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1. Introduction

“The lungs do not fill up like a pitcher filling with water from the bottom up. Air goes to all sections of the lungs at the same time.”

— page 40 of *Also Sprach Arnold Jacobs* by Arnold Jacobs,
compiled by Bruce Nelson

Trombonists have a dizzying array of methods and texts from which to choose when seeking to develop their musical skills. There are also many teaching styles and ideas which have been handed down through generations of trombone teachers and students. Some of these ideas have become so ingrained over time that they are assumed to be effective and accurate and are therefore used without scrutiny. Indeed, phrases such as “breathe low” have become an implicit part of the trombonist’s teaching and learning lexicon.

In some cases, a catch phrase or concept has come about as a knee-jerk reaction to a different problem. “Breathe low”, for example, may have originated as a reaction to players who lift their shoulders in a contrived sort of way when breathing or who have, with tension, prevented natural abdominal wall movement. Be that as it may, the reality is that breathing involves many motions; low, medium and high. To “breathe low” is to breathe with a contrivance every bit as destructive as the more obvious unnatural raising of the shoulders. Perhaps phrases such as these were never intended to be applied literally. If so, what becomes of the trombonist who “didn’t get the memo” that the instruction is not to be taken literally? Are there not those among us who are, by nature, literal?

To avoid misunderstandings it would be helpful to designate common ground in trombone teaching approaches. *What Every Trombonist Needs to Know About the Body* provides this common ground by applying anatomically accurate information to playing the trombone. By teaching from a position of anatomical accuracy, not only do we avoid misunderstandings, but we also provide ourselves with a secure somatic foundation upon which we can make music. Somatics is the study of the body in motion and a secure somatic foundation is provided when we teach with accurate knowledge of how the body is constructed and how it moves. Concepts which do not cooperate with the reality of how we are built endanger our somatic foundation and cause confusion.

When we play trombone based upon a secure somatic foundation, we are at less risk for injury and our movements are free of tension. The result is a beautiful tone, improved technique and minimum effort in our playing. *What Every Trombonist Needs to Know About the Body* is all about achieving these qualities and, ultimately, becoming better musicians.

Somatics is the study of the body in motion

“Music education belongs on a somatic foundation because musicians move for a living, like dancers and athletes, except that musicians’ movement is even more refined, precise and rapid.”

— page 4 of *What every Musician Needs to Know about the Body* by Barbara Conable

The idea for *What Every Trombonist Needs to Know About the Body* was first conceived by Barbara Conable, author of the parent book, *What Every Musician Needs to Know About the Body*. Barbara’s vision is to provide specific and clear information to all musicians to prevent pain and injury and to promote excellence in practicing and performing.

What Every Trombonist Needs to Know About the Body is based upon Barbara Conable’s book: *What Every Musician Needs to Know About the Body*. Someday, perhaps there will be a book for every instrument!

Writing *What Every Musician Needs to Know About the Body* was only Barbara Conable’s first step toward realizing her vision of providing clear and specific information to musicians in order to promote efficient and pain-free music making. In 1997, she also formed a group of educators called Andover Educators who teach music based upon a secure somatic foundation. Each new member of Andover Educators undergoes a rigorous training program in order to become a certified member. Once certified, members of Andover Educators deliver courses based upon *What Every Musician Needs to Know About the Body* and teach others how to make music based upon a secure somatic foundation.

**For more information about Andover Educators, visit:
www.bodymap.org**

6. Balance

“To have a minimum of stress, and therefore of strain, within the body, not only must the structure as a whole be in balanced relation with the outside forces, but each part must be in balance with every other part within the system.”

— page 56 of *The Thinking Body* by Mabel Todd

Basic Balance Principles

Imagine riding a bicycle very slowly, constantly making tiny movements with the handlebars and subtly shifting your weight in order to stay balanced and avoid falling. Your kinesthetic sense tells you if you are balanced and, if not, how to make the necessary corrections to avoid a fall. The accuracy with which you are kinesthetically able to discern gravity’s pull will help you know what corrections are needed in order to stay upright. Just as it affects riding a bike, gravity also affects the movements of trombone playing. In order to play efficiently we must take into account gravity’s pull and discern kinesthetically what subtle corrections are necessary to sound the way we want.

Now climb aboard our imaginary bike once again and ride very slowly. This time, however, imagine you are being pulled from above by a string attached to your head. This concept is sometimes used by trombone players to achieve good posture. The string pulling up on your head would straighten and stiffen your back, make your shoulder blades move close together and make your chest stick out. In this position, tiny movements with the handlebars or corrections with subtle weight shifts would be nearly impossible. Skinned elbows and knees would likely be the result!

Now let’s apply the same scenario to trombone playing, as we did before. Imagine having to play with a straight, stiff back, shoulder blades close together and chest out, as though the proverbial string is once again pulling you up from above. As with our bicycle experience, subtle corrections, spinal excursion and the many other complex movements of trombone playing would be impossible in this position. It is unfortunate that skinned knees and elbows do not result from misusing our bodies in this way when playing trombone. Surely immediately painful consequences like these would discourage such posture myths as “a string pulling you up.”

The Body Mapping reality is that we have a skeletal structure which cooperates with gravity's pull and we have postural reflexes which buoy us up in response to gravity's pull. Our bones are designed to deliver our weight down to the floor or chair in cooperation with gravity so there is no need to use voluntary muscles to hold ourselves up. By allowing our bony structure to deliver our weight downward, we are neutral when we play trombone because we are not using muscles to work against gravity. From this position of neutrality, we have musical movement available in any direction. If we choose to move away from balance, we can always come back to it easily because our kinesthesia informs us of the deviation, like riding a bike!

Our skeletons are designed to deliver our weight down to the chair or floor, in cooperation with gravity.

“The nervous system and the frame develop together under the influence of gravity in such a way that the skeleton will hold up the body without expending energy despite the pull of gravity. If, on the other hand, the muscles have to carry out the job of the skeleton, not only do they use energy needlessly, but they are then prevented from carrying out their main function of changing the position of the body, that is, of movement.”

— page 68 of *Awareness Through Movement* by Moshe Feldenkrais

If we allow our bony structure to bear and deliver our weight, we are balanced. If we are balanced, all the complex movements of trombone playing will happen with ease. From a balanced position, the powerful motion of spinal excursion coordinates our every breath. When we are balanced, subtle corrections are easy because our muscles are not being used to counteract gravity. When we are balanced, we are not required to hold ourselves up and we are free to move with the music instead of devoting ourselves to an unwinnable struggle against gravity.

If we allow our bony structure to bear and deliver our weight, we have automatic postural reflexes which keep us balanced. These reflexes are subtle involuntary muscular corrections which happen constantly and insure that we remain balanced as we play trombone. Automatic postural reflexes only work if we allow ourselves to be balanced and do not interfere with the weight bearing function of our bony structure. Trombonists who hold themselves up in an attempt to keep their back straight do not have the benefit of automatic postural reflexes.

We have automatic postural reflexes which insure that we remain balanced as we play trombone, if we allow them to.

EXPLORATION 1: *Constructive Rest and Long Tones*

Lie on the floor as in figure 11.1 and engage in the five steps of constructive rest. For more detailed instructions, refer to **Chapter 4: Inclusive Awareness and Constructive Rest**.

1. Cultivate a whole and integrated body awareness.
2. Come to the greatest degree of muscular freedom you can find in the moment.
3. Work on the integrity of your breathing.
4. Develop an accurate and adequate body map.
5. Put yourself in a right relationship with space.



Figure 11.1 Constructive rest position

Now stand up and play the following sequence of long tones.

♩ = 72

Next, put your trombone down and stretch out a little. Try putting your arms over your head and reaching for the sky. Try rolling your shoulder blades and collarbones and palpating your neck a little. Perhaps you have some favorite stretches you can do as well.

Now play the following sequence of long tones with freedom and ease in blowing. Continue to be aware of your entire body as you play, just as you cultivated in constructive rest. Notice how the freedom and balance in your body helps you create a free, pure and resonant tone quality.

♩ = 72