

BASSOON TECHNIQUE  
FRANK MORELLI

**Improving Sound and Intonation**

**Introduction:**

Good intonation and tone should not be independent of one another. It is important to work on resonance, tone color and vibrato along with intonation. When choosing a tuner, opt for a chromatic tuner that plays several octaves and produces a tone color with which it is possible to distinguish intonation. On the meter setting, be sure the tuner can “hear” the entire range of the bassoon. While it is true that standard chromatic tuners do not adjust for such variations in intonation as occur in actual performance, the benefits gained from using this technology far outweigh the slight limitations.

Support position, throat/tongue position and embouchure are the basic components of tone production to which the player must attend. When practicing to improve intonation, the goal is to reinforce or relearn the correct positions for those components for each note on the instrument. As we become more proficient at this we can better predict a given note’s tendencies as well as its relationship to the pitch or pitches that precede or follow in a musical line or pattern (scale, arpeggio etc.)

Always use a good, singing sound when practicing intonation. Don’t “back out” of the sound and play in a manner other than you would in actual performance. Practice without and with vibrato. Intonation is generally easier to distinguish when playing in perfect intervals (unison, fourth, fifth, octave, etc.) with the tuner. (An excellent way of providing pitches is The Tuning CD, which can be purchased through the web site, [www.thetuningcd.com](http://www.thetuningcd.com). One limitation of this tool is that it only provides pitches relative to A=440, while most tuners can be adjusted.)

**Exercise I-1** (tuner plays pitch):

- Set the tuner to the bassoon’s second b-flat. The notes that form perfect intervals with this note are b-flat (I), e-flat (IV) and f (V). Play these notes in succession or in other combinations (octaves, I-V-I, I-V-IV-I, etc.) It is most effective to slur from one note to the next. The process of articulation will confuse the issue of tongue/throat position.
- It is not enough to play a pitch, adjust to the tuner and move on. If it is necessary to adjust a pitch, fix it and make a mental note of its proper physical position. Now stop and replay the note with the intention of playing it exactly in tune in its newly adjusted position you’ve just learned. (If this is the first note of a given succession, stop playing and start on that note again. If you arrived at the note in question from another note, return to that previous note, making sure to play that note in tune and then return to the note you were focussing on.) If it is now in tune you can move on, otherwise repeat the process.
- If you find it difficult to hear the tuner when it is placed directly in front of you while playing, try having the sound from the tuner coming from your right or left.

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**Improving Sound and Intonation** (cont.)

To be sure, this is a painstaking process, but this level of care and discipline will be beneficial. At first you are likely to be disappointed with your ability to play in tune. With diligent work you will notice improvement almost immediately. Having the tuner furnish the pitch will also provide valuable ear training experience. You will become more adept at hearing those intervals you practice and at knowing immediately what to do if you are not in tune with another instrument. When practicing with the tuner on the meter setting you will get valuable experience focussing on your sound and pitch and on hearing intervals when playing unaccompanied.

**Exercise I-2** (tuner on meter setting):

- The crucial difference when practicing the exercise I-2 as opposed to exercise I-1, is that in I-2 you must decide for yourself whether a note is in tune prior to checking with the meter.
- Play a note. Decide if it sounds correct, and if so, then verify with the meter. If the meter disagrees, adjust the note and repeat the process as described above. Once again, decide for yourself if the note is now correct before checking the meter. If you continually look at the meter for assistance, you will be using this technology as a crutch instead of a learning tool.

**Improving Sound and Intonation in Scheherazade and Similar Passages**

**Introduction:**

Assuming that a slow passage such as the solo in *Scheherazade* has ceased to be a finger problem, then it is no longer necessary (or even advisable) to play it over and over. Only after you have a firm idea of your interpretation and are securely centered into your sound and pitch, should you play the excerpt.

**Exercise I-3:**

- The *Scheherazade* solo contains only seven distinct pitches. Choose a note to be produced by the tuner that will form perfect intervals with two or three of the pitches found in the solo. Employ exercise I-1, using this pitch and focus on the notes found in the solo, as described above. Repeat this exercise with other tuning notes so that all pitches found in the solos are practiced. Note that each of the seven pitches in this particular solo allow for two or three perfect intervals to be formed with other pitches in the solo.
- Additionally, you can employ exercise I-2 to work on your ability to play the passage in tune while not referring to a sounding tone.
- This exercise can be applied to virtually any musical example.

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**Improving Sound and Intonation** (cont.)

Accuracy of pitch and evenness of tone color and quality are essential in one's playing. It is extremely useful to take an "intonation and tone quality census" of your instrument, and to repeat this process periodically. The chart provided below makes it possible to accomplish this in an organized manner. Using a tuning meter, play your instrument without making effort to bring notes up and down in pitch while attempting to play without making an effort to adjust the tone quality of problematic notes. In this way you can best assess the natural tendencies of the instrument.

- Make notations on the chart of intonation tendencies, perhaps using marks such as "+" for sharp, "-" for flat and "o" for in tune. Of course, any notation that makes sense to you is advisable.
- Also indicate where there exist inconsistencies in the instrument's tone quality such as brightness, darkness, thinness, presence or lack of focus and resonance.
- You may wish to photocopy this chart for each use so that the original remains unmarked.

Lowest Octave	Second Octave	Third Octave	Fourth Octave
A	A	A	A
Ab	Ab	Ab	Ab
G	G	G	G
F #	F #	F #	F #
F	F	F	F
E	E	E	E
Eb	Eb	Eb	Eb
D	D	D	D
C #	C #	C #	C #
C	C	C	C
B	B	B	B
Bb	Bb	Bb	Bb

Lowest Octave	Second Octave	Third Octave	Fourth Octave
A	A	A	A
Ab	Ab	Ab	Ab
G	G	G	G
F #	F #	F #	F #
F	F	F	F
E	E	E	E
Eb	Eb	Eb	Eb
D	D	D	D
C #	C #	C #	C #
C	C	C	C
B	B	B	B
Bb	Bb	Bb	Bb

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**Developing Vibrato**

**Introduction:**

It is essential to be able to control the pitch, intensity and speed of your vibrato. The following exercises will help develop a “diaphragm” vibrato, which is generally preferable to a throat vibrato.

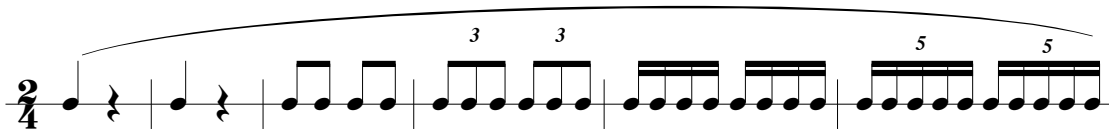
**Exercise V-1 (pitch variation):**

- Play a mid-range note on the bassoon. Using your support (not lip, jaw or throat) slowly raise and lower the pitch. At first don't be concerned with controlling the sound quality or pitch. Think of this step as analogous to stretching prior to physical exercise.
- Progress from the previous step by making the variation above and below the pitch more regular and controlled.

**Exercise V-2 (intensity variation):**

- Without the reed in your mouth imitate the panting of a small dog. Now try the same imitation while playing and vary the speed.

**Exercise V-3 (speed variation):**



- Most players don't use a vibrato with a speed of more than 300 per minute. This number was arrived at through observation and personal experience and has no intended theoretical significance.
- A good target speed can be set by working up to five oscillations per beat at a metronome marking of 60. The reason to work towards 5 @ 60 as opposed to 4 @ 75 is that the latter sounds too regular and mechanical compared to the former.
- Set the metronome to 60 or slower and practice your vibrato, integrating the techniques learned in exercises V-1 and V-2, and using rhythmic pattern shown in exercise V-3, above. Work up to 5 @ 60. It can be useful to set the metronome a little higher, say 65 or 70, as a kind of vibrato “abs crunch” exercise.
- Combine this exercise with intonation and tone production practice.

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**Basic Tonguing Mechanics**

**Introduction:**

It is not necessary to close off the entire opening of the reed to articulate. All that is necessary is for the tongue's upper surface, behind the tip of the tongue, to come into contact with the edge of the bottom blade of the reed. It is also not necessary to move the back of the tongue or to move the entire tongue in a back-to-front motion when tonguing. To help maintain the proper position, the very tip of the tongue may articulate lightly against the back of the bottom lip or lower teeth. Proper tonguing action is more like a bulge of the tongue, enabling the tongue to come up from beneath and perhaps slightly behind the reed to glance against the tip of the bottom blade. Proper tonguing can only be accomplished by using correct support. When tonguing you can check if your tongue is moving too much, or incorrectly by visual observation and/or touch:

**Exercise T-1:**

- While looking in a mirror, tongue at various speeds. Observe the area between your chin and your windpipe. If you see undulation (similar to the "warble" of some singers when using vibrato) you are probably tonguing incorrectly.
- While tonguing a note at various speeds using notes requiring only the left hand, gently cover the area between the bottom of your chin and your windpipe with your right hand. If you feel more than just a little movement, you are probably tonguing incorrectly.
- Remembering that "necessity is the mother of invention", if you have a relatively fast single tongue, you are probably tonguing correctly at that speed. Using the same methods of observation and touch as described above, begin tonguing as fast as you can and then gradually slow down. Notice if there is a change in the presence or lack of "undulation" as you slow down. This will add to your understanding of your tonguing technique.

**Exercise T-2:**

- Without the reed in your mouth practice saying "luh-luh-luh" with the tip of the tongue remaining behind the top of the lower teeth. Be sure that the jaw is relaxed and not moving.

**Articulation: Beginnings of Notes**

**Introduction:**

Even in the best of circumstances the tongue's role in articulation is to get in the way! Our goal is to have this occur in the best way possible. The tongue is soft tissue. The edge of the reed is relatively rigid. When the tongue comes into contact with the reed, even in the correct, glancing manner, enough of the reed will momentarily press into the surface of the tongue to create an articulation. The tonguing mechanics used to begin short or long notes being played slowly should be just as light, fast and glancing as when articulating a fast succession of notes. To accomplish this remember that ninety-

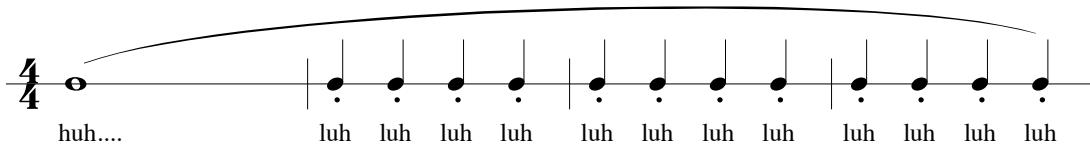
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**Articulation: Beginnings of Notes** (cont.)

five percent of the effort in tonguing is proper breath support. The support should be used to counteract the resistance of a given pitch so that the tongue can move lightly. Hard tonguing is a habit that develops from using unresponsive reeds and/or from not meeting the given reed's (note's) resistance with adequate support.

An especially useful note for testing your technique is high "a". Often this note has an audible "pop" or "clunk" at the moment of articulation. This is an indication that too much of the tongue is coming into contact with the reed and/or perhaps you are tonguing too slowly, as well.

**Exercise T-3:**



- Choose a note that is easy to initiate with a "support attack" i.e., without a tongued beginning. Notes above open "f" are often good for this purpose. With the tip of the tongue remaining lightly in contact with the tips of the bottom teeth or the back of the lower lip, first initiate and sustain the note. Then, continuing the airflow with the same support and using the "luh-luh-luh" technique (see exercise T-2), see how lightly you can articulate the existing note you are sustaining without stopping the reed (or tone) completely. This is analogous to a musical passage indicating dots above each note and all the "dotted" notes are also grouped under the slur marking i.e., *tenuto* tonguing. You should be able to eliminate any pop or crack in the sound in this manner.

**Ending Notes Without the Use of the Tongue or Throat**

**Introduction:**

When single tonguing it is not necessary to end a note by bringing the tongue back to the reed or by closing off the airflow with the back of your throat. The habit of ending notes this way develops as a result of the improper use of support. If the player does not support beyond the end of the note, the pitch will drop unless the embouchure and/or throat are tightened or the note is stopped abruptly with the tongue or throat. Although it can be difficult to break this habit, it is absolutely possible to accomplish. It is often helpful to keep the tip of the tongue lightly in contact with your bottom lip or teeth, as described above. The intention is not to "anchor tongue", but to have a tangible point of reference to feel for to help keep the tongue from moving in its habitual manner.

**Exercise T-4:**

- This exercise is an outgrowth of exercise T-3. After successfully accomplishing exercise T-3, begin to separate the notes, but allow air to "leak" through the reed into the bocal, somewhat like a hiss. This will ensure that the supported airflow

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has not been stopped in any fashion i.e., as if you were continuing to sustain the note. A variation of this exercise is to allow the air to flow (leak) through prior to, as well as after the actual sounded note.

**Improving Tonguing Speed**

**Exercise T-5**

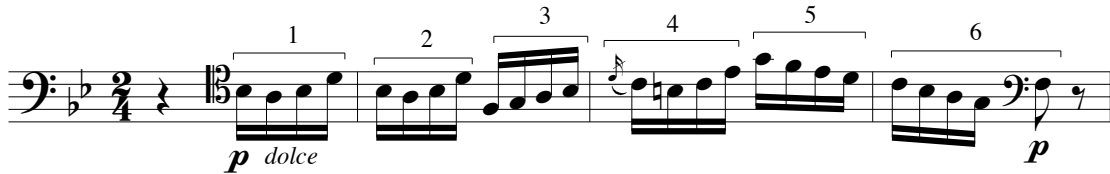


- In exercise T-5 above, note that each pattern (a. through f.) is an independent exercise. It is unnecessary and often inadvisable to segue from one directly into another. Tonguing should be light, with a ricochet feeling, little or no jaw movement and using only the front portion of the tongue. (Please read the previous sections for a fuller description of proper tonguing.)
- Start with a. and b. These are most useful in establishing proper tonguing mechanics. Set the metronome to a speed that is at the upper limit of what you can continue to do for at least 15 to 30 seconds. (The metronome setting will most likely be different for each pattern.) Choose a responsive note, such as open “f”. Remember, when you first practice these exercises, and over time, the metronome setting is merely a point from which to proceed and progress. In some instances, a. and b. will cause the player to reach the desired goal of tonguing fatigue (the burning sensation under your chin.) This point is sure to be reached when practicing c. through f. If and when this point is reached, stop playing and rest by taking a break from practicing or by continuing to play music that doesn’t require fast tonguing.
- Patterns c. and d. will usually be most helpful in improving speed. Follow the directions for practicing set out in the previous paragraph. Choose a speed near the top range of your ability that will allow you to reach the point of fatigue in less than a minute. Be sure your neck and jaw remain relaxed. If you lag behind, stay relaxed, maintain support and try to catch up or simply adjust your playing to regain synchronization with the metronome. As with any technical exercise, practicing in the context of rhythm is essential. In the course of a practice day, come back to these exercises five or six times. In other words, ten minutes a day should be sufficient.
- You may choose to increase the number of tongued notes you play in a row, essentially creating patterns beyond f. Keep track of the speeds for each exercise. You should see a positive result in just a few days. Remember: it is to be expected that each player will progress at his/her own pace.

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**Improving Beethoven “Four” and Similar Passages**

**Exercise T-6:**



- Notice that the passage is divided into six groups of a quarter note beat duration (excepting group 6.) Establish the maximum speed at which you can currently single tongue the excerpt. Assuming that your fastest speed was at quarter note equals 120, move up the metronome 10 to 15 beats per minute or two settings (to 132) on traditional metronomes with preset speeds. Play groups at the following settings:

- |                     |                     |
|---------------------|---------------------|
| 1. @ 135 (132)      | 1. & 2. @ 130 (126) |
| 1. - 3. @ 125 (120) | 1. - 4. @ 120 (116) |
| 1. - 5. @ 115 (112) | 1. - 6. @ 110 (108) |

- The player is encouraged to fine-tune these speeds and gradations to suit personal needs. When you can play the excerpt at a given sequence of speeds, move the top metronome setting up one notch (i.e., to 140 (138) in the case of the example provided) and follow the sequence, this time all the speeds will be up one setting from before. As you reach the goal (160 in this case), you can begin to play more than one beat at the top speed and then follow down the step-wise sequence as before. This method can also be applied to double tonguing this excerpt.

- Whether single or double tonguing, remember; “If you can’t say it, you can’t play it!” Without the reed in your mouth practice singing (or speaking) the phrase with the proper articulation and accounting for the grace note (group 4.) Be sure to place your tongue in the exact position as in playing: do not produce the consonant sound for “T” with the tongue behind your upper teeth unless that’s the way you articulate in performance! This method can also be used (*sotto voce*) in an audition situation as a run-through strategy immediately prior to playing it.