EMBOUCHURE UPDATE . . . *A Clinical Text Reference for Trumpet by* Mac Gollehon

EMBOUCHURE

Embouchure development demands top priority since it is possibly the most important physiological aspect of playing the trumpet.

How successful you become in creating and executing musical passages is determined largely by your embouchure training and development.

The embouchure mechanism is an elaborate network of approximately twelve muscles in the face that are governed by motor nerve control.

Strengthening this network of muscles is essential in maintaining a "grip" (embouchure position) and resisting the air pressure against the lips, cheeks, tongue and throat resulting in lip vibration. Developing strength becomes even more critical when playing at extreme dynamic levels and in the upper register.

The series of muscles in the embouchure apparatus must be developed methodically and systematically so that balance and fine tuning can be attained. For example: The ability to control your tone at every dynamic level from soft to loud and everything in between. Also, every note from the bottom of the register to the middle and top register must be of equal and excellent tonal timbre and pitch. In addition, your embouchure should permit you to be flexible enough to move through all the registers of the instrument from bottom to top and top to bottom with ease and control. Range, endurance, tonal contrast and quality, flexibility, control, and accuracy all stem from the formation of the embouchure. All aspects in the preceding sentence will be discussed in later pages with accompanying exercises. For now it is helpful to know just a bit about basic embouchure mechanics.

The muscle immediately around the lips is the orbiculous oris. Its strands form a circle around the lips and merge with other muscles at both corners of the mouth. It is important for this muscle to be strong while maintaining a relaxed firmness, since it is a focal point for the entire muscle network of the embouchure. I feel that it is probably the easiest muscle in the embouchure to control consciously. You can actually see its movement in the mirror while changing registers, doing slurs, etc. It is a good idea when developing this muscle to also a very important muscle in helping the other muscles to resist the compression of air initiated from the air column. This muscle can be developed in the *Endurance* section of exercises. Long sustained tones that give this muscle a sort of "burning" sensation after a while are indicated. Remember, embouchure fatigue when playing should only be a slight straining of the muscles around the lips. Hopefully you will feel more muscular fatigue or burning rather than numb lips or "dug in" lips. At the latter point of fatigue it is advisable to rest until you feel completely restored. When building your embouchure muscles you must have frequent rest periods. This is true of any sort of muscular exercise development process. By overdoing it you cut off the blood circulation in the lips and stand a chance of damaging membrane tissues resulting in cuts, bruises, cold sores, or stiffness.

The triangularis plays a strong role in holding the lip corner down. This muscle can be developed in the *Range* section exercises. This muscle is located beside the chin on and beneath the orbicularis.

Three muscles control the chin. They are mentalis and triangularis. I suggest for these in front of a mirror to try to avoid "bun many cases, a bunched up chin cov cave of other muscles, the chin."

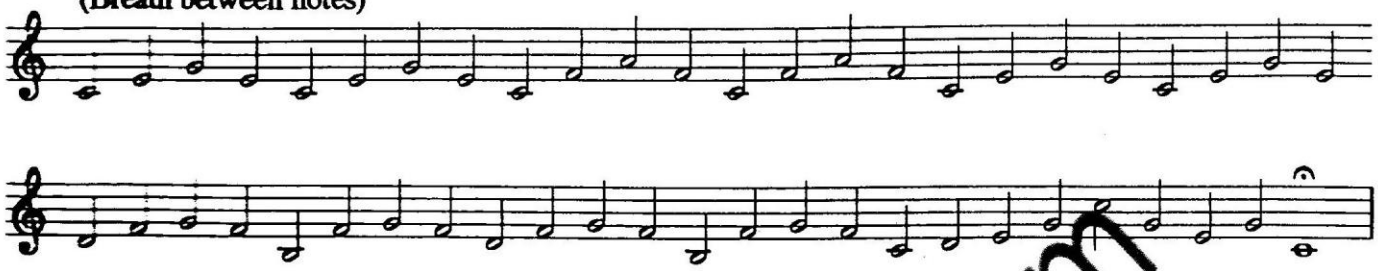
The masseter is a large connects with the buccin drills as for the buccin strengthen the mas the left cheek v using only th right che over a wh

The following demonstrates how to turn one of the CLARKE technical studies into a long breathing drill using the slow inhalation procedure.

(Exercise as normally written) *etc.*

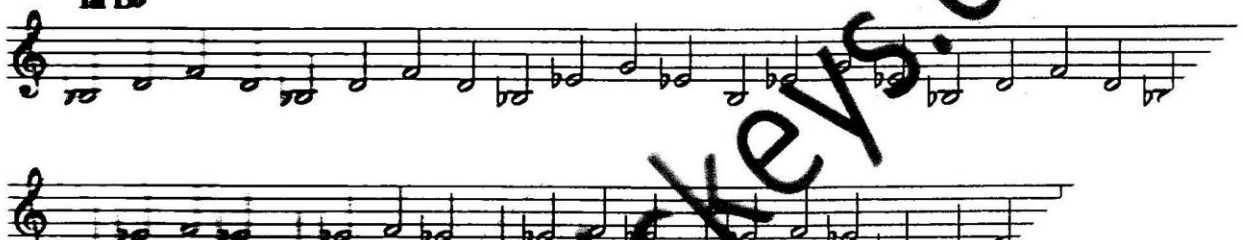
As a breathing exercise it becomes:

(Breath between notes)



Rest a few minutes and continue

In B♭



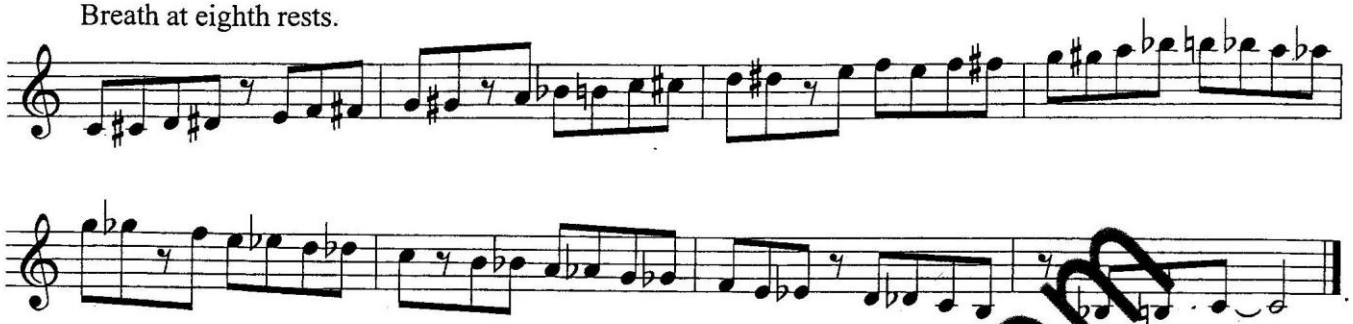
In E♭

FAST INHALATION EXERCISES

Many musical passages will require a fast inhalation. The best way to execute a fast inhalation is to rapidly expand the upper chest and back area between the shoulder blades. Try not to raise the shoulders or tighten the neck. Upon exhalation the function of the abdomen and diaphragm is simply to exert a force of thrust inward and upward.

The exercise I designed to accommodate this procedure is the chromatic scale sprinkled with eighth rests which is where the fast inhalation will take place.

Breath at eighth rests.



Remember this is just an exercise to get a feel for executing the fast inhalation.

Some idea: displaced eighth rests each eighth rest.

Ⓑ

TONE QUALITY and Variations in Tonal Colors

The one aspect of playing the trumpet that differentiates individuals the most is tone quality. Even the most homogenized of trumpeters in certain musical circles differ greatly in their concept of tonal timbre. Everyone has his personal preference as to the kind of timbre he wants.

Musical situations and individual goals have a large role in determining the kind of sound you aim for. If you perform mostly as a section player, you will more than likely strive for a sound that blends with the other players in the section. If you are primarily a soloist, you have more options and liberties in choosing your preferred sound.

There are so many different types of players and musical situations it would be ridiculous to attempt to mention all the possibilities, but we can touch on a few of the physiological factors affecting tone quality. These factors include tongue shape, oral cavity size and shape, teeth formation, air column, just to mention a few. It should come as no surprise that there are such enormous differences in individuals' sounds.

Tone quality must be developed and all of the physiological factors mentioned in the preceding paragraph would be meaningless without control of the air stream. It is also important to acknowledge that tone quality is not the same as breath control. An individual can have a pleasant tone without having a command of breath control. Even if this occurs, other areas of playing will suffer if proper breath control is not utilized—range, dynamics, endurance, and overall confidence.

Variations in timbre can be described with words such as dark, warm, bright, brilliant. Some players incorporate several describable colors in their sound—medium bright with some darkness, or medium dark with a bit of brilliance, or a large centered core of sound with both dark and brilliant edges. Still another kind of sound description would be a bright centered core with warmth and dark edges. As we try to visualize and represent these different sounds with words it's easy to see why tone is such a diverse issue.

To further broaden this area of controversy we invariably come to the subject of equipment. Here is an area where almost everyone differs in opinion all the way from the mouthpiece to the bell. It would be far too space consuming to discuss this in detail because there are so many different demands from different players.

At this point let's look at the options for a versatile player you are the kind of player that prefers to sound differ different times, depending on the nature of the music

For versatility in sound the physical variables in consideration will be:

1. Tongue position—front and back
2. Air Velocity
3. Air Direction
4. Tongue arch angles.

How To Darken Your Sound For A Special Effect

For the player desiring a much darker timbre than usual—the initial attack for this dark timbre finds the tip of the tongue striking in a legato attack between (but not protruding through) the teeth. Immediately after the attack and for the duration of the tone the front part of the tongue should move to the bottom of the lower teeth gums. The middle and back portion of the tongue should be relaxed and out of the way of the air. The syllable for the back of the tongue should be "[illegible]" or "GAA" depending on the tone desired.

The air velocity is not to be too fast, but the air quantity should be greater, because you have opened up the oral cavity to achieve the darker timbre.

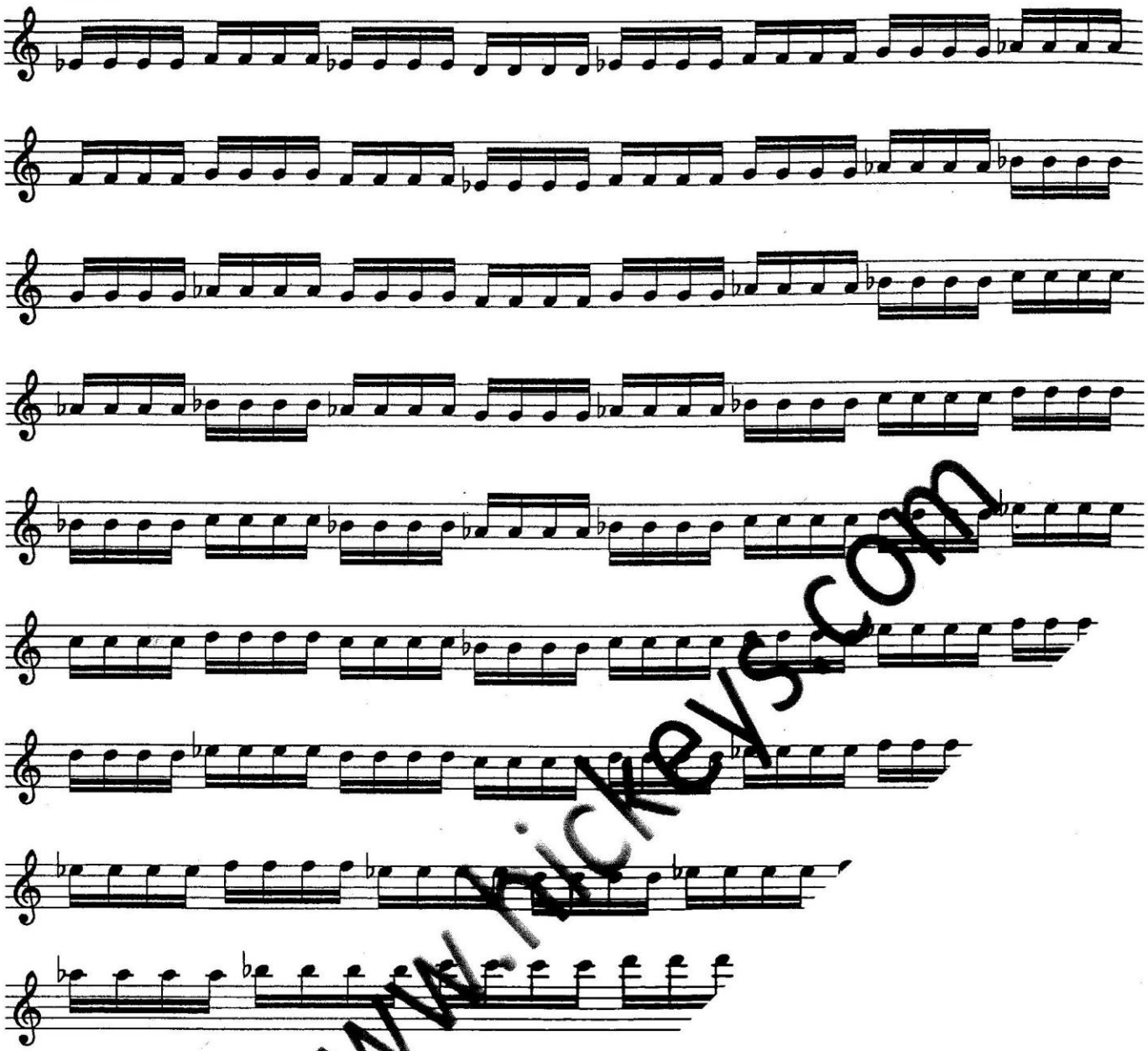
The air direction will find itself a bit more spread tered than usual as a result of the more open throat pr the "CAA" or "GAA" syllable. Be sure to aim the point between the teeth.

The tongue arch in this case is down and is determined by how dark the timbre ne Experiment and adjust.

How To Brighten Your Sound

For this timbre (generally fo desiring more brilliance i tip of the tongue strik tains that position f dle and back po in increased or "KEE" your s

In E♭



In A♭