

Little, Don, "A Young Tubist's Guide to the Breath", T.U.B.A. JOURNAL, Winter 1981

Quite a while ago I promised Cherry Beauregard that I would contribute an article to the "Tuba Pedagogy" section of our Journal. Now that the Second National Tuba - Euphonium Symposium - Workshop is just a fond memory and one large carton of unsorted records, letters, etc., I have finally been able to give this matter some thought. With this article, "A Young Tubist's Guide to the Breath," I intend to initiate and help coordinate a series of tuba pedagogy articles which will be directed specifically towards young tubists. If you have any suggestions as to subject matter, or would like to submit an article for consideration, please contact me or Cherry Beauregard. Addresses are listed on the inside cover of this Journal.

The development of artistic imagination and overall concept of sound are possibly the most important factors involved in learning to create musical sounds on any instrument, but there are always certain related skills which must be developed and understood in order to achieve complete success. For the tubist, the development of correct breathing habits is one of the most important of these skills.

It can be said that the breath is to tuba playing as the bow is to string playing. Both the breath and the bow initiate and prolong vibrations which help create musical sound, and they must both be steady and continuously flowing to produce pleasing and smooth musical sounds. As a violinist must master proper bowing techniques early in the study of violin, likewise the tubist must master the proper breathing skills necessary to play the tuba well.

An in-depth anatomical study of correct breathing for tuba playing can become necessarily complex if we attempt to analyze all of the breath-related functions of the human respiratory system that are affected by or related to tuba playing. Such knowledge, although enlightening and interesting, might not be directly applicable to tuba playing within the scope of this discussion. Instead we will focus on the general ways in which the breath affects tuba playing; what constitutes proper breathing for tuba playing; and similarities and differences between normal everyday breathing and breathing for tuba playing.

Although the tubist's lips vibrate and this vibration is the nucleus of tuba sound, it is actually the moving air of the exhaled breath which causes the lips to vibrate and to project that musical tone through the tuba to the audience. The proper formation of the embouchure is certainly a prerequisite to the production of good tuba sound, but the embouchure cannot really function properly to produce this sound without a healthy supply of air. Furthermore, our tuba-related breathing habits affect most other aspects of tuba playing including accuracy and consistency of attack as well as range, intonation and phrasing.

Normal breathing occurs every minute of every day and is usually comfortable, relaxed and unnoticed. Ideally, breathing for tuba playing can be just as relaxed and ultimately natural. Recognizing the differences between normal breathing and breathing for tuba playing can help this occur. The most obvious difference is that during tuba playing much more air must be moved in and out than during normal breathing. Another difference is that during tuba playing the exhaled breath must be expelled and projected (rather than just released) in a controlled and smooth flow. The tubist must accomplish all of these things as efficiently and effortlessly as possible.

This concept is expressed well in the words of the great tubist and teacher, Arnold Jacobs, who has said many times, "With regard to the breath for the tuba player, what we are aiming for is maximal efficiency with minimal effort."

What an encompassing but simple concept - that there need be little work involved in quickly and easily moving the large amounts of air required for tuba playing.

Correct breathing for tubists begins with proper posture, and in this context the importance of correct positions of the tubist and the tuba cannot be over-emphasized. Sparing extended discussion regarding posture, of which we are all experts, just keep in mind that correct posture for the tubist is to sit as you stand. It is significant that many, if not most, variations of improper posture will likely decrease the amount of air taken in as well as impair the ability to project this air comfortably and efficiently through the tuba, so sit erectly and position the tuba to your lips so that you do not slump down to the tuba even the least amount.

The tuba, the largest brass instrument, uses more air and requires more frequent breaths than any of the other brasses. Kent Mason says, "Tubists often must breathe every bar or more while trumpets can last for four or more bars. However, the player can make this unnoticeable, providing he breathes quickly and quietly in the appropriate locations." Many tubists unconsciously learn quickly and easily without instruction how to take in the large amounts of air needed for tuba playing. Others, for whom this comes less naturally, can also learn to breathe efficiently and comfortably with a little study and practice. How can this be accomplished?

First, become familiar with the actual feel of taking large breaths. Since we seldom take full breaths except during strenuous physical activity or as the result of a yawn, it is helpful to recognize and become familiar with the actual "feel" of a large breath because this provides a more tangible goal when the teacher once again instructs us to take full breaths. Try this. Once or twice daily place the tuba aside and take in as much air as comfortably possible. While maintaining completely open air passageways, hold the air in for a few seconds and get used to the feel of a full breath. Occasionally blow this lung full of air into a plastic bag. It can be quite enlightening to visualize just how much air you can move in and out!

Not only must the breath for the tubist be full, but it must be comfortable and natural as well. As you breathe fully and deeply for tuba playing, occasionally be aware of avoiding unnecessary tension anywhere in the body - especially in the shoulder area. Try to keep the shoulders relaxed and basically down, but be careful not to actively hold the shoulders down. Instead, think of the shoulders as being "free-floating" and allow them to both rise and fall slightly as you breathe and play. If this type of shoulder tension is a problem, self-observance in a mirror is helpful, as often it is possible to see the shoulders tensing up before the results of this tenseness are felt.

Also be relaxed and avoid tension in the throat and neck areas. Think of the throat as being the fuel line for the breathing system. Our fuel (air) must travel freely and unobstructed from the lungs to the embouchure in order to carry your sound through eighteen or more feet of brass tubing then go on to the audience! If tension or tightness is prevalent during inhalation, it will likely remain and cause difficulty during exhalation when the tuba is blown. One good way to avoid or reduce tension in the throat area is to imitate the feeling of a yawn during inhalation. Also helpful is whispering the word "hoe" during inhalation. Experimentation will show that both methods can help the throat to be more open and relaxed. The more open the throat is, the more air can be moved with the added bonus that

this can be achieved comfortably and quickly, In essence, upon inhalation think of maintaining an open fuel line from the lungs to the lips, and if done properly, the breath will be fairly quiet and will usually produce a rather open "whoosh" sound.

As air is taken in, one should think of taking in large volumes of air through the lips. A large breath will result in the simultaneous expansion of the entire chest cavity and abdominal area. Although it is anatomically correct that physical expansion is first necessary to draw air in, it is more natural and productive for the tubist to concentrate on drawing the air in through the lips and letting the body take over the natural physical activity. The body will do this job marvelously. The knowledge that physical expansion takes place when a proper breath is taken is helpful, but students often place too much emphasis on the physical aspects of this expansion and are unfortunately less attentive to the necessary act of taking in enough air. The result then is expansion that does not take in air. This is not difficult to avoid, however, if you approach breathing in a relaxed fashion and concentrate on inhaling huge volumes of air.

It is recommended that the breath be taken in through the mouth rather than the nose, as the nasal passages tend to be too small to accommodate the air requirements of tuba playing. Some performers of the high brass instruments such as the trumpet breathe through the corners of the mouth while maintaining full embouchure contact with the mouthpiece. This is generally not practical on tuba for several reasons - the most obvious being that the tuba mouthpiece covers too large an area of the mouth to allow sufficient air to enter. This type of breathing can also result in the problem of the lips becoming stretched progressively tighter. One effective method of drawing in air on the tuba is to let the lower jaw and lip drop slightly away from the mouthpiece while maintaining partial contact of the upper lip and the mouthpiece. As you do this, be sure that the throat is open and that the tongue is down and out of the way. Mentally anticipate the breath and drop the jaw quickly and when it is time, as some players start drawing in air even before the lips have separated causing wasted time and energy.

Generally the more efficient and relaxed the inhalation process is, the easier it becomes to "blow the tuba." Remember that the breath cannot just be released, it must also be projected through the tuba. It should always be projecting with the thought of sending the sound to the listener in the audience. Setting the embouchure and blowing air at imaginary or real objects on the other side of the room can help to strengthen this concept. Remember that the physical effort of blowing the tuba should be energetic but yet unforced so that the result is a free and even flow of air.

This next item can be a problem for all brass players but can be an even greater one for tubists. This is the holding or "locking" in of air immediately before playing after inhaling a breath. This is not beneficial to tuba playing in any way and often creates much unnecessary tension. Instead, play off of the "rebound of the breath" by starting to blow just at the moment of lungs are full or nearly full. The following exercise should reinforce this point:

1. Inhale a normal large breath then immediately play a mid-range tone for several seconds.
2. Repeat step one, only this time hold the air for four or five seconds before playing the tone.
3. Repeat step one again exactly as you did the first time. You should notice that it is generally easier to play off of the "rebound of the breath."

Also try to avoid excess tension in the stomach or, properly termed, abdominal area. Some muscular activity in the area is normal and another short experiment will illustrate this: Place your hand on your abdominal area and blow out a match held an arm's length away. A quick, light contraction of the musculature of this area will be felt. A similar action normally occurs when the tuba is blown. This type of muscular activity is normal for tuba playing and will occur naturally, however try to avoid inducing extra unnecessary tension into this area. A constant tension in the abdominal area accomplishes little positive result and this undesirable tension can reduce your effective lung capacity as well. When your band or orchestra director asks you or your section to "support the tone." do not automatically respond by tensing your abdominal area! It is a sound that your director is requesting, not a physical sensation, so try to produce that sound. A supported sound for the tuba player is a full, characteristic projected tone resulting physically from a proper embouchure backed up by a steady flowing column of air, and aesthetically from the concept of sound from within the musician - the tuba player. In closing this line of thought, try to always be natural and relaxed in the breathing process, as it is much easier to blow the steady stream of air required to produce a corresponding smooth and even tone on the tuba.

EXERCISES AND OTHER PRACTICAL WAYS TO IMPROVE BREATHING FOR TUBA PLAYING

The following is an easy exercise to help develop comfortable breathing for tuba playing:

4 | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | 1 2 3 4

Inhale Exhale----- Inhale Exhale----- Inhale

1. Inhale fully using all of beat four.
2. Exhale fully and evenly over seven counts projecting the air at a distant object. Control the air flow rate by adjusting the opening of the lips so that the air lasts comfortably over the seven counts.
3. Repeat steps one and two several times then rest because more than this might cause dizziness from hyperventilation (too much oxygen in the blood).
4. Invent your own variations on this exercise to correspond with varying musical demands. Always be sure that your breathing is full and relaxed.

Also try in the same fashion:

4+ | 1 2 3 4 + | 1 2 3 4 + | 1 2 3 4 + | 1 etc.

(This time inhale on the (+) of beat 4)

Exercises like these do not guarantee correct breathing for tuba playing, but they can help you understand how your body works and how to make it work for you when you play the tuba. In a way, practical exercises may be discovered and used for the improvement of breathing in most materials that a tubist will encounter if he applies some common sense and creative imagination.

Always plan your breaths and mark and edit your music accordingly. Your editings are excellent aids because they can help to develop a consistency in breathing habits. Due to the fact that we all vary somewhat in the amounts of air we can take in (called vital capacity), the editings that you make are personal and may not work for someone else. Logically, another person's breath editings might not work for you. This is a good time to mention that there are ensemble situations in which the music requires a

continuous sound extended over many bars that is physically impossible for most tubists. The alternation or "staggering" of breaths within a section of two or more tubas can successfully and comfortably accomplish this musical goal.

There are two significant variables to keep in mind when planning and editing your breaths - volume and range. On any given tone it takes more air to play it louder and less air to play it softer. Try this experiment: choose any mid-range tone and (timing yourself) hold it as long as possible at these three volumes:

Experimenting with this succession of contrasting volumes on almost any tone should immediately prove that regardless of the range of a note, the louder the note is, the more air it takes. Range effects breath in the sense that the lower the note is, the more air it requires. Again try another small experiment: play the following three tones at exactly the same volume, perhaps *mf*. Time yourself and see how long each note can be sustained:

This should immediately show how much more air is required to play in the lower register. Keep these two basics in mind as you edit and plan your breaths.

Although the music of the higher brasses (transposed to more comfortable octaves) provides excellent technical and musical challenges for the tuba, the tubist could easily need to breathe twice as often as a trumpet or trombone in the same passage. If the tubist unknowingly attempts to breathe only as often as the trumpet player, the result will be that he will gasp most of the time and probably have a pinched, thin tone as well. Play and enjoy the literature of the upper brasses as you wish, but recognize the differences in breath requirements and edit accordingly.

If you experience tension and gasping which make it difficult to take comfortable breaths in an extended passage of music, consider the following suggestions:

1. The First breath at the beginning of a passage is usually more efficient and comfortable than all that follow. Consciously be aware of the openness, general feeling and amount of air taken in during the first breath. Maintain this awareness so that you are able to imitate every aspect of the first breath through the succeeding ones.
2. As you finish a phrase and are about to take in air, anticipate and mentally prepare for the breath. Do not wait until you have gasped to recall the necessity of relaxing and opening up. Anticipation and preparation will give you the needed edge to successfully replace the old habit, the gasp, with a new comfortable one - a "whoosh" of freely moving air.
3. Divide long, extended passages into smaller phrases and practice one section at a time. This type of subdivision helps one to maintain a higher level of concentration on the difficulties encountered and allows one to approach each part of the passage with a fresh breath. Do not always begin practice on the first section in this procedure.
4. If the passage requires great dynamic volume, temporarily decrease the volume without sacrificing the quality of sound. Gradually work back to the louder volume.
5. If nothing else is successful, the last resort is to make a complete metronomic break at the end of each phrase to allow a little extra time to take a relaxed breath. Take the time you require to breathe comfortably, then proceed. The ultimate objective is to gradually decrease the time needed to take the

relaxed breath until there is no tempo break. Be careful with this process as carelessness can weaken rhythmic concepts if you are not precisely aware of what you are doing, (Remember that this can never be done in an ensemble situation, only in the practice room.)

In closing, let it be stressed that the creation of beautiful music on the tuba is our ultimate goal at all times and that the breath can and should be part of the artistry conveyed to the audience. Make the breath an integral, beautiful part of your music rather than an ugly hurdle to be passed over as quickly as possible. This concept can be strengthened if the tubist will practice music of a melodic and singing nature on a daily basis. In this type of music, the breaths usually possess a much more natural part of the music than in the type of breathing that tends to occur in a march or typical band bass line.

Here are several of the important points of this discussion reviewed for you for quick and easy reference:

1. Maintain proper posture and playing position.
2. Breathe fully, quickly and quietly.
3. Avoid tension - be relaxed and natural.
4. Project the breath through the tuba.
5. Edit, plan and be consistent with your breathing.
6. Make the breath part of the music!