

Telemann and Baroque Hand Horn Technique

By Joel Gilbert

Hampel Quotes

Domnich (written in 1808):

It was a ray of light to him ... he saw the means, by introducing and pulling out the stopper alternately, of running through the diatonic and chromatic scale of all keys without interruption. Then he composed for the horn new music where he introduced some notes which until now were strange to him. Some time after, having noticed that the stopper could be replaced advantageously by the hand, he ceased to use it.

Before this revolution, fortunate as it was brilliant, the manner of holding the horn was the same as that used today (1808) for the tromp de chasse [hunting horn]. But as the arm on which it was supported was required for the execution of the stopped notes, the holding of the instrument was changed....

Creator, in a sense, of a new instrument, Hampel, who was not experienced in his youth in the practice of stopped notes, restricted the usage to slow pieces. It was reserved for one of his disciples to give to this discovery all the extension and brilliance of which it was capable.

Gregory (written in 1969):

About 1760, during the course of experiments on muting which he carried out in order to try to modify the still raucous tone of the horn, the Dresden player Hampel discovered that the presence of the hand in the bell went a long way towards achieving his aim. Moreover he found that by changing the position of the hand in the bell it was possible to fill in many of the gaps between the notes of the harmonic series, although these stopped notes were of somewhat inferior tone quality. To Hampel, therefore, is given the credit for founding the great Bohemian school of hand horn virtuosi.

Morely Pegg (written in 1970):

It has been generally assumed that this new use of the hand in the bell was 'invented by Anton Hampel...second horn in King Augustus III of Poland's

famous orchestra at Dresden. What seems more likely is that Hampel extended and codified a technique about which at least something must have been known much earlier, even if little or no practical use had been made of it, at any rate so far as the horn was concerned.

Harmonic Series



- Non-harmonic tones - Any note not shown here is a non-harmonic pitch and requires some form of lip, hand, or device change to produce.
- B4, F5, and A5 are the non-harmonic tones most likely to be found in Telemann's music (play harmonic series on the horn and play a few NHT)
 - we will also be looking for any open series harmonics required in the same piece as the NHT
- Tuning system - we will be using equal temperament because of a lack of consensus as to what Telemann would have been using.
 - in equal temperament, the frequencies for the in tune pitches (based off of A4 at 440 cps) would be Bb4 466.16 cps, B4 493.88 cps, F5 598.46 cps, F#5 739.99 cps, Ab5 830.61 cps, A5 880.00 cps
 - The natural horn produces Bb4 at 457.845 cps (cycles per second)¹, F#5 at 719.471 cps, and Ab5 at 850.274 cps.²
 - The difference in pitch produced by the natural horn versus the 'in tune' note for equal temperament would be -8.315 cps for Bb5, -20.519 cps for F#5, and +19.664 cps.

Background and Historical Research

Instrument Design

- Cór de Chasse (invented around 1680)
- Master crook and Coupler system (around 1700)
- Inventionhorn (around 1750)

¹ 1 cycle per second is equal to 1 Hertz (Hz)

Producing Non-harmonic tones

- Vent holes, fact or fiction?
- Playing notes out of tune
 - Quantz

"Without purity of intonation in playing the ear can never be completely satisfied. Poor intonation is contrary to the proportions of the notes, and because of this weakness on the part of its performers the flute has fallen into disrepute among many connoisseurs who comprehend neither the characteristics nor the difficulties of the instrument, and suppose that it cannot be played more truly than has, until now, been the case among the majority."³

- Mutes
- Handstopping

Eisenach

- TWV 51:D8 Concerto in D (1708-1714)
- TWV 52:F4 Concerto for 2 Horns in F (1708-1714)
- TWV 52:D2 Concerto for Two Horns in D (1708-1714)

Frankfurt

- TWV 52:F3 Concerto for Two Horns in F (1716-1721)
- TWV 52:D1 Concerto for 2 horns in D (1716-1721)
- TWV 52:Es1 Concerto for 2 Horns in Eb (1716-1721)

Hamburg

- TWV 52:D2 Concerto for 3 Horns and Violin (1716-1725)
- TWV 55:F11 'Alster' Suite (1725)
- TWV 54:Es1 Concerto for 2 Horns and 2 violins (from Tafelmusik) (1733)
- TWV 54:F1 Concerto for 2 Hns, 2 Vlns, Oboe, Rcdr, BSN, and Strings (1720-1735)

³ Johann Joachim Quantz, *On Playing the Flute*, 2nd ed. (Boston: Northeastern, 2001), 104.

Conclusion

Totals for all the non-harmonic tones: 425 A5, 1123 F5, and 3 B4.

Totals of their open harmonic neighboring pitches: 0 Ab5, 203 F#5, 0 Bb4.

Job security has always been the mother of invention. - Richard Seraphinoff