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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 that they are assumed to be effective and accurate and are therefore not subject to scrutiny. Indeed, phrases such as “breathe low” have become an integral part of a trombonist’s teaching and learning lexicon.

In some cases, a catch phrase or concept has come about to solve a different problem. “Breathe low” for example, may be applied to players who lift their shoulders in a contrived effort to produce sound who have, with tension, prevented natural abdominal expansion. In many cases, however, the reality is that breathing involves more than just the lungs. To “breathe low” is to breathe with a core that is more obvious and less natural. The phrase “breathe low” was never intended to be applied literally. It “didn’t get the memo” that the phrase was never intended for those among us who are, by nature, “low”.

To avoid misunderstanding, this book provides the body to playing the trombone. It only do work with the somatic body.



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2. The Body Map and Kinesthesia

The movements involved in trombone playing are complex and varied. To create the sound we want, we must move the air through the instrument in a certain way, the slide must be placed correctly at the right instant, the tongue must create the appropriate articulation at precisely the right moment and all of these movements must be coordinated with the rhythm of the music. Furthermore, the motions must be infused with our own personal sense of phrasing, vibrato and musicianship and may need to be synchronized with a conductor and other musicians. There is no doubt that to play trombone is to *move*; to play trombone well is to *move well*.

The quality of our movements determines the quality of our trombone playing.

Consider a trombonist who has trouble tuning fifth position (mar do!). When we move our arm to place the slide, the quality and movement, along with our awareness of the pitch, determine movement must be developed right alongside *and as par* of the pitch.

Movement

Consider how you m

Play first position "f" to fifth times. As you do this, notice motion producing the intonation to regard the subtleties of dancers might use art and so of sensibility



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5. The Spine

*“Unnecessary effort
accompanying an action tends
to shorten the body.”*

— page 96 of *Awareness Through
Movement* by Moshe Feldenkrais



For a trombonist, an accurate and adequate body map of the spine is important for many reasons: the spine coordinates the free movement of our right arm to move the slide with accuracy and efficiency; the spine is connected to our breathing and rib movement; the spine plays an important role in delivering our weight to the floor or chair and the spine houses the spinal cord, which delivers kinesthetic information to our brain.

If you have not given much thought to the structure and function and size of your spine, chances are your body map needs more detail. Trombonists without an accurate and adequate body map of their spine often seem to have seemingly unrelated problems. For example, a trombonist who has shallow breathing and a center of gravity that is too high and a weak tone may try doing something like leaning forward in order to enhance their tone. If your body map of the spine is inaccurate, however, breathing exercises and the movement of breath

What do you think about the structure of the spine?

What are the effects of gravity on the spine?



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breathing by gathering and lengthening in cooperation with inhalation and exhalation. As can be seen in figure 5.5, the spine gathers as we inhale and it lengthens as we exhale, if we allow it to. This motion, referred to as spinal excursion, is a critically important aspect of the spine's entire range of motion. Spinal excursion coordinates with all of the other movements of breathing which will be outlined in detail in the breathing chapter. Take a moment to try the following movement break to learn about spinal excursion.



Figure 5.5 Spinal excursion (Drawing by Ber

Movement Break:

Feel the gathering and lengthening of the spine as you breathe.

Lie face down over 2 or 3 pillows and allow your head back neck muscles are not engaged. Breathe as you do so. If you have a mirror, turn your head to the side. The pillows rounds the spine. You'll feel it more as you breathe.



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When
mc

8. The Embouchure

“Make sure that all the muscular effort is transformed into movement, for effort that is completely converted into movement improves both one’s ability and one’s body. Effort that does not turn into movement, but causes shortening and stiffening, leads not only to a loss of energy, but to a situation in which the loss of energy causes damage to the body structure.”

— page 152 of *Awareness Through Movement* by Moshe

What is an Embouchure?

How we define our embouchure will have a bearing on how we move. From the body mapping perspective, our definition of embouchure should include movement because we move to play trombone. If there is no movement, there is no sound. The primary function of the embouchure is to move to produce sound and if there is no movement, there is no sound. Here, then, is a body mapping definition of embouchure:

An embouchure is a three-dimensional structure of the lips and the surrounding facial lip tissue.

An embouchure is three-dimensional.

an extremely
not moving
embouchure
creation



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Figure 8.4 Neutral position of the jaw



Figure 8.5



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The Tongue

At first glance, the tongue would seem to be quite different from the other members of the embouchure team. The tongue does, in fact, share some important characteristics with a few of the other team members.

Like the jaw, the tongue is highly mobile because of its structure. The jaw is capable of moving up and down, back and forth and side to side because of the special qualities of the TMJs. Similarly, the tongue is capable of moving all around the inside of the mouth with great flexibility because of its construction. The muscles of the face work together in an intricate network in order to create the sound we want. Similarly, the tongue is comprised of a network of small muscles which are used in tandem with one another in order to move in whatever way is necessary. The tongue is not just one large muscle—it is a collection of small muscles (see figure 8.7).

The tongue is not just one large muscle. It is a collection of small muscles.

The small muscles which comprise the tongue are similar to the network of small facial muscles. Like the facial muscles, the tongue muscles work collectively in order to usher food down our esophagus, to enunciate our words or to articulate on trombone. When we wish to perform a task with our tongue, we simply issue the request from our brain and the small muscles of the tongue respond together in order to move as required. Just like the network of facial muscles, it is not necessary (or possible) to control each muscle of the tongue individually. At any given moment, some of the tongue will be working and some will not.

Figure 8.7 The tongue
(Drawing by Benjamin Conable)

A trombonist who has mapped his tongue as a single muscle has no choice but to move his entire tongue with every tongue stroke and he has an expectation of the sensation of work throughout the whole of the tongue. The resulting articulation is heavy and often too slow for the music. Sometimes, players with

The tip of the tongue can move by itself without the involvement of the back of the tongue.



Figure 9.14 Suspension bridge and torso
(Drawing by Marco Gonzales, GIA Publications)

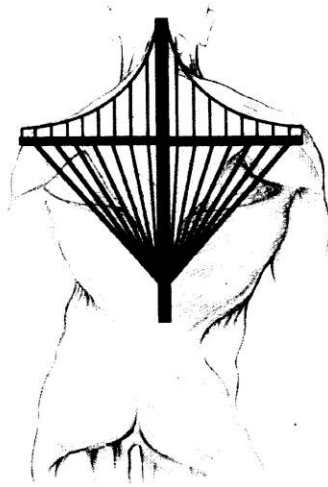


Figure 9.15 Suspension bridge and torso



If we superimpose one of the sections of the bridge onto a torso, as in figures 9.14 and 9.15, we get a sense of how the spine and pelvis bear and deliver the weight of the arms which are suspended above the ribs by a network of fascia, tendons and ligaments.

Earlier in this chapter we discussed the fact that there are five jointed areas in the arm: the SC joint, the upper arm joint, the elbow, the wrist and the fingers. When we move the trombone slide we use all five of these areas in various combinations according to our own body structure, the construction of our instrument and the needs of the music. Figure 9.16 shows all five of the areas where there are joints and how the bones attach to one another at these areas. This image shows an arm in its entirety. An arm includes the fingers, wrist, lower arm bones and upper arm bone. An arm also includes a collarbone, an SC joint and a shoulder blade. Make sure your body map of your arms includes the collarbones, SC joints and shoulder blades.

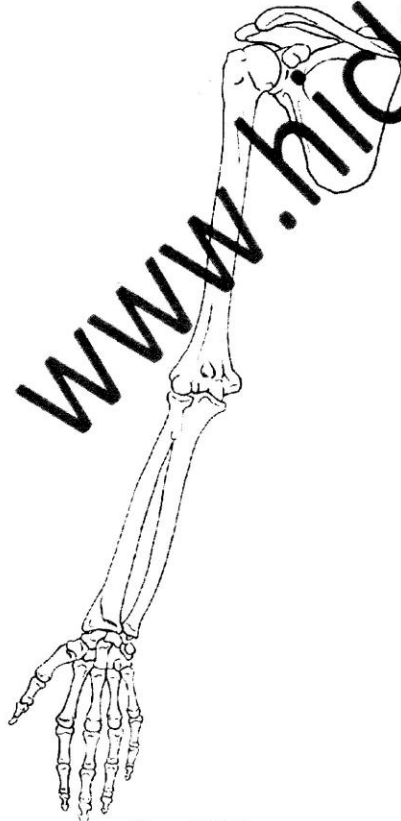


Figure 9.16 The arm
(Drawing by Benjamin Conable)

EXPLORATION 6: *The Lips as Vocal Cords*

Arnold Jacobs said “Pitch is not in the lips, but in the brain.” This exploration is intended to promote this thought by equating trombone playing with singing. In addition, trombonists should study figure 11.9 to clarify the nature of the lip tissue. As you play the exploration, allow the lip tissue to be supple in order to move in the mouthpiece for maximum resonance.

To play the exploration, sing the notes with square note heads and circles. When singing, keep your instrument directly up to your face and move the slide to the right position so it feels just like you are playing. Allow the sung notes to escape between the mouthpiece and the face – do not sing through the instrument. Avoid setting the facial muscles to produce the right pitch. Instead, imagine singing the note and allow the pitch to be generated directly from the brain.



Figure 11.9 The lips and facial muscles
(Drawing by Benjamin Conable)

♩ = 88 ◻ ◻ = Sing and finger

The musical score consists of five staves of music in bass clef with a key signature of two flats. The first staff begins with a tempo marking of quarter note = 88 and a legend indicating that square note heads and circles represent 'Sing and finger'. The music features a sequence of notes, some with square heads and some with circles, interspersed with rests. A large watermark 'www.hickeys.com' is overlaid diagonally across the score.

EXPLORATION 7:*The Movement of the Tongue*

The goals of this exploration are: to clarify the fact that the front of the tongue should move independent of the back; to be certain that no other embouchure team members are recruited to help with articulation; to clarify the position of the tongue relative to the AO joint; to experiment with the wide variety of articulations which can be created by moving your tongue in different ways.

- 1. Clarify the fact that the front of the tongue should move independent of the back.**

Before playing, take a moment to palpate the front of your tongue. Stick your tongue out and touch the tip lightly with your index finger. Now move just the front of the tongue up and down without moving the back. This is the motion of articulation.

- 2. Be certain that no other embouchure team members are recruited to help with articulation.**

Look in a mirror without playing the trombone and blow air while articulating as though playing trombone. Lightly draw your awareness moving the chin.

- 3. Clarify the position of the**

Point in to your ear hole
11.10. Notice that

Play the follow
you play it

- 4. Expe**
d:

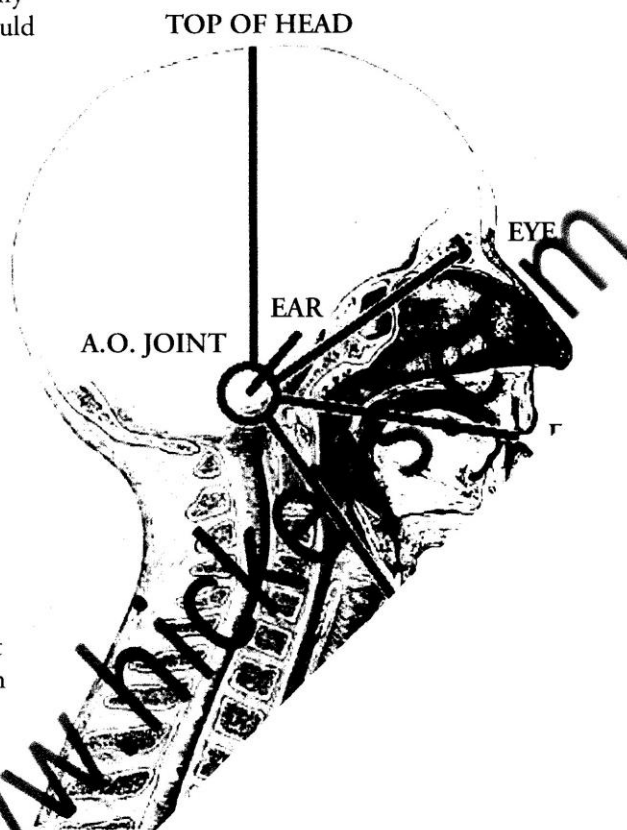


Figure 1'
(Dra



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d:

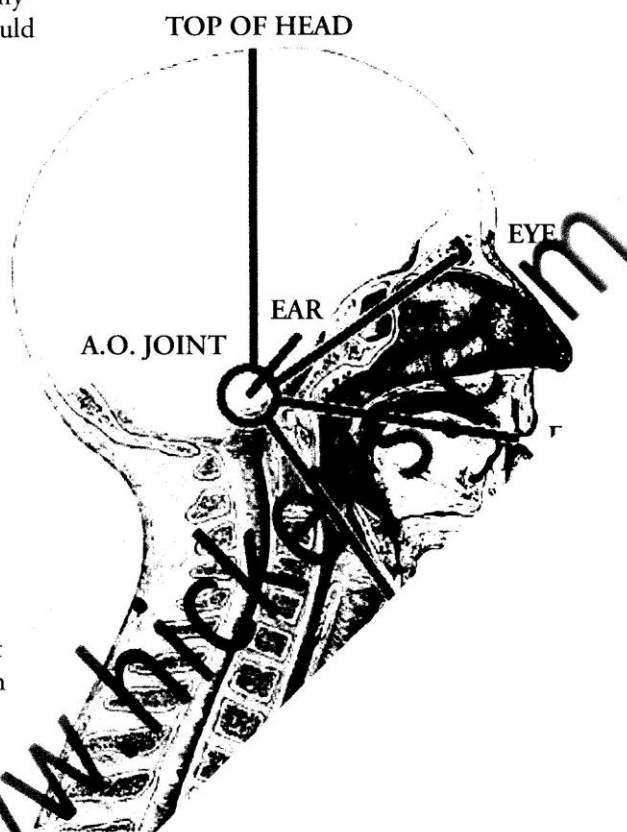


Figure 1'
(Dra



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♩ = 72 - 120

Legato - "Da" tongue

Sempre legato

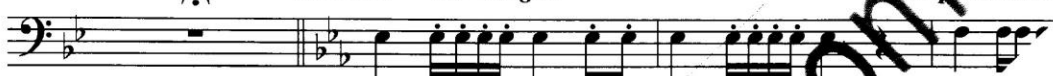


Continue pattern down the B-flat scale.



Staccato - "Ta" tongue

Sempre staccato



Continue pattern up

