

History of the “French Horn”

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Abstract

The “French” horn is one of the oldest instruments in history and also one of the most dramatically evolved in its time. The horn is one of the first instruments to be made of metal and used in a musical setting, and arguable the first brass instrument ever invented. This instrument has left its mark on all early genres of music, and in countless ensemble settings across the world. Originating in Europe, this instrument would travel across the developing world as it evolved with the times. One of the most versatile instruments in existence and the widest practical range of any wind instrument. The horn has a vast history that goes back further than many human civilizations around today.

The Horn, the Tool

The horn has been a crucial part of human life since the early primitive times, first appearing as instrument made of animal horn (thus the name, “horn”), known as the shofar, and lur.¹ This instrument was used in Hebrew culture and has many religious ties. The lur was a rather long instrument that was constructed from a mammoth tusk, and like other primitive horns had only a few-note range, too small for any musical implication. It was a large, curved, conical instrument that had a very loud and rough timbre.² These instruments were very decorated, and the bell would often resemble serpent heads, or other fixtures with an odd shape. Some of the specimens of these instruments from early times were also made from a bronze or light metal material. ³ Aside from the shofar and the lur, many other similar instruments would branch off in

¹ Wayne Bailey, Patrick Miles, Alan Seibert, William Stanley and Thomas Stein, *Teaching Brass*, 56.

² Barry Tuckwell, *Horn*, 5.

³ Tuckwell, *Horn*, 5.

different countries, each still very similar, and having their own impact on the sound of modern day brass instrument.

The horn we know of today branched from those types of instruments and went into European countries, and developed into a hunting horn that was used to call troupes of men (often on horseback) to hunt in large organized groups. The hunting horn was one of the most important and revolutionary tools of its time. They used this instrument to signal the beginning of a hunt, location of prey and end of the hunt. This horn was ideal because of the volume it could be played with in order to be heard throughout a forest, using a variety of calls for each designated occurrence. Like many of the early horns, this instrument continued to be made of merely animal horn for centuries and go unchanged. It would eventually be made from metal materials and become made in various shapes so a horseman could carry and play it more easily while riding⁴. In this time, the horn began to be curved in various manners, in various portions of a circle in up to five total loops.⁵ Horns of this time had very small and open bell, the flare we see today didn't appear until after several renovations of the horn's overall shape. These horns began curved just as much as an animal horn, but eventually would be bent and curved into various portions of a circle and eventually a full circle.⁶ France and Germany are the two major countries with horns that follow this trend with the *corn de chasse*, and *waldhorn*.⁷ With the addition of a widened bell flare, we see how this instrument began to develop into what we see today. In all of these instruments, there was no real set method of playing these instruments other

⁴ Tuckwell, *Horn*, 8.

⁵ Adam Carse, *Musical Wind Instruments*, 212.

⁶ Tuckwell, *Horn*, 10.

⁷ Carse, *Musical Wind Instruments*, 210

than buzzing the lips and tonguing to separate the sounds of each call⁸. The musical instrument of the horn wasn't developed until the seventeenth century.⁹

The Horn in Early Music

The horn was actually the first brass instrument to appear in an opera setting, which wasn't very long after it's development of musical purposes. This instrument began to copy literature and the usage of trumpets of this time. This is where the instruments begin to wind and curve in different designs of several loops and circles in order to play in different harmonic series and keys.¹⁰ Composers such as Cavalli and Lully began to use the new instrument in many of their works, which lead to giving the horn a permanent place in the orchestra in the 1700's.¹¹ The first record of a horn being used on stage with an opera was in 1633 with the work *Ermino sul Giordano*.¹² These instruments were used to present regal themes and moods to the plot. Horns in early operas were almost exclusively used for fanfares and stately themes to stress importance of a character or event.¹³ In the early 1700's the horn began to find itself more common place in the orchestra and theatre, especially in Germanic settings. The instrument that became most successful was the horn pitched in the key of "F", though there were several others in various other keys. This is a trend that would stand the test of time, as the majority of modern day horns are still pitched in this key.¹⁴

⁸ Tuckwell, *Horn*, 10.

⁹ Tuckwell, *Horn*, 1.

¹⁰ Tuckwell, *Horn*, 11..

¹¹ Anthony Baines, *Musical Instruments Through the Ages*, 296.

¹² Tuckwell, *Horn*, 8.

¹³ Baines, *Musical Instruments Through the Ages*, 297.

¹⁴ Adam Carse, *Musical Wind Instruments*, 213.

Early horns altered the key in which they play in by use of extensions to the leadpipe known as crooks. These devices were used by both early trumpets and horns alike¹⁵. Coming to existence in the early eighteenth century, crooks made changing key of the instrument more practical without having to change the whole instrument. The use of crooks would lead to the invention of “U” shaped adjustable slides that would add to the instruments to further allow alterations with tuning.¹⁶ At the same time of the crook came the invention of a removable or non-fixed mouthpiece for brass instrument that could be transfer from crook to crook.¹⁷

Not a “French Horn”

This instrument is commonly misconceived as being “French”, this however is more false than true. The horn was introduced to England by order of British Royalty in the 1500’s. This instrument was first played in England by Frenchman who were referred to as “those fine French horn players.” The term “French” was used to describe the players’ nationality, rather than the origins of the instrument.¹⁸ While many of the composers and settings of the horn in appear in France, this instrument owes most of it’s heritage to German development. The German *waldhorn* was more prevalent due to it’s larger bore and in that same effect, greater volume of sound and thickness of timbre. In 1815, the development of the valve would prove to be the most important innovation of the modern day horn. Valves were used in place of changing crooks, so to tubing was permanently fixated onto the instrument, and the use of the valve would redirect the airflow in order to get the desired pitch.¹⁹ Germany had much more influence over this

¹⁵ Adam Carse, *Musical Wind Instruments*, 215.

¹⁶ Adam Carse, *Musical Wind Instruments*, 217.

¹⁷ Baines, *Musical Instruments Through the Ages*, 298.

¹⁸ Bailey Miles, Seibert, Stanley and Stein, *Teaching Brass*, 57.

¹⁹ Baines, *Musical Instruments Through the Ages*, 300.

instrument than the French, especially in its later years of development. Even today some of the greatest horn makers are at home in Germany. The United States is the only country in the world that still recognizes this instrument as the “French Horn.”²⁰

The Golden Age

Known as “the golden age for horn”, the late eighteenth century is considered to be the most innovative time for the horn.²¹ Unlike trumpets, in order for the horn to play stepwise passages, the players began to put their hands in to bell. By closing off a certain portion of the bell, you could alter a pitch in the harmonic series to make it slightly sharp or flat. This would affect the timbre in some ways by dampening the sound but would allow the horn the capability of a broader range of notes, outside of those in the harmonic series, but still not every note in the chromatic series. Other tactics were attempted such as hole in the side, and larger adjustable slide, but these would prove to be to impractical given the instrument’s shape²². The horn is to be played off to the right side, with the right hand in the bell. This is still the standard playing position for all modern day horns as well. When the adjustments began to become standard, the new instrument became known as “the Hand Horn”. The difference between the power of the open notes and the muted, stuffy sound of the closed notes was a factor that no musician, regardless of talent or skill could quite hide completely.²³

As the beautiful texture and tone color of the horn began to become more noticed in the world, well renowned composers such as Mozart and Haydn are beginning to write for these

²⁰ Bailey Miles, Seibert, Stanley and Stein, *Teaching Brass*, 57.

²¹ Tuckwell, *Horn*, 31.

²² Adam Carse, *Musical Wind Instruments*, 219.

²³ Baines, *Musical Instruments Through the Ages*, 299.

instruments as featured soloist. One of Mozart's best friends and colleagues was a French horn player, thus he would write several horn concerti for horn and orchestra. These pieces are known as some of the standards in all of horn repertoire. The horn grew in popularity not only as a solo instrument, but most remarkably as a member of the orchestra. Horn were written for in pairs, a higher and a lower part. The music usually called for a horn in whatever key it was written in, so if the music modulated that horn would not play. In order to allow the horns to be heard throughout the piece, composers such as Mozart and later Beethoven, would write parts for two sets of horns, both in separate keys.²⁴ This meant that the parts, in order from highest to lowest would be first, then third, second and lastly fourth.²⁵ This trend is still common in today's band and orchestra pieces, though the instruments are now all in the same key. The beauty of these instruments was proven by the aesthetics of both what you could hear and see of these horns physically. Natural horns/hand horns from this period almost always had at least some extravagant engraving on the outside of the bell, as well as a colorful images on the inside of the bell that reflected art styles of their respective periods. This trend began in the baroque period, but would linger on into the classical period as well.

The Significance of the Valve

As previously mentioned, the Germans invented the valve, and added it to the horn in the second decade of the nineteenth century. The valved horn was much heavier and larger than the hand horn, which was the only factor that kept the instrument from springing to popularity. In the beginning stages of the use of this horn, often times there would be both hand horns and

²⁴ Tuckwell, *Horn*, 33.

²⁵ Tuckwell, *Horn*, 34.

valved horns in an orchestra at the same time. Soon realizing the superior sound quality of tone and timbre of a valved horn, both the players and the composers began to favor this instrument of the its predecessor. These horns started with only one or two valves, but eventually developed into the standard three and four valved instruments we see today. Valves replaced crooks, allowing new sections of tubing to be accessed and shut off at different times to allow for a more full tone in all areas of the harmonic series in several different keys.

There were two types of valves that are used for brass instruments, piston and rotary. Piston valves are cylindrical shaped that are longer than they are wide, and move vertically inside of a valve casing. These valves are typically spring loaded from inside the valve in the top or bottom. The rotary valve is also cylindrical, but spins around the center, being held in place by a rod in the center. These valves are spring loaded externally by linkage from the key to the valve. Piston valves were more commonly used on earlier horns and in France. Germany would use rotary valves, which is yet another attribute than can be traced back from modern day horns.²⁶ The rotary valve horn is much more manageable for the instrument and practical due to the mechanics of the embouchure as well as the set of the instrument's tubing. There's one other type of valve that was almost exclusively used on horns, and less commonly on trumpets, the vienna valve.²⁷ This is a valve that is made up of two separate cylinders that close off and open the air stream, each on a different side of the slide they're functioning with, the bottom of the valve becoming external when engaged. These valves are also spring loaded from within. The nature and placement of the spring made piston and vienna valves too slow to manage and produce a good sound, thus the rotary horn would take over popularity with horn players and

²⁶ Adam Carse, *Musical Wind Instruments*, 223.

²⁷ Tuckwell, *Horn*, 49.

manufacturers.²⁸ The reaction of the rotary valve is much more desirable to the player, than other types of valves due to the ease of response.²⁹

Composers such as Berlioz, Gavaert, and of course Wagner were among the first composers to use the valved horn regularly in their writings. Schumann, Berlioz, and Wagner actually scored for both a set of valved horns as well as a set of hand-horns in their scores.³⁰ Beethoven was one of the first composers of the late classical period to feature the horn and showcase its true sound.³¹ Beethoven wrote solo pieces for horn and orchestra, and included both hand horns and valved horns in his later compositions.

The Modern Horn

Modern day horns are very interesting instruments being that they are the only wind instrument that can be in more than one key at a time. A “single horn” is exactly what it sounds like, meaning in a single key, the two most common single horns being in F and Bb. The horn in F is the most practical with range and produces the most sought after dark and mellow sound, while the Bb horn is the ideal size, with shorter tubing that makes the notes easier to play. Today, the most common horn is known as a “double horn” which allows the player to switch back and forth between the two instruments to get the best sound in the easiest approach for the player. This type of horn was invented in the late nineteenth century and is accredited to Ed. Kruspe, who’s design of horn is still replicated by numerous horn manufacturers today. Less commonly used as the double, in the 1960’s came the creation of a triple horn, which is keyed in F, Bb, and

²⁸ Tuckwell, *Horn*, 50.

²⁹ Birchard Coar, *The French Horn*, 76.

³⁰ Adam Carse, *Musical Wind Instruments*, 223.

³¹ Birchard Coar, *The French Horn*, 42.

includes an F Alto side. The modern day horn is in numerous ensemble settings and is one of the most beautiful sounding brass instruments. The dark mellow sound the horn allows it to play alongside woodwinds in a Woodwind quintet, and it's brassy more regal capabilities allow this horn to be used in a an expected setting with other brass instruments. Both in bands, and orchestras, the horn is one of the most virtuosic instruments in existence with a history that is truly unique.

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