

Striving for Tone

Practical Methods to Improve Tone on the Horn

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The horn is critical to all instrumental ensembles, and to hear horns played with a great tone is a treat. Horn players with a beautiful tone are already doing many fundamentals of the instrument correctly. But few players are blessed with a great tone right from the start, and there are always elements that can be improved; careful consideration of the following interrelated issues can help a great deal toward building a great horn tone.

1. Equipment.

Human nature is to think of equipment being the problem first--it can't be me, it must be the horn! A horn that is clean and in good repair is very important to tone, but even the cleanest, best maintained horn will give poor results if it is of indifferent quality. Differences of a thousandth of an inch are very important in the horn and mouthpiece.

Compare horns and mouthpieces at loud dynamics in a large room and get the advice of a professional if at all possible. I recommend in all cases the use of the double horn, even with young beginners. Students will advance more rapidly with better tone and accuracy on the double horn than is possible on the single F horn.

2. The Right Hand.

This is certainly part of the tone problem for many players. My observation is that horn players themselves will tend to gravitate to a hand position that is too covered. This relates to our personal perception of our tone, which can differ from reality as perceived in an audience.

The right hand should be cupped slightly and placed in the bell with the backs of the fingers touching the bell, leaving about 1 1/2 to 2 inches of opening between the palm of the hand and the bell.

The most ideal right hand position is one that allows for a player to perform stopped and open notes by merely "closing the door" with the heel of the hand. No inward thrust of the hand should be required to play stopped horn.

3. Tonguing.

Among horn players the most common and critical problem is a "twa-twa" articulation. Essentially there is a tonal lag to the notes, each note starting at less than full volume. It is of course unintentional but it becomes so ingrained that players don't realize that they are doing it. This problem will cause off beats to sound late even when they are not, for example, as full volume is not achieved until a fraction of a beat after the initial articulation. Many times when a conductor says the horns are dragging this is an element of the problem. A "baps" type of exercise where you work to achieve full volume immediately can be of great use, coupled with work on slow, smooth scales.

Beginnings and endings of notes are also an element of how tone is perceived. On the horn there is a need to develop shadings of tongue strokes, similar to "trombone legato," combined with careful attention to note endings.

Finally, tongue placement in the mouth by register can also be critical. In the high range I suggest more of a “tee” articulation, in the middle range “ta,” and in the low range more of a “toh” articulation. Attempting to play in the high range with a low range articulation (or vice versa) will be a source of frustration for a player.

4. Air and Posture.

We could wish that every brass player would naturally take a large breath and would sit in a position closely related to their standing posture. Instead, many hornists do not take or use large breaths and contort their bodies to fit their horns.

Players should bring the horn to their face in the place where it is naturally, without changing basic body position. This may require considering playing with the bell off the leg for taller players. As for air, just take a large breath in and start the music in one motion. It is a simple process and sometimes visualizations and explanations of how to breathe tie us in knots.

Finally, there is a very significant element related to posture in the topic of horn holding position. Try playing with the bell on and off the leg in a large room; the difference in tone is quite marked, especially if on the leg the horn is blowing into the body. Every horn player has a habitual favorite horn holding position but unbiased listeners will tend to favor the bell off the leg.

5. The Embouchure.

The embouchure is very important to tonal color. Fortunately, really major changes in the embouchure are often not required to make large improvements in tonal color; small changes can make a huge difference.

5A. Wet Lips. The majority of advanced horn players (but not all) play with wet or moist lips. I favor this practice as this allows the mouthpiece to settle into a natural placement without forcing the embouchure in any way. If you take a mouthpiece, wet your lips, and let the mouthpiece slide into place over the “hook” of the upper lip you will almost automatically obtain a good, natural mouthpiece placement for the horn, 2/3 upper lip 1/3 lower lip.

5B. Dynamics Soft to Loud. It takes a combination of air and setting the embouchure correctly to play loud and in tune. Frequently the player who has limited loud dynamics does not realize that they not only have to blow more air but they also have to open the embouchure very slightly at loud dynamics in relation to the position used at soft dynamics. This technique should be addressed on a daily basis.

5C. “Clamping.” This has to do with too much pinching, up and down, in the embouchure. A very small difference can make the tone either be harsh and buzzy or open and full.

5D. The Corners. Farkas correctly described the horn embouchure as being a “puckered smile.” Frequently there is too much smile in the horn embouchure which will add a distinct edge to the tone and may cause other problems. Another way to think of this, suggested by Fred Fox, is that the embouchure is made up of two groups of muscles, those we use to say “EEE” and those we use to say “MMM.” The “MMM” muscles are the ones to focus in on while playing the horn.

5E. Pressure and High Notes. Excessive pressure works to hit higher notes but it is wrong! It will make pitch sharp, cut endurance, etc. Moderate pressure is necessary but you should not normally resort to heavy pressure.

Before addressing what to do about this problem, I always like to ask students “why does mouthpiece pressure help in reaching the high notes?” The reason is because the extra pressure makes the lip aperture smaller. Farkas, in *The Art of Brass Playing*, gave the example of a doughnut. If the doughnut is placed under a sheet of

glass and is squashed down the hole in the middle *does* get smaller. Our lips are the same; as the mouthpiece squashes them the aperture gets smaller and higher notes come out, but at the cost of tone and endurance.

It is critical to instead focus our attention on focusing the size of the aperture inside the mouthpiece by using the muscles of the lips without using excessive pressure. Thinking “MMM” really does get at what we want, especially when playing passages like slurred arpeggios.

5F. Jaw Position/Lower Lip. Jaw position is very important and is often neglected. The jaw should, speaking generally, be forward slightly from its position at rest in a high brass embouchure or a whole group of problems may arise. A correct jaw position for most players will make the air stream go forward, hitting what Fred Fox termed the “bull’s eye” of the mouthpiece. Players with a “tear drop” upper lip will, however, need to form an embouchure with a slightly receded jaw and more of a downward airflow.

5G. Dropping the Jaw. This is critical to tone production in the low range of the horn. On the horn we want a fairly firm but open embouchure in the lower range (below roughly written middle C), not a loose, “fish lips” approach.

6. Buzzing on the Mouthpiece.

Buzzing on the mouthpiece can be a great way to find angles to work on many issues, but in particular is useful in the following areas:

High Range Problems. Horn players should be able to buzz all the notes on the horn, especially the range from the bottom of treble clef to the top of the range of the horn. I find that if a student can’t buzz to the top of their range usually there are small adjustments that need to be made in the geometry of the embouchure, especially with the use of the corners. Curiously, students who can’t buzz well frequently can’t whistle either; this again relates to the use of the corners of the embouchure.

Focus the Pitch. Buzzing passages really forces one to center the notes. We want to always play at the center of the pitch for the most resonant, beautiful tone. Pitch bending exercises, played on the horn, are also very important exercises toward the development of a focused, centered pitch.

Accuracy. Often repeating a passage just played (and missed!) on the horn on the mouthpiece alone will show exactly how the passage was missed (overshooting intervals, scooping notes, etc.). Practice for accuracy on the mouthpiece.

As a footnote, always strive for a focused, “buzzy” buzz on the mouthpiece.

7. Don’t Forget to Warm-Up.

This is an important discipline around which there can be no short cut if a great horn tone is a goal. Warming down is also a good idea too!

8. Occasionally You Really Do Have to Think About Big Changes.

There are good, solid reasons why very close to 100% of professional horn players play 2/3 upper lip. Stray too far from this basic proportion and the resulting serious low range and tone problems may require a major change.

If a hornist has a good tone but a low placement, it is certainly possible to play a lot of horn literature without making a major change. It probably is however holding them back from being the player that they could be. There must be a little self-analysis; a player needs to first realize clearly what goals they have and how the embouchure may be holding them back in relation to those goals. I never force changes on a student; I try to remain practical and goal oriented, and let the student think it all over carefully.

Most players won’t need to make a major embouchure change of the type I did myself (twice!) but it may be something that is needed to reach a higher level.

9. Sharpness in the High Range is Often Not Embouchure Related.

First, an observation: many horn players, especially less accomplished horn players, tune the F side much lower than the B-flat side on the double horn, which will cause the high range to be sharp. The topic of tuning a double horn seems to be much more of a mystery than it should be.

The first step is to match the tuning of the F and B-flat sides of the horn. This is most easily accomplished by matching the two sides of the horn on C, third space. For most models of double horn it is best to start with the B-flat horn on this note, tune it exactly in tune using the main slide, and then match the F horn to the B-flat horn.

Double horn models do vary in tubing arrangement. The main slide on a double horn will always be the first one you come to if you follow the tubing in from the mouthpiece. You will have at least one additional slide (besides the valve slides) that controls only the F side. Another common design has two F horn slides, however, and some also have yet another slide that controls only the B-flat side of the horn.

Another way to check the balance of intonation between the F horn and the B-flat horn is to first carefully tune a written C in the third space on the B-flat horn, using only the main slide. Then tune a G on the second line by adjusting ONLY an F-horn tuning slide, of which again your horn will have one or two, depending on the wrap. *Tune the F side to the B-flat side.* Open B-flat horn notes such as C on the third space and F on the top line should be the very best notes on your horn, ones that are never sharp.

Many seem to get stumped at this point, as they know their B-flat side is sharp on these notes but they don't have a separate B-flat horn tuning slide available to lower the notes or the slide is pulled out all the way. Either situation is however not a problem when one realizes that the F side is *flat* relative to the B-flat side. *Push in the F side* so that both sides match and *then pull the whole horn down* to pitch with the main slide.

At this point adjust the valve slides. Once the horn is completely in tune with itself you should not need to adjust any slide other than the main slide in an ensemble situation. If this tuning method resulted in drastically different slide settings than you are accustomed to using be sure to check yourself with a tuner frequently as you may have been fighting your horn and not playing in its true tonal center for quite some time.

A more complete description of how to tune a double horn may be found on the Internet at http://www.public.asu.edu/~jgerics/double_horn.htm

Selected Horn Pedagogy Resources

- Farquharson Cousins. *On Playing the Horn*, 2nd ed. (Caron).
- Philip Farkas. *The Art of Brass Playing* (Wind Music).
- _____. *The Art of French Horn Playing* (Summy-Birchard).
- Fred Fox. *Essentials of Brass Playing* (Volkwein Bros.).
- Douglas Hill. *Collected Thoughts on Teaching and Learning, Creativity, and Horn Performance* (Warner Brothers).
- William Robinson. *An Illustrated Advanced Method for French Horn Playing* (Wind Music).
- Frøydis Ree Wekre. *Thoughts on Playing the Horn Well* (Reistad).
- Milan Yancich. *A Practical Guide to French Horn Playing* (Wind Music).

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