Haydn and the Horn

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Joseph Haydn's relationship with the horn stands out as one of the richest in music history. With two concertos, several chamber music works, and some of the most challenging orchestral writing in the repertoire, he made an enormous contribution to the instrument. To understand the significance of Haydn's contributions better, I will begin by providing some background information on the horn in the eighteenth century. This was an era of striking transition for the horn. It began the century as an instrument used almost exclusively in the hunt where it played the crucial role of conveying information to all participants. By the end of the century the horn had become a standard member of most instrumental ensembles and was well on its way to becoming, as Robert Schumann called it, the "soul of the orchestra." Let me begin with the hunt, by which I mean the courtly *chasse à courre* in which a single animal was pursued to the point of exhaustion by hounds and men on horseback and foot. This required the coordination of a large number of participants over vast distances of dense forest. It therefore necessitated a means of communication.



Figure 1: Hardouin, *Le Trésor de la Vénerie* (1394); *Cornure de l'aide* (call for assistance)¹

1

¹ All eighteen of Hardouin's illustrations are reproduced in: Jean des Airelles, *Étude sur les Cornures. Les Plus Belles Fanfares de Chasse* (Paris, Librarie Cynégétique: 1930), 13-31.

Initially communication was accomplished with rhythmic shouts or huées, but these were quickly adapted to the corne, a small, crescent-shaped instrument that was made from an animal horn or a hollowed out piece of wood (figure 1). Although practical in size and easy to carry, the corne, as a musical instrument, was limited to one or two different pitches and thus limited in its melodic possibilities.

Changes in design beginning in the seventeenth-century led eventually to the trompe de chasse, an instrument constructed from a long conical tube formed in the shape of a hoop so that it could be worn around the body (figure 2). The trompe was adopted as the standard hunting horn at the court of Louis XIV around 1680 and spread quickly to other parts of Europe. It also led to the composition of a new repertoire of melodic hunting horn calls that would set the standard for horn writing throughout the century.



Figure 2: Johann Elias Ridinger (1698-1767); copperplate engraving showing a huntsman playing the *trompe de chasse*.

Although horn calls varied from court to court, the repertoire used at Versailles was held in particularly high esteem and known throughout Europe. La vue, a call that appears twice in Haydn's oeuvre, illustrates the basic features of this repertoire (Example 1). As with other calls in the repertoire, the melody is limited to the notes of the harmonic series (figure 3) and stays mostly in the upper register where consecutive pitches occur. The eleventh harmonic, notated as f', is played in its natural tuning which is slightly sharp compared to standard systems of intonation. The sharp f' is a distinctive pitch that occurs throughout the hunting horn repertoire.



Figure 3: Harmonic Series. Pitches notated as quarter notes are slightly sharp compared to standard systems of tuning such as equal temperament.



Example 1: *La vue.* Attributed to André Danican Philidor.

Given the hunt's role as a potent visible indicator of high standing and the passion for the activity among the nobility, it is no surprise that the horn began to appear often in court ensembles. This led to modifications resulting in the development of an orchestral horn that was distinct from the hunting horn. Some of the changes addressed practical issues, such as devising a system by which the length of the horn could be altered to allow it to play in different keys and wrapping the tube tighter make the overall shape more compact. One discovery in particular had an enormous impact on the subsequent development of the horn: this was the discovery, around 1750 by the Dresden court horn player Joseph Hampel, that the insertion of the hand in the bell would change the pitch of the instrument and thus enable the player to obtain notes outside of the harmonic series.

Hampel's discovery led to radical changes in the way the horn was played that defined the instrument's technique until valves were eventually added in the nineteenth century. Because of this, 1750, the approximate year of Hampel's discovery, is viewed by modern performers on the natural horn as a watershed moment: music written before this date is assumed to have been performed without the hand in the bell, and all music written after this date is assumed to have been played with the hand in the bell.

This viewpoint is convenient in that it provides a ready solution to the performance of non-harmonic series and out-of tone pitches in eighteenth-century music. It also suggests a method of achieving the growing number of non-series pitches in music of this era. Hampel's discovery was unquestionably significant, but it took decades for his ideas to achieve their full potential and reach widespread acceptance. Even a cursory

glance at the written and pictorial evidence from eighteenth-century accounts of horn playing reveals that hand stopping was extremely rare until the very end of the century.² With this in mind, it is necessary to re-examine the music of the late eighteenth century to question the appropriateness of hand stopping.

The issue of using the hand in the bell has a significant impact on the sound of the instrument. If not using the hand, the bell of the instrument can be held high and free from the body to produce a bright sound that is similar to the sound of the hunting horn. If using the hand in the bell, the instrument is held with the bell down close to the body to produce a dark, muffled sound that would become more common in the nineteenth century. In order to understand this issue better, I turn to the horn parts written by Joseph Haydn. If hand stopping was being employed by the players, there should be evidence of it in Haydn's writing.

Haydn and the Horn

Haydn's music is ideal for this type of scrutiny for several key reasons. First, in his service to the Esterhazy family, Haydn had the opportunity to work closely with a series of accomplished horn players and he responded eagerly and imaginatively to their various talents and strengths. Second, Haydn wrote for the horn in a all of the common genres of the day, from chamber to solo to orchestral and contributed some of the most interesting and innovative passages of horn writing in the eighteenth century. Third, Haydn's career spans the era that saw the implementation and widespread acceptance of hand stopping. Overall, Haydn's writing for the horn reveals contemporary attitudes to the instrument and provides insight into the ways the horn was played, heard, and understood in the courtly and public milieus of the eighteenth century.

Like most noble patrons of the time, the Esterhazy family prized the horn for its strong associations with the hunt and the ways the it glorified and celebrated the family's high standing and nobility. Haydn responded to the expectations of his patrons in three important ways: obvious references to the hunt, the unusual prominence given to the horn in symphonic works, and the striking virtuosity of the writing. The horn, regardless of context or melodic content, carried powerful associations with the hunt and thus provided a means of glorifying the court and emphasizing its splendor. Haydn exploited this association in one of his earliest compositions as Vice-Kapellmeister to the Esterházy family, Symphony No. 6 "Le matin" (1761), and returned to it in several subsequent works, including Symphony No. 31 "Hornsignal" (1765), Symphony No. 73 "La chasse" (1782), and the opera La fedeltà premiata (1781). In Symphony No. 6 the main theme of the first movement is a triadic melody in D major that is typical of contemporary hunting calls and certainly recognized as a stylized hunting call by Haydn's audience. The association with the hunt becomes especially apparent just before the reprise where the orchestra stops dramatically and a single horn plays the theme (Example 2). Since hunting was considered a morning activity, the reference to the hunt supports the program of the symphony by evoking the matinal time of day.

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² J. Drew Stephen, "Bach's Horn Parts: Alternatives to Nodal Venting and Hand Stopping," *The Horn Call* 37, no. 3 (2007), 60-61



Example 2: Haydn, Symphony No. 6, "Le matin." First movement, mm. 81–91.]

In Symphonies Nos. 31 (Example 3) and 73 (Example 4), the hunting references are topical rather than programmatic. Both symphonies quote authentic hunting calls: a Croatian call used on the Esterházy estates in the first case³ and *La vue* from the Versailles repertoire in the second. The final movement of Symphony No. 73—the only movement containing hunting music—was also used by Haydn as the overture to the opera *La fedeltà premiata* a year earlier. The hunt here takes on dramatic significance. Proficiency in the hunt is associated with bravery and loyalty. The hunting music and hunting imagery is associated primarily with the hero Fileno, to reinforce these traits in his character.



Example 3: Haydn, Symphony No. 31, "Hornsignal." First movement, mm. 1–15.

3

³ For more on the provenance of this call, see Josef Pöschl, *Jagdmusik: Kontinuität und Entwicklung in der europäischen Geschichte* (Tutzing: Hans Schneider, 1997), 80; and Horst Walter, "Das Posthornsignal bei Haydn und anderen Komponisten des 18. Jahrhunderts," *Haydn Studies* 4, no. 1 (1976): 21-34.



Example 4: Haydn, Symphony No. 73, "La chasse." Fourth movement, mm. 30–37.

The prominence of the horn in Haydn's *oeuvre* becomes apparent when one considers the unusually large number of works for four horns: the symphonies Nos. 13, 31, 39, and 72 plus and the Cassation in D. Since the Esterházy orchestra as a whole only consisted of 16 or 17 only sixteen or seventeen players, the horn section, in these pieces, constitutes a quarter of the orchestra. This proportion, notes David Wyn Jones, was neither achieved nor contemplated by later composers such as Gustav Mahler or Richard Strauss. ⁴ Haydn featured the instrument by making it a defining sound in the orchestra or through virtuosic writing and used both approaches to glorify and celebrate his courtly patrons

During his active engagement at the Esterházy court from 1761 to 1790, Haydn worked closely with eighteen individual horn players and wrote for them with a clear awareness of their skills and abilities. He was thus able to develop a profound understanding of the instrument that enabled him to write horn parts that are not only idiomatic but frequently exploit the full potential of eighteenth-century technique. Still, his approach consisted mostly of continuing or extending Baroque practices rather than exploring the more recent innovation of obtaining non-harmonic series tones through hand stopping. His general approach to virtuosic writing can be seen in the opening of Symphony No. 72 (Example 5). The high horns (horns 1 and 3) perform brilliant runs in the upper reaches of the instrument while the low horns (horns 2 and 4) demonstrate a fluid agility through rapid descending arpeggio figures in the middle and low ranges. Like most of his writing for horn, the pitches remain strictly within the confines of the harmonic series.

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⁴ David Wyn Jones, "Horn," in *Oxford Composer Companions: Haydn*, ed. David Wyn Jones (Oxford: Oxford University Press: 2002), 158.



Example 5: Haydn, Symphony No. 72. First movement, mm. 1-17

The confounding problem with Haydn's writing for horn is that although, for the most part, the writing is restricted to the notes of the harmonic series, isolated non-series pitches occur with enough frequency to raise questions. It is tempting to see these non-series tones as evidence that Haydn was using the new technique of hand stopping—and this has certainly been done in the past—but this evaluation would rest on the assumption that the only way to obtain these notes is by using the hand in the bell. A close examination of the music reveals that hand stopping is not practical in these cases or there are other more efficient means of obtaining these notes. To illustrate this I consider Haydn's non-harmonic series tones systematically in separate categories and in the contexts in which they appear in individual works. The following categories begin with the most common non-series tones and progress to the least common.

1. Low Range. The harmonics in the low register are highly pliable, making it easy to obtain one or more pitches below them by using the lip alone. This is especially true of the notes below the second harmonic (G, A, B) which can easily be lipped down from the open c. These notes are almost always approached in this way and it is likely that they

were always obtained without the hand, even in the hand-horn era, to avoid an otherwise muffled sound that would project poorly. There is ample evidence to suggest that the low-register notes in Haydn's horn parts were obtained by lipping rather than with the hand. First, they are always of long duration in a slow tempo. The opening measures of the Adagio from Symphony No. 51, in which Haydn exploits the abilities of each horn to play in the extreme of its register, is typical of Haydn's approach (Example 5). Second, in pieces where they occur, the non-harmonic-series notes are found only in the low register. If Haydn's players were accustomed to producing notes in the low register with the hand, why would he not exploit this in other registers too?



Example 5: Haydn, Symphony No. 51. Second movement, mm. 1-12. The non-harmonic series tones in this and all subsequent examples is indicated by an asterisk (*).

2. Written b' below the eighth harmonic. Players in the eighteenth century must have had a means of obtaining this pitch without using the hand in the bell. Not only does it occur in pre-hand-stopping horn writing, it also occurs in trumpet writing where there was never a possibility of using the hand to adjust the pitch. Bach's approach to this note is typical. Regardless of whether he is writing for horn, as in the first Brandenburg Concerto of no later than 1721 (that is, long before the earliest reasonable estimate of the first use of hand stopping), or trumpet, as in the "Et expecto resurrectionem" movement of the B-Minor Mass of 1733 (Example 6) he calls for it on a weak beat, for a short duration, and usually in a lower voice. Haydn's use of this note in the Symphony No. 31 (Example 7) reveals an approach similar to that used by Bach. Unlike the low-register factitious notes which occur on strong beats and for a long duration, b' occurs only on weak beats and for a short duration (never longer than an eighth note).



Example 6: Bach, Mass in B Minor. Credo: Et expecto resurrectionem, mm. 2-14.



Example 7: Haydn, Symphony No. 31, "Hornsignal." Second movement, mm. 8-23.

3. Written a' and f'. Prior to 1789, when Haydn calls for a' in Symphony No. 92, the only instance of Haydn requiring a horn player to produce either of these pitches is in the Concerto in D of 1762. Lying just below the naturally flat seventh harmonic, the a' is a common stopped note which can be obtained fairly easily. Roeser, writing in 1764, includes a' among the "four or five pitches that can be played on the horn by means of the hand," but adds that they "must be used prudently if one wishes to use them." The f', by contrast, is an extremely difficult note to produce with hand-stopping. Dauprat, writing in 1824, advises that "certain stopped notes (such as, for example, the d' below the first line of the staff, and the f' just above) sometimes resist the efforts of beginners for quite a long time, and this may make them feel disgusted with an instrument whose imperfections they learn before they experience its beauties and advantages." Mozart, despite requiring an advanced facility in hand-stopping, does not require this note in any of the solo works written for Joseph Leutgeb, one of the earliest horn players with an established reputation for his hand stopping abilities. Haydn, by contrast, displays no caution in approaching either pitch. Both the a' and the f' occur as sixteenth notes in an allegro tempo where they follow and precede an open harmonic (Example 8). The production of these passages using hand-stopping requires an advanced facility that was very likely unimaginable in the 1760s. However, since the pitches are of short duration and pass quickly, both passages can be produced very acceptably without using the hand at all.



Example 8: Haydn, Concerto for Horn in D. First movement, mm. 82-91.

4. The character of the writing. Despite the presence of non-harmonic-series notes, Haydn's horn writing is not idiomatic of hand-horn writing. Not only are the non-harmonic-series notes more easily obtained and practical without using the hand, they do not in any way exploit the timbral or dramatic possibilities of hand-stopping. This becomes apparent by comparing Haydn's horn writing to Mozart's. A good example is the Concerto for Horn K. 495 (Example 9). Unlike Haydn, Mozart exploits the

10

⁵ Valentin Roeser, *Essai d'instruction a l'usage de ceux qui composent pour la clarinette et le cor* (Paris: Mercier, 1764), 14. The five pitches named by Roeser are: b, f-sharp', a', b', and c-sharp''.

⁶ Louis-François Dauprat, *Méthode de Cor Alto et Cor Basse*, trans. Viola Roth (1824; reprint, Bloomington: Birdalone Music, 1994), 34.

⁷ Mozart does require this pitch in the Rondo KV 371. See Herman Jeurisson, "Mozart's Very First Horn Concerto," *Historic Brass Society Journal* 3 (1991): 51-52. Note that the f^{l} in this instance occurs as a short note after and before the already stopped a^{l} . It is easier to produce since it requires only a slight adjustment of the hand.

possibilities of the hand horn and clearly approaches the instrument in an entirely different way. This does not mean to imply that Mozart is more adept at writing for the horn than Haydn. Haydn's brilliance lies in the ways he exploits the possibilities of the open notes of the horn and not in the ways he embraced the new technique of hand stopping.



Example 9: Mozart, Concerto for Horn KV. 495. First movement, mm. 97-104.

Conclusions

Since it appears unlikely that Haydn required hand-stopping in his Esterhàzy-era horn parts, is there a point later in his career where he began to write for this technique? Although it is subtle, a noticeable change in his approach to the horn is discernible in the 1790s. Significantly, the change in Haydn's writing corresponds exactly to the years in which hand-stopping was becoming widely acknowledged and accepted.

There are still very few non-harmonic-series tones in Haydn's horn parts in the 1790s, but those that appear are used for dramatic purposes and are fully idiomatic of hand-stopping. An excellent example occurs in the Prelude ("The Representation of Chaos") of *The Creation* of 1789 (Example 10). As the musical depiction of chaos becomes increasingly dissonant and dense in measure 29, the horns play a characteristic horn-fifths figure that is answered in the other winds by a melody falling from *c-flat* to produce a harsh dissonance of a minor second on the fourth beat. The passage culminates in a fully diminished chord in the second half of the following bar with the first horn playing a half-note *e-flat* with a *forzando* indication. When played stopped—as this pitch must have been given its duration and the *fz* marking—a strident sound is produced that is entirely appropriate to the situation and adds strikingly to the dramatic effect created by Haydn at this point in the composition.



Example 10: Haydn, *Die Schöpfung*. "Einleitung: Die Vorstellung des Chaos," mm. 29-31.

Given the current prevailing interest in historically informed performances, our approach to eighteenth-century horn parts generally, and Haydn's horn parts specifically, should be reconsidered, especially when these works are performed on the natural horn. Although specialists definitely existed who could obtain non-series pitches with the hand, it appears this was not the only method of obtaining certain pitches and possibly not even the most common one. In most cases, players were able to perform eighteenth-century horn parts with the bell held high and away from the body. In light of this, should modern players attempt this music without the hand in the bell? One suspects it would now be highly impractical for players to attempt these works exclusively on the open horn: few players today possess the skill to bend notes to the extent that players in the eighteenth century were accustomed, and few audiences today would be forgiving of the inconsistencies in tuning that would probably occur. Still, there are reasonable steps one can take. The most significant step concerns the quality of the sound. Contemporary

writings and iconography indicate that, before the introduction of hand stopping, the horn was held free from the body with the bell in the air. It was only when using the technique of hand stopping that the instrument was held against the body and the hand inserted in the bell. Since holding the horn with the bell in the air allows for a clear, bright sound, players should strive to achieve this, even if using the hand in the bell. An occasional lack of refinement—the horn was, after all, closely associated with the outdoor activity of the hunt—should be celebrated rather than suppressed.

Haydn's writing for the horn reveals his responses to an instrument whose technique was changing and developing over the course of several decades. Concerning his symphonies, Haydn remarked famously, "I was set apart from the world, there was nobody in my vicinity to confuse and annoy me in my course, and so I had to be original." The same can be said of his approach to the horn. Although he did not embrace the new technique of hand stopping, he explored brilliantly the possibilities of the open horn and found many innovative ways to expand its vocabulary through non-harmonic-series pitches.

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⁸ This method of holding the horn is described in Heinrich Domnich, *Méthode de Premier et de Second Cor* (Paris: Le Roy, 1807), iv; and in the anonymous *New Instructions for the French Horn* (London, ca. 1770). Visual depictions of this method of holding the horn can be found in a 1758 Canaletto engraving of the Imperial Opera Orchestra at Vienna and a 1782 drawing of a musical afternoon at Dr. Burney's house. Both illustrations are reproduced as plates VIIa and VIIb in Horace Fitzpatrick, *The Horn and Horn-Playing* ⁹ Georg August Griesinger, *Biographische Notizen über Joseph Haydn* (Leipzig: Breitkopf und Härtel, 1810). English translation in *Haydn: Two Contemporary Portraits*, transl. Vernon Gotwals (Madison: The University of Wisconsin Press, 1968), 17.