴ Naharin sought to develop and expand the physical and artistic limits of the body in ways that challenged dancers to engage with, listen to, and find joy in the sensations within and

³³ Katan-Schmid, Einan. *Embodied Philosophy in Dance: Gaga and Ohad Naharin's Movement Research*. Palgrave Macmillan, 2018.

³⁴ "About Gaga," Gaga/People, accessed September 21, 2020, <https://www.gagapeople.com/en/>.

created by their bodies. Gaga teachers often refer to the physical movements of Gaga as “research” that one conducts within one’s own body. Though Naharin developed a vocabulary describing movements within the Gaga framework, the Gaga language framework is constantly evolving. While Gaga does not fall within the traditional realm of somatic practices, its philosophies are directly related to somatic principles of body awareness and engaging the mind and body as a synergistic whole. Gaga Movement Language is “about making yourself available to hear what the body has to say in any given movement. And if you do that – the Naharin thinking goes – you will free yourself from the conventional ways people move.”³⁵

The Influence of Gaga Movement Language on Non-Dancers

Naharin’s research, coupled with the requests of a Batsheva seamstress for dance classes, led to Naharin’s development of Gaga/People classes, or Gaga movement geared for non-dancers. In early versions of Gaga/People classes, Naharin quickly realized a much “broader application of his classes”³⁶ where he “refrained from employing dance terminology in these classes, instead using layman’s terms to direct participants through a series of physical explorations.”³⁷ Through his work with non-dancers, Naharin began developing creative ways to get non-dancers to connect to sensations through movement without using dance terminology. Instead of plié and tendu, Naharin used words such as

³⁵Chris Jones, "Hubbard Street Goes Gaga with Naharin Work." *Chicago Tribune*, Jun 09, 2018.

³⁶ Galili, D. F. *Gaga: Moving beyond Technique with Ohad Naharin in the Twenty-First Century*. Dance Chronicle, v. 38, n.3, 2015. 365.

³⁷ Galili, *Gaga: Moving beyond Technique*, 365.

“floating, availability, traveling stuff, texture, explosive power, dynamics, (and) efficiency of movement.”³⁸ The lack of dance terminology gave the non-dancers in these early Gaga/People classes creative license to take movement cues and make them their own. In turn, Naharin realized that his dancers had much to learn from the non-dancer’s creativity and freedom of expression. Today, Gaga/People classes and Gaga/Dancers classes follow a similar trajectory, with the Gaga/Dancers classes being longer and incorporating ballet terminology that would not be used in a Gaga/People setting.

Instead of strict movement guidelines and rules, the flow of a Gaga class “is awash with prompts that encourage students to let things happen rather than to make them happen.”³⁹ At first glance, a Gaga movement class may seem like one lengthy and continuous improvisatory experiment. Yet this is not the case; however improvisatory the movement may appear, a Gaga instructor’s intentions and movement cues are quite specific. If the instructor cues students to float their arms out to their sides and send a ripple of movement from one side to the other, and a student keeps their arms down and attempts no movement through their arms, that student is technically not following the movement prompts. On the other hand, the instructor will not tell students how their floating arms should look. Instead, the instructor will use imagery and sensory cues to help students find intention through each floating arm movement. The imagery cues may also be sequenced to guide students further in their own physical explorations. Using the example of the floating arms, the instructor may ask students to first float their arms as though they are relaxed on a beach feeling the sand between their fingers and their toes.

³⁸ Galili, *Gaga: Moving beyond Technique*, 65.

³⁹ *Ibid*, 368.

They may be asked to continue their floating arms at the same tempo but float their arms as though they are in a hurry. A final movement cue may be for students to “float their bones inside their flesh and move quickly while maintaining a sense of plenty of time.”⁴⁰ After taking students through all these prompts, the Gaga instructor will often repeat the cued sequence, increasing the dynamics and tempi from each scenario to the next. The repetition gives students opportunities to further explore sensations and demonstrates how the same movement cue can feel drastically different depending on the student’s internal sensations. Gaga is not about a student replicating one specific image as designated by the teacher, but instead encourages the student to listen and respond to the sensations, imagery, and emotions that are elicited by the movement cues within their own body.

The Benefits of Gaga Movement Language for Singers

The Gaga framework provides singers an ideal environment for exploring the multitude of movement their bodies can create. In fact, Gaga’s improvisatory qualities are very similar to those of another somatic practice already widely accepted within music pedagogy. Dalcroze Eurhythmics marries movement with rhythm, musical exercises, improvisation, and imagination to help unlock a practitioner’s inner musicality, and bears striking similarities to Gaga:

“A frequent activity in Dalcroze classes is to begin with large movements expressing some basic aspect of music, perhaps a sway from side to side with matching arm swings. Gradually the size of the movements becomes smaller along with the amount of energy used and the parts of the body involved. The torso

⁴⁰ Friedes, Deborah, “Learning to Speak Gaga,” *The Jerusalem Post* (Jerusalem, Israel), July 31, 2009.

becomes quiet, then the shoulders, arms, wrists, and hands-until the entire body is absolutely still. At this point the inner spirit is aware of the rhythmic sensation, throbbing internally and making its lasting imprint in memory. By swaying at varying degrees of energy and with different parts of the body (arms, wrists, fingers), we experience subtle differentiations of the sensations of weight, energy, time, and space.”⁴¹

The Eurhythmics exercise outlined bears many of the same qualities one finds in a Gaga class. Variations of tempi, rhythm, and dynamics are integral to Gaga movement philosophies. Though not developed specifically for musicians like Eurhythmics, Gaga Movement Language offers many of the same pedagogical techniques that celebrate and encourage improvisation and creativity.

The Gaga/People class framework eschews formal dance terminology in favor of descriptive imagery meant to engage students on a multi-sensory level. Singers entering an undergraduate music program will have varying degrees of prior dance experience, with many singers likely unfamiliar with traditional dance vocabulary terms such as *plié* or *rond de jambe*. Descriptors such as “floating,...letting go,...yielding,...[and] other forces”⁴² can foster a sense of ease and greater efficiency. Gaga Movement Language challenges its practitioners to explore movement “based upon first listening to the body before telling the body what to do” and is rooted in clarity and form coming from “really sensing where you are in space.”⁴³

In addition, a Gaga class never comes to a complete stop, encouraging constant flow of movement and breath “with both the teacher and the participants moving

41 Schnebly-Black, Julia, and Moore, Stephen F, *The Rhythm Inside: Connecting Body, Mind, and Spirit Through Music*, Los Angeles: Alfred Publishing, 2003, 77.

42 Galili, *Gaga: Moving beyond Technique*, 381.

43 Patel, Bhumi B, "When the Whole World is Empty: Gaga as a Modality for Kinesthetic Grief Processing" (MFA Thesis, Mills College, 2017), 6.

throughout the entire lesson. Encouraged to listen to their bodies throughout, students may work at a lower intensity if need be, but may not stop and watch. The teacher challenges participants with multilayered tasks that heighten awareness to specific usage of body parts, speed, level of intensity, direction, texture, and action.”⁴⁴ Even when the instructor is demonstrating movement, the students are also moving, taking cues from the instructor in real time. The Gaga format prioritizes analyzing through active movement that varies in dynamics, speed, flow, and weight, similar to the musical nuances singers strive to create in their own repertoire. In addition, Gaga’s constant yet changing movement flow mirrors the freedom and engagement of consistent breath support; therefore, practicing Gaga can help singers more fully connect to their breath support without activating excess tension.

The Gaga class format does more than discourage critiquing one’s colleagues; the format creates a flexible model for all bodies, regardless of size or dance experience, to explore movement in an engaging and inviting environment. Classes are held in spaces with either no mirrors or with all mirrors covered, discouraging students from visually judging themselves or their peers. Visual aids are useful to both singers and dancers in helping them see mistakes and make corrections. Mirrors can also distract singers from focusing on the task at hand, leading to judgement and harsh self-criticism. The lack of mirrors temporarily frees singers of all shapes, sizes, and abilities from accidentally or intentionally passing harsh judgement on how they look. Any insecurities will begin to subside as students become more comfortable with the Gaga class format. In “30 Days of

⁴⁴ Galili, *Gaga: Moving beyond Technique*, 368.

Gaga: A Non-Dancer's Diary of Dance," student Tony Wan describes his first Gaga/People class and the freedom he felt when he released his insecurities. Even though "from the point of view of an American with no dance background...[Gaga] looks...pretty weird,"⁴⁵ Tony quickly found freedom and a new ability to express himself through his body:

"I'm very conscious my movement bares only the slightest of resemblance to my teacher's. I think to myself, "Man, I must look so stupid...We shake our tails. We let our eyes lead us around. We get down and up from the floor. We move with silly images. Am I REALLY into this?...Then I notice something. In this dance studio full of students learning dance, there are no mirrors! Not a single one. I have an AHA moment. No one is looking at themselves...no one is looking at me...no one [cares] what I look like...and if no one [cares] what I look like, why should I? The music and energy in the room builds to a crescendo. This is about what dance feels like from the inside."⁴⁶

Singers are increasingly under pressure to look a certain way in addition to singing well. The format and philosophies of Gaga take those pressures away, allowing singers to explore their bodies and movement without judgement. The Gaga/People class format allows singers of all movement abilities and experiences to be on a more equal playing field, and can be easily molded for a somatics based movement course for singers. The most important research a singer can undertake is to learn to listen to their own body. Gaga can help singers develop a keener awareness of how their body moves when they are singing, and can help singers find a greater sense of freedom and enjoyment in choreography and staging.

⁴⁵ Tony Wan, "30 Days of Gaga. A Non-Dancer's Diary of Dance," A Non-Dancer's Diary of Dance (blog), September 21, 2020, <https://www.gagapeople.com/en/30-days-of-gaga-a-non-dancers-diary-of-dance/>.

⁴⁶ Tony Wan, "30 Days of Gaga," March 31, 2020.

CHAPTER 5

BARTENIEFF FUNDAMENTALS AND SINGERS

Defining the Bartenieff Fundamentals

Like Gaga Movement Language, Bartenieff Fundamentals are a movement approach intended to unlock stiff joints, increase body awareness, and consists of movements and language accessible to people with varying degrees of movement abilities. Comparing Gaga Movement Language and Bartenieff Fundamentals is similar to analyzing two different well-established voice teachers: they have different approaches to achieving the same goal, with a high percentage of students making clear and consistent progress.

Known as the father of European modern dance, Rudolf Laban developed methods and philosophies that revolutionized modern dance and bridged the gap between the performing arts and science. His teachings and theories, known as Laban Movement Analysis, are based on the principle that all movement is a combination of body, shape, space, and effort.⁴⁷ One of Laban's most influential students, Irmgard Bartenieff, was a dancer, physical therapist, and scholar with a passion for interdisciplinary work. She is credited with being among the first in the dance field to actively promote Laban's work in the United States. Bartenieff eventually developed a "physical re-education method that develops movement efficiency and expressiveness. The work came to be known as Bartenieff Fundamentals."⁴⁸

⁴⁷ Woodruff, "Bartenieff Fundamentals(TM)," 173.

⁴⁸ "Irmgard Bartenieff," The Laban/Bartenieff Institute for Movement Studies, accessed October 11, 2020, <https://labaninstitute.org/about/irmgard-bartenieff/>.

The Bartenieff Fundamentals are a series of exercises and movements patterned after the movements observed in infants, “developed to provide exercise concepts for the experience of the body in motion with an awareness of how and why it is moving.”⁴⁹ The Fundamentals are seemingly simple yet deceptively challenging:

“[The Fundamentals] mirror the stages of development of the brain and the motor skills that babies and toddlers progress through on their way to mastering mature movement patterns. Practicing the Fundamentals strengthens the body’s internal support for both everyday and highly skilled movement. The Fundamentals require the use of deep muscles, close to the core of the body, and the use of breath support to increase the power and flow of movement. They also require a clear spatial intent: an understanding of where movement initiates in the body and how it sequences through the body from one part to another.”⁵⁰

The Bartenieff Fundamentals focus on engaging deep core musculature and initiating the power and flow of movement via breath support. They function not only as a great warmup in a dance class, but also as a technical resource for better understanding how our breath initiates movement in our own bodies. The Bartenieff Fundamentals can help singers develop a stronger and more consistent awareness of their breath support.

The Bartenieff Fundamentals differ from Gaga Movement Language in that a Fundamentals-based class will not have continuous movement throughout. Like Gaga, the Fundamentals are best understood through individual movement and kinesthetic exploration, as opposed to sitting for long periods of time. Bartenieff eschewed teaching methods that relied heavily on sitting and thinking, instead prioritizing action and doing:

“Movement, not more pondering, was what brought new knowledge...our bodies contain knowledge which is not accessible by ordinary linear intellectual probing.

⁴⁹ “The Bartenieff Fundamentals,” The Laban/Bartenieff Institute of Movement Studies, accessed October 2, 2020, <https://labaninstitute.org>.

⁵⁰ Ibid.

Moving, and a willingness to perceive the movement, brings access to bodily knowledge-particularly the meaningful connection between thoughts.”⁵¹

Singers using Bartenieff’s philosophy of “Activate and Motivate” will experience connections within their own bodies that cannot be developed in a lecture-style classroom.

Hallmarks of the Bartenieff Fundamentals

The Bartenieff Fundamentals consist of a series of movements and exercises developed by Irmgard Bartenieff, outlined in her book detailing her research, *Body Movement: Coping with the Environment*. These exercises are meant to be fluid, to be modified and expanded upon by choreographers, dancers, and physical therapists. Modifications are to be expected, and are a key aspect of Bartenieff’s research and work. Just as Bartenieff expanded upon the teachings of Rudolf Laban, the Fundamentals she developed are meant to be a flexible model, to be molded and adjusted according to the needs of individual students.

Most of the exercises from the Fundamentals can be traced back to what Bartenieff called “The Basic Six.” These six movements form the foundation of most Bartenieff movement sequences:

⁵¹ Hackney, Peggy, *Making Connections : Total Body Integration Through Bartenieff Fundamentals*, Florence: Taylor & Francis Group, 1998, 6.

Figure 10, Bartenieff Fundamentals: Preparatory and Basic Six Exercises⁵²

Preparatory Exercise A (Arm Swings)	“Assists mover in experiencing distinctions between each of these muscle actions.” (Flexion-Extension, Abduction-Adduction, & Internal-External Rotation) ⁵³
Preparatory Exercise B (Breath Exercises)	Can be accomplished lying supine in an x or standing Low to middle range and varying in pitch, with soft dynamics (piano to mezzo piano) On any pitch or collection of pitches in the lowest part of the singer’s vocal range, vocalize on the following vowels as cued by the instructor, initiating the sound from each of the following regions of the body: ⁵⁴ [u]: coccyx and sacrum, pelvic floor [o]: navel and lower lumbar spine [a]: lower ribs [e]: sternum and ribs [i]: base of the skull
Preparatory Exercise C Rock and Roll (Heel Rocks)	“To introduce with a rhythmic foot movement (up and down flexion and extension from the ankle), the connections to the tilting forward and backward of the pelvis: a) the connection of the pelvic area to the heel (grounding), and b) the connection of the two main muscles regulating flexion and extension actions (the iliopsoas in flexion from the groin, and the hamstrings in extension from the sit bones, ischium)” ⁵⁵
No. 1A Thigh Lift (Pre-Lift)	“To raise the thigh with maximum efficiency, i.e., using iliopsoas muscles, without using extraneous muscles. The iliopsoas is the key to pure hip movement. [And,] to become aware of “pure” joint and segmental movement.” ⁵⁶
No. 1B Thigh Lift (Lift)	“To raise the thigh through iliopsoas initiation and deep folding of the inguinal area which causes a “pure” thigh flexion movement [and] to become aware of the graded pelvic tilt.” ⁵⁷

⁵² Bartenieff and Lewis, *Body Movement*, 231-248.

⁵³ Ibid, 231.

⁵⁴ Ibid, 232.

⁵⁵ Ibid, 234.

⁵⁶ Ibid, 235.

⁵⁷ Ibid, 236.

No. 2 Pelvic Forward Shift	“To mobilize the weight by means of pelvic shift and use of the pelvic floor. To prepare for forward and backward weight transference and level change.” ⁵⁸
No. 3 Pelvic Lateral Shift	“To shift the weight laterally without any twist, by using the area of lowest components of the pelvic-hip action. The latter is known as the “pelvic floor” (rough between pubic bones, ischium and coccyx). To establish the predominance of the pelvic floor muscles in lateral weight shifts and the fusion of the pelvic floor muscles with extensors of the hip in forward weight shifts in forward progression, [and] to establish the predominance of the pelvic floor muscles as rotators (internal and external) of the thigh-legs with abduction and adduction of the thigh legs.” ⁵⁹
No. 4 Body Half (Vertical)	“To be come aware of the vertical midline of the body which separates right and left sides, [explore] simultaneous use of right (or left) arm and leg in [the] vertical plane, [explore] preparation for right-left asymmetry, [and] preparation for alternating use of right and left sides of whole body” ⁶⁰
No. 5A Knee Drop	“To establish a clear twist of the lower unit against the upper unit, to establish the predominance (unilateral use) of pelvic floor (rotators) with abduction and adduction, [and] to establish heel to coccyx connection” ⁶¹
No. 5B Alternating Knee Drop and Arms	“To further emphasize the diagonal that occurs in 5A, [and] to establish awareness of the arm relationship to the knee drop by practicing drops to alternate sides.” ⁶²
No. 6A Arm Circles	“Helps establish a clear diagonal connection between the right upper and left lower or between the left upper and right lower parts of the body, by engaging the obliques of the abdomen in the front and the latissimus in the back.” ⁶³
No. 6B Diagonal Sit-up	“Initiates movement from upper body with support from lower body.” ⁶⁴

⁵⁸ Bartenieff and Lewis, *Body Movement*, 238.

⁵⁹ *Ibid*, 239.

⁶⁰ *Ibid*, 241.

⁶¹ *Ibid*, 243.

⁶² *Ibid*, 244.

⁶³ *Ibid*, 246.

⁶⁴ *Ibid*, 248.

“The Basic Six” exercises are not, by professional dance standards, extremely technically demanding movements. Most people, dancers or non-dancers, will be able to execute these movements. What makes the “The Basic Six” challenging is activating the necessary muscles and areas of the body without excess muscle engagement. The Basic Six represent one of the core principles of Bartenieff’s work: movement should serve practical functions that translate to lasting positive impacts on a people from a diverse range of mobility abilities and needs.

The Bartenieff Fundamentals’ Influence on Non-Dancers

The principles and movements that form the foundation of the Bartenieff Fundamentals have proven relevancy well beyond the scope of dance. Irmgard Bartenieff developed her theories not just from working with dancers, but also through her work with physical therapy patients. In *Body Movement: Coping with the Environment*, Bartenieff notes that Laban’s teachings on analyzing the human body while in motion piqued her interest in working with patients in ways that went beyond strengthening muscle groups:

“Because Laban’s focus was always on the body in movement, his training crystallized that focus for me when diagnosing both physical and emotion dysfunction. Thus, spatial concepts had to be incorporated into mechanical anatomical activity in order to produce maximal functioning. In physical therapy, that meant thinking in terms of movement in space, rather than by just strengthening muscle groups. And, the introduction of the spatial concepts required an awareness of intent on the part of the patient that activated his will and thus connected his independent participation to his own recovery. There really is no such thing as pure “physical” therapy or pure “mental” therapy. They are continuously interrelated.”⁶⁵

⁶⁵ Bartenieff and Lewis, *Body Movement*, 3.

Bartenieff's theories were further cultivated during her work in the polio ward at Manhattan's Willard Parker Hospital. While working with patients who had lost the use of their limbs with varying degrees of severity, Bartenieff quickly discovered that any movement her patients were able to make had a wide-reaching impact on their bodies. In her polio stricken patients, "every little movement of a patient lying in bed would produce a far-reaching effect on the weight distribution in the patient's whole body."⁶⁶ In addition, when Bartenieff could empathetically motivate her patients, guiding them through specific cues to activate a part of their body to achieve a specific goal, those patients regained a wide range of mobility and progressed further than the patients who were treated with more traditional polio therapies. Bartenieff's theories on movement have proven effective with rehabilitating injuries, and increasing movement function for athletes and musicians, as well as dancers. If the Bartenieff Fundamentals have successfully increased awareness and mobility in both professional dancers and in polio patients, there is certainly a benefit to adding the Bartenieff Fundamentals to the Voice Somatics Integration Lab as a vital part of an opera singer's core curriculum.

The Benefits of Bartenieff Fundamentals for Singers

The Bartenieff Fundamentals are a strong conduit for integrating awareness with breath and movement, while also introducing basic dance terminology to opera singers in an engaging manner. Through her research and work with patients, Irmgard Bartenieff came to see "breathing as a support system"⁶⁷ for the human body that powered

⁶⁶ Bartenieff and Lewis, *Body Movement*, 3.

⁶⁷ Woodruff, "Bartenieff Fundamentals(TM)," 209.

movement, which she codified as Breath Support Training (BST). BST consists of exercises designed to use breathing as a source for internal support to initiate movement, achieving many of the same goals singers have with breath support, including:

- a. “Support for the continuity of movement (the phrasing and the flow) which may involve timing the exhale to facilitate a sequence or integrating (orchestrating) movement of different parts of the body.”
- b. Centering and awareness of the self and the body
- c. Internal support through shape change of the musculoskeletal-skeletal framework
- d. Using the exhale for release of excess tension to facilitate a stretch or to release a holding pattern.”⁶⁸

Bartenieff’s principles of breathing and support are very similar to the principles governing breath support for singing. Bartenieff believed breathing should never be static, but rather a constant flow timed to facilitate specific movement. Her theories on centering and awareness are vital to helping anyone studying the Fundamentals to more effectively and efficiently engage the necessary muscles to execute specific movement. Bartenieff’s theory on internal support and releasing tension complements the processes singers use to slow the exhalation process without producing excess tension.

In addition, the Bartenieff Fundamentals provide an engaging and creative path to introduce singers to basic dance terminology. Once students become working professionals in the opera industry, it will benefit them to know some basic dance vocabulary. Students will likely be called on to perform simple dance choreography in opera staging rehearsals and may even have movement components of auditions. It is unlikely that many singers in the Voice Somatics Integration Lab will have the body and build of a professional ballet dancer, or feel comfortable in a ballet class wearing tights

⁶⁸ Woodruff, "Bartenieff Fundamentals(Tm)," 209.

and a leotard. This does not mean these singers cannot dance and move with awareness, engagement, and purpose to achieve a high level of artistry. By incorporating basic ballet and dance terminology directly into Bartenieff-based movement patterns and sequences, students learn important skills with an increased awareness of how their body functions and moves best.

CHAPTER 6

THE VOICE SOMATICS INTEGRATION LAB

Lab-based Learning

Merriam-Webster defines a laboratory as “a place providing opportunity for experimentation, observation, or practice in a field of study.”⁶⁹ Designating this course as a lab prioritizes creativity and process-based learning, establishing the expectation that students’ development and growth throughout the semester is more important than the end result. While students will be held accountable for their assignments and coursework, the lab is designed so that no category of coursework is weighted more than 20% of their overall grade, creating an atmosphere where students have space to fail, make mistakes, and learn from these mistakes.

Target Instructor

The ideal instructor for the lab will have extensive experience as a teacher/performer in both opera and dance. The instructor will also need to have extensive experience in Gaga Movement Language and Bartenieff Fundamentals, as well as knowledge of additional somatic practices. Expertise in every somatic technique is not needed; however, the instructor must have enough understanding of core concepts of techniques such as yoga, Pilates, Feldenkrais, and Alexander Technique. Should a student express interest in an alternate movement technique, the instructor must have contacts and resources to which they can refer the student. Most importantly, the instructor must have a

⁶⁹ Laboratory,” Merriam-Webster, s.v. “Laboratory,” accessed September 21, 2020, <https://www.merriam-webster.com/dictionary/laboratory>.

passion for helping others, and a willingness to put ego aside to better assist their students.

In a course such as the VSI Lab, each student will receive specific movement cues, imagery, and information that best fits their individual needs. The instructor must be willing to tailor the lab's content to best fit the bodies and learning trajectories of the students.

Target Student

The ideal student for the VSI Lab is an undergraduate or graduate student enrolled in a vocal performance degree program, taking the course within either the first four semesters of an undergraduate degree or the first two semesters of a graduate degree. By doing so, students place a high priority on learning about mind and body early in their studies. A vocal performance degree program is an intensive curriculum, with lessons, coachings, theory, ear training, languages, diction, history, convocations, recitals, opera workshops, auditions, ensembles, and general education or liberal arts requirements. The intensity and myriad demands of a vocal performance degree program mean students run the risk of negatively impacting their health in order to accomplish these degree requirements. By enrolling in a course such as the VSI Lab within the first half of a vocal performance degree program, students begin cultivating body awareness habits that are just as important as their academic coursework in traditional lecture-style classroom settings.

Class Size

The ideal class size for the Voice Somatics Integration Lab is 15-20 students. The relatively small class size allows the instructor to give individualized attention to all students throughout the duration of the lab, yet is large enough to build a sense of camaraderie among the students. Being a student in the lab involves taking risks, experimenting with new ways of moving, and a willingness to work outside of one's comfort zone. As a result, it is highly plausible that students may at times feel a bit silly, or experience insecurities about attempting something completely different.

Suggested Texts

Principle Texts

Bartenieff, Irmgard, and Lewis, Dori. *Body Movement: Coping with the Environment*. New York: Gordon and Breach, 1980.

Katan-Schmid, Einan. *Embodied Philosophy in Dance: Gaga and Ohad Naharin's Movement Research*. Palgrave Macmillan, 2018.

Supplemental Texts and Resources

Beller, Alexandra. *Containers, Magic, and the Ineffability of Balance: A study of the effects of LMA language on finding the intangibles in dance*. Graduation Thesis, The Laban/Bartenieff Institute of Movement Studies, 2015.

Caldwell, Timothy J. *Expressive Singing: Dalcroze Eurhythmics for Voice*. New York: Prentice Hall, 1995.

Feldenkrais, Moshe. *Awareness Through Movement*. New York: Harper Collins, 1990.

Fitt, Sally Sevey. *Dance Kinesiology*. Boston: Schirmer, 1996.

Galili, D. F. *Gaga: Moving beyond Technique with Ohad Naharin in the Twenty-First Century*. *Dance Chronicle*, v. 38, n.3, 2015. p.360-392.

Hackney, Peggy. 1998. *Making Connections : Total Body Integration Through Bartenieff Fundamentals*. Florence: Taylor & Francis Group. Accessed August 29, 2020. ProQuest Ebook Central.

Hibbard, Therees Tkach. "Building Body-Voices: Developing Moving Musicians in Choral Rehearsals." *Choral Journal* 53, no. 7 (02, 2013): 43-53.
<http://login.ezproxy1.lib.asu.edu/login?url=https://search.proquest.com/docview/1357480170?accountid=4485>.

Hibbard, Therees, and Martin, Gary M. *The Use of Movement as an Instructional Technique in Choral Rehearsals*, 1994, ProQuest Dissertations and Theses..

Humphrey, Doris. *The Art of Making Dances*. New York: Grove Press, 1959.

The required texts for the lab will be *Body Movement: Coping with the Environment* and *Embodied Philosophy in Dance: Gaga and Ohad Naharin's Movement Research*. In *Body Movement: Coping with the Environment*, Irmgard Bartenieff details her philosophies, research, and movement patterns. While there are additional scholars with published work on the Fundamentals, Bartenieff's text is the definitive text and original source material for these concepts. Compared to the Fundamentals, there are relatively few scholarly resources analyzing Gaga Movement Language. One great resource, however, is Einan Karan-Schmid's book, *Embodied Philosophy in Dance*, which offers a comprehensive look at Naharin's theories, work, and research.

The VSI Lab does not intend to address every somatic methodology, nor is it possible to learn everything about the Bartenieff Fundamentals or Gaga Movement Language in one semester. The supplemental texts are a reference point for students to encourage further exploration and research. Due to the expense associated with purchasing these texts, particularly the Karan-Schmid text, students will not be required to purchase these resources. Instead, excerpts of these texts will be posted to the online class portal as required reading assignments delineated in the course schedule.

The Voice Somatics Integration (VSI) Lab: Syllabus

Course Overview

The Voice Somatics Integration Lab is designed to help singers bridge the gap between Somatic movement practices and classical singing. Through multiple movement approaches and techniques, including Gaga Movement Language and the Bartenieff Fundamentals, students will gain a fuller understanding of how to apply these concepts to their own artistic practice. Ultimately, the course will showcase the singing of operatic repertoire with a healthy vocal technique while simultaneously addressing the physical demands of staging and choreography that are often viewed as “obstacles.”

Course Objectives

- To understand how anatomical structures of the pelvis and spine impact breath support, therefore aiding or hindering vocal technique
- To help students gain a deeper understanding of how their bodies move, and to challenge students to find a balance between maximizing their vocal technique and executing physically demanding movement beyond the confines of traditional opera staging
- To assist students in developing a movement vocabulary unique to their strengths
- To assist students in applying movement vocabulary to their creative process and performance

- To guide students in pushing boundaries and challenging standards associated with body types, voice types, and genders, in regard to both the music industry and cultural norms in society
- To apply somatic practices directly to the process of learning, rehearsing and performing choreographed operatic repertoire that is vocally appropriate for each student

Course Outcomes

- Singers will be able to articulate how movement impacts their larynx at an anatomical level
- Singers will be able to articulate how specific movement impacts their ability to sing with healthy vocal technique
- Through the application of a somatics and movement-based creative process, singers will understand how to effectively apply movement in their vocal studies and performance
- Through a movement-based creative process, each singer will gain knowledge critical to understanding their body as a whole instrument, and the language and movement that best helps them further develop as singing artists
- Each singer will produce a choreographed song or aria, and give a three- to five-minute presentation detailing their choreographic process

Assignments & Grading Percentages

Attendance & Participation	20%	Every Class
Wellness Logs	10%	Weekly
Improvisatory Sketches	10%	Weeks 3, 4, 6, 7, & 8
Peer-Led Warm-Up Sequence	10%	Weeks 11-14 (1 sequence/student)
Interactive Anatomy & Movement Exams (2 Total)	10%	Weeks 5 & 10
Proposal for Final Project Performance	10%	Week 8
Final Project Performance	20%	Week 14
Written Reflection of Course & Final Project	10%	Week 15

Attendance & Participation (20%)

A premium is placed on showing up to class and being an active and engaged participant. This is critical not only to learning the required course material, but for effectively building rapport with colleagues. Each student may have maximum of two unexcused absences without adversely impacting their grade.

Wellness Logs (10%)

Students taking the VSI Lab are required to submit 10 wellness logs documenting the following:

- 1) 3 hrs of physical activity outside of the classroom
- 2) Briefly describe how their mind and body felt before, during, and after workouts
- 3) Briefly describe their nutrition and meal habits for the week

- 4) Briefly describe how their mindset, mentally and emotionally, felt throughout the week

The purpose of the wellness logs is to invite students to think critically about their everyday life routines and habits, and how those routines and habits may or may not impact how they feel about their bodies. Grades are not assigned based on content: if a student completes and submits their wellness logs on time, they will get full credit for them. Students may submit more than 10 wellness logs if they so choose; however, only one wellness log per week, and up to 10 wellness logs total, will be accepted for a grade.

Improvisatory Sketches & Peer-Led Warm-Ups (10%)

Each session of the course will begin with movement sequences grounded in Gaga Movement Language and Bartenieff Fundamentals. Classes will be heavily movement-based to help singers find greater body awareness and explore physicality and sensation in relation to their voice. Once students become comfortable with Gaga Movement Language and Bartenieff Fundamentals, they will begin developing short improvisational sketches using both voice and movement. Singers will select an excerpt approximately thirty to sixty seconds in length from a piece in their current vocal repertoire. The selected piece should be learned and memorized, and very comfortable for the singer to perform. Once they have selected their excerpts, each singer will create a list of words and phrases that evoke their chosen excerpt's text and music. From these lists, students will pick between three to six words to match with three to six movement cues from the Gaga and Bartenieff warm-ups they have been learning in the Lab.

Once the students have their chosen words and movements, they will be given class time to experiment with matching intention with movement and voice. After experimenting with this process, singers will then perform their excerpts in class for their peers.

This improvisational exercise challenges singers to make specific choices with respect to their intentions, text, music, and movement. Improvisation can be an overwhelming concept to grasp, especially within the scope of classical vocal music and opera. With a clear yet flexible framework on a small scale, combined with the space to develop ideas and listen to one's own body vocabulary, improvisation becomes less daunting and more possible for singers.

These improvisatory sketches also give singers the chance to experiment with songs and arias for their final project. The length of the sketches and the required number of movements will increase in small increments weekly throughout the semester, as outlined in the course schedule. By the time they present their final project proposals, students will have a clearer idea of how they want to craft their movement vocabulary with their singing.

Peer-Led Warm-Up Sequence (10%)

Throughout Bartenieff Sequences 1 and 2, the instructor will make space for students to build their own small scale themes and variations of movement within the Bartenieff Sequences they have already explored. These variations will build on themselves throughout the semester, culminating in students leading their peers through their own movement sequences as part of the class warm-up. While these sequences should be

influenced by Gaga Movement Language and Bartenieff Fundamentals, the movements and structure of the sequences are chosen by the student, or students, leading the warm-up. Singers may choose to work independently to create and lead their own sequence, or may collaborate with up to two other students to create and lead a warm-up sequence collectively.

Interactive Anatomy and Movement Exams (10%)

Understanding how the human body functions as a whole gives singers more tools at their disposal, and frames the knowledge gained in vocal pedagogy classes through a somatic movement lens. Therefore, including an overview of human anatomy and physiology that addresses specific parts and functions of the body not usually associated with a pedagogy class is integral to a somatic-based movement course for singers. The point of the overview is not to analyze every anatomical structure and its function. By the end of this course, singers are expected to understand how to use their bodies more effectively to help them sing and should have a basic understanding of the structures in their bodies and how those structures function to help them move.

The anatomy units of the course will be divided as follows:

- 1) Interactive Anatomy and Movement Unit 1: Understanding Anatomical Terms
- 2) Interactive Anatomy and Movement Unit 2: Understanding Structures and Muscles

There will be two Anatomy and Movement Exams; the first covers material from Weeks 1-4, the second covers material from Weeks 6-9. All terminology for both exam portions will be available to the students during Week 1 of the course, and all material for both exam portions will be discussed in depth in class. Each exam has 2 parts:

Exam 1

- 1) A small group portion, where groups of 2-3 students perform Bartenieff Sequence 1
- 2) A one-on-one movement/oral exam where the student will demonstrate their understanding of terms from Interactive Anatomy and Movement Unit 1:

Understanding Anatomical Terms

Exam 2

- 1) A small group portion, where groups of 2-3 students perform Bartenieff Sequence 2 with the added Ballet Extension
- 2) A one-on-one movement/oral exam where the student will demonstrate their understanding of terms from Interactive Anatomy and Movement Unit 1:

Understanding Skeletal Structures and Muscles

Proposal for Final Project (10%)

In Week 9 of the semester, students will present their final project proposals, addressing the following points in their proposals:

- 1) The song or aria they intend to perform

- 2) An improvisational sketch of an approximately 30-60 second excerpt of the song or aria, demonstrating the types of movement the student intends to incorporate into their performance
- 3) Potential challenges the student will face in integrating their vocal technique with movement, and how they plan to address those challenges
- 4) A legible and clearly marked PDF of the piano/vocal score for the song or aria they intend to perform.

Final Project Performance (20%)

The course culminates in a performance of songs and arias showcasing the students' progression through the semester. Along with their performance, students will also give a brief three-to-five-minute presentation detailing the steps they took to incorporate movement into their chosen piece. With guided and objective feedback from the professor and colleagues, each student will choreograph their chosen piece using movement that showcases the many ways their body operates as a complete singing instrument. In addition, each student will be able to describe their choreography and vision with great detail and specificity.

Written Reflection of Course & Final Project (10%)

After the Project Performances, students will share their post-performance reflections in writing (maximum of 500 words) and in one-on-one meetings with the professor to further debrief and evaluate their growth and progress throughout the semester.

The Voice Somatics Integration (VSI) Lab: Course Schedule

Week 1/Day 1

- **Read:** Syllabus
- **Watch:** *The Making of We Shall Not Be Moved, Chapter 1: Truth*
<https://youtu.be/MExzmWCSpWo>
- **Watch:** *Discussing Body Image and Dance*, Bill T. Jones, The Connecticut Forum for Creative Artists, https://youtu.be/k_oaNwljMmE
- **Watch:** *Mark Morris Dance Group*, <https://youtu.be/y9LdbcZxT1Q>
- **Watch:** *Yo-Yo Ma Plays the Prelude from Bach's Cello Suite No. 3*, (video of full performance not available on YouTube, will require university resources)
- **Watch:** *Dido and Aeneas, Mark Morris Dance Group*,
<https://youtu.be/8GAJPo9ZQSc>

Week 1/Day 2

- **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
- **Read:** Introduction, pp. 1-6, *Bartenieff Fundamentals: A Somatic Approach to Movement Rehabilitation*, Dr. Dianne Woodruff
- **Watch:** Embodied Laban/Bartenieff Fundamentals, Laban/Bartenieff Institute of Movement Studies, <https://youtu.be/9iijoJv-33E>
- **Watch:** *Floorwork Basics*, Vincent Yong and the Lasalle College of the Arts,
https://youtu.be/tW1Tm_ztrGA

Week 2/Day 1

- **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
- **Read:** Chapter 1: Activate and Motivate, *Body Movement: Coping with the Environment*, Irmgard Bartenieff and Dori Lewis
- **Watch:** Alexandra Beller: *Egg*, <https://youtu.be/DuqGJPQ2EGw>

Week 2/Day 2

- **Due:** Wellness Log (Minimum of 1 per week, 10 per semester)
- **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
- **Read:** Chapter 2: The Body Architecture, *Body Movement: Coping with the Environment*, Irmgard Bartenieff and Dori Lewis
- **Watch:** Alexandra Beller, *Sifting Miracles*: <https://youtu.be/VQhESNW10fk>

Week 3/Day 1

- **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
- **Read:** Hibbard, Therees Tkach. "Building Body-Voices: Developing Moving Musicians in Choral Rehearsals." *Choral Journal* 53, no. 7 (02, 2013): 43-53.
- **Watch:** "Let the Body Sing," <https://youtu.be/C0ps3kRkdms>
- **Watch:** *The Process of Becoming Infinite*, Bill T. Jones,
<https://youtu.be/OBWeo5FKoOA>

Week 3/Day 2

- **Due:** Wellness Log (Minimum of 1 per week, 10 per semester)
- **Due:** Presentation of Individual Improvisational Sketches
- **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
- **Read:** Beller, Alexandra. *Containers, Magic, and the Ineffability of Balance: A study of the effects of LMA language on finding the intangibles in dance*. Alexandra Beller/Dances, 2015. Pages 3-20. <https://alexandrabellerdances.org/labán>
- **Watch:** *Milkdreams: Alexandra Beller/Dances (with Baby Ivo)*: <https://youtu.be/jFTWMtv5VX4>

Week 4/Day 1

- **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
- **Read:** Beller, Alexandra. *Containers, Magic, and the Ineffability of Balance: A study of the effects of LMA language on finding the intangibles in dance*. Alexandra Beller/Dances, 2015. Pages 21-35. <https://alexandrabellerdances.org/labán>
- **Watch:** *Milkdreams (Baby Modern Dance)*: <https://youtu.be/jYA3TBwarwE>

Week 4/Day 2

- **Due:** Wellness Log (Minimum of 1 per week, 10 per semester)
- **Due:** Presentation of Individual Improvisational Sketches

Week 5/Day 1 (No assignments due)

Week 5/Day 2

- **Due:** Wellness Log (Minimum of 1 per week, 10 per semester)
- **Exam:** Interactive Anatomy and Movement Unit 1

Week 6/Day 1

- **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
- **Watch:** *Ohad Naharin Discusses Gaga Movement*, <https://youtu.be/OGPG1QL1vJc>
- **Watch:** *Gaga Dancers: Movement Language, Harvard University* <https://youtu.be/e4JXj5tkab4>

Week 6/Day 2

- **Due:** Wellness Log (Minimum of 1 per week, 10 per semester)
- **Due:** Presentation of Improvisational Sketches
- **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
- **Watch:** *Batsheva Dance Company: "It's About Making the Body Listen,"* <https://youtu.be/gRky99sO-og>
- **Read:** Pages 367-375, Galili, D. F. *Gaga: Moving beyond Technique with Ohad Naharin in the Twenty-First Century*. *Dance Chronicle*, v. 38, n.3, 2015.

Week 7/Day 1

- **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
- **Watch:** Bones of the Pelvis | Pelvis Anatomy, <https://youtu.be/VnQiNF1tIQc>
- **Study:** Picture Comparisons of the Male Pelvis and Female Pelvis, <https://www.registerednurses.com/male-vs-female-pelvis/>
- **Study:** Ligaments of the Female Pelvis, University of Dundee School of Medicine Accessed Sept. 21, 2020: <https://sketchfab.com/3d-models/ligaments-of-the-female-pelvis-34f74adaf3ec4105b987f6162ed85eef>

Week 7/Day 2

- **Due:** Wellness Log (Minimum of 1 per week, 10 per semester)
- **Due:** Presentation of Improvisational Sketches
- **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
- **Watch:** Gaga Dancing: Lesson 1-A 360/VR Experience, <https://youtu.be/oLz09Splpf8>
- **Read:** Pages 384-387, Galili, D. F. *Gaga: Moving beyond Technique with Ohad Naharin in the Twenty-First Century*. Dance Chronicle, v. 38, n.3, 2015.

Week 8/Day 1

- **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
- **Watch:** 3D Anatomy of the Spine, <https://youtu.be/AR41M2nybg0>
- **Read:** Pages 83-86, Chapter 8, Breathing for Singing. McCoy, Scott. *Your Voice: An Inside View*. Princeton: Inside View, 2004.

Week 8/Day 2

- **Due:** Wellness Log (Minimum of 1 per week, 10 per semester)
- **Due:** Presentation of Improvisational Sketches
- **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
- **Watch:** *Naharin's Virus*, performed by Batsheva Dance Company, <https://youtu.be/4r5c1rZXROU>
- **Watch:** Batsheva Dance Company – Sadeh21, <https://youtu.be/A6RWvh0JMv8>
- **Watch:** Echad Mi Yodea, https://youtu.be/7v6tY_u-MIs
- **Read:** Pages 12-23, Patel, Bhumi B. "When the Whole World is Empty: Gaga as a Modality for Kinesthetic Grief Processing."

Week 9/Day 1

- **Due:** Presentation of Final Projects Proposals

Week 9/Day 2

- **Due:** Wellness Log (Minimum of 1 per week, 10 per semester)
- **Due:** Presentation of Final Project Proposals

Week 10/Day 1 (No assignments due)

Week 10/Day 2

- **Due:** Wellness Log (Minimum of 1 per week, 10 per semester)
- **Exam:** Interactive Anatomy and Movement Unit 2

Week 11/Day 1

- **Due:** Peer-led warm-up sequences
- **Watch:** *Dido and Aeneas, Mark Morris Dance Group* (video of full performance not available on YouTube, will require university resources)

Week 11/Day 2

- **Due:** Wellness Log (Minimum of 1 per week, 10 per semester)
- **Due:** Peer-led warm-up sequences
- **Due:** Presentation of sketches of final projects (works in progress)
- **Watch:** *Dido and Aeneas, a Conversation between Mark Morris and Joan Acocella*, <https://youtu.be/i0S4dbx8F2c>

Week 12/Day 1

- **Due:** Peer-led warm-up sequences
- **Watch:** Bill T. Jones, *The Dancer, the Singer, the Cellist...and a moment of creative magic* <https://youtu.be/o4DD3dgfvS0>
- **Watch:** *Body, Movement, Language: Bill T. Jones and AI*, <https://www.billtjonesai.com>

Week 12/Day 2

- **Due:** Wellness Log (Minimum of 1 per week, 10 per semester)
- **Due:** Peer-led warm-up sequences
- **Due:** Presentation of sketches of final projects (works in progress)
- **Watch:** Bill T. Jones, *We Shall Not Be Moved* (video of full performance not available on YouTube, will require university resources)

Week 13/Day 1

- **Due:** Peer-led warm-up sequences
- **Watch:** Hannigan and GSO: Ligeti's *Mysteries of the Macabre*, <https://youtu.be/sFFpzip-SZk>
- **Watch:** Barbara Hannigan, the Soprano Conductor, <https://youtu.be/YnzmQZpEy4>

Week 13/Day 2

- **Due:** Wellness Log (Minimum of 1 per week, 10 per semester)
- **Final:** Performance of Final Projects

Week 14

- **Due:** Final Project/Course Reflections

CHAPTER 7

THE VOICE SOMATICS INTEGRATION LAB: COURSE MATERIALS

Gaga-Inspired Movement Language Map

This is a sample narrative for a warm-up sequence based on Gaga Movement Language. Only certified Gaga instructors are allowed to use specific Gaga terminology. Therefore, the following movement prompts are inspired by principles of Gaga Movement Language and do not use specific Gaga terminology.

Prior to beginning the warm-up:

- If logistically feasible, cover any mirrors or windows to minimize visual insecurities
- Students should spread out to have space to move freely
- Live or recorded music should accompany the warm-up
- The instructor leads through both spoken and movement cues, moving throughout the entire duration of the warm-up

Warm-up:

- 1) Begin moving to the music, warming up muscles slowly, yet moving with intention from the balls of the feet to the crown of the head
- 2) As the music continues, mentally trace the movement through one part of the body to another part of the body, then mentally trace the movement to a new part of the body. Reverse the action and mindfully trace the movement back through the body. Be cognizant of the sensations that arise as movement travels through the body from one point to another
- 3) Float the arms out to the sides
- 4) Keep movement flowing through the whole body, even as the arms and upper extremities become the focus at this time
- 5) With floating arms, pretend the arms have become heavy yet are still buoyant
- 6) Now, imagine the weight that made the arms heavy has been lifted, and the arms are floating like feathers
- 7) Now, imagine the arms are like caramel, fluid and stretchy
- 8) Begin to stretch one arm out to the side; as that one arm stretches, send the ribbon of caramel through the arms and stretch out the opposite arm. Feel a stretch across the shoulder blades, as though the caramel ribbon is pulling them apart. Put lots of effort into keeping this caramel ribbon stretched, stretching the shoulder blades even further apart, as though the ribbon might not stretch any more...then release the intensity to let go of the effort.
- 9) With the release of the added effort, tune into the sensations of the arms and the shoulder blades, finding additional stretch through the shoulder blades all the way through the fingertips. This stretch should feel good, like a release of an excess of tension.
- 10) Keep movement flowing throughout the whole body, even as the arms and upper extremities become the focus.

- 11) Now, shift the focus to the pelvis while maintaining movement throughout the body
- 12) Bend the knees and begin to explore the movement of the pelvis. The pelvis can be shifted forwards, backwards, sideways, at a diagonal, and in a combination of multiple directions
- 13) Trace the movement of the pelvis down through the legs and into the feet, the ankles, the heels, and the toes
- 14) Trace the movement back up through the legs and pelvis, mindfully tracing the movement through the abdominals, the ribs, the shoulders, and the arms
- 15) Trace the movement from the arms and into the neck and the jaw. Let the jaw hang loose, tracing the movement through the jaw, the ears, and the top of the spine
- 16) Place hands on the jaw, maintaining the movement throughout the body
- 17) Imagine a melting sensation from the top of the spine all the way down to the pelvis, maintaining movement throughout the body while maintaining and exploring this melting sensation.
- 18) Increase the intensity of the effort in the movement around the spine, while still maintaining movement.
- 19) Once you have intensified the effort in your movement as much as possible, then let go of the effort. Let the release of the extra effort assist in finding more stretch and more fluidity throughout the spine
- 20) Trace the fluid movement of the spine back down through the pelvis, finding additional stretch through letting go of that effort
- 21) Begin to shake all the limbs, as though shaking off bugs.
- 22) Release the jaw, release the shoulder blades, release the muscles in the pelvis and hips
- 23) Shake everything as intensely as possible for the next 10 seconds, then slowly decrease the intensity of the shaking sensation
- 24) Move to the music as best fits (your) body, emotions, and mood in this moment, finishing out the current song exploring the many ways (your) body moves through space

Bartenieff Fundamentals Sequence 1

The Preparatory Exercises and Basic Six Exercises⁷⁰

Preparatory Exercises A, B, and C
No. 1A and B, Thigh Lift
No. 2, Pelvic Forward Shift
No. 3, Pelvic Lateral Shift
No. 4, Body Half
No. 5A, Knee Drop
No. 5B, Alternating Knee Drop and Arms
No. 6A, Arm Circles
No. 6B, Diagonal Sit-up
Reverse the Diagonal Sit-up to transition back into X Position

Additions⁷¹

X Position	Lying supine in an x
O Position	Rolling to one side while bringing limbs, head, and tail in toward the naval, before return to an x-shape. Repeat on the other side. *
X Position	Return to X Position after both rolling through O Position on both sides
O Position Left	Return to the O Position on the Left, but do not return to an x-shape
Open-up Left	Lying on one side with elbows and knees bent at 90 degrees to the torso, open both top arm and leg, arcing through the horizontal plane.
O Position Left	Return to O Position
X Position	Transition to X Position
O Position Right	Return to the O Position on the Right, but do not return to an x-shape
Open-up Right	Lying on one side with elbows and knees bent at 90 degrees to the torso, open both top arm and leg, arcing through the horizontal plane.
O Position Right	Return to O Position
X Position	Transition to X Position
O Position Left	Return to the O Position on the Left, but do not return to an x-shape
Open-up Left with Roll	Lying on one side with elbows and knees bent at 90 degrees to the torso, open both top arm and leg, arcing through the horizontal plane. Keeping arms overhead, continue to roll to the other side and return to X Position

⁷⁰ Bartenieff, Irmgard, and Lewis, Dori. *Body Movement: Coping with the Environment*, New York: Gordon and Breach, 1980, 231-248.

⁷¹ Woodruff, "Bartenieff Fundamentals(Tm)," 11-13.

X Position	Return to X Position
O Position Right	Return to O Position
Open-up Right with Roll	Lying on one side with elbows and knees bent at 90 degrees to the torso, open both top arm and leg, arcing through the horizontal plane. Keeping arms overhead, continue to roll to the other side and return to X Position
X Position	End in X Position
Heel Rock	Preparatory Exercise C
Heel Slide	Leading with the heel, slide the heel towards the pelvis, allowing the knees to bend in the process (*Component of Preparatory Exercise 1A) ⁷²
Knee Drop (Knee Reach)	With knees flexed, feet on floor, drop the knees to one side, return to center and drop to the other side*
Knee Drop with Opposing Arm	Repeat the Knee Drop and allow opposite arm to excursion sideward and upward into line with the knees*
Arm Circle Left	Continue the arm movement of the Knee Drop with Opposing Arm so that the arm makes a circle over the mover's head and across the hips
Spiral Sit-up Left (Diagonal Sit-up)	Extend the Arm Circle with repetitions that build momentum to bring the mover to a sitting position, spiraling up from the floor
Transition	Reverse the Diagonal Sit-Up back into X Position
X-roll	Lying supine in an x, reach with one hand across torso and up toward opposite hand; continue reaching until the body rolls to a face-down position. With the other hand, reach across top of the x, leading with little finger, tracking hand with eyes (head and neck in extension); continue reaching until the body rolls to a face-up position.
Knee Drop (Knee Reach)	(Description already noted)
Knee Drop with Opposing Arm	(Description already noted)
Arm Circle Right	Description already noted)
Spiral Sit-up Right (Diagonal Sit-up) with addition	Once sitting up, continue the momentum to come to standing

⁷² Bartenieff, Irmgard, and Lewis, Dori, *Body Movement: Coping with the Environment*, New York: Gordon and Breach, 1980, 231-248.

Bartenieff Fundamentals Sequence 2⁷³

Preparatory Exercises A, B, and C
No. 1A and B, Thigh Lift
No. 2, Pelvic Forward Shift
No. 3, Pelvic Lateral Shift
No. 4, Body Half
No. 5A, Knee Drop
No. 5B, Alternating Knee Drop and Arms
No. 6A, Arm Circles
No. 6B, Diagonal Sit-up
Reverse the Diagonal Sit-up to transition back into X Position

Ballet Extension

Parallel First	Stand with feet in parallel, approximately hips width distance apart.
Parallel First Plie Series	Demi-Plié and stretch, repeating 4 times Grand-Plié and stretch, repeating 2 times
Upright Rocks	Gently rock back and forth between the balls of the feet and the heels, then rotating outward from the hips, fan the feet out to a turned out first position. Transfer to 2 nd position.
Turned Out Plié Series	Repeat series below with 2 nd , 1 st , 3 rd , and 4 th Position on both left and right sides: Demi-Plié and stretch, repeating 4 times Grand-Plié and stretch, repeating 2 times
Tendu Series	Repeat the following series in 1 st parallel, then turned out 2 nd , 1 st , 3 rd , and 4 th positions on both left and right sides: 4 tendus front, side, back, side
Degage Series	Repeat the following series in 1 st parallel, then turned out 2 nd , 1 st , 3 rd , and 4 th positions on both left and right sides: 4 degages front, side, back, side
Battements Fondus	Repeat the following series on both left and right sides: Front (beginning in 3 rd or 5 th position, working leg in front): Fondu to tendu Fondu to degage Fondu to developpe, transition to wide 4 th position Find the snake of the spine as cued in a Gaga sequence, exploring movement within the wide 4 th position Transition back to 3 rd or 5 th position Repeat to the side, back, and side (4 th position becomes 2 nd position to the side)
Battements Frappe	Repeat the following series in 3 rd or 5 th position on both left and right sides:

⁷³ Woodruff, "Bartenieff Fundamentals(TM)," 11-13.

	4 Battement frappes front, side, back, side
Ronds de jambe	Repeat the following series in 1 st position on both left and right sides: 4 slow ronds de jambes, en dehors/en dedans 4 quicker ronds de jambes, en dehors/en dedans
Petit Battements sur le cou-de-pied	Plie, releve, to sou-sou in a tight 5 th position, left front Explore balance through Gaga style movement in releve (it is ok for students to be not be perfectly centered with their balance) Petit battements side, left leg, 2x Petit battements side, right leg, 2x
Leg Swings	7 leg swings front to back, right leg, transition on 8 th leg swing 7 leg swings side to side, left leg, transition on 8 th leg swing 7 leg swings back to front, right leg, transition on 8 th leg swing 7 leg swings front to back, left leg, transition on 8 th leg swing 7 leg swings side to side, right leg, transition on 8 th leg swing 7 leg swings back to front, left leg, transition on 8 th leg swing
Grand Battement	Use the same movement pattern used for the leg swing series, but with only 1 battement (not 7)
Changements	16 changements from 3 rd or 5 th position (can begin with either leg in front)

Theme and Variations on Bartenieff Sequence 2

The goal is to increase students' confidence in their artistic and technical instincts, using musical terms such as theme and variations to describe this process, as opposed to calling the process choreography.

Possible themes and variations include the following:

- Reversing a portion of a Bartenieff Sequence
- Borrowing from Gaga philosophies, asking students to embody specific emotions, intentions, and scenarios through a Bartenieff Sequence
- Shuffling movements within a portion of a Bartenieff Sequence to create a completely new progression
- Setting a portion of a Bartenieff Sequence to a specific musical excerpt
- Performing a portion of a Bartenieff Sequence to a piece of music selected at random
- Having each singer perform a solo variations of a Bartenieff Sequence excerpt while simultaneously performing a short excerpt from their current vocal repertoire

Sample Lesson Plans

Week 1/Day 1

- Resources (prepare before class):
 - **Watch:** *The Making of We Shall Not Be Moved, Chapter 1: Truth* <https://youtu.be/MExzmWCSpWo>
 - **Watch:** *Discussing Body Image and Dance*, Bill T. Jones, The Connecticut Forum for Creative Artists, https://youtu.be/k_oaNwIjMmE
 - **Watch:** *Mark Morris Dance Group*, <https://youtu.be/y9LdbcZxT1Q>
 - **Watch:** *Yo-Yo Ma Plays the Prelude from Bach's Cello Suite No. 3*, (video of full performance not available on YouTube, will require university resources)
 - **Watch:** *Dido and Aeneas*, Mark Morris Dance Group, <https://youtu.be/8GAJPo9ZQSc>
- Introductions
 - Instructor introduction and background with dance, movement, and somatics in relation to opera and singing
 - Student introductions and backgrounds with dance, movement, and somatics in relation to opera and singing
- Syllabus Review
 - Go through syllabus with students
 - Outline instructor and student expectations for the semester
 - Address any questions or concerns from students
- Gaga-inspired Warm-Up
 - Introduce the Gaga-inspired warm-up outlined in 6.1, Gaga Movement Language Map
- Bartenieff Sequence Part 1
 - Introduce the Bartenieff Sequence Part 1, outlined in Chapter 6.2
 - Introduce the Sequence in small segments, demonstrating each segment of movements first, then letting students try the segment out
- Guided Class Discussion
 - Guided discussion on the assigned resources students prepared prior class
 - *The Making of We Shall Not Be Moved, Chapter 1: Truth*
 - How does the staging and choreography enhance the musical score?
 - Is there a case to be made that the staging and choreography distract from the score? If so, how?
 - Individually, what aspects of the staging would seem the most challenging to you? If you were contracted to perform one of these roles with this staging, what steps would you take to prepare physically for this staging?
 - *Discussing Body Image and Dance*
 - What parallels to the opera industry can be drawn from Bill T. Jones's observations on body image and dancers?

- What are the cultural standards for beauty and body image in the opera industry?
- Discuss specific opera singers who may not conform to cultural standards for beauty and body image who, like the dancers Bill T. Jones refers to, are beautiful movers with compelling presence?
- Mark Morris Dance Group, Yo-Yo Ma, & Dido and Aeneas
 - In the excerpts shown of his work, what musical nuances has Morris interpreted through movement?
 - How does his interpretation either align with or go against what movement you would have visualized for this music?

Week 1/Day 2

- Resources (prepare before class):
 - **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
 - **Read:** Introduction, pp. 1-6, *Bartenieff Fundamentals: A Somatic Approach to Movement Rehabilitation*, Dr. Dianne Woodruff
 - **Watch:** Embodied Laban/Bartenieff Fundamentals, Laban/Bartenieff Institute of Movement Studies, <https://youtu.be/9iij0Jv-33E>
 - **Watch:** *Floorwork Basics*, Vincent Yong and the Lasalle College of the Arts, https://youtu.be/tW1Tm_ztrGA
- Gaga-inspired Warm-Up
 - Instructor leads a variation of the Gaga-inspired warm-up outlined in Chapter 6.1, Gaga Movement Language Map
- Bartenieff Sequence Part 1
 - Review the Bartenieff Sequence Part 1 outlined in Chapter 6.2
 - Review the Sequence in small segments, demonstrating each segment of movements first, then letting students try the segment out
 - Introduce and discuss the following names, concepts, and terminology outlined below throughout reviewing the Bartenieff Sequence Part 1
- Guided Class Discussion
- Interactive Anatomy and Movement Unit 1: Concepts to Discuss in Class⁷⁴
 - Rudolf Laban: Founder of Laban Movement Analysis (LMA), father of European modern dance
 - Laban Movement Analysis (LMA): Developed the principle that all movement is a combination of body, shape, space, and effort.
 - Irmgard Bartenieff: Dancer, physical therapist, and scholar, former student of Rudolf Laban, developed the Bartenieff Fundamentals
 - Bartenieff Fundamentals: A physical reeducation method that develops movement efficiency and expressiveness
 - Skeleton: The architectural support for the human body
 - Ligaments: Nonelastic connective tissue that connects bone to bone

⁷⁴ Fitt, Sally Sevey, *Dance Kinesiology*, 17 & 20.

- Joints: The point where 2 or more bones join together
- Tendons: Elastic connective tissue that connects muscle to bone
- Bursa: Tiny fluid-filled sacs that serve as “ball bearings” at the body’s high-friction points
- Hyaline Cartilage: Dense cushioning material found on the articulating surface
- Synovial Fluid: Connective tissue encasement around a joint (joint capsule)
- Articulation: Point(s) at which two or more bones meet to form a joint
- Articulating Surface: Surface of a bone that contacts another bone

Week 2/Day 1

- Resources (prepare before class):
 - **Read:** Interactive Anatomy and Movement Terms, to be discussed in today’s class
 - **Read:** Chapter 1: Activate and Motivate, *Body Movement: Coping with the Environment*, Irmgard Bartenieff and Dori Lewis
 - **Watch:** Alexandra Beller: Egg, <https://youtu.be/DuqGJPO2EGw>
- Gaga-inspired Warm-Up
- Bartenieff Sequence Part 1
 - Review the Bartenieff Sequence Part 1 outlined in Chapter 6.2
 - Review the Sequence in small segments, demonstrating each segment of movements first, then letting students try the segment out
 - Introduce and discuss the following names, concepts, and terminology outlined below throughout reviewing the Bartenieff Sequence Part 1
- Guided Class Discussion
- Interactive Anatomy and Movement Unit 1: Concepts to Discuss in Class
 - Dalcroze Eurhythmics: A playful and experimental process for awakening, developing, and refining innate musicality through rhythmic movement, ear-training, and improvisation⁷⁵
 - Certified Movement Analyst (CMA): Movement specialists certified in Laban Movement Analysis and Bartenieff Fundamentals⁷⁶
 - Vertical Throughness: A quality of active posture in which the body is balanced around its vertical axis-vertical being the primary dimension of the body⁷⁷
 - Underlying Core Support: A term adopted by CMA’s referring to anchoring/hallowing engagement in the abdominals⁷⁸
 - Kinesphere: LMA term for personal space⁷⁹

⁷⁵ What is Dalcroze? Dalcroze USA, accessed October 2, 2020, <https://dalcrozeusa.org/about-dalcroze/what-is-dalcroze/>.

⁷⁶ Hibbard, Therees Tkach. *Developing Bodyvoices: A “Bodysinging” Philosophy*. Lincoln: University of Nebraska-Lincoln, 2009. 3.

⁷⁷ Ibid, 3.

⁷⁸ Ibid, 3.

⁷⁹ Ibid, 3.

- Interpersonal: LMA informed term for the space beyond personal space⁸⁰
- Vertical Plane: the anatomical plane that divides the body into front and back parts
- Horizontal/Transverse Plane: the anatomical plane that divides the body into superior/top and inferior/bottom parts
- Sagittal Plane: the anatomical plane that divides the body into left and right parts

Week 2/Day 2

- Resources (prepare before class):
 - **Read:** Interactive Anatomy and Movement Terms, to be discussed in today's class
 - **Read:** Chapter 2: The Body Architecture, *Body Movement: Coping with the Environment*, Irmgard Bartenieff and Dori Lewis
 - **Watch:** Alexandra Beller, *Sifting Miracles*: <https://youtu.be/VQhESNW10fk>
- Gaga-inspired Warm-Up
- Bartenieff Sequence Part 1
 - Review the Bartenieff Sequence Part 1 outlined in Chapter 6.2
 - Review the Sequence in small segments, demonstrating each segment of movements first, then letting students try the segment out
 - Introduce and discuss the following names, concepts, and terminology outlined below throughout reviewing Bartenieff Sequence Part 1
- Guided Class Discussion
- Interactive Anatomy and Movement Unit 1: Concepts to Discuss in Class⁸¹
 - Deep: muscle layer closest to the bone
 - Superficial: muscle layer closest to the skin
 - Proximal: usually used in limbs- closer to the center of the body
 - Distal: farther away from the center of the body
 - Medial: Toward the middle
 - Lateral: To the side
 - Superior: Above
 - Inferior: Below
 - Anterior: Front
 - Posterior: Back

Week 3/Day 1

- Resources to prepare before class:
 - **Read:** Hibbard, Therees Tkach. "Building Body-Voices: Developing Moving Musicians in Choral Rehearsals." *Choral Journal* 53, no. 7 (02, 2013): 43-53.
 - **Watch:** "Let the Body Sing," <https://youtu.be/C0ps3kRkdms>

⁸⁰ Hibbard, *Developing Bodyvoices*, 3.

⁸¹ Fitt, *Dance Kinesiology*, 20.

- **Watch:** *The Process of Becoming Infinite*, Bill T. Jones, <https://youtu.be/QBWeo5FKoOA>
- Condensed Gaga-inspired & Bartenieff Sequence Warm-Up
 - Instructor leads a shortened variation of the Gaga-inspired warm-up outlined in Chapter 6.1, Gaga Movement Language Map, and a shortened variation of Bartenieff Sequence Part 1
 - Incorporate the new Interactive Anatomy and Movement concepts and terms into the warm-up
- Guided Class Discussion
- Breakout Sessions
 - Set aside class time for students to work on individual improvisational sketches, to be presented on Week 3/Day 2
- Interactive Anatomy and Movement Unit 1: Concepts to Discuss in Class⁸²
 - Off-Set Balance: balance where the center of gravity shifts toward the edge of the base of support
 - Stable Balance: balance where the center of gravity is directly centered over the base of support
 - Dynamic Balance: balance where the center of gravity is outside the base of support

Week 3/Day 2

- Resources (prepare before class):
 - **Read:** Beller, Alexandra. *Containers, Magic, and the Ineffability of Balance: A study of the effects of LMA language on finding the intangibles in dance*. Alexandra Beller/Dances, 2015. Pages 3-20. <https://alexandrabellerdances.org/labandances>
 - **Watch:** *Milkdreams: Alexandra Beller/Dances (with Baby Ivo)*: <https://youtu.be/jFTWMtv5VX4>
- Condensed Gaga-inspired & Bartenieff Sequence Warm-Up
 - Instructor leads a shortened variation of the Gaga-inspired warm-up outlined in Chapter 6.1, Gaga Movement Language Map, and a shortened variation of Bartenieff Sequence Part 1
 - Incorporate the new Interactive Anatomy and Movement concepts and terms into the warm-up
- Presentation of Individual Improvisational Sketches
- Guided Class Discussion
- Interactive Anatomy and Movement Unit 1: Concepts to Discuss in Class⁸³
 - Pronation: Also called beveling and usually associated with actions of the feet, when feet are in an extreme position of abduction and eversion
 - Supination: Also called sickling, and usually associated with actions of the feet, when feet are in an extreme position of adduction and inversion

⁸² Fitt, *Dance Kinesiology*, 24.

⁸³ Ibid, 20 & 30.

- Flexion: Decreasing the angle between two levers
- Extension: Increasing the angle between two levers
- Hyperextension: Increasing the angle between two levers beyond 180 degrees

Week 4/Day 1

- Resources (prepare before class):
 - **Read:** Beller, Alexandra. *Containers, Magic, and the Ineffability of Balance: A study of the effects of LMA language on finding the intangibles in dance.* Alexandra Beller/Dances, 2015. Pages 21-35.
<https://alexandrabellerdances.org/labán>
 - **Watch:** *Milkdreams (Baby Modern Dance)*: <https://youtu.be/jYA3TBwarwE>
- Condensed Gaga-inspired & Bartenieff Sequence Warm-Up
 - Instructor leads a shortened variation of the Gaga-inspired warm-up outlined in Chapter 6.1, Gaga Movement Language Map, and a shortened variation of Bartenieff Sequence Part 1
 - Incorporate the new Interactive Anatomy and Movement concepts and terms into the warm-up
- Guided Class Discussion
- Breakout Sessions
 - Set aside class time for students to work on individual improvisational sketches, to be presented on Week 4/Day 2
- Interactive Anatomy and Movement Unit 1: Concepts to Discuss in Class⁸⁴
 - Rotation: movement around the central axis of a lever
 - Inward Rotation: also called inversion, rotation of the limbs inward toward the front of the body
 - Outward Rotation: also called eversion, rotation of the limbs outward, away from the front of the body
 - Abduction: movement away from the midline of the body
 - Adduction: movement toward the midline of the body
 - Ossification: hardening of bone

Week 4/Day 2

- Visiting Guest Artist: Dr. Therees Hibbard, Visiting Associate Professor of Music, St. Olaf College
- Presentation of Individual Improvisational Sketches, with feedback from Dr. Hibbard

Week 5/Day 1

- Catch Up Day
- Review the concepts and terms associated with Interactive Anatomy and Movement Unit 1: Understanding Anatomical Terms

⁸⁴ Fitt, *Dance Kinesiology*, 20.

Week 5/Day 2

- Interactive Anatomy and Movement Terminology Unit 1 Exam
- Concepts and Terms to Prepare for the Exam:
 - Perform Bartenieff Sequence Part 1 in groups of 2 to 3 students
 - One-on-one assessments with the instructor, where students verbally and/or physically articulate 10 concepts or terms discussed in the unit from the *Unit 1: Concepts and Terms* list.

Week 6/Day 1

- Resources (prepare before class):
 - **Watch:** *Ohad Naharin Discusses Gaga Movement*, <https://youtu.be/OGPG1QL1vJc>
 - **Watch:** *Gaga Dancers: Movement Language, Harvard University* <https://youtu.be/e4JXj5tkab4>
- Gaga-inspired Warm-Up
- Bartenieff Sequence 2, with Ballet Extension
- Breakout Sessions
 - Set aside class time for students to work on individual improvisational sketches, to be presented on Week 6/Day 2
- Interactive Anatomy and Movement Unit 2: Concepts to discuss in Class:
 - Plié
 - 1st Position
 - 2nd Position
 - 3rd Position
 - 4th Position
 - 5th Position
 - Battements Tendus
 - Battements Tendus Jetes (Degages)

Week 6/Day 2

- Resources (prepare before class):
 - **Watch:** *Batsheva Dance Company: "It's About Making the Body Listen,"* <https://youtu.be/gRky99sO-og>
 - **Read:** Pages 367-375, Galili, D. F. *Gaga: Moving beyond Technique with Ohad Naharin in the Twenty-First Century*. *Dance Chronicle*, v. 38, n.3, 2015.
- Gaga-inspired Warm-Up
- Bartenieff Sequence 2, with Ballet Extension
- Presentation of Improvisational Sketches
- Guided Class Discussion
- Interactive Anatomy and Movement Unit 2: Concepts to discuss in Class:
 - Battements Fondus
 - Battements Frappe
 - Ronds de jambe

- Petits battements sur le cou-de-pied
- Grand Battement
- Changements

Week 7/Day 1

- Resources (prepare before class):
 - **Watch:** Bones of the Pelvis | Pelvis Anatomy, <https://youtu.be/VnQiNF1tIQc>
 - **Study:** Picture Comparisons of the Male Pelvis and Female Pelvis, <https://www.registerednurses.com/male-vs-female-pelvis/>
 - **Study:** Ligaments of the Female Pelvis, University of Dundee School of Medicine Accessed Sept. 21, 2020: <https://sketchfab.com/3d-models/ligaments-of-the-female-pelvis-34f74adaf3ec4105b987f6162ed85eef>
- Gaga-inspired Warm-Up
- Bartenieff Sequence 2, with Ballet Extension
- Guided Class Discussion
- Breakout Sessions
 - Set aside class time for students to work on individual improvisational sketches, to be presented on Week 6/Day 2
- Interactive Anatomy and Movement Unit 2: Concepts to discuss in Class⁸⁵
 - Ilium: the most superior bone of the os coxa/pelvis
 - Ischium: the most inferior bone of the os coxa/pelvis
 - Pubis: the most anterior bone of the os coxa/pelvis
 - Sacrum: the 5 fused vertebrae superior to the coccyx
 - Coccyx: the 4 fused vertebrae directly inferior to the sacrum, also called the tail bone

Week 7/Day 2

- Resources (prepare before class):
 - **Watch:** Gaga Dancing: Lesson 1-A 360/VR Experience, <https://youtu.be/oLz09Splpf8>
 - **Read:** Pages 384-387, Galili, D. F. *Gaga: Moving beyond Technique with Ohad Naharin in the Twenty-First Century*. Dance Chronicle, v. 38, n.3, 2015.
- Gaga-inspired Warm-Up
- Bartenieff Sequence Part 2, with Ballet Extension
- Presentation of Improvisational Sketches
- Guided Class Discussion
- Interactive Anatomy and Movement Unit 2: Concepts to discuss in Class⁸⁶
 - Pubis Symphysis: the part of the pelvis where the right and left pubic bones articulate with each other
 - Acetabulum: the hip socket, or a fusion of the three bones of the pelvis (ilium, ischium, pubis)

⁸⁵ Fitt, *Dance Kinesiology*, 53 & 66.

⁸⁶ Ibid, 53-55.

- Sacroiliac Joint: the joint where the ilium articulates with the sacrum
- Anterior inferior iliac spine: the top front crest of the ilium bone of the pelvis
- Posterior inferior iliac spine: the top back crest of the ilium bone of the pelvis

Week 8/Day 1

- Resources (prepare before class):
 - **Watch:** 3D Anatomy of the Spine, <https://youtu.be/AR41M2nybg0>
 - **Read:** Pages 83-86, Chapter 8, Breathing for Singing. McCoy, Scott. *Your Voice: An Inside View*. Princeton: Inside View, 2004. Print.
- Gaga-inspired Warm-Up
- Bartenieff Sequence 2, with Ballet Extension
- Guided Class Discussion
- Breakout Sessions
 - Set aside class time for students to work on individual improvisational sketches, to be presented on Week 6/Day 2
- Interactive Anatomy and Movement Unit 2: Concepts to discuss in Class⁸⁷
 - Atlas: 1st cervical vertebrae
 - Axis 2nd cervical vertebrae
 - Cervical vertebrae: the first 7 vertebrae at the top of the spine, includes the atlas and axis
 - Thoracic vertebrae: the 12 vertebrae directly under the cervical vertebrae (upper back)
 - Lumbar vertebrae: the 5 vertebrae directly under the thoracic vertebrae (lower back)

Week 8/Day 2

- Resources (prepare before class):
 - **Watch:** *Naharin's Virus*, performed by Batsheva Dance Company, <https://youtu.be/4r5c1rZXROU>
 - **Watch:** Batsheva Dance Company – Sadeh21, <https://youtu.be/A6RWvh0JMv8>
 - **Watch:** Echad Mi Yodea, https://youtu.be/7v6tY_u-MIs
 - **Read:** Pages 12-23, Patel, Bhumi B. "When the Whole World is Empty: Gaga as a Modality for Kinesthetic Grief Processing."
- Gaga-inspired Warm-Up
 - Bartenieff Sequence Part 2, with Ballet Extension
- Presentation of Improvisational Sketches
- Guided Class Discussion
- Interactive Anatomy and Movement Unit 2: Concepts to discuss in class⁸⁸
 - Pyramidalis: an abdominal muscle with attachments at the linea alba and the front top rim of the pelvis
 - Transverse abdominals: deepest abdominal muscle, assists in exhalation process

⁸⁷ Fitt, *Dance Kinesiology*, 66.

⁸⁸ *Ibid*, 181-182.

- External oblique muscles: largest abdominal muscle by surface area, active in respiration process
- Internal oblique muscles: deepest set of oblique muscles, active in respiration process
- Quadratus lumborum: set of paired stabilizer muscles that assist with exhalation
- Psoas minor: portion of the iliopsoas with attachments at the lumbar spine and femur
- Psoas major: portion of the iliopsoas with attachments at the lumbar spine and femur
- Iliacus: portion of the iliopsoas with attachments at the ilium and the femur
- Iliopsoas: the psoas minor/psoas major/iliacus; this combination of muscles assists with stabilizing the spine and pelvis

Week 9/Day 1

DUE: Proposals for In-Progress Project

- Gaga-inspired Warm-Up
- Bartenieff Sequence Part 2, with Ballet Extension
- Presentation of Final Project Proposals

Week 9/Day 2

DUE: Proposals for In-Progress Project

- Gaga-inspired Warm-Up
- Bartenieff Sequence Part 2, with Ballet Extension
- Presentation of Final Project Proposals

Week 10/Day 1

- Review/Catch-Up Day
- Review Concepts and Terms associated with Unit 2: Understanding Skeletal Structures and Muscles

Week 10/Day 2

- Interactive Anatomy and Movement Terminology Unit 2 Exam
- Concepts and Terms to Prepare for the Exam:
 - Perform Bartenieff Sequence Part 2 in groups of 2 to 3 students
 - One-on-one assessments with the instructor, where students verbally and/or physically articulate 15 concepts or terms discussed in the unit from the *Unit 2: Concepts and Terms* list.

Week 11/Day 1

- Resources (prepare before class)
 - **Watch:** *Dido and Aeneas, Mark Morris Dance Group, (video of full performance not available on YouTube, will require university resources)*

- Peer-led warm-up sequences
- Breakout Sessions, working on final projects pieces

Week 11/Day 2

- Resources (prepare before class)
 - Watch: *Dido and Aeneas, a Conversation between Mark Morris and Joan Acocella*, <https://youtu.be/i0S4dbx8F2c>
- Peer-led warm-up sequences
- Present sketches of final projects (works in progress)

Week 12/Day 1

- Resources (prepare before class):
 - Watch: Bill T. Jones, *The Dancer, the Singer, the Cellist...and a moment of creative magic* <https://youtu.be/o4DD3dgfvS0>
 - *Body, Movement, Language: Bill T. Jones and AI*, <https://www.billtjonesai.com>
- Peer-led warm-up sequences
- Breakout Sessions, working on individual pieces

Week 12/Day 2

- Resources (prepare before class):
 - Bill T. Jones, *We Shall Not Be Moved*, (video of full performance not available on YouTube, will require university resources)
- Peer-led warm-up sequences
- Present sketches of final projects (works in progress)

Week 13/Day 1

- Resources (prepare before class):
 - Hannigan and GSO: Ligeti's *Mysteries of the Macabre*, <https://youtu.be/sFFpzip-SZk>
 - Watch: Barbara Hannigan, the Soprano Conductor, <https://youtu.be/YnzmQZpEy4>
- Peer-led warm-up sequences
- Breakout sessions, working on individual pieces

Week 13/Day 2

- Final Rehearsals and Run-Throughs of all final projects
- Performances of the Final Projects

Week 14

- Final Project/Course Reflections, Written Portion Due
- Final Project/Course Reflection One-on-One's (scheduled by appointment)

CONCLUSION

The inherent relationship between body and voice can be harnessed through the Voice Somatics Integration Lab to better serve the technical and artistic needs of classically trained singers. Through movement exploration of Gaga Movement Language and Bartenieff Fundamentals, the VSI Lab marries dance, somatics, improvisation, and choreography with anatomical studies of structures and muscles key to alignment and breath support. In addition, these movement methodologies can challenge singers to conceptualize movement as a total body experience.

The VSI Lab is the result of not only formal research into peer reviewed literature within the field, but also a culmination of experiences and projects I have undertaken combining movement with singing. In 2017, I produced, directed, and choreographed a production of Handel's *Acis and Galatea* as part of the Student Lab Program through Arizona State University Music Theatre and Opera. I envisioned the production as a fusion of choreography and vocal roles performed together solely by the singers. Throughout the short rehearsal process, a problem quickly arose. I had choreographed the opera using movement that worked with my body and my movement abilities, assuming that all singers would absorb choreography quickly and be able to incorporate dance with their singing. I soon realized that in order to highlight the strengths of the singers and best ensure their success, the movement and staging needed to work with their bodies and abilities. There was a gap between the vision I had of a fully choreographed opera, and the singers' training with movement in performance settings. This was no fault of any of the singers; they were vocally well-trained, disciplined, positive, and collaborative. If

given the time, space, and resources, they would likely become more adept at merging movement with vocal technique in an organic and healthy manner. The discoveries the singers and I made during the *Acis and Galatea* rehearsal process illustrated the need for a pedagogical bridge between dance technique and vocal technique. Through analysis and research, the VSI Lab is the resulting bridge offering singers a pathway to connect dance and singing into an integrated whole.

The VSI Lab offers singers a unique combination of movement methodologies that encourage creativity, improvisation, exploration, and intention. Both Gaga Movement Language and Bartenieff Fundamentals are rooted in somatic principles and challenge each practitioner to develop a movement vocabulary that is organic to each individual body and personal experience. In the VSI Lab, combining these two methodologies creates a somatic-style “cross-training” experience for students, blending the more established Bartenieff Fundamentals with the newer developments and philosophies of Gaga. Because Gaga Movement Language is still relatively new within the scope and history of modern dance, exploring Gaga within the context of singing and other artistic disciplines offers new possibilities for exploration and research.

The VSI Lab is a guide, with opportunities to be further developed and explored through a variety of research avenues. Further studies and research with regard to the VSI Lab may include topics such as embodied cognition, analyzing the “groove” in music as it relates to movement, researching additional somatic methods, and continued exploration of Bartenieff Fundamentals and Gaga with vocal pedagogy and performance. Embodied cognition, or the theory that cognition is influenced by what physically

happens in the body, can be explored more in depth through the lens of either the Gaga or Bartenieff methods. Einen Katan-Schmid's *Embodied Philosophy in Dance: Gaga and Ohad Naharin's Movement Research* also looks at embodiment and the theoretical aspects of Gaga and dance. The VSI Lab research can also be explored further through the writings and ideas of rhythm and meter theorists. Theorists such as Dr. Mark Butler, whose research includes analyzing rhythmic groupings and dissonance in electronic dance music, or EDM, may shed further insight on analyzing rhythm and its influence on movement and staging in contemporary opera performance trends. Research on additional somatic practices, such as yoga or Pilates, are also possible avenues for further study. Additionally, developing a more thorough understanding of their physical capabilities allows singers to better advocate for their physical and artistic needs in operatic staging rehearsals. Within these professional settings throughout their careers, singers can implement the information and skills gained from the VSI Lab to find an optimal balance between vocal technique and movement.

Movement, for both dancers and singers, is a synthesis of mind, breath, body, and voice. The connections between these four elements have the potential to help singers develop a consistent vocal technique as well as an expanded full-body movement vocabulary. The ability to both sing and move beautifully is not confined to a singular body or voice type. With somatic methods that empower and encourage creativity, such as Gaga Movement Language or Bartenieff Fundamentals, it is possible for a wide array of bodies and voices to physically embody characters on the operatic stage through

movement and sing with healthy vocal technique. It is my goal for the VSI Lab to become a useful model and pedagogical tool for developing and nurturing the next generation of opera singers, enabling them to explore all facets of their instrument to become kinesthetically nuanced performing artists.

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This is the graduation thesis for renown choreographer and dancer Alexandra Beller, as part of her graduation requirements met to become a Certified Movement Analyst through the Laban/Bartenieff Institute. The thesis analyzes Beller's creation of her piece titled *Milkdreams*, a piece with choreography inspired by the movement habits of her infant son and created using the principles and movements of the Bartenieff Fundamentals. Beller details her analysis of the movement patterns and behavior of her infant son, the processes she and her dance company used to create the piece, and the lessons she learned through this process.

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Dr. Hibbard details her process and techniques using movement with high school aged choral musicians as part of the Youth Choral Academy at the Oregon Bach Festival. Dr. Hibbard outlines the steps she takes to build what she calls "Body Voices," or "Artist-Athletes," Her techniques include physical warm-ups, upper-body and lower-body stretches, full-body stretches, weight change and locomotion, and using folk songs and spirituals as a vehicle to apply these concepts to vocal technique.

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BIOGRAPHICAL SKETCH

Melanie Holm is a soprano currently based in Phoenix, Arizona. She was in the 2020 Young Artist Academy with Antigua y Moderna, singing Cleopatra in a virtual production of *Giulio Cesare*, released Fall 2020 via YouTube. Melanie is a member of the 2020 DBR Lab at Arizona State University, a multidisciplinary arts lab curated by Daniel Bernard Roumain and Jeff McMahon. Through the DBR Lab, she is creating a choreographic film adaptation of Olympia's Doll Song that highlights the power of women owning their bodies and their stories. Melanie was a 2019 Emerging Artist with Opera in the Ozarks, singing Amy in *Little Women*, Blonde in *The Abduction from the Seraglio*, and covering Musetta in *La Boheme*. She was also a 2019 Opera in the Ozarks Outreach Artist, performing for schools and communities in a preseason tour throughout Northwest Arkansas. Melanie was a featured performer with the 2019 OME New Music Festival in Phoenix, performing music by OME Guest Composer-in-Residence Sarah Gibson and premiering the song cycle *Atypical Chronicles* by composer Ashlee Busch. She was a 2018-2019 Molly Blank Fund ASU-Gammage Teaching Artist, developing her own artist residency based on the Kennedy Center's arts integration method and leading Teaching Artist residencies at Red Mountain High School in Mesa, Arizona, and with the Scottsdale Arts Cultural Connections Program. Additional engagements include joining Arizona Opera as a 2018 Education Artist, singing nearly 100 performances of *Hansel and Gretel* (Gretel) and *Opera 101: The Audition* (Soprano Soloist) to nearly 40,000 students. As an Education Artist, Melanie was also a featured soloist in *Candide's Musical Mayhem*, a lecture recital hosted by Arizona Opera and Nina Bernstein Simmons. Melanie is a passionate advocate for contemporary music and using multidisciplinary forms to bring classical music to new audiences. She is part of the Arizona Women's Collaborative, an initiative formed in 2018 to promote the creation of new music by female identifying composer/librettist teams. Melanie has sung in multiple workshops and readings of new operas and musicals, singing Silvia in *Behold the Man* (Paul Fowler/Andrew Flack), an operatic retelling of the botched Ecce Homo fresco internet meme sensation, with Arizona State University, Lynn in *The Halloween Tree* (Theo Popov/Tony Asaro) in collaboration with Arizona State University and American Lyric Theater, Lillie in *Babe* (Andrea Jill Higgins/Carolyn Gage) at Arizona State University and the National Women's Music Festival, and La Babette in *Big Red Sun* (Georgia Stitt/Jon Jiler) at the University of Nebraska-Lincoln. Additional performances include *Owen Wingrave* (Mrs. Julian), *Dido and Aeneas* (Belinda), and *The Magic Flute* (Papagena) with Arizona State University, and *The Gypsy Baron* (Arsena), and *Dido and Aeneas* (Belinda) with the Mittelsächsisches Theater-Freiberg, Germany. Melanie's accolades include being an Arizona State Lyric Opera Theatre Guild Grant Recipient, an Encouragement Award Winner at the Metropolitan Opera District Auditions, and a Semi-Finalist in the Phoenix Opera Southwest Vocal Competition. Melanie holds degrees from the University of Nebraska-Lincoln (BM/Voice, Dance Minor), Arizona State University (MM/Opera Performance, DMA/Voice Performance), and studies with Stephanie Weiss.