

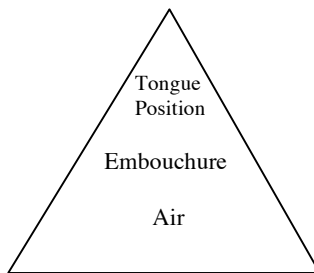
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Untying Your Tongue-Tied Clarinet Section

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Proper articulation is built on a foundation of proper tone production fundamentals.

There are three primary factors in producing a good clarinet tone: Air, Embouchure and Tongue Position. These fundamentals are weighted as such that they can be seen as forming a tone production pyramid.



Tone Production Pyramid

- Air forms the base.
- Embouchure is the second level built on the foundation of Air.
- Tongue Position is the top level built on top of both Embouchure and Air.

Fundamentals Check List:

Air Support

1. Keep the diaphragm out and relaxed throughout the entire exhalation process. This happens naturally at the beginning of the breath, but as one starts to run out of air, the diaphragm muscle will tighten inward and start to restrict airflow. Keep these muscles out and relaxed when you feel this happening.
2. Keep the upper chest and lower throat area open at all times while slurring or articulating. This is perhaps the most significant cause of articulation problems.
3. There are two resistance points in the body that can restrict airflow while one is playing, the embouchure and the throat. If the embouchure is loose, or loosens during articulation, the throat introduces more resistant pressure by closing.
4. For good articulation, the resistance point should be at the embouchure, because the air behind it needs to be free, full, pressured and ready to immediately pass through the mouthpiece. If the throat is tight, there is not enough pressure at the mouthpiece and reed for good articulation and staccato.
5. To work on correcting these problems, take a full breath so that the upper part of the lungs truly expands. Without locking the air by closing the throat, immediately exhale (or play your instrument). The expanded feeling experienced right at the turn around of the breath is PERFECT air support.
6. Keep this sense of openness while playing and articulation will be improved dramatically.

Embouchure

1. Embouchure muscles should be formed with a firm and forward “oooo” with the lips, followed by a slight opening of the front teeth. Notice the chin is flat and pointed down naturally as a by-product.
2. Avoid teaching embouchure formation starting with the “flat chin” approach. The side muscles tighten in the wrong direction and there is a lot of conflict between muscle groups in the embouchure.
3. If done correctly, the embouchure firmly squeezes the mouthpiece in a 360-degree grip. The jaws are held open enough to allow the reed to vibrate freely. There should be no air leak. Air leaking is an indication that the embouchure grip is not at 100%.
4. To practice proper embouchure formation, push the lips forward into an “ooo” shape and blow out cool air for 15 seconds or more.
5. Loosening the embouchure is one of the most common problems in articulation. It usually occurs in conjunction with a tight diaphragm and throat muscles.
6. It is often useful to instruct students that their embouchure should be tighter while articulating than when they are slurring.

Tongue Position

1. Tongue position controls the voicing of the tone, and quality of the tonguing stroke.
2. The tongue should be high in an “eee” position at all times, over the entire range of the instrument. It should never be low in an “ah” position. This works for the other woodwind instruments, but should never be done on the clarinet.
3. A good way to find this position is to repeat the word “she” many times. The sides of the tongue will firmly push into your molars. Remember this feeling and position.
4. To establish the proper feel of tonguing motion, repeat the word “knee” many times rapidly.
5. The tongue tip remains close to the hard palate and moves vertically, not horizontally. This is the most important detail in understanding the tonguing stroke.
6. With both of these vocalizations, most of the tongue stays very still in the arched “eee” position. While slurring or tonguing, the only movement of the tongue is at the tip.

Developing the Legato Stroke

The legato tonguing stroke is the basis for all tonguing strokes and therefore needs to be mastered before discussing any other articulation. This tonguing stroke requires that the tip of the tongue touches just underneath the tip of the reed in a vertical motion.

Utilize the “buzz” tongue exercise.

- a. This is a very effective exercise that can teach or re-train the tongue to execute a good legato stroke.
- b. Sustain a note. Touch the reed with the tip of the tongue lightly enough to dull the sound, then pull the tip away. Repeat this on/off motion many times.
- c. As this gets comfortable, reduce the time the tongue is on the reed and accelerate until the tongue naturally produces a good legato stroke.
- d. This exercise trains the tongue to touch the reed without closing the throat, and to get a feel for legato tonguing as a series of releases from the reed.

- e. Lower notes are easier to do this exercise than high notes. One should start on a comfortable note in the left hand in the lower register. Once one can do smooth legato quarter notes on this pitch, move to a higher note and repeat the exercise. The higher the note the more difficult the exercise becomes.
- After mastering this exercise, students will have attained a good legato tonguing stroke. There should be no jaw motion, no change in tone quality with each articulation, the sound should never stop, and there should be no under-sounds in the clarion register.
 - It is very important that one achieve this skill as other strokes are built on this foundation. A staccatissimo tonguing stroke is not as different from this legato stroke as one might think, and it is not possible to get a quality staccato stroke if this basic legato stroke can not be done correctly.

Development of Staccato Stroke

1. The most important quality in developing this stroke is proper air support, a firm embouchure and keeping the tongue close to the reed.
2. A good staccato stroke does not mean that one tongues harder, it simply means the air is fully supported and the tongue stays on the reed for longer periods of time.
3. Staccato, at least at slower to moderate tempi; can be understood as a series of tongue releases from the reed. As soon as the tongue moves off the reed, the pressurized air immediately goes through the mouthpiece. The tongue stays close to the reed so it can quickly return to the reed and stop the sound.
4. To do this well, the embouchure should be very firm (without biting) and there needs to be good air support.
5. As one goes faster, the tongue needs to feel lighter and more legato. A fast legato sounds staccato.

Tongue Release

1. The release is where many articulation problems begin. Stopping the sound with the tongue with excessive tongue motion can lead to numerous problems. Stopping the sound with the air can lead to the habit of closing the throat after each tonguing stroke.
2. How do we release articulated notes? This is where things get a little less clear, as the types of releases vary in degree depending on musical style and context, as well as student ability.
3. In the beginning, it would be best to start with no tongue-stopped releases.
4. To do this, the tongue can only touch the reed to begin a new note. This is what is done in the execution of a good legato tonguing stroke.
5. When this type of release (or non-release) is mastered one can then develop a tongued release where one stops notes with the tongue to achieve various shortened lengths.
6. The throat should not close off to stop notes.
7. If the throat can stay open as the tongue moves on and off the reed with all note lengths from staccato to legato, tongue stopped or non-stopped, one will begin to achieve a consistent and quality tonguing stroke capable of handling any musical situation.

“Air Tonguing” Exercise

1. Take a deep breath and feel the diaphragm muscle, upper chest, and collarbone area expand until it feels a little uncomfortable. Exhale freely.

2. Push the lips forward into a tiny “ooo” shape with an opening size similar to a soda straw. Take a deep fully expanded breath again, say “ooo” and exhale. The smallness of the embouchure should allow you to exhale for 15 to 25 seconds.
3. Say “knee, knee, knee” in rapid succession. Remember this firm tongue positioning. Take a deep breath, firm “ooo”, “knee” tongue position and exhale. Try to get a slight “whistle” sound.
4. Do the above three things, and as you exhale, tongue with a light stroke on your hard palate (remember the “knee” feel with its vertical tonguing motion). Repeat again with shorter and shorter strokes. As the stroke shortens, keep expanded and firm in the embouchure and with the release of the tongue, you should get a quick burst of air. Note that the throat does not close off during this process, and for short notes, less air is required.

Getting Started – Tips for Teaching Beginners

The Beginning

1. Beginning students are usually a bit awkward and are not really capable of applying most of the finer points of articulation discussed here.
2. When tonguing is taught to beginners, they frequently over use the muscle and bad habits form from day one.
3. For this reason, it is best to avoid articulation for as long as possible during the first few months. Have students use their breath to start and stop notes.
4. Introduce the tongue only when it needs to be used for musical reasons. You might simply have students slur all notes that are not repeated, and if your tempo is slow, you can have them use the breath for repeated notes. Keep it simple.

Teaching Legato

1. When one gets to the point where articulation needs to be taught, avoid teaching staccato and only focus on teaching a legato stroke.
2. Emphasize the importance of a gentle stroke where the tip of the tongue stays close to the reed. Have them say “knee, knee, knee...” to get a feel for what a proper vertical tonguing stroke will feel like.
3. Regularly remind students that the tip of the tongue needs to touch just under the tip of the reed.
4. Use the slur tone as a reference. Tongued notes and slurred notes should have the same tone quality.

Minimize Emphasis on Articulation

1. As a student is beginning to develop articulation skills, check the mechanics on a regular basis, but remember to go easy early on. Emphasizing articulation from day one will not result in a tonguing prodigy when the student gets to high school.
2. Instead, be consistent on insisting that the air, embouchure and fingers be solid and sound.
3. If a student can tongue legato and can keep the air and embouchure solid, you may find that you don’t have to spend that much time talking about tonguing. For many with good fundamentals, tonguing is natural and causes very few problems.

Diagnosing Problems

Basics: Checklist

1. Are you tonguing on the reed?
2. Where on the tongue are you touching the reed?
3. Can you slur the passage?
4. Can you tongue repeated slow quarter notes on any pitch in the chalumeau register? In the clarion register?

This is a basic procedure for addressing any articulation problem when working with a student.

1. Have student slur the passage and tell them to play with a good sound. For many, simply blowing more air through the horn will do wonders. Review air support fundamentals: relaxed diaphragm, expanded upper lung/larynx area, and fast free air. Do not let the student proceed without having these qualities.
2. Have the student play slurred with a firm “ooo” embouchure, still reminding them about their air. Make sure the embouchure is firm and still and that a good consistent tone is demonstrated for the passage.
3. Next add the tongue and play the passage slowly. Start with legato, again monitoring and reminding the student of air and embouchure. When this sounds good move towards the required note length.
4. As a teacher, at this point relax, there is nothing else to do. Students need to figure out and work on these components themselves if there are still problems. Most of the time they will get it, but even if it isn't quite right, they will figure it out. Be patient and next time you work with them repeat the process.

Specific Articulation Issues

For beginners, the following problems are common:

1. Not Tonguing on the Reed

- Symptoms: Throat noise/vocalization with each tonguing stroke, a tongue stroke that has an attack but sounds unclear and lacks the standard reed/tongue noise.
- Primary Causes: Student doesn't like the feel of touching the reed with the tongue. They articulate notes by opening and closing their throat. They are literal when they have been taught to say “tee, too, dee” or other consonant so they tongue on the roof of their mouth or hard palate as they articulate.
- Cure: Go over tonguing basics. Review buzz tongue exercise, insist the student touches the tongue on the reed. It is surprising how quickly students fix this problem, often times in a week or two.

2. Chewing Articulation

- Symptoms: A squeezed out articulation, excessive squeaking, tonal instability in tone during articulation.
- Primary Causes: Loose embouchure and/or excessive tonguing motion.
- Cure: Squeeze embouchure firmly. Have student slur the passage to see if the chewing problem is stopped. Repeat passage slowly with a legato stroke slowly, making sure to

monitor the basics. Gradually shorten the articulation length while keeping a firm and still embouchure.

3. Excessive Tongue Motion

- Symptoms: Heavy tonguing, lack of speed, instability in tone.
- Primary Causes: Tongue is moving horizontally, not vertically. Incorrect tonguing consonant/vowel (“taw”). Pushing the tongue into the reed too hard with a loose embouchure.
- Cure: Review basic checklist. Have student say “knee, knee...” to feel the correct vertical tonguing motion close to the reed. Review “buzz” tongue exercise. Encourage a “thee” tonguing stroke. Practice air tonguing with a very light touch on the hard palate. Firm up the embouchure

For Intermediate/Advance Students these are some common problems.

4. Heavy Thud Tonguing

- Symptoms: Under sound preceding each note especially on higher notes, squeezed out sound, slow speed, labored sounding articulation
- Primary Causes: Excessive tongue motion with loose embouchure. Tonguing too low on the reed. Tonguing too far back on the tongue.
- Cure: Review tonguing basics. Review legato tongue stroke using the “buzz” tongue exercise and air tonguing exercise.

5. Under Sound in Upper Register

- Symptoms: Sluggishness in the upper register, under sound precedes most notes
- Primary Causes: Heavy tongue, not enough air speed, tight upper chest, loose embouchure, and low tongue position.
- Cure: Keep upper chest open and free, think “she” tongue position, firm embouchure without biting. The higher one plays, the lighter the tongue stroke must be. Review legato tongue and “buzz” tongue exercises.

6. Lack of Clarity in Attack

- Symptoms: Inability to have a pointed attack, staccato is non-existent, articulation always sounds mushy.
- Primary Causes: lack of air support/closed throat, loose embouchure, and incorrect tonguing consonant.
- Cure: Keep larynx/upper chest open and expanded, tighten embouchure, move the air support pressure from the throat to the lips, experiment with different attack strokes.

7. Squeaking/Timbre Change While Articulating

- Symptoms: Lack of tonal stability, excessive squeaking, especially in the upper register.
- Primary Causes: Soft reed with chewing articulation, (i.e. jaw movements while articulating), incorrect tongue motion/vowel.
- Cure: Check reed, have student slur passage to see if a consistent tone is maintained, tongue legato, gradually work to desired articulation length.

8. Lack of Speed

- Symptoms: Sluggish articulation, inability to tongue quickly, lack of coordination between fingers and tongue

- Primary Causes: Too much tongue motion, clipping notes, throat closing
- Cure: Keep tongue closer to the reed. Practice legato tonguing, use a lighter stroke and do not clip notes. The air must keep flowing. The tongue must only start notes at faster speeds. At a fast tempo, legato is staccato.

9. Inability to Tongue Staccato

- Symptoms: Inability to tongue short notes, not able to pop notes out crisp staccato notes.
- Primary Causes: Not enough air support, loose embouchure, and incorrect tonguing stroke.
- Cure: Review proper use of air and embouchure formation. Make sure support is solid with firm embouchure, open upper chest and correct tongue position. When the support is solid, try to use a more aggressive tonguing stroke attack. If notes need to be stopped with the tongue (i.e. clipped) keep the larynx area of throat open, diaphragm out and a tight embouchure.

10. Tongue/Finger Coordination

- Symptoms: Tongue gets tripped up in a technical passage, lack of clarity of articulation, general sloppiness.
- Primary Causes: Uneven finger technique, heavy tonguing, poor articulation practices.
- Cure: Have student slur the passage. Chances are it will be uneven. When the passage is played perfectly slurred, play it again with a legato tongue slowly. Work the passage up to tempo with legato tongue. At this point, the notes will probably be short enough, but if shorter notes are needed, work on shortening the length with a light tongue.

Developing Tonguing Speed

Role of Air

- Problems in airflow are one of the major problems in developing tonguing speed.
- As one tongues faster, the tongue must become lighter and more legato to allow the air to flow.
- The lung cavity and lower throat need to stay open and free to maximize response. When the tongue leaves the reed, the air needs to have the right amount of pressure to flow through the mouthpiece instantly.
- If the throat needs to open up to allow airflow as the tongue is released, there is a slight delay, which affects speed and tongue/finger coordination.

Note Length

- As speed increases, there must be enough time for the air to clearly produce a note.
- If a note is very fast and the tongue stroke is too short and aggressive, there reaches a point where there is no time for the note to actually speak.
- As one gets faster, the length of time the tongue stays on the reed must be reduced.

Stroke

- At fast speeds, the tongue needs to lightly touch the reed using a “thee” stroke.
- As notes get faster, one needs to concentrate on the skill of letting the tongue start notes without clipping them. This clipping will prevent one from achieving faster speeds.

With these basic strategies, one can then develop a plan to work on tonguing speed with students. It is important to wait to do this until the student is a bit older and established in their playing.

What Not To Do To Develop Speed

- Do not assign exercises that are excessively fatiguing and show no similarity to music that a student might actually play.
- Do not emphasize articulation over the other fundamentals. Tone production is the fundamental base from which tonguing needs to be developed.
- You cannot force fast articulation, it must be allowed to happen.
- Do not over emphasize staccato articulation too early. In fact, the less one can focus on articulation in general during the first months the better.

What to Do To Develop Speed

- Regularly ask where on the reed student is tonguing, and what part of the reed.
- Emphasize proper air and embouchure firmness.
- Keep the tongue relaxed when articulation fast past passages.
- With young students and even more advanced, simply emphasize better airflow, this does wonders!!
- Make sure the finger technique is solid and even. The tongue is inherently even while the fingers are not. One sometimes is too quick to blame the tongue.
- Develop a quality legato stroke. Remember, fast articulation is a legato stroke. Use the buzz tongue exercise.
- As speed increases, do not clip slur endings or ends of articulated notes.
- Monitor the amount of air being pushed through the mouthpiece as you go faster. Avoid backpressure. I often tell my students to use 1/3 less air pressure in heavily articulated passages. Usually the volume remains the same, but they get a much clearer staccato and a better tone. Using the air tonguing exercise is good for practicing this.
- Practice fast tonguing in short bursts of three to five notes. Look for exercises or studies that do this.
- Master the slur-two/tongue-two articulation. When things get too fast, one must be able to instantly make this substitute.

If you have any questions, please feel free to contact me:

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