

What Every Singer Needs to Know About the Body

Third Edition

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Introduction

During the 25 years I taught the Alexander Technique and Body Mapping to singers, I witnessed more unnecessary suffering than I care to remember. Singers do not ordinarily suffer the acute physical pain of a poorly moving violinist, flutist, or pianist, though singers suffer more throat pain than is commonly known. Many singing students and choir members do not admit that their throats are hurting, so teachers need to learn to regularly inquire so that throat pain can be addressed. Singers do suffer greatly from a profound disappointment that they can't do what their musical imaginations prompt them to do: frustration because they can't improve their singing, and fear that they will fail to do in performance even what they can do with luck on a good day in the studio. Many singers program what they do not want to sing because they fear they can't manage what they do want to sing. Many singing teachers have given up singing altogether and carry in their souls an abiding grief as a result, not to mention envy. Some teachers elaborately justify why they are singing no longer, claiming to be at peace with it, but joyfully sing again when they are given the information they need to sing well.

Singers' suffering is not from lack of technique. Classical singers, in particular, are awash in technique. Technique is the content of their voice lessons. Technique is what they practice. Technique is what they read about. Technique is what is addressed at their conventions. Technique is what they are hired by their universities to convey to the students. Technique is what they listen for when they judge contests. If technique were the issue, every singer would sing beautifully and often.

No, movement is the reason singers suffer, that is to say, faulty movement, tense movement, movement done without awareness and therefore without discernment. Singers who do not feel the movement of their breathing can't assess whether it is good movement or bad. They have to judge their breathing by what they hear, and hearing offers them no remedy, only the isolated information that something is not as desired. In the practice room, the usual response is to repeat the passage, hoping for a better result. If a better result is achieved in the moment, it cannot be secured because the singer does not know what caused it. Repetition of faulty movement continues and the poor singer finishes the practice session as ignorant and helpless as at the beginning.

To gain mastery, these singers must learn to feel their movement, and constantly evaluate its effectiveness. They must become profoundly acquainted with all the sensations of a fine singer's breath, with the movement of the ribs, with the movement of the entire cylinder of the abdominal wall, with the flowing up and down of the pelvic floor, with the coordinated gathering and lengthening of the spine in breathing, with the dynamic "up and over" of the head at the atlanto-occipital joint. They must learn to make all the proper choices about the movements of breathing to get just the air they need and deliver it across the phrase in the most musical and comfortable way. Singers must cultivate the best movement in breathing so that they know instantly how to recover the best movement if they should lose it in performance, just as they would recover intonation.

In order to feel the movement of breathing, singers must learn that they have a sensory mechanism specifically for feeling the movement. The great natural singers know this instinctively, of course. The movement sense is called kinesthesia and it tells us about our moving, our position, and our size. Moment-by-moment kinesthetic awareness is as important for stately oratorio singing as it is for singing while one dances. Singing is movement—pure and simple, nothing else—and it must be conceived and perceived as such so that the best movement may be chosen in the moment.

To breathe well, a singer must have an accurate and adequate body map of the structures and movements of breathing. Any error in the body map will impair the breathing. When a teacher sees impaired breathing, it just makes sense to ask the students about their mapping (their internal representation) of the structures that are not functioning well. If, for instance, a teacher observes inadequate rib movement either on inhalation or on exhalation, the teacher should inquire, "Tell me about ribs. Where are they and how do they work?" It would be usual for the student to put hands on the lower ribs, those that surround the stomach, spleen, and liver, and speak of those. This student has not mapped the upper ribs that surround the lungs. No wonder the upper ribs don't move well! They are not even in the student's body map! Another student might tell the teacher with a perfectly straight face that ribs move because the lungs are filling with air, and the teacher will have to question the student as to what imagined miracle of nature this takes place. Another student might have no interest in rib movement at all because he or she has imagined that air goes into the belly. The teacher will not know without inquiring just what error in the body map is dictating that poor movement. Once the error is known, the remedy is at hand. The remedy is learning, in the first instance, that upper ribs exist, in the second that all of the ribs move to increase thoracic circumference so that air comes into the lungs, and in the last that the lungs are not in the belly but in the upper torso.

In order to learn whatever singing technique is being taught, a singing student must have an accurate and adequate body map of the vocal tract. This is something the late, lamented, Pat Berlin (College-Conservatory of Music at the University of Cincinnati) understood long before she met me, and it was one factor in her success. If she encountered a student with tongue problems, she would hand the student pencil and paper and say, "Draw me a tongue." She and the student would then compare the drawing with good pictures of the tongue in an anatomy book to discover what misconception about the tongue was compromising the movement of the tongue. Sometimes the error was functional rather than structural, in which case teacher and student would have to keep their detective hats on a little longer and ask some questions. It often turned out that the culprit was in having mapped the whole tongue as working all the time, rather than just the fibers that take the tongue in this direction or that. The tongue tension makes perfect sense in light of that misconception, but now the remedy is at hand: Send the culprit off into oblivion and absorb the truth of the tongue into the body map so that only the portion of the tongue that needs to be working at any moment is working, and the rest of the tongue is just going along for the ride.

Body Mapping is not technique, but it is the basis for technique; the fertile ground out of which good technique can grow. Some students will come into the studio with perfectly accurate and adequate body maps and no mention will ever need to be made in lessons about the student's structure, function, or size. The larger portion of students will have inaccurate and inadequate body maps that will constantly frustrate teacher and student alike by producing ineffective movement. A few minutes here and there of attention to mapping the structures of balance, gesture, breathing, articulation accurately and adequately, and resonance, will amend the ground and promote proper growth of technique.

It is a sad fact that singing teachers and choral directors are often at odds about how singers should be singing. Attention to the body map provides common ground as well as the information necessary for singers to adjust appropriately to differing requirements. Singers learn that they can move differently in the choir than in the opera and meet the demands of each art form.

I am remembering a very frustrated young jazz singer who spoke passionately at a National Association of Teachers of Singing winter workshop about her need for instruction to solve vocal problems. She said she felt she couldn't go to a classical singer for help because the training would "make her

sound funny,” but she thought no one else would have the information she needed to get her voice healthy and keep it that way. The young woman was in tears. What was she to do? Couldn’t singing teachers learn to teach all singers without imposing their “elite” technique? I submit that any teacher of classical singing can teach a jazz singer how to stay vocally healthy by addressing the body map, especially with regard to accurate and adequate mapping of the vocal tract, and of the structures and movement of breathing.

I have the highest regard for the authors of the book you are about to read, both for their artistry and for the integrity with which they have learned and imparted the vitally important content of the book. This book is a resource for solving vocal problems and for mastery on the stage and in the studio. Enjoy.

—Barbara Conable



How to Use This Book

When I was a young singer, I had moments of brilliance when everything seemed to come together. I occasionally gave riveting performances. Then I had hours of frustration trying to recreate that sensation. What was I doing wrong? Why was I so inconsistent?

The fact is that I had a natural sense of how to sing. When I lost myself in the music, that innate coordination occasionally took over and I communicated with ease and aplomb. But when I concentrated on fixing things, which was most of the time, I got stuck.

It was not until I began my work in Body Mapping that I was able to pinpoint the problem. It was not with my instrument, my musical understanding, my work ethic or even my technique. It was that I had almost no connection to my body, so that when things were working well I didn't know why, and when things weren't working well, I didn't know how to fix them. I would work on the problem by isolating it, instead of putting it in the context of my whole body and spirit. Body Mapping helped me correct some misconceptions and revolutionized my awareness of the signals my body was sending me. My co-authors and I hope it will do the same for you.

As you approach this book, we ask you to look at this information with fresh eyes. You may have many moments of recognition that affirm what you already know and correspond to the way you move. You may also have those wonderful "aha" moments when you discover something new that makes instant sense and corrects a longstanding problem. On the other hand, you may run into information that is so strange to you that you think it must be wrong. If that happens, examine that information closely. Look at other reliable sources. Talk to other singers. If you think we have made a mistake, contact us! Otherwise, keep working on your body map until you are sure it corresponds with anatomical truth.

This book is about the anatomy and physiology of singing. In order to be accurate, we use scientific terms. However, you do not need to memorize the scientific terminology to refine your body map. You do need to have an adequate and accurate understanding of your body's structure and function. That understanding may be conscious or subconscious but it must be more than intellectual knowledge. It must be *embodied*, so that it is clear not only in your mind but also in your muscle, bones, sensory receptors, ligaments, and connective tissue. An adequate and accurate map must be part of the fiber of your being. Only then will you move and sing with complete integrity and consistency.

We have tried to make the information accessible to all kinds of singers. There are many exercises in this book that are intended to help you understand and embody the material. In this new edition, we have provided many audio and video recordings to guide you through the exercises. If you don't need them yourself, you might have students, colleagues or friends who will find them helpful.

That being said, reading this book will not qualify you to teach Body Mapping. MaryJean, Kurt-Alexander, and I have studied Body Mapping intensively with Barbara Conable, founder of Andover Educators. We have incorporated this information into our own performance and have been trained to help others do the same. We are licensed as Andover Educators to teach the course *What Every Musician Needs to Know About the Body*. After reading this book, you may be inspired to seek further training in Body Mapping. If so, we invite you to visit www.bodymap.org to find a teacher near you.

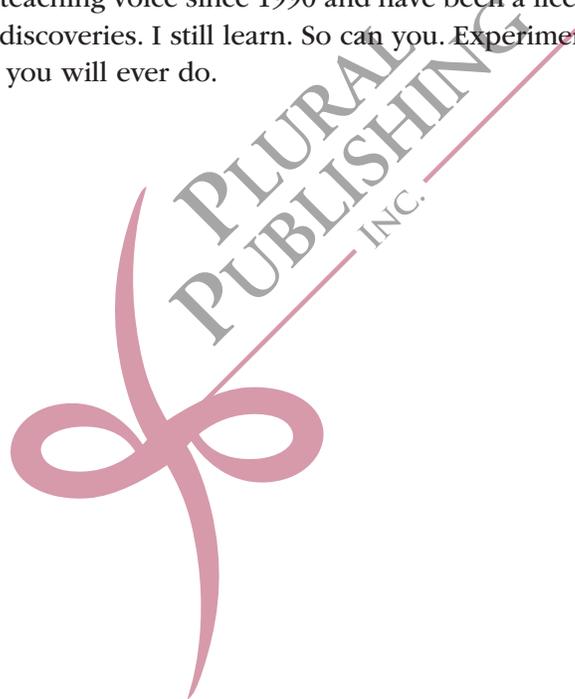
This book will not give you a technique or method. It is intended to guide your experimentation and discovery. You may choose to sit and read it like a text book. Or you may just read one page over and over until it makes sense. You may work through a chapter just studying the drawings. You may

practice with the book open to one drawing until that image is thoroughly incorporated into your body map. You may watch one of the videos many times until you have embodied that movement. There is no wrong way to use this book except with a closed mind.

If you feel overwhelmed, slow down. Take the time to experiment and test your assumptions. Remember that sometimes it takes a long time to correct misconceptions. You have them for a reason and have probably lived with them for some time. Intellectually grasping a new fact may happen quickly. Embodying that fact physically can often take longer. Be patient and keep at it. You'll be amazed with the results.

This year I have been trying to find a better way of cultivating whole-body awareness in my students. One day it occurred to me to have my student sing while balancing on one foot, and doing movements we later dubbed "fake tai chi." She sang with a deeper, richer, more connected tone than ever before and her eyes lit up in recognition. She knew what inclusive awareness was intellectually, but this was the first time she embodied that knowledge, integrating the springiness of her whole body in her singing. I have been teaching voice since 1990 and have been a licensed Andover Educator since 2003. But I still make new discoveries. I still learn. So can you. Experiment. Question. Grow. Discover. It's the most exciting work you will ever do.

—Melissa Malde



Multimedia List



Look for this icon throughout the text, directing you to related materials available on the companion website.

Chapter 1

- Audio 1–1. Awakening the Kinesthetic Sense
- Audio 1–2. Experiencing Micromovement
- Audio 1–3. Using Inclusive Awareness with Kinesthesia
- Audio 1–4. Experiencing Three Forms of Attention
- Video 1–1. Body Mapping Firsthand: Success Stories

Chapter 2

- Audio 2–1. Embodying Powerful Substitutes for the Word “Posture”
- Audio 2–2. Experiencing a Tense Muscle Versus a Released Muscle
- Audio 2–3. Experiencing Appropriate Effort
- Audio 2–4. Experiencing Support From Your Skeleton
- Audio 2–5. Experiencing Compression and Release of Your Spinal Discs
- Audio 2–6. Experiencing Spine Location and Function
- Audio 2–7. Experiencing Head Balance Forward and Back
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- Video 5–11. Mapping the Soft Palate
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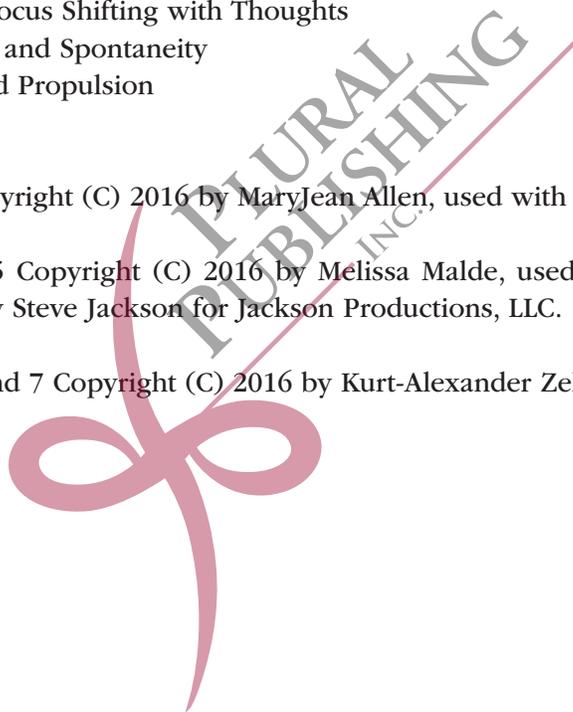
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Acknowledgments

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—Melissa Malde

Thank you to my coauthor and good friend, Kurt-Alexander Zeller, who started me on this journey by encouraging me to take Barbara Conable's week-long course in 2000, *What Every Musician Needs to Know About the Body*. I am grateful to Barbara for creating that amazing course, and for training and certifying me to teach it. Barbara, you are an extraordinary person, teacher, author, and poet. Special thanks to my coauthor, Melissa Malde, who was the driving force of all editions of this book. Melissa's tenacity in the pursuit of a goal is both splendid and admirable. I am grateful to my friends, colleagues, and coauthors Melissa Malde and Kurt-Alexander Zeller, who provided their time and valuable writing expertise during the creation of all editions.

I owe a great debt of gratitude to my teachers, colleagues, family, and friends who have supported and inspired me over the years. Thank you to my voice teaching friends and colleagues, especially to Lynn Eustis and Matthew Chellis, to choral director Martin Sirvatka, and to my collaborative teaching partners Matthew Ellenwood and Matthew Gemmill. Many thanks to my fellow Andover Educators, who along with me, learn more about Body Mapping every day, with special thanks to Amy Likar, Kelly Wilson, Lea Pearson, Shawn Copeland, and Janet Alcorn. Heartfelt thanks to my excellent Alexander Technique teacher and director of *The North Carolina Alexander Technique Program*, Robin Gilmore and to my other fabulous Alexander Technique teachers including Meade Andrews, Lucia Walker, Michael Frederick, Penny O'Connor, and Bob Lada, and my Alexander Technique colleagues including Susan Dorchin. Much gratitude goes to my parents, George and Jeannine Steinmetz, who always supported me in the field of music, my students, past and present, who inspire me as a person

and teacher every day, my encouraging friends including Sally Stone and Polly Lontis, and my husband, John Allen for his loving support, multiple creative talents, humor, and writing expertise.

—MaryJean Allen

It is humbling for an author to contemplate how much of the credit for the book in the reader's hand truly belongs to someone else. I would like to thank Jan Powell, Sarah Hoover, B.D. Stillion, and Kay Hooper for kindling ideas that made their way into this book, as well as Jack Paulus, Amy Likar, Christopher White, Chris Arrell, and Jeff Kayser for providing invaluable technical assistance. I am grateful for the many ways the collective wisdom of the entire network of Andover Educators has deeply enriched my work, and I especially treasure the keen insight, open enthusiasm, and warm friendship of my co-authors, Melissa Malde and MaryJean Allen. Repeatedly, they have employed all three qualities to help me express what I have to say more clearly and vividly.

I owe still greater debts to the late Ellen Faull, whose example showed me that great teachers teach the individuals in front of them rather than the subject in their heads, and to Barbara Conable, whose perception and generosity of spirit have been transformative: Body Mapping is not only powerful; it's fun. Most of all, I thank all of my teachers and each of my students for everything I have learned from them.

—Kurt-Alexander Zeller



1

Body Mapping, Kinesthesia, and Inclusive Awareness

MaryJean Allen

THE BIG PICTURE

You are invited to attend a performance of an exceptional singer. She embodies the qualities of an accurate and refined **body map** along with kinesthesia and inclusive awareness. Her tone quality is beautiful and effortless, and she navigates easily throughout her vocal range. Her entire body looks buoyant and flexible as she moves and gestures expressively. Even during the moments that she seems still, we can observe her **micromovement**, which makes her look very graceful. For example, we see a very small movement of her head, or a slight movement with her hand. Her larger gestures look elegant as well. She has efficient breath management, excellent dynamic control, and outstanding musicianship. Her voice effortlessly fills the space. Her spine gathers as she breathes in and lengthens as she sings. She has clear diction, her facial expression is genuine, and her delivery of the music and text is heartfelt and moving. Her poise makes us relax and really enjoy her performance.

THE ESSENTIALS

Body Mapping, kinesthesia, and inclusive awareness are powerful tools that can help you achieve a performance like the singer I just described. In this chapter, each of these tools is explained in detail to help you learn how to move freely and smoothly so that your tone quality and expressiveness will become even better. This book is designed to help singers, voice teachers, vocal coaches, and choral conductors of all musical styles.

Because singing is movement, singers need and deserve training that creates an accurate body map, a fine-tuned kinesthetic sense, and the conscious use of inclusive awareness. Even if you are not naturally coordinated, you can learn how to move with freedom and elegance in singing. If you are a singer who already moves beautifully, you may teach or coach a student who does not. Even the very best singers continue to change and grow.

ORIGIN OF BODY MAPPING

Body Mapping was articulated by William Conable, Alexander Technique teacher, and former Professor of Music at The Ohio State University. In 1998, Barbara Conable, Alexander Technique teacher, founded Andover Educators, a not-for-profit organization that trains and licenses musicians to teach Body Mapping to promote facility and prevent injury. She applied this concept in her six-hour course and accompanying book, *What Every Musician Needs to Know About the Body*. Her three decades of teaching demonstrate that the body map has a profound and direct effect on each musician's success.

Barbara Conable's course and her book are informed by the insights of F. M. Alexander, (the founder of *Alexander Technique*) as well as other somatic disciplines and current findings in the neuroscience of movement. On page one of her book, *How to Learn the Alexander Technique*, Barbara Conable describes the Alexander Technique as follows:

Alexander Technique is a simple and practical method for improving ease and freedom of movement, balance, support, flexibility, and coordination. It enhances performance and is therefore a valued tool for musicians. Practice of the Technique refines and heightens kinesthetic sensitivity, offering the performer a control which is fluid and lively rather than rigid. It provides a means whereby the use of a part—a voice or an arm or a leg—is improved by improving the use of the whole body.

Regarding Body Mapping and the neuroscience of movement, in the Training Manual for Andover Educators, Barbara stated:

Bill Conable and I did not know when he discovered the body map practically (you may read that story in an appendix of *How to Learn the Alexander Technique*) that it was also being named and explored by neuroscientists. I learned about the scientists' work fairly recently. It would have helped us very much during our years of exploration to know about the scientists' work, but we didn't.

So Barbara's development of her Body Mapping course was actually concurrent yet independent of neuroscientific research. Since then, Andover Educators have incorporated that research. This book is based on Barbara Conable's work and her six-hour course. To read an article by William Conable entitled "The Origins and Theory of Body Mapping" (see: <http://bodymap.org/main/?p=299>). To gain a more thorough understanding of the science of Body Mapping, read "The Biological Basis of the Body Map" by Andover Educator's Science Advisor, Dr. Richard T. Nichols (see <http://www.andovereducators.wildapricot.org/resources/Documents/The%20Biological%20Basis%20of%20the%20Body%20Map.pdf>). You can also read Dr. Nichol's article in Appendix B of this book, *The Scientific Basis of Body Mapping*.

Due to continued brain-body research, there will be many more discoveries about the brain and its connection to the body. This book is not intended to be the "final word" although it is intended to assimilate the knowledge of brain-body as it applies to singing at this point in time, and combine that knowledge with practical application of Body Mapping concepts so that our readers may benefit from it.

THE DETAILS

The Body Map and Body Mapping

Let's begin with brief definitions of the body map and Body Mapping, kinesthesia, and inclusive awareness. I explain them in detail later in this chapter.

- The body map is your mental representation of your body's size, structure, location, and function.
- Body Mapping is the process of refining, correcting, and embodying individual body maps.
- Kinesthesia is the sense that detects your body in motion. Singers who learn how to perceive their bodies in motion with their kinesthetic sense will clearly discern movement size, position, and quality, which is vital for beautiful, communicative, and healthy singing. Kinesthesia is a fundamental component of Body Mapping.
- Inclusive awareness is conscious, simultaneous organized awareness of your inner and outer experience. Inclusive awareness is also a fundamental component of Body Mapping and includes kinesthesia.

According to Amy Likar, Body Mapping teacher and former President of Andover Educators, your body map is your conception of your body, in whole or part.

Although our brain contains many different maps of our body, such as a map of our jaw, and a map of our ribs, etc., in the Body Mapping process we identify it as one body map. In the Training Manual for Andover Educators, Barbara Conable explained:

By analogy to the visual maps, which are interdependent to a degree that justifies the singular, visual map, if you had thirty maps of the terrain around your house: a street map, a topographical map, a map of population, a map of rainfall, etc., and they were all bound together, you might very well say as you begin a trip around your neighborhood, "Do we have the map?"

Next, here is the most important fact about Body Mapping; because your body map governs your movement, you move according to what you believe about your body. For example, if you think only your lowest ribs move during inhalation, you will try to move according to that map, even though all of your ribs are designed to move during inhalation. Thus, the integrity of any movement that you want to make depends on the integrity of the body map that governs it. The process of Body Mapping corrects and refines your body map. When you correct and refine the map of your ribs, your rib movement will be smoother because you will move in the way your body is designed to move, resulting in better breathing and singing.

Here's another benefit of Body Mapping: Singers who bow before an audience can learn to do so healthily yet elegantly. In order to bow and bend forward smoothly and gracefully, your body map needs to reflect its anatomical design. However, some people inaccurately map their waist as a hinge, causing them to bend forward in a manner that can irritate or injure their back. An accurate body map reveals that you are not designed to bend forward from the waist; you are designed to bend forward

from the hip joints. Singers who learn to bend forward from their hip joints while they bow will feel and look graceful.

While all musicians can learn to bow in a healthy manner, not all need the same level of body map. The body map needs to reflect the particular requirements of each type of musician. A singer would not need to have a detailed map of the wrist and forearm, as a violinist requires. However, singers need a detailed, accurate map of the musculoskeletal structures of optimal stance, breathing, resonance, articulation, and gesture.

It is vitally important to note that the body map can be effective whether it is conscious or unconscious. This explains why there are excellent singers, instrumentalists, dancers, actors, and athletes who move and perform beautifully but have not consciously mapped their bodies. Although their body map is unconscious, it is still accurate, which is why they move so well.

Your body map began in infancy, developed in childhood, and is changeable throughout your life. Your map is designed to grow and change as your body grows and changes, so your body map is flexible and changeable. This is a wonderful and positive aspect of Body Mapping; your map is always transformable. Even if you have had an unclear or incorrect map for many years, that map can still be enhanced or corrected. When you change your map by correcting and refining it, your movement, and therefore your singing, will improve.

Anatomy Applied to Movement

During the Body Mapping process, it is essential to apply anatomical facts to your movement as you sing. As you learn the anatomical information to correct and refine your body map, your map will change when you translate the anatomical information directly into movement. This book is not purely an anatomy book; rather, it provides anatomical information so that you can create an adequate and accurate body map, and apply it to your movement. You can use your kinesthesia and inclusive awareness to move in ways that produce a healthy and graceful musical performance.

Sometimes, a body map may be corrected instantly, but often it takes multiple interventions to fully correct and refine a body map. Develop your kinesthetic sense and inclusive awareness, your essential mapping tools. Be patient and persistent, continuously experiment and explore, and enjoy the process of Body Mapping. Remember that time taken to correct your body map is always well spent because your body map governs your movement.

If you have an incorrect body map, your movement and your singing will be tense and could even cause injury. If you have an unclear body map, your movement and your singing will be tentative or awkward. When you have a correct and refined body map, and use that along with your kinesthesia and inclusive awareness, your movement and your singing will be fluid, expressive, and healthy.

Elements of Your Body Map

Your body map contains several important and interconnected elements, which include:

- Structure (bone, muscle, tendon, etc.)
- Size
- Location
- Function (movement design and purpose)

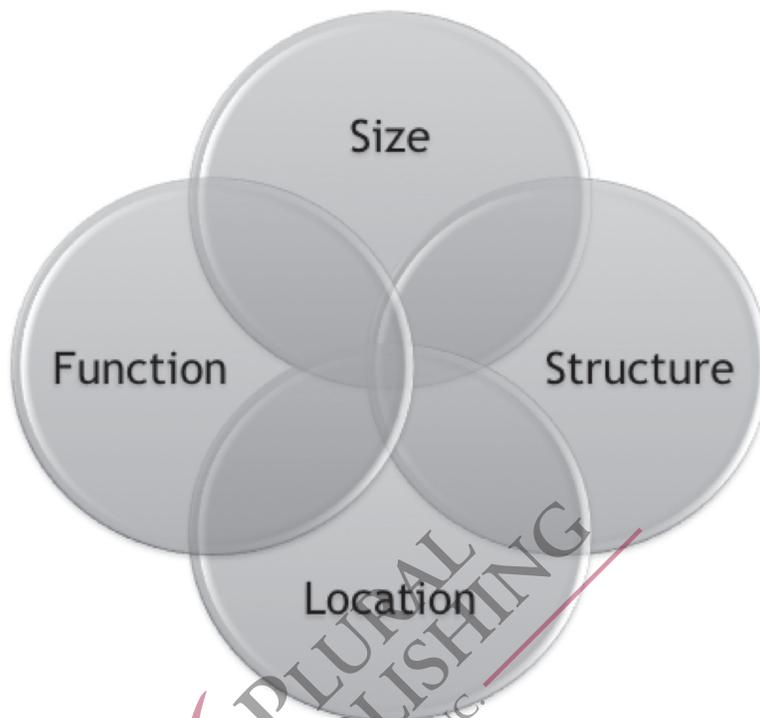


Figure 1-1. Body mapping elements. Created by MaryJean Allen. Copyright 2016.

In the process of Body Mapping, these elements are of equal importance and can be approached in any order. I designed Figure 1-1 to illustrate the relationship of the four elements of a body map. After you have viewed Figure 1-1, let's look at examples of those mapping elements.

Mapping Size

Not accounting for bodily growth and change can lead to an incorrect map. For example, one of my adolescent male voice students grew six inches during the summer. He also gained some muscle. During a voice lesson the following September, John moved and sang as if he were still his previous size. His body map had not yet “caught up” with his increased height and broader width and depth. He slumped down, and he also moved with his shoulders slightly rounded forward toward his chest. To address the problem, I asked John to go home and have one of his parents help him accurately measure his height, his shoulder width, and to measure his depth from the front of his body to the back of his body. Those measurements helped John to use anatomical facts to correct his body map. But this was only the beginning of the Body Mapping process. I needed to help John transfer those anatomical facts to movement. At his next lesson, I asked John to study himself in a full-length mirror. I stood next to him as he looked in the mirror to give him a frame of reference. With his corrected map, John moved and sang with his actual height, width, and depth. Then, I asked John to move again with his *old* body map, with its shorter height and narrower width and depth. As he sang, I asked him to