

# Gaining the Upper Hand on Teaching the Right Hand for French Horn

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What's so hard about putting the right hand in the horn bell? Plenty, if you are starting a young student. Playing with the wrong hand position in the bell is endemic among young horn players. Of course there are degrees of wrong. After having taught hundreds of beginners as well as having seen various degrees of success and approaches by many band directors, I consider myself in a privileged position to offer suggestions on this topic. There are two main considerations that must be addressed in approaching the right hand in the bell. First, what is the correct position, and second, how best to achieve this for young students?

## **Lessons From History**

A short history is instructive in helping us form an opinion on the proper position of the right hand. In the mid-18<sup>th</sup> century, prior to the invention of the brass instrument valve, horn players began to insert the right hand into the bell to change the pitch of the instrument by opening and closing the opening to the bell. Anton Joseph Hampel is generally credited with having developed a technique, somewhere between 1750 and 1760 which was initially applied to the (valveless) natural horn. This technique,

known as hand-stopping, allowed notes outside of its normal harmonic series, producing a fully chromatic scale.

When valves were first developed they were used only as a quick crook change and applied to the left hand because most of the action was still with the right hand in the bell. This is why the horn is the only left handed instrument in the orchestra. In addition, composers were slow to adopt fully chromatic horn parts that would have been difficult to play on the hand horn. There was also a long tradition of teaching the natural horn first before going on to the more expensive valve horn. Two of the greatest pedagogues in the latter part of the nineteenth century (Oscar Franz and Henri Kling) begin their methods with natural horn, proceeding to hand horn and finally valve horn half a century after the invention of the valve.

## **Pitch and Hand Position**

The point of this history is to show that the hand position was always applied in the context of changing pitch through hand stopping first and later applied to playing the valve horn. This is true both chronologically in history and by pedagogical choice even after the development of valves. Therefore

the hand position must reflect its hand horn origins. An historically correct hand position begins with the mandate for changing pitch. Kling expands on this mandate, "The player must endeavor to produce these 'Stopped Notes' as clearly as possible, and the difference in tonal quality between these and the 'Natural Tones' must be equalized as much as possible; the 'Stopped Tones' must not sound as though a cloth had been introduced into the instrument." The mandate to change pitch must also include a minimal difference between open and closed tones.

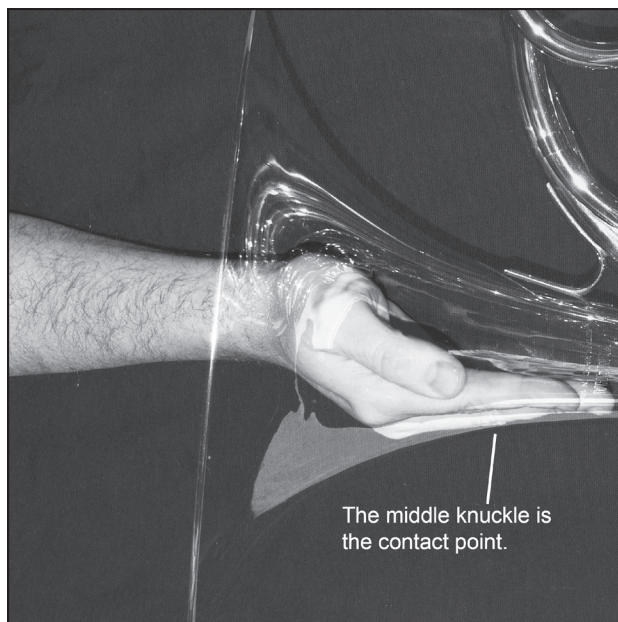
What kind of hand position does that translate to? Because of a resurgence in historically informed performance on the natural horn, there is little doubt that the hand position should be about a quarter step flatter than with the hand out of the bell. Too far out and the tones are too dissimilar. Too far in and the tone is too covered. Extending the inside of the convex bell with a concave hand at a spacing of about two inches produces a sound that is neither too open or closed with a stable scale—particularly in the upper register. In order to facilitate quick pitch changes outside the natural harmonics, the hand must open and close like a door where

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the knuckles act as hinges. Modern professional horn players can use the same hand movement to fine tune individual notes, produce a tightly stopped brassy sound or “echo horn” with a loose seal of the bell that gives the impression of distance. The same movement is also used at the periphery of the range with the hand being more open in the low register so the notes are stronger and clearer and more closed in the extreme upper register to stabilize the pitches.

### Good Hand Position

Ideally the hand should also be in a position to hold the horn off the leg or to stand. (There is a small and waning school of horn playing that uses a different hand position better suited for sitting and playing with the bell on the leg.) In order to be able to hold the bell off the leg, the bell should be supported on the thumb and index finger. That puts the thumb at twelve and the finger knuckles pressed against the side of the bell at three o'clock. For most professionals, it is the middle knuckles, not the ones next to the palm that should be in contact with the bell. This common faux pas becomes painfully apparent in young horn



players with small hands who instinctively try to stop the horn bell on the diagonal (instead of perpendicular to the length of the bell) with the fingers too far in and the seal on the upper knuckles instead of the middle ones. To sum up, the optimum hand position will be historically correct and fully functional for quick hand horn movements. It will allow for standing performance, playing off the leg if desired, produce a stable and in-tune scale with a tone that has the same amount of openness as the open notes on the hand horn. These are the historic parameters that form the basis for the modern hand position.

### Typical Problems for Beginners

Given the fact that most beginners are too small for the instruments they must hold, starting them with the correct right hand position is a lot to ask. Here's why. The distance between the mouthpiece and the bell is fixed and will usually require some kind of contortion that an adult would not have to make. Most kids struggle with the weight of the horn and must initially put the horn on the leg, perpendicular to the floor because their left shoulder can't support the weight of the instrument if it is held across the chest. This can make the right arm position more difficult because it must come from a different angle at the bottom instead of from the side. Additionally, holding the bell correctly in place takes hand strength and resolve made more difficult with an undersized hand. The right hand will inevitably follow the path of least resistance and drift closed over the bell or to a point on the bell where it has no effect. This is exacerbated when students, with less than adult length legs, must sit at the edge of the seat with an inclined leg that the bell slips off of.

### Waiting Helps

It is very easy to underestimate the difficulty of getting the hand in the right position. That is why it is important to wait. If you are not successful in the first

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couple of months you will have to battle ingrained bad habits. How long should one wait and what should you do in the meantime? The best practice is to introduce the right hand position as soon as it is feasible to do so successfully. Depending on the age of the class or student, their size and strength, it's advisable to wait two to five months before attempting the correct right hand position. Before proceeding to using the right hand, the new horn player can grasp the bell around the rim toward the bottom. Starting the student with the hand out of the bell allows the student to habituate the ear to the volume and clarity of the sound without the hand in the bell. A brief, formative time with the hand out of the bell can act as a corrective to a muddled sound caused by the premature use of a poorly formed hand. There is also danger in waiting too long because the ear will habituate itself to a sound that is too open and establish a habit of ignoring the right hand. This recommendation comes from having seen the right hand introduced at every stage along the continuum from the beginning to the end of the first year. Once the learning curve has kicked in and the basics of holding and playing the horn are underway, attention can now profitably turn to the task of using the right hand.

### Listening for the Right Sound

The challenge for most teachers is that they think they have achieved success when they haven't. There are three audible signs that must be taken into

account. The first was mentioned in connection with the hand horn. The sound must be neither too open nor too closed. The second audible criteria is a clear sound. A clear sound can be independent of the degree of openness. This happens when the hand is poorly formed, even though everything looks perfect from the outside. Don't believe your eyes believe your ears if you hear a lack of clarity. This can be due to curled fingers. Ignore this common chestnut; "cup your hand like you're drinking water." This leads directly to curled fingers partially obstructing the bell and sealing with the wrong set of knuckles. Instead, have the students form the hand outside the bell with two parallel lines, the fingers and the forearm, connected by the palm in an oblique angle. Add the thumb going to the second knuckle on the forefinger to widen the tube and your odds of getting it right improve dramatically. This position keeps the ends of the fingers up against the bell wall and a uniform distance between the palm and the bell every time. The third criteria is a stable scale, particularly in the high register. The heel of the hand plays an important part in stabilizing the high notes. Monitoring this is problematic because the young student can't play high notes yet, so it's difficult to check and it can also be complicated by the size of the bell and the student's hand. Eventually it all matters, so once you begin to teach the right hand you must continue to check the hand position until you know they have it right.

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