

~~~~Buoyant Airflow~~~~

By Debra Taylor

The acclaimed brass pedagogue, Arnold Jacobs, spoke about the use of “buoyant air” in brass playing as a way to teach ease, resonance, and articulation. He often used the imagery of a beach ball bobbing on top of a water fountain to describe buoyant airflow. Conversely, to demonstrate tense, effortful airflow, he would make a hissing sound. He used “tHa” to describe healthy articulation, with the emphasis on airflow (represented by the H). In the decades since I was a student of Mr. Jacobs, I have been committed to passing along these concepts through my teaching.

This study was created in my studio at the University of New Mexico to help trombone students develop buoyant airflow. This is NOT an articulation exercise, although improved articulation is one of the benefits. These particular articulations were chosen so that wind players can **experience** buoyant air. The study uses wind patterning (practicing airflow away from the instrument), which is a common and effective teaching technique. “Buoyant Airflow” is unique, because it teaches virtuosity of airflow through wind patterning extreme changes in air speed.

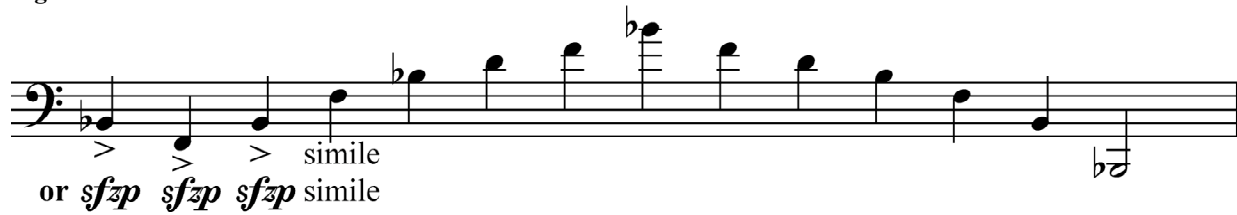
I have been impressed by the numerous breakthroughs that students have experienced as a result of this study. When trombonists become tense while playing, this study gives them a quick route to ease and resonance. Students who are too passive in their approach to the instrument learn to play with a more athletic approach. Even the most advanced trombonists have gained a wider variety of articulations and note shapes. I use this study every day, as a way to find my best sound quickly. In general, the study helps to ensure that the benefits of daily breathing exercises are realized on the instrument. The following is a summary of how to perform the “Buoyant Airflow” study.

~~~~The Study~~~~

To begin, wind pattern the accented quarter notes in figure #1 for ten to fifteen seconds on the outstretched hand, WITHOUT articulation. Blow from the lips, as if it were a long tone, with air accents (fast bursts of air and no tongue) on each beat. **Constant air** at varying speeds should be felt on the palm of the hand. Imagine that you are moving air like a tuba player. Then wind pattern quarter notes with *sfzp*. Careful attention should be paid to creating accents and *sforzando piano* ENTIRELY with changes in air speed. It is useful to imagine an accented note as air moving at a speed of 75 miles per hour (mph), followed by 50 mph. Similarly the *sforzando piano* notes could begin with 100 mph air flow, followed by 25 mph air. Take time to master both types of accents as a wind pattern.

Next, play figure #1 on trombone, first with accents, then with *sfzp*. Use your air exactly the same way as when doing the wind patterns. Avoid the tendency to tongue more aggressively when playing any type of accent. Think of **barely tonguing**. Accents should be created **entirely** with changes in air speed. When executed correctly, **it should feel like you are tossing the air**.

Figure 1



Use of a metronome is recommended. A metronome marking of 64 is a good place to start. Play the study as written, and then choose a different slide position on successive days, covering all positions. For best results, return to the wind patterned segment of this exercise often throughout a practice session, even for as little as twenty seconds at a time!

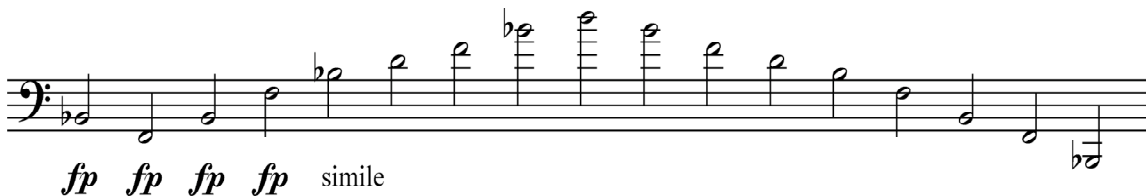
To learn the greatest virtuosity of airflow, move on to the *forte piano* part of this study. *Forte piano* simply means fast air followed by slow air. First, wind pattern figure 2a, making sure to observe exactly where the *piano* occurs. Use “la” to create **slurred** sixteenth notes. Next, wind pattern with **half notes**, still using the exact timing of dynamics in figure 2a.

Figure 2a



Finally, perform figure 2b on the trombone in half notes, with a light tongue, again with the timing of dynamics used in #2a. Care must be taken to subdivide mentally while playing half notes, in order to place the *p* exactly where intended. With an improved understanding of *forte piano*, figure 2b can have a fabulous sound, with no percussive over-articulation at the beginning of each note. In actual music making the timing of the *piano* in *fp* will vary with the context. The timing for this study was chosen to teach the most **energized air**.

Figure 2b



When to use this study

- As part of the warm-up, after breathing exercises and buzzing
- Practice the wind patterned segment many times each day, for as little as 20 seconds at a time, to reinforce virtuosic airflow
- When you feel that you are tonguing too hard
- When articulation lacks clarity
- When sound is tight, nasal, or fuzzy
- Before playing loud or accented music
- To improve response problems
- To relax throat tension
- Just before performances, to ensure your best sound
- Use the wind pattern segment during concerts, before an important solo

Variations

- Limit or increase the range of the arpeggio to suite the circumstances
- Start the quarter note wind pattern with no tongue and gradually add a very light tongue
- Vary the placement of the *piano* while working on *forte piano*, in both wind patterning and playing

After performing the “Buoyant Airflow” study, return to making music and enjoy the improvement! I hope that the publication and use of this study will lead to exciting improvements for all who take the time to include it in their daily practice. Feel free to write to me with comments or questions at djtaylor@unm.edu.