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# Natural Horn Performance in the 19th Century

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The natural horn was an instrument with a distinct sound that garnered much popular appeal in the 18<sup>th</sup> and 19<sup>th</sup> century. The natural horn was a valve-less brass instrument that was quite popular during the 18<sup>th</sup> century. The natural horn evoked a very particular aesthetic: light, nimble, virtuosic, “natural”, voice-like. Then the new invention of valves was applied to brass instruments in the early 19<sup>th</sup> century. Because of the highly pleasing sound produced by the natural horn the application of valves to the instrument met a fair amount of resistance. So the natural horn continued to be used well after the invention of the valve horn. My thesis is that this happened due to the influence of tradition, performers, and a particular naturalist aesthetic that persisted from the classical period into the romantic.

This thesis shows the interaction between performer and composer, how both affect each other, and how societal and traditional aesthetic ideals can inform our work as musicians. It is necessary to understand these issues for better overall musicality on the modern horn, for example, what makes certain things idiomatic. Also, performers can make more informed decisions on phrasing and dynamics based on what the composer would have wanted on a natural instrument. However, in order to fully

understand why the natural horn persisted we have to understand the history behind the instrument.

The natural horn was still a hunting horn when first introduced into the orchestra. Only capable of sounds produced by its particular tube length, a different horn was necessary for each key. The horn became more practical with the invention of crooks, which were separate rings of tubing (to be put into one corpus) at varying lengths that could produce all keys (Morley-Pegge 20). The crooked horn moved the horn from the hunt to being an orchestral instrument (Fitzpatrick 33). The development of hand horn technique also assisted in this transition.

Hand horn technique evolved because of the lack of chromatic notes on the natural horn. Partial notes can be bent somewhat with the lips, but it is more effective with the hand. Bohemian horn players of the Prague-Dresden axis brought hand horn technique to new heights in the early to mid 18<sup>th</sup> century. Of these players the most famous is Anton Hampel, who is often credited with the invention of hand horn technique. He most likely did not “invent” this technique, but rather codified it and was the first great pedagogue of hand horn. He paved the way for the great hand horn virtuosos of the classical era, and by the time of his death the horn was a widely accepted solo instrument, planting the seeds for the hey-day of the virtuosic hand horn period (Fitzpatrick 89).

The hand horn achieved great popularity throughout Europe as a solo instrument in the late 18<sup>th</sup> century. Modern audiences might have a difficult time believing that virtuosic performance is possible on the hand horn, given the often clunky performances heard on period instruments. However, this instrument was popular as a solo instrument in the late 18<sup>th</sup> century precisely because horn players achieved a great deal of dexterity to the point where they were playing highly virtuosic runs and leaps like a violin. The skill of the performers, particularly in Dresden, led to a great deal of solo horn literature. Both composers and performers in Dresden were interested in new uses of the horn in an extended range, and tones outside the harmonic series (Hiebert 112).

Dresden was a hub of soloistic and virtuosic horn playing. One reason for the emergence of the virtuosic horn player in Dresden is rooted in the fact that doubling on horn and trumpet was not permitted. This allowed for players to concentrate on their horn playing skills, leading to strong solo playing, which was furthered by composers writing works that exploited the particular talents of the players at hand (Hiebert 113). So the composers and performers had a circular influence on each other, in that highly skilled performers inspired composers to write more complex music for the horn, and the creation of more complex music prompted horn players to develop virtuosic technique.



Composer wrote pieces that exploited the horn's virtuosic possibilities, and because of the performers' increasing technical proficiency, the horn found a firm place within the Dresden orchestral and operatic tradition. Composers increased the number of keys the horn played in, which also exploited the different timbres achieved with different tube lengths (Hiebert 115). Increasing the keys horn was written in made horn a more stable and permanent member of the orchestra. The role of horn also evolved and got more complex as it was involved in more movements, both slow and fast. Over the course of the 18<sup>th</sup> century composers not just in Dresden but all over Europe began to see the horn as an essential part of the orchestral texture (Hiebert 121).

At the root of many of these changes in how the horn was written for, performed on, and perceived was the development of hand horn technique. One example of a piece with this technique written by a hand horn player is Hampel's Concerto in D. In the second movement he has a scalar passage down two full octaves that would have required a lot of advanced hand stopping technique. He used hand stopping primarily in low horn playing in slow movements, and this is exploited in his concerto (Hiebert 129). This is just one example out of many solo pieces that have been obliterated by history. Hampel may not have been an outstanding

composer, but his works are very important for understanding the development of hand horn technique.

The next great virtuoso of hand horn was Giovanni Punto. Hampel has already been mentioned as the great Dresden pedagogue of hand horn technique, and his influence continued to be felt through his famous student Giovanni Punto. Mozart and Beethoven both wrote for Punto, and he also wrote solo compositions that all required the hand stopping skills he learned from Hampel (Hiebert 122). Punto was one of many performers writing solo compositions for themselves to showcase their skills, like virtuosic runs on hand horn.

The virtuosity achieved and displayed on hand horn gave the instrument a very favorable reputation in Europe. Many thought highly of the tone and musicality achieved by the instrument. 18th-century music critics often spoke of the mellifluous tones of the natural horn soloists of their day. For example, in 1773 Charles Burney described Willem Spandau as:

[playing] in all Keys, with an equality of tone, and as much accuracy of intonation in the chromatic notes, as could be done on a violin . . . he rendered an instrument which, from its force and coarseness, could formerly be only supported in the open air, in theatres, or spacious buildings, equally soft and pleasing with the human voice. (Fitzpatrick 167).

It's shocking to realize now, but the skill achieved in natural horn playing in the 18<sup>th</sup> century was such that the horn actually achieved greater popularity than the violin as a solo instrument with the public (Fitzpatrick 178).

The great popularity of the instrument also had to do with the aesthetics of the 18<sup>th</sup> century and the "stile galant". The aesthetics of that time had naturalism as the central goal, with simpler textures and lyrical melodic lines. The classical aesthetics of the 18<sup>th</sup> century moved from the complex polyphony of the baroque to more homogeneous sounds. Dense contrapuntal motion gave way to simpler melodic lines supported by more vertical harmonies.

Another important consideration for the 18<sup>th</sup> century was the aforementioned strong association with the human voice. The instrument has a wide variety of colors, a smooth quality (in order to negotiate the timbral changes musically), and overall soft tone (Fitzpatrick 179). This new style of a more focused melodic line harkened to the idea of vocal music, the most "natural" of all music. Instrumental music of this time often imitated the human voice. All music, not just vocal music, was preferable in a singing style. The natural horn, with all its different timbres on open and stopped notes, and light quality, was reminiscent of the human voice. Thus the beauty of the horn drew crowds, in part because the sound of

the horn dovetailed neatly with the classical aesthetics of the 18<sup>th</sup> century.

Another important part of the naturalism of the 18<sup>th</sup> century had to do with the “pastoral”, or countryside. Not only did instrumental music reflect the human voice, but it also reflected country and hunt sounds/dances. The horn still had very strong associations with the hunt and peaceful country life. For an 18<sup>th</sup>-century concert attendee the pastoral feel could have been very nostalgic and poignant, harkening to simpler times, as it often does today. These strong associations with singing and pastoral or country themes resonate so deeply with perceptions of the horn that to a certain extent they persist today with the valve horn. We still perform classical works and struggle on our large clunky instruments to achieve the light singing quality achieved by the natural horn. The horn is still associated with the hunt and with “singing” lyrical writing. These are residual aesthetics from the hey day of the natural horn, so it is no surprise that the natural horn continued to be used even after the valve horn was invented in 1815.

In 1815, it was announced in the *Allgemeine musikalische Zeitung* that Heinrich Stölzel had devised a mechanism for the perfection of the *waldhorn* that provided a chromatic scale of all open tones similar in sound to natural tones for almost three

octaves. This was made possible by two levers for the right hand (Baines 206).

The new instrument met a fair amount of resistance in its early years throughout Europe. This was partly because of serious mechanical defects that affected tone and attacks. However, even when in mid-century these defects were taken care of there were still very strong prejudices against the valve horn (Morley-Pegge 3).

Part of the reason why there were still strong prejudices against the valve horn was because of the deeply engrained history of the natural horn in European life. The natural horn held strong associations with the hunt and country life in general. The stopping technique and hand horn had pastoral associations, since the natural horn was rather recently an outdoor instrument used for hunting horn calls. This meant a lot to the urbanizing European middle class. The hand horn recalled these memories of country life and already had a fair amount of sentimental value for the bourgeoisie.

However, the primary reason for strong prejudices against the valve horn is rooted in aesthetics. As previously stated, the aesthetics of the 18th century had deep roots in naturalism. The natural horn exemplified these aesthetics, in particular with the relationship to the human voice. Out of all instruments, it had the closest aural representation of the human voice.

The idealization of the human voice at this time definitely extended to instrumental music, as shown by Georg Sulzer in 1792 “...those instruments are superior which are most capable of imitating all the tonal nuances of song as produced by the human voice.” (Rogan 53). The natural horn as compared to other instruments of the time did effectively imitated the human voice, which had a lot to do with its popularity as a solo instrument during the last half of the 18<sup>th</sup> century.

The singing quality of the natural horn was seen to be its most attractive trait. The idiomatic compositional dialect for the horn was constantly being tied to the voice. Even according to Beethoven’s composition teacher, Johann Georg Albrechtsberger “The horn should sing: here lies its most beautiful, singular, truly magical strength.” (Rogan 54). It was even common practice for horn teachers to recommend studying singing to their pupils as a base to build their horn playing on. For example, in his horn method c.1810 Joseph Frohlich recommended that “Whoever therefore should want to accomplish anything at all on this instrument should simply study the school of singing.” (Rogan 54).

The natural horn with its timbral changes between stopped and open notes showed the variety of tone colors possible to achieve by the human voice. Also, as a result of how the performer had to approach the instrument technically with right hand

movements in the bell, he had to blow through lines and compensate for the timbral changes by playing stopped notes more softly and open notes more stridently. There was delicate taste needed in playing, and a far smaller amount of tubing in the instrument. This gave the natural horn a delicate vocal feel lost on the sturdier and assertive valve horn (Morley-Pegge 26).

All of these aesthetic ideals tied in with the idea of singing and the human voice were thrown into confusion by the valve horn. Johann Friedrich Reichardt says that the invention of such artificial instruments where you can more easily play and produce various embellishments further distance instrumental music from vocal music (Rogan 54). In general, advocates of the natural horn criticized the valve horn because of its absence of vocal shadings (Rogan 55).

In the *Allgemeine Musikalische Zeitung* from 1837 Gottlieb Reissiger asks what has been gained from the valves and keys lately invented: "They spoil and distort the natural characteristic tone" he wrote "and lead us to the point where we soon shall...not be able to properly color and tint...(Rogan 55)." The uniform quality of all open notes on the horn made it seem a lot more mechanical and bland. On the other hand, the natural horn's strongly played stopped notes created dramatic effects through timbral dissonance (Rogan 63).

However, not everyone was a strong natural horn advocate; some argued on the side of the valve horn. Most of the argument for the valve horn didn't center on the absence of stopped notes, but rather focused on the technical facility provided. The valve horn made it possible to create quicker changes of fundamental pitch or key instead of crook changes on the natural horn (Rogan 56).

The argument in favor of the valve horn seemed to be more of a justification of the instrument than a strong vote in favor of a huge aesthetic change. Salamon Jadassohn, in *Lehrbuch der Instrumentation* (1889), says that the valved horn is nothing more or less than a natural horn which is capable of being pitched in six other keys. He also recommends continuing the same idiomatic language of the natural horn, saying that fast diatonic or chromatic passages will never have a good effect even though they are possible on the new instrument (Rogan 56).

Even Henri Kling in 1898 said that "...the chromatic horn is in reality nothing more than a perfected natural horn." (Rogan 56). This shows the resounding influence of the natural horn on aesthetic tastes, almost all the way into the 20<sup>th</sup> century. The valve horn was really seen as an instrument that should be treated idiomatically like the natural horn, but would just be easier to manage. In Berlioz's treatise on instrumentation he says



One should not forget, that in the hands of a skilled player, the valved horn is capable of all the stopped notes possible on the conventional horn...it is possible to play a complete scale without one single, open note. (Rogan 58).

Part of the controversy was also that horn players were playing parts originally written for natural horn on valve horn.

Berlioz also states that

Many composers have an aversion toward these new instruments...as they have...been used by many horn players when the conventional natural horn is called for, the players finding it more comfortable to play the stopped notes with the help of this [valve] mechanism as open notes.

(Rogan 58)

Players were not respecting the original wishes of the composers. Schubert also feels strongly about the neglect of stopped notes, and views this as the result of the indifference of players (Rogan 59). So part of the controversy surrounding valves, and in turn aesthetics, was that players were neglecting the wishes of composers in regard to stopped notes. Some responsibility is placed on conductors to keep tabs on what their performers are up to. Schubert says in *Über den Verbrauch und Mißbrauch der Ventilinstrumente in Verbindung mit anderen Instrumenten* (1865)

If the author dare speak a word of reproof here, this censure is addressed directly at those conductors who tolerate the use of valved instruments in orchestral works in which horns and trumpets without valves are indicated, and the use of valved horns pitched in F to replace all possible crookings of the natural horn...one should at the least require the horn players to play all given stopped notes...in a corresponding manner, especially when it is clear that the composer has assigned particular importance to a stopped note. (Rogan 59)

Through this we see that towards the end of the 19<sup>th</sup> century the controversy lay not just in the instruments themselves, but in how they were played. While it could be acceptable to play a valve instrument, it was unacceptable to ignore the style of natural horn playing and disregard naturally occurring stopped notes.

We have discussed various topoi, or aesthetic issues at hand about natural horn. Now I will use a few musical examples from my lecture recital to further demonstrate the idiomatic writing for natural horn in the 18<sup>th</sup> century and 19<sup>th</sup> century. The first musical example comes from the standard canon of horn repertoire, the Mozart Fourth Horn Concerto in E flat, movement three, Rondo Allegro Vivace. This piece demonstrates the two basic topoi that the horn illustrated in the 18<sup>th</sup> century: the hunt and

the human voice. This piece from the 18<sup>th</sup> century illustrates idiomatic writing for natural horn, and hence is a great jumping off point for the compositions that occurred in the 19<sup>th</sup> century. The 18<sup>th</sup> century galant style is well represented in this concerto, with strong associations with the pastoral themes of the hunt and peaceful country life. Mozart definitely takes advantage of this aspect of the horn in all his horn concerti, and it is particularly defined in the rondo of the fourth concerto.

On the second page of the attached packet there is the main theme of the rondo, a typical “hunting horn” call. The first theme is the main theme of the piece, it is predominantly open (41 open tones 5 stopped). In terms of phrasing this theme can be broken into two four bar phrases, both of which begin with reiterated open tonic notes. The first phrase can be further broken down into two bar “phraselets” that begin with reiterated open tonics. All of the most important notes in this theme are open tones. Even when two downbeat stopped notes do occur, they are on weak bars within the “phraselets”.

Another important aesthetic to the hand horn for the 18<sup>th</sup> century that is shown in this rondo was the strong association with the human voice. The second theme you see (page two) is the main theme of the B section. As a result of the more stepwise motion (and hence singing quality) of this theme there are far less

open tones than in theme one (28 open, 16 full stopped, 4 half stopped). The ratio of open to stopped is far closer to fifty/fifty. Stopped notes make up the second half of the first and third four bar phrase. This theme also ends with a stopped note. The utilization of half stopped (covered) tones occurs in this theme, usually as a lead in into fully stopped tones.

The greater variation in tone color in this second theme harkens more to a singing human voice than an outdoorsy hunting horn. This similarity to the human voice happens because of the preponderance of stopped notes, which occurs because of stepwise motion perfect for singing. The stopped tones and covered tones also lend a softer tone to this legato theme, which gives this theme a singing quality, as opposed to the brassier open tones of the first theme.

These strong associations with singing and pastoral themes resonate so deeply with perceptions of the horn that to a certain extent they persist today with the valve horn. The horn is still associated with the hunt and with “singing” lyrical writing. This is why I started with a perfect example of idiomatic natural horn writing from the 18<sup>th</sup> century.

The Mozart is a great example of traditional writing for natural horn and to a certain extent uses historically traditional roles of the horn to evoke nostalgia for the pastoral for an 18<sup>th</sup> century

audience. Another piece that utilizes this instrument to evoke nostalgia for traditional roles of the horn is the Brahms Horn Trio, opus 40. The specific musical example is the third movement of this piece. The third movement, marked “Adagio mesto” or mournful adagio, is the crux of the entire piece, and also has the most important use of half steps or stopped notes. The topoi of this movement would have to be the expressivity of stopped notes and nostalgia in personal terms and in terms of archaic musical devices. This movement is the emotional center of the piece and it expresses the main subject matter: Brahms’ grief at the death of his mother and his urge to honor her life.

In terms of instrumentation, Brahms already seems to be paying homage to his childhood; he played both natural horn (*waldhorn*) and violin as a boy. In the third movement in particular he seems to be looking back to his childhood in the “lullaby-esque” melody. However, this movement isn’t simply “looking back” in a personal sense- it is also looking back historically in the use of a fugue subject, mimicking much earlier contrapuntal writing. This manner of “looking back” historically is akin to what we saw in the Mozart with the topoi of the hunting horn.

The archaic historicism of contrapuntal writing makes the use of the natural horn most appropriate as opposed to a valve horn, if for no other reason than it was the only horn in existence

when contrapuntal music was contemporary. However, there are also plenty of artistic reasons for the use of the natural horn. This movement exploits the melancholy expressivity of stopped notes and the tension held within them. Stopped notes have a darker and more constrained quality to them appropriate for an *adagio mesto* movement.

To fully understand the artistic motivations behind the use of stopped notes we need to understand the layout of this movement. On page three of the attached packet there is the third movement of the Brahms Horn Trio, a basic ternary form with the first A section being measures 1-18, section B measures 19-44, section A measures 45-85, and measures 76-85 functioning as a coda.

In the first A section we are introduced to theme 1, which has 23 notes in total, 10 of which are stopped. Two of the three stopped notes in measure one function as passing tones; however, the other stopped note falls on a strong beat, one of two important notes in the basic melodic contour in measure 1. The next important melodic stopped notes are in bar 8, the highest notes of the whole theme. The melody lands on a high stopped a flat on the downbeat of bar 8, and it is reiterated on the third eighth note of that bar. The second strong beat of bar 8 is also stopped, then theme one decrescendos and dies away with three open notes in a row.

Stopped notes occur quite frequently even from the outset due to the repeated half step motion in the lullaby melody. They become the focal point of the melody as opposed to the notes that are ignored or glossed over as passing tones. So what by some would be considered a fault of the horn is exploited as an expressive device by Brahms.

The stopped tones gain importance over the open tones for a good portion of this movement, and when played piano the open tones have an empty emotionless feel to them due to a lack of tension, as in the quasi-fugato section. In this section the open tones call back to simpler times in terms of less hand horn technique. They lend an archaic “churchy” feel to this fugal section.

The quasi-fugato theme in section B has 36 notes in total, 7 of which are stopped to some degree. The proportion of stopped to open is clearly much smaller than in theme 1 of section A. Three of them do fall on strong beats, however only two of them are important melodically. The third “downbeat” stopped note is an instance of phrasal displacement with the bar line that occurs because of rhythmic diminution of the theme. Over all this theme is mainly open, the phrasing within the theme is very long, and there are no dynamic variations throughout. This theme is definitely much flatter than the main theme of section A which has smaller phrasal structure legato markings and varied dynamics.

Then there is the second iteration of section A, which introduces us to a new theme. This theme has a total of 10 notes, two of which are stopped, one of which is only half stopped. This theme is by far the simplest one in melodic contour, rhythm, and dynamics. All the notes are open except the last two, the penultimate note is simply a passing tone, and the final note is a held half stopped A. This theme's sparseness is definitely outlined clearly with all the open tones.

As the music progresses the open tones are swallowed by more stopped notes, leading to a great contrast at the climax of the movement. The climax releases a great deal of emotion, and seems to be the final true cry of grief and hence release of the pain felt in this piece. The horn crescendos up a stopped tone arpeggio to a fortissimo open high B flat (concert E flat) allowing the open tone to ring forth in the most overpowering moment in the whole movement. The music then goes back to its original sense of melancholy with more deadened stopped pitches to close out the whole movement.

A different aspect of natural horn writing in the 19<sup>th</sup> century is orchestral writing, as opposed to solo or chamber music writing. A number of 19<sup>th</sup> century composers stuck to natural horns in their symphonic writing for many similar aesthetic reasons already discussed. Those aesthetics being: the topoi of the pastoral



countryside, including hunting horn calls, and similarities to the many shadings of the human voice with the different open and stopped timbres. The main thing that differs between orchestral music and solo music is the importance of the key in orchestral music. Often there are crook changes for different movements within a symphony, and each crook has a distinctive tone color. My musical examples are in a variety of different keys that vary from light to dark, to illustrate the contrast found in these different crooks.

The first excerpt is from Beethoven's Eighth Symphony, third movement in F Major. It is the first horn part from the first and second horn duet in the trio. This symphony was written in 1812, right before the invention of the valve horn. It is a good example of standard orchestral classical horn writing, and in that sense is more conservative than other Beethoven symphonies from that period. The key is F Major, which is strongly on the lighter end of the scale in terms of crook tone color.

This excerpt is typical light orchestral classical horn writing, as it has only thirteen stopped notes and three half stopped in four lines of music (page four of the attached packet). It is all in the higher range of the instrument, where the open tones get closer together and provide for smoother open tone melodies. This is a

very dance-like and graceful trio, and is simply a good jumping off point for typical orchestral natural horn writing.

The next excerpt is back in the familiar key of E flat from the first half of the recital, the third movement of Beethoven's Ninth Symphony, in the fourth horn part. This symphony was written in 1824, right at the cusp of the valve horn era. There is some debate as to which instrument Beethoven wanted to be played for his work, and even when the piece was first being introduced to the public we have record of it being played on both instruments.

This excerpt has a lot more meat to it when on natural horn due to the variety of tones produced by stopping. There are a total of 32 stopped tones (appendix page 29), including a scale on the flat sixth scale degree, causing almost every pitch in this major scale to be stopped. Such difficulty in a fourth horn part may seem strange now, however, virtuoso hand horn parts were usually low horn parts, where as high horn parts were generally easier. Hence, this excerpt is a perfect example of low hand horn virtuosity. The timbral variety of the instrument is present, while showing the technical facility displayed on natural horn and the smoothness that composers were looking for.

The longest horn from my list of excerpts is C basso for Brahms 1<sup>st</sup> Symphony, fourth movement, in the first horn. The key of C is a much darker crook on our scale of light and dark keys.

This is the first excerpt written squarely in the valve horn period of the late 19<sup>th</sup> century, however, Brahms indicates *waldhorn* on all his scores, like the horn trio. This excerpt is a typical lyrical alpine horn call, that can easily be imagined as being heard coming from a distant forest.

This is very simple and conservative, yet beautiful horn writing, especially when heard on the proper crook. The feel of the music is brought across from the darker and more ponderous nature of the C-basso crook. This excerpt is all open tones, but as a result of being played on this crook has more of a reflective and naturalistic feel.

In Brahms, the darker color lends a pastoral color to the music, and a feeling of distance, while in Mendelssohn the darker key is used in a more soloistic and voice-like manner. This next excerpt is from Mendelssohn's Third Symphony, the adagio third horn solo duet with the celli, in the key of D. As a darker key on the natural horn, D is a very good timbral match between the celli and horn. This excerpt is more intermittently laced with fully and half stopped tones in comparison to the other excerpts. In that way it resembles the soloistic music examples a little more. This excerpt seems like it could be straight from a solo piece except the key of D is far more common in orchestral writing because of its darker

nature, and it's more difficult to control because of the longer crook length.

This excerpt displays a much more soloistic and voice-like treatment of the natural horn in orchestral music. With the flowing melodic line weaving in and out of stopped and open tones we get the resemblance to the human voice that is often spoken of in reference to this instrument.

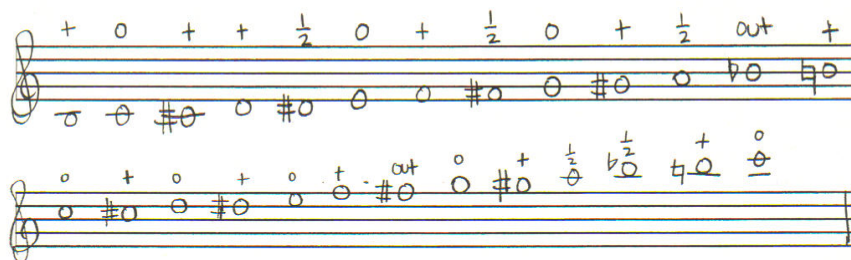
The smallest length of horn yet discussed is the last musical example in the key of G. The last excerpt is from Maurice Ravel's *Pavane pour une Infante Defunte*, which is from the French school of writing. This is a much smaller length of tubing and hence a much lighter crook than any other we have explored thus far. This light crook fits in well with the Parisian school of playing, which treated the natural horn more like a woodwind instrument and with much more grace.

This excerpt has a rather ethereal feel, especially when performed on the proper crook, since it is in the higher range of the instrument. In the climax of the excerpt the instrument hovers in this high range, allowing for stepwise open tone motion. This also helps to create the delicate ethereal feel that is often felt from French classical music, especially in terms of natural horn playing.

The natural horn has had an enduring aesthetic appeal and hence enduring repercussions on our playing. Singing quality,

stopped notes, the hunt, and true lyricism were all present in ideal natural horn playing. Its importance was such that the instrument itself and hand horn technique endured through the beginning of the valve period. A combination of virtuosic soloists, 18<sup>th</sup> century aesthetics, and tradition caused this instrument to persist through the 19<sup>th</sup> century and highly influence horn playing even up to present day.

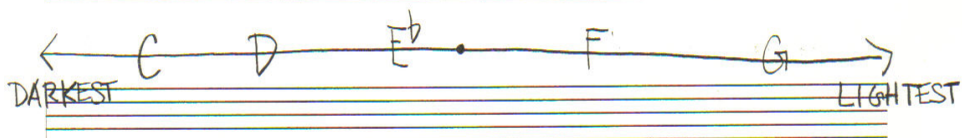
## Hand Positions :



o = open + = full stopped  $\frac{1}{2}$  = half stopped out = hand out of bell



## Key Tone Color :



## Mozart Horn Concerto No. 4 Rondo - Allegro Vivace

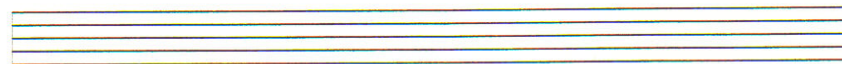
## Theme 1



## Theme 2



□ = full stopped    ○ = half stopped    △ = out





## Brahms Horn Trio

## Waldhorn in Es

5

**A** Adagio mesto *theme 1*  
*pespress.*

*quasi-fugato theme*

*sempre p e legato*

*dim.*

**B** *cresc. un poco stringendo*

*poco a poco - in tempo*

*pespress.*

**C** *theme 2*  
*molto p*

*poco accel.* *f passionato*

**D** *coda* *poco rit.* **Tempo I**

*pp* *sf* *v*





Beethoven 9 mvmnt 3

Corno IV

8

65 *Andante moderato* 14 *Clar. I* *Adagio*

*Fag. I* *pp* *dolce*

85

93 *Solo* *cresc.*

99 *Lo stesso tempo* *p*

103 *cresc.* *p*

110 *cresc.* *cresc.* *p*

115 *cresc.* *p*

119 *più p* *pp* *cresc.* *f*

122 *f* *f* *f* *A* *dolce*

127 *f* *f* *f* *2*

133 *B* *pp cresc. p* *cresc.*

139 *p* *7* *cresc.*

150 *C* *f* *p* *3* *f* *fp* *p* *f* *pp*

104





## Mendelssohn 3

## CORNO III.

Musical score for Horn III of Mendelssohn's Third Symphony, measures 4 to 542. The score is written in G major and 3/4 time. It features various dynamics including *p*, *mf*, *f*, *ff*, *pp*, *cresc.*, *dim.*, *sempre ff*, *allucen*, *rit.*, and *dim.*. The score includes several first endings marked with '1' and repeat signs. A section marked 'in D. Adagio. 76.' begins at measure 9, with a tempo change to 76 beats per minute. This section includes measures 9, 24, and 8. The score concludes with a final measure marked '542'.



# Pavane pour une Infante Défunte

Natural Horns I & II in G (Cors Simples)

Maurice Ravel

*Lent*  $\text{♩} = 54$   
**SOLLO**  
 1<sup>re</sup> Cor. *pp*  
 2<sup>d</sup> Cor. *pp*

*Cédez*  
*p*  $\rightarrow$  *pp* *expressif*

*En élargissant* *au Mouvement*  
*pp*  $\rightarrow$  *mf*  
*pp*  $\rightarrow$  *mf*

**un peu retenu** **©**  
*f*  
*f*  
*pp*  $\rightarrow$  *mf*  
 630

## Bibliography

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## Summary

My project is on the natural horn and its usage in the 19<sup>th</sup> century. The natural horn was a valve-less brass instrument that was quite popular during the 18<sup>th</sup> century. The natural horn evoked a very particular aesthetic: light, nimble, virtuosic, “natural”, voice-like. Then the new invention of valves was applied to brass instruments in the early 19<sup>th</sup> century. Because of the highly pleasing sound produced by the natural horn the application of valves to the instrument met a fair amount of resistance. So the natural horn continued to be used well after the invention of the valve horn. My thesis is that this happened due to the influence of tradition, performers, and a particular naturalist aesthetic that persisted from the classical period (c. 1700-1780) into the romantic (c.1780-1900). I illustrated my thesis not only through a written paper, but also through a lecture recital on the natural horn.

The natural horn developed from an instrument of the hunt into an orchestral instrument in the 18<sup>th</sup> century. The switch from outdoors to concert hall was helped along by the development of hand horn technique, which allowed for all chromatic notes to be played on the instrument. To understand the difference between hand horn technique versus playing with valves one has to understand the differences between the two instruments. There are

two primary differences. The natural horn is much smaller than the valve horn in bore size, the bore size being the size of the interior chamber of the instrument. The bell flare is also much smaller on a natural horn. This makes the sound of the instrument lighter and more delicate than our heavier modern horn. The other major difference between the two instruments is the lack of valves on a natural horn. As a result, the natural horn can't play every chromatic tone open like the valve horn: performers have to use the technique of hand stopping.

There are four basic hand positions with natural horn- open (which is our regular hand flat against bell position), stopped (which is when the bell is closed off completely with the hand), half stopped (which is when one doesn't close the hand completely), and out (which is when one takes the hand out of the bell). All of these different hand positions achieve different tone colors, ranging from bright and open to nasal or covered. This variation in tone color is exactly what appealed to many 18<sup>th</sup> and 19<sup>th</sup> century composers, performers, and aficionados of classical music.

Another variable in tone color with natural horn are the different crooks. Crooks are separate rings of tubing (to be put into one corpus- the body of the instrument) at varying lengths that can produce all keys (Morley-Pegge 20). The crooked horn moved the



horn from the hunt to being an orchestral instrument (Fitzpatrick 33).

My project demonstrates the continued presence of the natural horn by using musical examples from all over Europe that employed, or could be played on natural horn even though they were composed after the advent of the valve horn. In the paper portion I use quotations from music critics of the 19<sup>th</sup> century who spoke of the varying aesthetics of the natural horn and valve horn in addition to letters and other writings from the 19<sup>th</sup> c. Between sources from the 19<sup>th</sup> century and scholarly analyses from the present there is a strong basis to believe in the influence of performers on compositions and the importance of naturalist or classical aesthetics in preferences for the natural horn.

In my lecture recital I played a number of musical examples, some for background information on the roots of “typical” natural horn writing. The bulk of my musical examples on natural horn were in fact examples from the romantic period of western art music. In the beginning of my lecture recital I also illustrated the differences between the natural horn and the valve horn physically by showing the audience the two instruments. I also showed the difference aurally by starting out my lecture recital with a musical excerpt on valve horn which I then immediately played on natural horn.

This topic is still important today for a variety of reasons. First, to have well informed historical period performances we need to use natural instruments. It is also important in understanding writing for the valve horn, and what makes certain things idiomatic for the modern instrument. When playing older repertory it's also key for more informed decisions on phrasing and dynamics based on what the composer would have wanted on a natural instrument, which can greatly help our musicality. On a larger scale, this paper shows the interaction between performer and composer, how we affect each other, and how societal and traditional aesthetic ideals can inform our work as musicians.