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## CORNO AND CORNO DA CACCIA: HORN TERMINOLOGY, HORN PITCHES, AND HIGH HORN PARTS \*

by REINE DAHLQVIST

The purpose of the first part of this article is to examine horn terminology – to see if a given term always referred to the same or to different instruments – and horn pitches during the first half of the 18th century. The second part is devoted to the use of the horn in the extreme high register, a use which has generally been connected with the late Baroque and, by some hornists and scholars, with performers who doubled on horn and trumpet. In both parts, special attention is given to the works of J.S. Bach.

### I

It is generally accepted that the horn („French horn“) or *Waldhorn* was developed or „invented“ about 1680 in Paris, a statement which in fact must be regarded as a simplification.<sup>1</sup> In any case it was in the German Empire that the horn – of a more convenient model than the *parforce* horn with its coils laid out in a wide diameter – was first used in art music.<sup>2</sup> In Vienna, however, some sort of horn was already in use around 1680.<sup>3</sup> It was also in Vienna where the so-called orchestral horn, a more narrowly coiled instrument which could be supplied with several crooks, was developed, according to an account from 1703 by M. Leichamschneider, a document which also displays his seal with three horn-players.<sup>4</sup>

\* The author wishes to thank Edward H. Tarr for his editorial assistance, which consisted in revising my entire text, assisting with its organizational structure, and proposing some additions to give a better background.

<sup>1</sup> Cf. Morley-Pegge, R., *The French Horn* (London 1960), and Baines, A., *Brass Instruments* (London 1976), pp. 146-154/57.

<sup>2</sup> First dated instance in C. Badia's *Diana rappacificata*, performed in Vienna in 1700 (two horns in F).

<sup>3</sup> A horn appears in an anonymous *Sonata da Caccia con un Cornu* from the orchestra of the archbishop of Kremsier (Sign. IV, 81). The work can be dated from the 1670's and is for a horn in C „alto“, apparently in „Chorton“, the customary pitch of that day. It may well come from Vienna, since many compositions in Kremsier archives were written there.

In a ballet by A. A. Schmelzer performed on November 15, 1680 there is a remark: „Und ist die Intrada neben Banda von Geigen mit Jägerhorn producirt worden“ (Österreichische Nationalbibliothek, Musiksammlung, Ms. 16588). The music is only presented in a keyboard score, but it is in C; thus a horn in C must have been used, as in the anonymous sonata just mentioned.

<sup>4</sup> This account was first published by A. Kellner, *Musikgeschichte des Stiftes Kremsmünster* (Kassel & Basel 1956), p. 296, but not *in extenso* and not mentioning the seal.



Even if we know the rough outlines of the development of the horn from the beginning of the 18th century, many obscurities regarding terminology, design, pitches, etc., still remain.

### 1. *Bach's terminology*

When C. S. Terry (*Bach's Orchestra*, London 1932) investigated Bach's orchestration he found that Bach labeled his horn parts either „Corno“ or „Corno da caccia“. He therefore supposed that Bach meant two different instruments. He assumed that „Corno“ was the *Waldhorn* which was played with a deep conical mouthpiece, while „Corno da Caccia“ meant an earlier form, a *Jagdhorn*, with tubing which was largely cylindrical and played with a shallower mouthpiece. The latter instrument thus produced a brighter and thinner tone, similar to that of the trumpet, according to Terry.

Terry regarded the following works as having been written for the *Corno/Waldhorn*: BWV 1, 40, 52, 79, 83, 88, 91, 100, 112, 118 („Lituus“), 136, 195, 205, 212, 233, 248, 252; and the following for *Corno da caccia/Jagdhorn*: (14), 16, 65, 128, 143, 174, 208, 213, 232, 1046, 1046a. NB: He actually placed BWV 14 in the first group, apparently by mistake.

For his investigation Terry used the collected works published by the *Bach-Gesellschaft* in Leipzig (1851-1899). In this edition, however, there is no proper description or comparison of the different sources, and several sources are not used at all. In order to inspect Bach's terminology, then, one must turn to the original sources, i.e. the scores and parts.<sup>5</sup> Almost all of the pertinent indications are to be found in his vocal music.

The information on instrumentation in Bach's *scores* is generally very scanty. A given work's instrumentation is most often given in the main title before the first movement. At the beginning of the separate movements the instrumentation is almost never indicated, an obligato instrument or instruments sometimes being mentioned. The *parts* were then copied by copyists following Bach's instructions. Certain parts were copied by Bach himself; in a very few cases he wrote out all or most of the parts. Finally he revised the parts and entered the figured bass in the organ part. Score and parts were then given a cover containing information on title and orchestration.

The sources of the works which Terry regarded as having been written for *Corno/Waldhorn* and *Corno da caccia/Jagdhorn* will therefore be examined.<sup>6</sup> First those for *Corno/Waldhorn*:

<sup>5</sup> A procedure also adopted by Laurence Dreyfus in his excellent study, *Bach's Continuo Group* (Cambridge/USA & London 1987).

<sup>6</sup> As sources we have consulted scores and parts; cf. references in Dürr, A., *Zur Chronologie der Leipziger Vokalwerke Bachs. Zweite Auflage* (Kassel 1976); the *Kritische Berichte* to the *Neue Ausgabe sämtlicher Werke* (1954- ); and information kindly provided by Dr. Hans-Joachim Schulze, Bach-Archiv Leipzig, in letters.



- BWV 1 The score is missing, but the parts are labeled „Corno 1“ and „Corno 2“.
- BWV 40 No instrumentation in the main title of the score and no designation within the score at the 1st movement, but at the 7th movement the designation is „2 Corn“. The parts are labeled „Corno 1“ and „Corno 2“.
- BWV 52 The designation within the score (1st movement) is „Corne 1“ and „Corne 2“. The parts have the same labeling.
- BWV 79 The designation within the score (1st movement) is „1. Corn“ and „2. Corn“. The parts are labeled „Corno 1“ and „Corno 2do“.
- BWV 83 No indications in the score, but the parts are labeled „Corno 1“ and „Corno 2“.
- BWV 88 No indications in the score, but the parts are labeled „Corno 1“ and „Corno 2“.
- BWV 91 The designation within the score for the 1st and 6th movements is „Corno 1“ and „Corno 2“. The parts are labeled „Corno 1“ and „Corno 2“.
- BWV 100 On the cover the horns are designated „2 Corni da Caccia“, while in the main title they are called „2 Corni“ (no designation within the score). The parts are labeled „Cornu 1“ and „Cornu 2“, and in a second group of autograph parts „Corno 1“ and „Corno 2“.
- BWV 112 In the main title the designation is „2 Corni“; there is no movement designation, but at the 6th movement we read „2 Corni“. The parts are labeled „Cornu 1“ and „Cornu 2“.
- BWV 136 On the cover (by J.A. Kuhnau) and in the fragment of the score for the 1st movement, the designation is „Corno“. The part is also labeled „Corno“.
- BWV 195 The horn parts were added to a later performance of this work and written into the trumpet parts, where they are designated „Corne 1“ and „Corne 2“.
- BWV 205 The instrumentation is noted in a summary at the very bottom of the first page of the score; here the horns are designated „2 Corni da Caccia“. The movement designation is „Corno 1“ and „Corno 2“. At movement 11: „Aria Äoly con Trombe e Corni“. The parts are missing.
- BWV 212 At the 16th movement is written „Corne de Chasse“, and at the 18th, „Corne“.
- BWV 233 (A copy by Altnikol.) The designation within the score at the 1st movement is „Corni all unisono“.
- BWV 248<sup>iv</sup> In the main title we read „2 Corni da Caccia“. (There is no movement designation.) On the cover of the parts the autograph designation is „2 Corni da Caccia“, while the parts themselves are labeled „Cornu di Caccia I“ and „Cornu di Caccia II“.
- BWV 253 The autograph parts are labeled „Corno 1“ and „Corno 2“.



The following works were written, according to Terry, for *Corno da Caccia/Jagdhorn*:

- BWV 14 For this cantata – first performed on January 30, 1735 – Bach wrote out both the score and most of the parts, among them the horn part. On the cover of the parts (and the score) Bach has the designation „1 Corne da Caccia“, in the main title „1 Corne“; as movement designation „Corne“, while the part is labeled „Corne per force“. The part contains the movements 1, 2 and 5. In the first and last movement the horn doubles the soprano while in the second, a bass aria, it is an obbligato. This part has no designation within the score, but at three places later in the score (bars 53, 71/72, 94) the designation „Tromba“ appears (!): at bar 53 „Tromba tacet“, before bar 72 „Tromba“, and in bar 94 over the violin part „Tromba in unison“ (for bars 94 - 96). This very high part in Bb alto, which is feared by hornists, must have been intended for a trumpet in B-flat. That Bach changed his mind when writing the part is less likely; he simply forgot to note „Tromba“ at the beginning of the second movement. We should not be surprised to see Bach expect a single musician to play horn and trumpet in the same work. See BWV 195 above and BWV 128 below.<sup>7</sup>
- BWV 16 There is no horn part in the score, so it must have been added when Bach revised the parts. The autograph part is labeled „Corno da Caccia“ and contains the movements 1, 3, and 6. As in the previous work the horn doubles the soprano part (but not on notes of the natural harmonic series). The third movement, a bass aria, is for a natural horn in C but in a true trumpet idiom.
- BWV 65 The designation in the main title is „2 Core de Chasse“ and in the designation within the score for the first movement „2 Cor“.
- BWV 128 No designations in the score. The parts are labeled „Corno 1“ and „Corno 2“, and in the first part at the third movement Bach added „Tromba“. „2 Corni da Caccia“ found on the cover of the parts is a later addition.
- BWV 143 There are no contemporary copies (the earliest is from the 1760's), and its authenticity has been questioned.<sup>8</sup>
- BWV 174 The designation in the main title is „2 Corni da Caccia“ (no designation within the score). The first part is missing, but the second is labeled „Cornu d'Caccia 2“.
- BWV 208 In the main title the designation is „2 Corni da Caccia“, at the 2nd movement the designation within the score is „2 Corni“, and at the 11th movement „Corno 1“ and „Corno 2“.

<sup>7</sup> See also MacCracken, T., „Die Verwendung der Blechblasinstrumente bei J.S.Bach...“, *BJ* 1984 p. 77.

<sup>8</sup> See A. Dürr, „Zur Problematik der Bach-Kantate BWV 143...“, *Mf* 30 (1977) pp. 299-304.



- BWV 213 In the main title the designation is „2 Corni da Caccia“. There is no designation within the score. The parts are labeled „Cornu 1“ and „Cornu 2“. The 13th movement was copied by Bach himself.
- BWV 232<sup>i</sup> In the score („Quoniam“) the horn is designated „Core da Caccia“. The autograph set of parts has the designation „Corne de Chasse“ on the cover, while the part itself is labeled „Corno da Caccia“.
- BWV 1046 In the main title the designation is „2 Corni da Caccia“ while the designations within the score are „Corn: 1“ and „Corn: 2“; above the first trio of the 4th movement is written „Trio à ... Corni ...“, above the 2nd trio „Trio à 2 Corni ...“, and as a designation of the 2nd Trio within the score „Corne 1“ and „Corne 2“.

As is evident from the above investigation, Bach has given his horn parts several designations: „Corne“, „Corno“, „Corno da Caccia“, „Corne de Chasse“, etc.. Both Italian and French terms are used or even mixed, even in one and the same score. In the First Brandenburg Concerto Bach uses the designations „Corn:“, „Corne“, „Corni“ and „Corni da Caccia“; in the B Minor Mass (BWV 232) „Core da Caccia“, „Corne da Chasse“ and „Corno da Caccia“. The terminology does not even differ between Bach and his copyists.

J.S. Bach's varying terminology does not seem to indicate the use of two different instruments, but rather the same instrument. „Corno“ is thus an abbreviation of „Corno da Caccia“ („Cor“, „Corne“ and „Cor de Chasse“ etc.). In the score there was not always enough place for writing the complete title. Why did Bach not add „da Caccia“ when his copyist had only written „Corno“ if he was anxious to obtain a different sound?

## 2. The terminology of other composers

Similarly, contemporary theoretical writers do not confirm that there existed a difference between *Corno/Waldhorn* and *Corno da caccia/Jagdhorn*. J. Mattheson writes: „Die lieblich pompeusen Wald-Hörner, Frantzösisch Cors de Chasse, Italienisch Cornetti di Caccia...“.<sup>9</sup> J.G. Walther wrote, „Corno da Caccia, Corni di Caccia (ital.) ein Waldhorn, Waldhörner“.<sup>10</sup>

<sup>9</sup> Mattheson, J., *Das neu eröffnete Orchestre* (Hamburg 1713), p.267. It is remarkable that Mattheson uses the diminutive „Cornetto“ instead of „Corno“. He wrote so in some of his scores, too. In *Ouverture avec Sa Suite pour les Hautbois de M<sup>r</sup>. le General Schoudebourg* he only writes „Cornett 1“ and „Cornetto 2“. The piece dates from about 1706. [Marx, H.J., „Zum Schicksal der Musiksammlung der alten Stadtbibliothek Hamburg“, *Acta Musicologica* 55 (1983) p. 114. The dating was also confirmed in a letter from Deutsche Staatsbibliothek Berlin, Handschriftenabteilung, from September 18, 1989. The Berlin authorities were then preparing to return the manuscripts to Hamburg.] In *Henrico* (1712) he also writes „Cornetti di Caccia“ (in the aria II,6). [Kleefeld, W., „Das Orchester der Hamburger Oper 1678-1838“, *Sammelbände der internationalen Musikgesellschaft* 1 (1899/1900) p. 281.] This designation is also used in the printed collection of arias for R. Kaiser's *L'inganno fedele* (1714), but in the manuscript of *Cupido* (1712) we find „Corno da Caccia“ (1 & 2). [*Ibid.*, p. 281.]

<sup>10</sup> Walther, J.G., *Musicalisches Lexicon* (Leipzig 1732), col. 186.



In Austria, the horn was named not „Waldhorn“ but „Jägerhorn“ in the vernacular, at least up to the middle of the 18th century. (Note that M. Leichamschneider in Vienna called his orchestral horn „Jägerhorn“ in the account from 1703, cf. above p. 1.) J. J. Fux called his hornists in Vienna „Jägerhornist“, „Jägerhornisten“.<sup>11</sup> In the Salzburg court records, the hornists were called „Jägerhornist(en)“ during the entire 18th century (this also concerned J. Leitgeb).<sup>12</sup> „Corno da Caccia“ is thus possibly a translation of the Austrian „Jägerhorn“. The French term „Cor de Chasse“ was also used. In a very early work with horn, G. Vogel's cantata *Nun aber gibst du Gott* from the first years of the 18th century (cf. below), all the instruments have Italian designations except the horns, which are named „Waldhorn“ as if they did not yet have any term for it. This also concerns some works by C. L. Boxberg (see further below).

A literal translation of „Waldhorn“ is „Corno di selva“, a term which C. Graupner used from 1715 to the 1730's on the covers of his scores and parts, as well as in his scores, if he gave any designation at all. (Often he wrote only „Corno“.) His copyists, however, generally wrote „Corno“ or „Corne de Chasse“.<sup>13</sup>

#### *Excursion: The term „Tromba da caccia“, 1620-1990\**

In Italy the common designation for the horn was „Corno“ or „Corno da caccia“, in certain few works also „Tromba da caccia“, an instrument which in modern times has been equated with Praetorius' „Jägertrommet“ and G. Reiche's coiled instrument but most probably never meant these instruments.<sup>14</sup>

\* Written in collaboration with Edward H. Tarr (who is responsible for certain formulations and details, as well as the latter three-fourths of the fourth paragraph, the last sentence of the fifth paragraph, and the last paragraph).

<sup>11</sup> Köchel, L. Ritter von, *Johann Josef Fux* (Wien 1872), pp. 379, 404sq.

<sup>12</sup> Hintermeier, E., *Die Salzburger Hofkapelle von 1700 bis 1806* (Diss. Salzburg 1972), *passim*.

<sup>13</sup> Microfilm of a selection of cantatas and orchestral music and information from Dr. Oswald Bill, Hessische Landesbibliothek Darmstadt, Musikabteilung.

<sup>14</sup> See my dissertation, *Bidrag till trumpetten och trumpetspelets historia. Fran 1500-talet till mitten av 1800-talet* (Göteborg 1988), vol. I, pp. 28sq. There is shown that certain composers – Caldara, Porpora, Hasse, Anonymous, J. C. Bach, and D. Perez – wrote for one or, usually, two „tromba da caccia“ in works dated between 1715 and 1767, and furthermore that the use of these instruments (tonality, etc., also the opposition of this term to „trombe lunghe“ or trumpets) clearly show them to be horns. An English translation of this portion (as well as on coiled trumpets, French and Italian trumpets, *Clarino piccolo*, etc.) is in preparation for publication in the *Journal of the Historic Brass Society*, Nr. 4 (1992). In his article, „Die ‚Missa Romana‘ von Giovanni Battista Pergolesi“, *SMZE* 117. Jg. (Nov./Dez. 1977) pp. 317-321, especially p. 320, Raimund Rügge showed that Pergolesi, too, unequivocally used the term „tromba da caccia“ to mean the horn.



The origin of the identification of the term „Tromba da caccia“ with G. Reiche's coiled instrument is the fact that in his *Theatrum instrumentorum* of 1620,<sup>15</sup> M. Praetorius depicted a „Jägertrummet“, a coiled instrument which at first sight seems to be identical with a coiled instrument held in the hand of the Leipzig *Stadtpfeifer* Gottfried Reiche (1667-1734), the musician responsible for the execution of Bach's high brass parts between 1723 and 1734, in a famous portrait done by E. G. Haussmann, presumably on the occasion of Reiche's 60th birthday, a portrait frequently reproduced in the modern literature. In *Syntagma Musicum* II (1619),<sup>16</sup> Praetorius further states that „some have trumpets made like a posthorn or like a coiled-up snake“ („Etliche lassen die Trummeten / gleich einem Posthorn / oder wie eine Schlange zusammengewunden / fertigen“) – without, however, using the term „Jägertrummet“. Certain authors – C. Weigel in 1698,<sup>17</sup> F. Friese in 1709,<sup>18</sup> J. H. Zedler in 1745,<sup>19</sup> and J. E. Altenburg in his well-known treatise of 1795<sup>20</sup> – stated that there existed coiled trumpets which were called „Italian trumpets“, Altenburg further stating that they were used in Italy.

The latter statement has been used by some scholars as evidence for a connection between Reiche's instrument, the „Jägertrummet“, and the „Tromba da caccia“. The first writer to do so was C. S. Terry. H. Kunitz regarded it as a „Corno da Caccia“ and went on to say that certain trumpeters like Reiche (!) used a Corno da caccia (!) in high D (!) (and apparently F too) for difficult high trumpet (!!) parts, without giving any source for his opinion.<sup>21</sup> Later, G. Karstädt claimed that Reiche's instrument was the *Corno da caccia* (!) which Bach required in the First Brandenburg Concerto and in some cantatas, unlike the *Corno* and the *Waldhorn* which he required in other works (!).<sup>22</sup> K. Janetzky and B. Brühle unequivocally called Reiche's instrument a „corno da caccia“. <sup>23</sup> Finally H. Heyde regarded it as an instrument between a small helical horn and a Jägertrompete.<sup>24</sup>

The equation of Reiche's instrument with both „Jägertrummet“ and „Tromba da caccia“ has been especially emphasized during the last two decades by Don Smithers, to whom trumpet scholarship owes so much due to his passionate and thorough contributions. He has thus single-handedly added to this

<sup>15</sup> II (Wolfenbüttel 1620), Plate VIII:11

<sup>16</sup> p. 33.

<sup>17</sup> *Abbildung der gemein nützlichen Hauptstände* (Regensburg), p. 232.

<sup>18</sup> *Ceremonien und Privilegia derer Trompeter und Pauker* (Dresden), p. 8.

<sup>19</sup> „Trompete“, *Grosses vollständiges Universal-Lexikon* 45 (Leipzig und Halle), col. 1102.

<sup>20</sup> *Versuch einer Anleitung zur heroisch-musikalischen Trompeter und Pauker-Kunst* (Halle), p. 12.

<sup>21</sup> *Die Instrumentation*, Teil 6: Horn (Leipzig 1956), pp. 347 sq., 438-445.

<sup>22</sup> „Das Instrument Gottfried Reiches: Horn oder Trompete?“, *Kongressbericht Kassel 1962*, ed. by G. Reichert and M. Just (Kassel et al. 1963), pp. 311-313.

<sup>23</sup> *Das Horn* (Bern und Stuttgart 1977), p. 41.

<sup>24</sup> „Das Instrument von Gottfried Reiche“, *Beiträge zur Bach-Forschung* 6 (1987), p. 104.



confusion of terms, not only in his book of 1973, in which he calls Reiche's instrument a „Tromba da caccia“ or „kleine Italienischen [sic] Trompette [sic]“,<sup>25</sup> but also most recently in an otherwise excellent article from 1990, „Bach, Reiche, and the Leipzig *Collegia musica*“,<sup>26</sup> stating there that certain museum curators „do not seem to know when a *tromba* is not a *corno*“, and then, flatly, that „Reiche's instrument is an Italian *Tromba da caccia*, or *Welschtrompete*“ (still another term!).

However, it is very dangerous to use an early 17th-century source for the description and terminology of instruments a century later, or later still, especially if the sources are sporadic and without illustrations. Above all, it is not advisable to use a German source for the situation in Italy a century later. Besides, it is very doubtful if coiled trumpets were ever used in Italy, no matter what Altenburg may have written. The same doubt must also apply the above-mentioned statement of Weigel, Friese, Zedler, and Altenburg that French and English trumpets were a second and a third higher in pitch, respectively, than the German trumpet. Why not be prudent, like A. Baines,<sup>27</sup> and call Reiche's instrument and similar ones simply „spiral instruments“?

Those modern authors equating „Tromba da caccia“ with the trumpet fail to notice the obvious parallel of the Italian term with a French one still current, „Trompe de chasse“, „Trompe“ here meaning the horn.

In France, „Cor de chasse“ was the general designation for the horn during the greater part of the 18th century. Thus J. de Laborde deals with the horn under the heading „Cor de chasse“,<sup>28</sup> and the instruments of the hornists appearing at the Concert Spirituel (e.g. J. Leitgeb, C. Türschmidt etc.) were likewise named „Cor de chasse“. <sup>29</sup>

In Dutch, French and German music prints, the term „Corne de chasse“ is met with now and then up to about 1800.

Returning to the term „Corno da caccia“, composers gradually dropped the suffix „da caccia“, but J. Haydn still used the suffix in his horn concerto from 1762, „Concerto per il Corno da Caccia“ (Hob. VII d 3). At the solo part (designation within the score) he wrote only „Corno“.

Thus the various terms „Corno“, „Corno da caccia“, „Cor de chasse“, etc., did not designate two different instruments but the same one, called „Waldhorn“ in the vernacular in Germany and „Jägerhorn“ in Austria.

<sup>25</sup> *The Music & History of the Baroque Trumpet before 1721* (London 1975, Buren 2 1988), pp. 30-31, 73 FN 38, 150, 343 FN 49.

<sup>26</sup> *Historic Brass Society Journal* 2 (1990) p. 10 FN 18.

<sup>27</sup> *Op. cit.* (cf. FN 1), pp. 137-144.

<sup>28</sup> Laborde, J.B. de, *Essai sur la musique* I (Paris 1780), p. 252.

<sup>29</sup> Pierre, C., *Histoire du Concert Spirituel 1725-1790* (Paris 1975), pp. 116, 129, 150, 255-305 passim.



### 3. The term „Lituus“

A Latin form was „Lituus“. Even if I. Kürzinger stated in 1763 that this term could mean either a trumpet or a horn,<sup>30</sup> the general meaning was a horn.

The term is first recorded in Bohemia, first in an inventory from 1706 at Osseg („Litui vulgo Waldhörner“),<sup>31</sup> then in a print of 1714 from Prag, G.W. Jacob's collection of psalms, *Anathema gratiarum actionis perpetuae*. The term probably spread from Bohemia to Germany, where it was often used in the music prints of J.J. Lotter in Augsburg. For example, the fifth concerto in J.J. Schnell's collection of *VI. Concerta commode tractabilia*, written for the Prince-Bishop of Bamberg and printed by Lotter in 1731, contains parts for two horns or trumpets („inserto lituo vel tubâ, primo & secondo“).<sup>32</sup> We meet with this Latin terminology the most often in Lotter's editions of works of J.V. Rathgeber; as with the Schnell concerto, the term is very often given as an alternative for the trumpet: „Tuba“, „Tuba vel Lituo“.<sup>33</sup>

In Rathgeber's Op. 8, *Harmonia lugubris*, a collection of funeral masses printed in 1731, two „litui“ are combined with three trombones. This rare combination of instruments is found again in J.S. Bach's funeral motet, BWV 118, *Jesu Christ, mein Lebenslicht* (c. 1736-37).<sup>34</sup> Bach might have known Rathgeber's pieces, which were also funeral music, and then used the same instruments and terminology.

### 4. Pitches

Besides terminology, horn pitches have also been a matter of dispute. Should horn parts written in C, or even D or F, be performed in *basso* or *alto*? The supposition that the term „Corno da caccia“ meant a horn in high pitch has also been used as an argument. Thus Thurston Dart felt that the two horn parts in the First Brandenburg Concerto should be performed an octave higher

<sup>30</sup> Kürzinger, I., *Getreuer Unterricht... Nebst einem alphabetischen Anhang...* (Augsburg 1763), p. 84. Cf. also MacCracken, pp. 77f, who however only knows this one source and is therefore probably in error in wishing to have these „Lituus“ parts performed on trumpets.

<sup>31</sup> Nettel, P., „Weltliche Musik des Stiftes Osseg“, *Archiv für Musikwissenschaft* 4 (1921/22) p. 357.

<sup>32</sup> See Edward H. Tarr's CD, *The Princely Trumpet*, Christophorus CD 74559, recorded in 1989.

<sup>33</sup> See also Koch, H.O., *Sonderformen der Blasinstrumente in der deutschen Musik vom späten 17. bis zur Mitte des 18. Jahrhunderts* (Diss. Heidelberg 1980), pp. 149sqq.

<sup>34</sup> A cornettino is also used as a treble instrument. (In a later version from c. 1746-47, only horns and strings are used.)



than the usual pitch.<sup>35</sup> More in dispute are the two horn parts in Bach's cantata BWV 65. Hans Kunitz<sup>36</sup> and Marianne Helms, the editor of the work in the *Neue Bach-Ausgabe*,<sup>37</sup> feel that the two horn parts should be in C alto, both mentioning the terms „Corno da caccia“ and „Cor de chasse“, whereas Horace Fitzpatrick,<sup>38</sup> Thomas MacCracken,<sup>39</sup> and Alfons Vernooy<sup>40</sup> all feel that they should be in C basso. More recently, Ludwig Güttler<sup>41</sup> and Werner Wolf<sup>42</sup>, advancing the hypothesis that the horn part in „Quoniam tu solus sanctus“ from Bach's B Minor Mass should be performed in D alto, have been emphatically contradicted by Peter Damm,<sup>43</sup> Edward H. Tarr,<sup>44</sup> and Herbert Heyde.<sup>45</sup>

<sup>35</sup> Liner notes to a recording of the Brandenburg Concertos with Philomusica of London (L'Oiseau Lyre, late 1950's), which he repeated in his article „Bach's ‚Fiauti d'echo‘“, *Music and Letters* 41 (1960), pp. 340 f. However, he apparently changed his mind, since he later had the trumpet part in the Second Brandenburg Concerto performed on a horn in „low“ F, after the designation „Tromba ô vero Corno da Caccia“ on a part copied from a set of parts in Leipzig during the 1750's by Chr. Penzel (Brandenburg Concertos. Academy of St. Martin-in-the-fields. N. Marriner, conductor. Philips 6700 045 [1971]).

By studying some iconographical sources related to the Saxon court hunting corps, Herbert Heyde thinks that they used horns in high F (=trumpet pitch), and in the Royal orchestra too, at least until 1718; see „Blasinstrumente und Bläser der Dresdner Hofkapelle in der Zeit des Fux-Schülers Johann Dismas Zelenka (1710-1745)“, *Alta Musica* 9 (Johann Joseph Fux und die barocke Bläsertradition. Kongressbericht Graz 1985) (Tutzing 1987), pp. 52 ff. The sources are, however, too vague for such a conclusion.

<sup>36</sup> *Die Instrumentation*, Teil 6: Horn (Leipzig 1956), pp. 446f.

<sup>37</sup> I/5 (1975), pp. 3-46; Kritischer Bericht (1976).

<sup>38</sup> *The Horn and Horn-Playing and the Austro-Bohemian Tradition* (London 1970), p. 77.

<sup>39</sup> *Op. cit.*, pp. 66f. (cf. FN 7).

<sup>40</sup> Editor of Bach's *Complete Horn Repertoire*, 3 vols. (Montreux, Musica Rara 1987), cf. Vol. I, p. 53.

<sup>41</sup> „Zur Verwendung des Corno da Caccia in der Arie ‚Quoniam tu solus‘ in der Messe h-moll von Johann Sebastian Bach“, *Bachwoche Ansbach '85: Offizieller Almanach* (Ansbach 1985), pp. 55-58.

<sup>42</sup> „Corni da caccia mit neuer Technik“, *Brass Bulletin* 46 (1984) pp. 42-44.

<sup>43</sup> „Zur Ausführung des ‚Corne da Caccia‘ im Quoniam der Missa h-moll von J.S. Bach“, *BJ* (1984) pp. 91-105.

<sup>44</sup> „Das gewundene Jagdinstrument von J.W. Haas im Trompetenmuseum Bad Säckingen“/ „The Coiled Hunting Instrument by J.W. Haas in the Bad Säckingen Trumpet Museum“, *Brass Bulletin* 54 (1986) pp. 8-22, especially 16-22.

<sup>45</sup> Oral communication in a discussion after a lecture of his at the Bad Säckingen Trumpet Museum on April 20, 1988 (communication from Edward H. Tarr). In the written report from the Fux Congress in 1985, p. 61 FN 20 (cf. FN 35), he is more diplomatic, saying that the emblematic and contrapuntal arguments advanced by Damm and Güttler for each of their two positions are lost in the spiritual vastness of Bach's music. In „Instrumentenkundliches über Horn und Trompete bei Johann Sebastian Bach“, in *Johann Sebastian Bachs historischer Ort* (Wiesbaden/Leipzig 1991) (*Bach-Studien* 19), 250-265, he states on p. 256 that the low execution would be the more appropriate („... so erscheint die tiefe Aufführung ... als die angemessenere und als die, die dem lokalen Klangideal am meisten entsprochen haben dürfte“).



One reason for Güttler's (and Wolf's) opinion is the presence of 18th-century horns in high D (or rather D-flat, modern pitch) in certain collections, and possessing a wide cylindrical mouthpipe so that they can be played with a trumpet mouthpiece, as well as their assumption that most early horn players doubled on horn and trumpet. (Concerning the support for this latter, see below.) Some cases in point are the following surviving instruments in high D:

- a pair of horns by Georg Friedrich Steinmetz (1668-1740), preserved in the Musikinstrumenten-Museum of Berlin (No. 4187 and 4188).<sup>46</sup>
- a pair of horns with crooks for C by Friedrich Ehe (1669-1743), preserved in the Museum Carolino Augusteum of Salzburg (No. 24/1 and 24/2).<sup>47</sup>
- a horn by Ernst Johann Conrad Haas (1723-1792), preserved in Historisches Museum Basel, Sammlung alter Musikinstrumente, formerly in the collection of Wilhelm Bernoulli (No. 1980.2118).<sup>48</sup>

In order to find a satisfactory solution to these and similar controversies – if a solution is indeed to be found –, we will have to see what sort of evidence there is for horn pitches in art music. The main kinds of evidence are left to us in theoretical writings, and evidence found in the music itself.

## 5. Written evidence and music

The horn is first mentioned in C. Weigel's *Abbildung der Gemein-Nützlichen Haupt-Stände*, printed in Nuremberg in 1698. Unfortunately he does not say anything about the pitch or pitches in use at that time. He only reports on p. 233 that some horns have a diameter like a rather large plate („ziemliche Schüssel“), while others are coiled twice, three times, or even four times.

The first writer to state something about pitch is Mattheson 1713. In his opinion the most useful are those in F *Cammerton*. He also mentions that there are horns in G *Chorton* (= A *Cammerton*), but he does not say anything about lower pitches than F and above all, nothing about horns in high C or even D *Cammerton* (thus trumpet pitch).<sup>49</sup>

<sup>46</sup> Staatliches Institut für Musikforschung Preussischer Kulturbesitz. Musikinstrumenten-Museum Berlin. Krickeberg, D., and Rauch, W., *Katalog der Blechblasinstrumente* (Berlin 1976), pp. 102f.

<sup>47</sup> Birsak, K., „Die Blechblasinstrumente im Salzburger Museum Carolino Augusteum“, *Salzburger Museum Carolino Augusteum. Jahresschrift*, Band 22 (1976) p. 21.

<sup>48</sup> Gutmann, V., *Mit Pauken und Trompeten. Ausstellung ausgewählter Instrumente aus der Sammlung historischer Blechblasinstrumente und Trommeln von Pfarrer Dr. H. C. Wilhelm Bernoulli (1904-1980). 5. Juni 1982 – 5. Dezember 1982 auf der Westempore der Barfüsser-kirche.* (Basel 1982), pp. 33f, 37.

<sup>49</sup> Mattheson, *Das neu eröffnete Orchestre* (Hamburg 1713), p. 267.



J. F. B. C. Majer mentions that „nowadays“, that is, about 1730, there are horns in C, an octave lower than trumpets.<sup>50</sup> Such instruments apparently existed well before 1730, since H. H. Franck in Hildburghausen made a parforce-horn in B-flat basso already in 1716.<sup>51</sup>

As far as the music is concerned, it appears as if in Saxony there were two main pitches, A being the highest, notwithstanding the above-mentioned hunting instruments in still higher keys.

F.W. Zachow (d. 1712), one of the very first composers to write for the horn, wrote for instruments in D, F, and A.<sup>52</sup> In the cantatas *Lobe den Herrn, mein Seel* and *Es wird eine Rute aufgehen*, the horns, labeled „Corne de Chasse“, are in A *Chorton* (as are strings, continuo, and voices), while the woodwinds are notated a minor third higher, in C low *Cammerton*. This practice also concerns *Nun aber gibst du, Gott, einen gnädigen Regen*, where the oboe in a later copy has been transposed down to A.<sup>53</sup> The horns in *Dies ist der Tag* are designated „Corne de Chasse magg“ (1&2). They are in D *Chorton* while the woodwinds are in F low *Cammerton*. In another setting of *Nun aber gibst du Gott, einen gnädigen Regen*,<sup>54</sup> the horns are designated „Corno grosso“ (1&2) and are in F. In this set of parts from Grimma (for the first performance there in 1719), all the parts are in low *Cammerton* (thus in F) while the continuo is in D. The horns in F low *Cammerton* are equal to those in D *Chorton*. The „Corne de Chasse“ (1&2) in *Meine Seele erhebt den Herren* are also in F *Cammerton*, as are the other parts including the continuo (preserved as a score, however, there being no separate parts, of which that for the continuo would have been transposed).

Horns in A, called „Waldhörner“, appear in G. Vogel's cantata *Nun aber giebst du, Gott, einen gnädigen Regen* performed in Grimma in 1704 and 1721.<sup>55</sup> In this work, there is also a part for „Bassone“ in C, apparently a later addition. This work was therefore composed in 1704 or probably somewhat earlier, since the works performed at Grimma generally reached that town one or more years after they were composed. The first performance would also have been in *Chorton*. (The older part for „Fagotto“ is in A.)

<sup>50</sup> Majer, J.F.B.C., *Museum Musicum ... das ist Neu-eröffneter Music-Saal* (Schwäbisch Hall 1732), p. 41.

<sup>51</sup> Meer, J.H. van der, *Verzeichnis der europäischen Musikinstrumente im Germanischen Nationalmuseum Nürnberg, Band I. Hörner und Trompeten, Membranophone, Idiophone* (Wilhelmshaven 1979), p. 54 (Sign. W. 3013).

<sup>52</sup> *Denkmäler deutscher Tonkunst*, vol. 21/22 (Leipzig 1905).

<sup>53</sup> This is apparent from the fact that the second oboe reaches a b, which was unplayable, and the fact that the first oboe does not reach higher than a". The transposed parts otherwise reach c"". This was not Zachow's last cantata; the indication „1712. 17. Juny“ refers to the date when the copy was made. The date of performance was most probably May 15, 1712. See Thomas, G., *Friedrich Wilhelm Zachow* (Regensburg 1966), p. 156.

<sup>54</sup> Dresden, Sächsische Landesbibliothek, Musikabteilung, Mus. 2150-E-504.

<sup>55</sup> Dresden, Sächsische Landesbibliothek, Musikabteilung, Mus. 1919-E-500.



Horns in A („Corni da Caccia“) are also prescribed in J.C.F.Fischer's *Litaniae Lauretanie*, printed in 1711. In two other pieces in the collection, two Clarini in C are prescribed. The pitch at this early period (and without woodwind) is most probably *Chorton*.

In G.W. Jacob's *Anathema gratiarum*, printed in Prague in 1714 (cf. above), the horn pitches are E flat, G, A and B flat, probably *Chorton*.

Turning now to Leipzig, two „Corni“ in A are prescribed in J.Kuhnau's cantata *Welt à Dieu ich bin dein Müde*.<sup>56</sup> The continuo is written in G, voices and strings in A, while „Obboe 1&2“ and „Flauto“ are in B flat – thus low *Cammerton*. The horn parts are of course transposed. In the autograph score of Kuhnau's cantata *Nicht nur allein am frohen Morgen*,<sup>57</sup> dated Dec. 1718 (in Fer. 2. Nativ. Domini), the continuo and voices are in A while strings and woodwinds are in C.<sup>58</sup> In the first movement (chorus), „Corni“ are noted at bar 52 and before the 4 last bars of the chorale with which the movement concludes. The parts show that some movements have been expanded by several bars. There are no separate parts for „Corni“, but there are two for „Clarino 1&2“, which were written by J.A.Kuhnau (previously „Hauptkopist A“ in A. Dürr's investigation). Kuhnau's intention must first have been to use horns (with timpani), but then he changed his mind and had the parts performed on trumpets. Two horns in F are prescribed in *Wie schön leuchtet der Morgenstern* preserved in a score copy. The horns are designated „2 Corni grande“. <sup>59</sup> As in Zachow's compositions, pitches lower than A were designated „grosso“ etc..

Horns in D, F, G and A *Cammerton* are met with in J.D.Zelenka's compositions, and from about 1726/28 J.W.Rathgeber prescribed horns in C, D, E-flat, F, G, A and B-flat (*Cammerton*).<sup>60</sup>

<sup>56</sup> Leipzig, Musikbibliothek der Stadt Leipzig, Sign. III. 2. 125.

<sup>57</sup> Leipzig, Musikbibliothek der Stadt Leipzig, Sign. III. 2. 121.

<sup>58</sup> At the beginning of the first movement a double key signature appears: G2-clef/c3-clef for strings and horns; the last could therefore be regarded as being in A *Chorton* or high C low *Cammerton*.

<sup>59</sup> *Denkmäler deutscher Tonkunst*, vol. 58/59 (Leipzig 1918). In Kremsmünster in 1710, two horns in A were lengthened to be pitched in F while two „grosse Jägerhorn“ were cut to fit the pitch of the organ. See Kellner, A., *Musikgeschichte des Stiftes Kremsmünster* (Kassel & Basel 1956), p. 308. Were the latter horns in a pitch lower than F? The horns with four crooks each in Leichamschneider's account from 1703, however, were also called „1 paar grosse neue Jägerhorn“. They should have been higher than F, with crooks for, say, F, G, A, and B-flat. Or did this horn, too, have pitches lower than F?

<sup>60</sup> That he writes for both voices and instruments in *Cammerton* in his church music is evident from the part for oboe in no. 5 of *Sacra anaphonesis* (op. 5, printed in 1726), which is not transposed a tone higher.



## 6. J. S. Bach's Leipzig horn parts and their background

The majority of J. S. Bach's horn parts are written for horn in F and G, a few in C, D, and A, and one in B-flat (the *Litui* in BWV 118). Three horns in B-flat also occur in BWV 143, but the work's authenticity has been questioned by Alfred Dürr (cf. FN 8).

Bach has also written a large number of parts for a single horn, in most cases doubling the soprano part in the chorales and notated at concert pitch, often with a number of sharps or flats in the key signature (a procedure of his which we are otherwise familiar in his trumpet parts in several chorales). C. S. Terry (*Bach's Orchestra*, 1932) regarded them as having been written for a slide horn („corno da tirarsi“), some have thought that „corno“ is an abbreviation for „cornetto“ and that such movements should thus be performed on a cornett, and still others felt that they could be and indeed were performed on natural horn if they are transposed. These controversial parts in concert notation do not form the object of this study, as they need a special analysis,<sup>61</sup> but rather those which were unequivocally written for natural horn. Some parts have both transposed and untransposed parts for horn.

In order to show the reader which pitches Bach used and how often, I herewith present the following chronology (reperformances of works are generally not quoted):

### Weimar

1713 or 1712 <sup>62</sup>	BWV 208	2 horns in F
1713 c.	BWV 1046a	2 horns in F

### Cöthen

1717c.	BWV 1046	2 horns in F
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In Weimar and in Cöthen, then, Bach wrote only for horns in F.

### Leipzig

1723 (18. 07.)	BWV 136	1 horn in A <sup>63</sup>
1723 (26. 12.)	BWV 40	2 horns in F <sup>64</sup>
1724 (06. 01.)	BWV 65	2 horns in C

<sup>61</sup> I have dealt with these problems on pp. 46-52 in my dissertation (cf. FN 14) and am prepared to agree with Terry that a slide instrument was used in most cases.

<sup>62</sup> Kobayashi, Y., *Report at the colloquium on the early works of Bach* (University of Rostock, September 1990, publication in prep.), referred to in: Zehnder, J.-C., „Giuseppe Torelli und Johann Sebastian Bach“, *Bach-Jahrbuch* 77 (1991) p. 94, FN 174. (Communication from Edward H. Tarr.)

<sup>63</sup> The first number is transposed, but the last, a chorale, is untransposed and a doubling of the soprano.

<sup>64</sup> The numbers 1 and 7 are transposed while 3, 6, and 8 (chorales) are written at concert pitch, the first horn doubling the soprano.



1724 (02. 02.)	BWV 83	2 horns in F <sup>65</sup>
1724 (16. 04.)	BWV 67	1 horn in A <sup>66</sup>
1724 (25. 12.)	BWV 91	2 horns in G
1725 (25. 03.)	BWV 1	2 horns in F
1725 (10. 05.)	BWV 128	2 horns in G (Tromba in D in number 3)
1725 (03. 08.)	BWV 205	2 horns in D (+ 3 trumpets in D)
1725 (31. 10.)	BWV 79	2 horns in G
1726 (01. 01.)	BWV 16	1 horn in C (cf. also above, p. 4)
1726 (21. 07.)	BWV 88	2 horns in G
1726 (28. 07.)	JLB 7	2 horns in F <sup>67</sup>
1726 (24. 11.)	BWV 52	2 horns in F (No. 1 from BWV 1046:1)
1729 (06. 06.)	BWV 174	2 horns in F
1729 c.	BWV 250-252	2 horns in G
1731 (08. 04.)	BWV 112	2 horns in G
1733 (27. 07.)	BWV 232 <sup>i</sup>	1 horn in D
date of dedication)		
1733 (05. 09.)	BWV 213	2 horns in F (No. 1 used again in BWV 248 <sup>iv</sup> :1)
1735 (01. 01.)	BWV 248 <sup>iv</sup>	2 horns in F
1735 (30. 01.)	BWV 14	1 horn in F (cf. also above, p. 4)
1732/1735	BWV 100	2 horns in G
1736/1737	BWV 118	2 horns in B-flat
1737/1739	BWV 233	2 horns in F
1742 (30. 08.)	BWV 212	1 horn in D and G
1748 (Aug.)/	BWV 195	2 horns in G <sup>68</sup>
1749 (Oct.)		

<sup>65</sup> The first number has transposed parts while number 6 (chorale) has an untransposed part in the first horn, doubling the soprano.

<sup>66</sup> The horn part written by J. A. Kuhnau is marked „Corno da Tirarsi“, „da Tirarsi“ having been added by Bach. In the first number the part is transposed, but contains notes outside the harmonic series in some bars. Numbers 4 and 7 (chorale) are untransposed and double the soprano. In the score Bach began to write a transposed horn part in number 6 (aria, bass and chorus), but interrupted his work on the part, crossing it out and writing „Corno tacet“. Moreover, in the score Bach wrote „Corno“ only at the beginning of the first number, without the suffix „da Tirarsi“.

<sup>67</sup> On the cover of this cantata by Johann Ludwig Bach, a copyist has written „2 Clarini piccoli o Corni di Silva“. The parts are, however, designated „Corno 1<sup>us</sup>“ and „Corno 2<sup>do</sup>“. In a score, written about 1743/1746, J. S. Bach has written „2 Corni“. The performance in Leipzig was thus with horns. The horns as alternatives were apparently suggested by J. L. Bach in Meiningen, as F trumpets were not always available (or did he even give his musicians in Meiningen a choice if they were not familiar enough with the F trumpet?). (J. S. Bach had borrowed the parts from Meiningen and copied them in Leipzig.)

<sup>68</sup> This cantata – which otherwise features 3 trumpets in D – might have been composed as early as 1727/1731, but for the performance in 1748/1749 Bach added a chorale with 2 horns. During this period he also compiled the B minor Mass, BWV 232, with the aria „Quoniam“ (no. 10) in the Gloria for a horn in D.



## 7. Summary: Leipzig

As stated at the beginning of this section, Bach's natural horn parts were generally written for horn in F or G. Bach's premier brass-player, Gottfried Reiche, who died on the 6th of October 1734, left a horn among other instruments.<sup>69</sup> On the basis of the frequency of the various pitches used by Bach, this instrument may well have been in G, with a crook for F. The second horn-player will also have owned a horn in the same pitch. Now we will occupy ourselves with the exceptions.

### *BWV 65 and BWV 16 in high or low C? Horns in high and low D*

Were the horn parts in BWV 65 (and the single one in BWV 16, from 01.01.1726) written for instruments in high C? Did they have horns in this pitch in Leipzig too? Let us examine the situation in that city under Zachow and Kuhnau.

Zachow's horns in A *Chorton* are equivalent to B-flat *Cammerton* and C *tief Cammerton*. If the works in Jacob's collection mentioned above are in *Chorton*, then the B-flat horns are equivalent to C *Cammerton*.

The horns Kuhnau first intended in his cantata *Welt à Dieu* were in C *tief Cammerton* or A *Chorton*. As Kuhnau decided to write in that key, they will have had horns of that pitch in Leipzig. It is reasonable to think that they had an older pair of horns in A *Chorton* in Leipzig – the *Stadtpfeifer* did not own all the instruments themselves.<sup>70</sup> Very few works by Kuhnau have been preserved, so we do not know if F and A were the only pitches he used. In any case, his A horns were not high enough to fit „C alto“ in *Cammerton*, if Bach intended this pitch at all, but Bach may have borrowed instruments in this pitch.

When Johann Wilhelm of Eisenach, on a tour to various places, visited Jena in 1718, the cantatas *Ihr Herrn vergnügten Seelen ex B. mit Waldhörnern und Hautbois* and *Nun danket alle Gott ex C mit Trompeten* among other things were performed in his honour.<sup>71</sup> The question is here if the cantatas were in *Chorton* with oboes in C in the first work or if they were in *Cammerton*. In the first case the horns would have been in C *Cammerton*/B-flat *Chorton*.

<sup>69</sup> Schering, A., „Die Leipziger Rathsmusik von 1650 bis 1775“, *Archiv für Musikwissenschaft* 3 (1921) p. 34.

<sup>70</sup> According to an inventory from July 3, 1789 upon the occasion of Hiller's succeeding Doles as *Cantor*, the churches of St. Thomas and St. Nicolai jointly owned „2 Hörner in B“ (as well as two more in G with 3 crooks each, two slide trumpets and three trombones). See Heyde, *op. cit.* (FN 45), p. 251. However, in earlier times (Kuhnau and Bach), the churches did not own such instruments; the players were expected to provide them themselves (Heyde, *op. cit.*, 250-251).

<sup>71</sup> Jung, H.R., *Georg Philipp Telemann als Eisenacher Kapellmeister* (Diss. Halle 1975), vol. I, p. 89.



Both alternatives show, however, that C major either in *Chorton* or *Cammerton* was preferred for trumpets and the lower key for horns.

On the other hand, A. Lotti wrote for two horns in C in *Teofane* for Dresden in 1719.<sup>72</sup> The first horn reaches e''' several times. If this was in C *alto* his horn parts were higher than those he wrote for the trumpet, which is quite unlikely.

Even if Mattheson did not mention the pitch of C *alto*, it apparently was used, albeit in a limited way, during the first years of the 18th century. There are four earlier, less equivocal examples with high C and even D horns. First R. Keiser had already written for C horn in his *Octavia*, performed in Hamburg in 1705.<sup>73</sup> This instrument will have been in C *alto*, since we have no certain evidence that the low C horn was already in use then.<sup>74</sup>

Second, horns in high pitch were used in a collection of cantatas by C.L. Boxberg which must have been composed in 1703/04.<sup>75</sup> A horn occurs in three cantatas, 1) *Daran erkennen wir*, 2) *Lasst hinzutreten*, and 3) *Drei sind dir die Zeugen im Himmel*, all with the setting of soprano, oboe, horn, bassoon, and continuo.<sup>76</sup> In all three cantatas, the voice and continuo are in *Chorton* while the woodwinds are in *Cammerton*: 1) in E-flat/F with „gross Waldthorn“ transposed in C, and in 2) and 3) in B-flat/C with the „Waldthorn“ in C. In another work of Boxberg's, *Fürchtet Gott und ehret den König*, the setting is for soprano, oboe, „Clarino“, bassoon, and continuo. Here the woodwinds are in D, while the other parts are in C.<sup>77</sup> Thus, Boxberg used the trumpet in the pitch of C *Chorton* (= D *Cammerton*) and the horn in the lower pitches of E-flat and B-flat *Chorton* (or F and C *Cammerton*). As the horn in E-flat/F was called „gross Waldthorn“, the one in B-flat/C must have been in „alto“. As in the above-mentioned cantata by G. Vogel, the term „Waldthorn“ attests to the fact that the „foreign“ terms „Corno da caccia“ and „Cor de chasse“ were not yet in general use or known everywhere.

<sup>72</sup> Dresden, Sächsische Landesbibliothek, Musikabteilung, Mus. 2159-F-7 (Act III:1). The appearance of this pitch raises the question as to whether Leichamschneider's horn with six crooks already had crooks for low C, or if this lowest pitch was obtained by using another horn in low C. Conceivably, a horn when equipped with this low (and sixth) crook was so clumsy to hold that it was only very seldom used. This is further evident from a note at the foot of the first page of the aria in question: „Un tuon più Alto“. (The horns in the sinfonia are in D. Should the entire aria be transposed a whole tone to fit the horns better? Or is it a later addition?)

<sup>73</sup> *Georg Friedrich Händels Werke. Supplemente*, vol. 6 (Leipzig 1902).

<sup>74</sup> In 1699 a coppersmith repaired among other things two „C-Hörner“ for the monastery of Kremsmünster. He also made two pair of „Grumbogen“, but it is not clear if they really belonged to the horns (Kremsmünster, Regenterei, KRB 373). At this early date the horns would have been in high C. It is in any case interesting to see that the horn was already used in Kremsmünster at this time.

<sup>75</sup> Cf. Sorensen, S., „Über einen Kantatenjahrgang des Görlitzer Komponisten Chr. Ludw. Boxberg“, *Natalicia musicologica Knud Jeppesen* (Copenhagen 1962), p. 242.

<sup>76</sup> Lund, Universitetsbiblioteket, Handskriftsavdelningen, Saml. Wenster, Litt. M 3, 4, and 11

<sup>77</sup> Lund, Universitetsbiblioteket, Handskriftsavdelningen, Saml. Wenster, Litt. M 33..



Third, F. G. Klingenberg of Stettin frequently used a pair of horns in his *Hochzeitsarien* (wedding arias), beginning in 1704. The most frequently used pitch up to 1711 was B-flat. In the first of these works he used the pitch of C; this must have been high C, otherwise the horns in B-flat would have been in B-flat *basso*, which is preposterous. Later, in 1714, 1715, and 1717, he used the pitch of C again: these horns will have been his old ones in high C, pitched in *Cammerton*, since they were employed together with oboes (not transposed). In 1716 he wrote for the first time for the horn in F, a pitch which soon became the standard one. M. Rohde, working in the same town, also employed these pitches. A third composer G. Klingenberg, beginning in 1722, always wrote for horns in D and F. This may give a hint as to how lower pitches gradually came into use. Why did F. G. Klingenberg and M. Rohde so often use the higher-pitched horns and not trumpets? The reason can only be that trumpets were not permitted in civic weddings.<sup>78</sup>

Fourth, a pair of horns in D and notated in trumpet pitch (d', f'-sharp, a', d''-a'') occur in J. H. Wilderer's *La Monarchia stabilita* from 1703 (Düsseldorf).<sup>79</sup> The fact that horn parts were notated at trumpet pitch does not mean that these instruments had the same pitch as trumpets, rather than an octave lower.<sup>80</sup> Nevertheless, it is doubtful if low D horns were intended at this early date; even though Weigel mentioned horns coiled four times (or at least three and a half), no evidence for horns pitched in low D *Cammerton* at this early date has yet come to light.

It is true that horns in high D besides the five mentioned above do exist in some collections, a small group of them even accepting a trumpet mouthpiece rather than one for horn, but they were most probably intended for use in the hunt. Several of them have loops or rings through which a cord can be threaded, so that the instrument can be hung round the player's neck, a

<sup>78</sup> Cf. Freytag, W., *Musikgeschichte der Stadt Stettin im 18. Jahrhundert* (Greifswald 1936), Anhang.

<sup>79</sup> Vienna, Österreichische Nationalbibliothek, Musiksammlung, Cod. 17 903 (Act III:6).

<sup>80</sup> Several Italian composers beginning with A. Scarlatti wrote their horn parts an octave above the sound, apparently to avoid ledger lines. So did A. Vivaldi, but only in his last works with horns with transposed parts. In Germany G. Ph. Telemann wrote his horn parts at trumpet pitch, e.g. in the score of his cantata *Wer mich liebet, der wird mein Wort halten* [Frankfurt am Main, Stadt- und Universitätsbibliothek, Musiksammlung, Ms. Ff. Mus. 1474] he writes a single „Corno da Caccia“ to a''' (in the aria „Mache der Seelen gebrechliche Hütte“). (In the part it is transposed to C.) His contemporary trumpet parts do not go higher than concert d'', most often not higher than a'' and b''. The high notation of horn parts by some composers is therefore no evidence that they should be played *alto* or at trumpet pitch.



contrivance which is not necessary for orchestral use.<sup>81</sup> Otherwise, we have no evidence that horns in high D were ever used in art music.

As mentioned above, in 1718 a pair of horns made by Leichamschneider was brought from Vienna to Dresden, each with six crooks,<sup>82</sup> but we have no information as to the pitch of the crooks. E.L. Gerber mentions a pair of *Inventionshörner* by J. Werner in Dresden, made in 1755 and with crooks from B-flat basso to B-flat alto.<sup>83</sup> Why did he not supply a crook for C *alto* if this had been used in Dresden previously? (It could perhaps have been played in high C by using a shank or tuning bit.)

The first author who really mentioned the C *alto* was V. Roeser in his *Essai d'instruction a l'usage de ceux qui composent pour la clarinette et le cor*, printed in Paris in 1764. Obviously, the pitch of C *alto* did not first come in use only towards 1760. It had a certain use during the first and, to a lesser degree, during the second decade of 18th century. Then it is apparently only met with in isolated cases (if at all), but it enjoyed a certain restricted use after the middle of the 18th century, now as the highest pitch of the orchestral horn (achieved either with a shank or a crook) and with a wider bell than the horns from the beginning of the century. The only composer who seems to have used it several times is J. Haydn, who often used it instead of trumpets (since he had to recruit them to Esterhaza).<sup>84</sup> The F horn seems to have been used for the first time in C. Badia's *Diana*, performed in Vienna in 1700.

The question raised above, as to whether Bach used horns in high or low C in BWV 65, is difficult to answer. As we have seen, we cannot be sure that his musicians had access to instruments pitched so high. The horn parts do not have the pronounced heroic character which would be suitable for a high horn, such as the part in BWV 16. Concerning BWV 65 it could be said that high horns are the only possible instruments to cover the very considerable

<sup>81</sup> In 1737 it was noticed in Leipzig that „acht Regimentspfeifer hatten zum Schmaus auf ...; kleinen Waldhörnern geblasen“ (Schering, A., „Die Leipziger Rathsmusik“, *Archiv für Musikwissenschaft* 3 (1931) p. 49). Were these instruments used by the *Hautboisten* pitched in high C, as they were not permitted to use the trumpet? (The *Stadtpfeifer* had this right when playing in the church and at academic festivities or when a royal personage visited Leipzig or members of the council of Leipzig.) Or were the horns in a lower pitch but more frequently and tightly coiled?

<sup>82</sup> Fürstenau, M., *Zur Geschichte der Musik und des Thaters am Hofe zu Dresden*, vol. 2 (Dresden 1862), p. 58.

<sup>83</sup> Gerber, E.L., *Historisch-Biographisches Lexicon der Tonkünstler*, vol.2 (Leipzig 1792), col. 549.

<sup>84</sup> On the use of the high C horn at Esterhaza see Bryan, P., „The Horn in the Works by Mozart and Haydn: Some Observations and Comparisons“, *The Haydn Yearbook* 9 (1975) pp. 222sq.; and Gerlach, S., „Haydns Orchesterpartituren. Fragen zur Realisierung des Textes“, *Haydn-Studien* 5,3 (1984) pp. 180sq.



space between the Oboi da caccia and the very high-lying recorders. The range is also not particularly high for Bach, with only two b''s and one c''' in the first part (no. 6, 46-51), a fact which might also point to the use of a horn in C alto. On the other hand, the listener's tonal impression of the higher harmonics of the lower-pitched horn is higher than the pitch actually played.

This consideration also applies to BWV 16 (no. 3), first performed on January 1, 1726; but here a higher-pitched instrument would do the part more justice. In such a case, however, we must ask why Bach did not then write for a trumpet, since this instrument would have been more suitable: note the text, „Lasst uns jauchzen, lasst uns freuen“.<sup>85</sup> Could it be that Bach forgot to write „Tromba“ in the part at the beginning of this movement? Such an omission would not be unusual for him.

Horns in low D were apparently accessible in Leipzig during the first years of Bach's activity there, and it should have been possible to supply them with crooks for C basso. Horns in C basso probably existed by this time (note the *parforce* horn in B-flat at modern pitch = A *Chorton*, B *Cammerton* from 1716); the horns in Dresden could apparently be crooked in low C at this time. A horn in high C, however improbable, cannot be completely excluded from either BWV 65 or 16, although we have seen that a trumpet would better suit the part and the text of the latter work.

<sup>85</sup> When Bach wrote the horn part for BWV 16 he only had to copy the soprano part for 1 (chorus) and 6 (Chorale) from the score; but the part written for a natural instrument, the aria and chorus (no. 3), was added after the score had been written. It would be very strange if Bach had intended this part for a trumpet and forgot to write „Tromba“ at the head of this movement. (Note this „negligence“ in BWV 14.) The question must also be put why Bach used horns in D only when he apparently wrote for other players than the *Stadtpfeifer* (in BWV 205 and 232, whereas BWV 212 was not composed until 1742). Did the *Stadtpfeifer* not have such horns or was it not always possible to borrow them? (In BWV 205 there must have been additional players too.) Could there, however, have been a pair of horns in high C which Bach used in BWV 65 to obtain a softer sound than the trumpets could have produced, he using one of them again later in BWV 16? The hornist J. Kölbel has written a trio for clarinet, horn and bass in D. The gap between the clarinet, frequently reaching e''', f''' and g''' (sounding a'''), and the horn, often reaching d''' and e''' (sounding f-sharp''), is thus very pronounced. But there is no reason to believe that the horn part was intended to be played in „D alto“, a quite impossible pitch for a hornist. (The MS is preserved in Darmstadt, Hessische Landes- und Hochschulbibliothek, Musikabteilung, Mus. 1181.)



### *Trumpet and horn as alternatives; Bach's „Quoniam“ aria*

The alternative designation „Tromba o Corno“, which is to be found in some scores,<sup>86</sup> has no significance as to pitch; it does not mean that the horn had the same pitch as the trumpet. Similarly, „Corno da caccia“ did not necessarily mean an instrument in high pitch. We thus have no reason to believe that the horn part in the aria „Quoniam“ from the B Minor Mass was written for a horn in high D. This aria with its unusual, low instrumentation consisting of bass singer, horn, two bassoons, and continuo appears for the first time in the dedication copy of the *Missa* which Bach made on July 27, 1733 for the new Elector of Saxony, Friedrich August II, although the editors of *Bach Compendium* do not rule out the movement's possibly being derived from an earlier work now lost.<sup>87</sup> At any rate, we know that horns crooked or pitched in low D were in common use by this date. A horn in D alto would not fit the other low instruments or the bass voice as well as one in D basso.<sup>88</sup>

### *Pitches: Conclusion*

To sum up, then: as far as the pitches of the horn in art music are concerned, high C in *Cammerton*, as well as the pitches B-flat, A, and F – in both *Chorton* and *Cammerton* –, were used already during the first years of the 18th century. *Cammerton* F probably originated in Vienna just before 1700. *Cammerton* (low) D apparently came in during the 1710's on the Viennese orchestral horn. Although the situation is relatively clear, we must still exercise caution when trying to assign a given work to a given horn pitch, high or low.

That caution is in order can be seen from the fact that W.A. Mozart combined two horns in E-flat with two in high E-flat in his symphony KV 123 from 1772. Mozart only wrote for the latter instrument up to d'' (concert f''), as might be expected.<sup>89</sup> The pitch of E-flat alto is otherwise completely unknown in art music.

<sup>86</sup> E.g. in G. Ph. Telemann's cantata *Nun komm der Heiden Heiland* [Frankfurt am Main, Stadt- und Universitätsbibliothek, Musiksammlung, Ms. Ff. Mus. 1285] with „Clarino piccolo ô Corno“ 1 and 2; or J. L. Bach's cantata JLB 7, cf. FN 67. The F trumpet was not always available.

Some symphonies by G. Chr. Wagenseil have trumpets and timpani, when used as introductions to operas, but horns instead of trumpets (without timpani) when used in chamber music. Cf. *DTÖ*, Vol. 31 (Vienna 1908), XIX.

<sup>87</sup> Hans-Joachim Schulze and Christoph Wolff, *Bach Compendium*, Vokalwerke, Teil IV (Leipzig 1989), S. 1187.

<sup>88</sup> See FN 40 - 45 above.

<sup>89</sup> *Neue Ausgabe sämtlicher Werke*, vol. IV/11:3 (Kassel & Basel 1956).



## II

J. S. Bach's horn parts do not go higher than the 18th partial, or written d''', regardless of the key in which the instruments were pitched. The performance of his horn parts is often regarded as strenuous, because of the composer's occasional disregard for rests.

As we shall see below, other composers, contemporary and later, exceeded the technical limits set by Bach, by requiring their horn players to ascend more or less with regularity as high as the 20th, 22nd, and 24th partial, or e''', f''', and g''' – generally on the lower pitches of D, E-flat, E, but also to a lesser degree on F (and G). The „world-record“ height for horn notes in classical music is even a''' (on a horn in C) and a concert c''', written f''' and g''' on the pitches G and F respectively, as we shall see below.

### 8. Trumpeter – hornists

The high horn parts in works by J. S. Bach and his contemporaries have led to problems for modern hornists. The ability of hornists to play in the extreme high range during the first half of the 18th century has been explained by some scholars (and hornists), e.g. R. Morley-Pegge<sup>90</sup> and H. Fitzpatrick<sup>91</sup>, that the players doubled on the horn and trumpet. Fitzpatrick has also found some horn mouthpieces with rims as broad as on trumpet mouthpieces, as well as evidence that some players had a reputation on both instruments.

Doubling on horn and trumpet is true for a certain group of players, but not for all of those mastering the high range. Nor is it true that these parts disappeared toward the middle of the 18th century. This group is, of course, the *Stadtpfeifer*.

The *Stadtpfeifer* were among the very first to play the horn. Several of them had training on the trumpet, on which they had a moderate or in some cases great skill. Already in 1698 (31st May) C. S. Scheinhardt and his musicians played at the banquet for Tsar Peter in Leipzig, and among other instruments they played „Waldhörner und Trompeten“.<sup>92</sup> This group was later called *Neukirchenmusiker* and became a third independent group, next to the *Stadtpfeifer* and *Kunstgeiger*. It is therefore very likely that the *Stadtpfeifer* in Leipzig also played the horn before 1700.

<sup>90</sup> *The French Horn*, 1960.

<sup>91</sup> *The Horn and Horn-Playing and the Austro-Bohemian Tradition 1680 - 1830*. K. Birsak was apparently strongly influenced by Fitzpatrick and stated that the horns in high D, with crooks for C and made by F. Ehe, were used by trumpeters who doubled on horn. („Die ‚Jagdhörner‘ im Salzburger Museum Carolino Augusteum“, *Museum Carolino Augusteum. Jahresschrift*, Vol. 22, (1976), p. 91.)

<sup>92</sup> Schering, A., „Die Leipziger Rathsmusik“, *AfMw* 3 (1921), p. 47.



G. Reiche's skill on the trumpet and apparently on the horn too is well-known. Another *Stadt-pfeifer* and early horn player was M. Amende (born in Prussia), a *Rathsmusiker* in Danzig, who excelled on the trumpet and horn. He died already in 1709.<sup>93</sup> J. J. Quantz tells us that when he began his education in Merseburg in 1708 he had first to play the violin, then the oboe and the trumpet, later *Waldhorn* and other instruments.<sup>94</sup> For the *Stadt-pfeiferprobe* in Zeitz in 1743, J. G. Görner (in Leipzig) wrote a movement each for „Trompete“, „Alt Posaune“, „Zink oder Cornetto“, two movements each for „Violine“ and „Hautb. oblig“ and finally a movement for the „Waldhorn auss F“. <sup>95</sup> The horn thus almost immediately became one of the instruments which the *Stadt-pfeifer* had to play. For players thus trained on the trumpet it was not difficult to play the high parts written by Zachow (especially those in A) and by J. S. Bach (especially those in F and G).

The horn was very soon introduced in the *Hautboistenbande* too. Mattheson's composition from about 1706 has been mentioned above. In 1708 it was reported from Zerbst that the „Hautbois warten mit den Waldhörnern auf“. <sup>96</sup> Horns were also used in the *Jagdbande* or *Jagdhautboisten* about the the same time (e.g. in Berlin and Weissenfels). <sup>97</sup>

In an instruction from 1714 concerning how *Trompetenscholaren* should behave, it is stressed that they shall not dare to be together with *Kunstpfeifer* oder *Waldhornisten*, much less teach them the military signals. <sup>98</sup> The hornists are here mentioned as a separate group of musicians. They may have come from the *Stadt-pfeifer* or could also have been educated in the *Hautboistenbande*. Of course they may also have been from the *Jagdmusik*. In any case they did not have training as field and court trumpeters, otherwise the military signals would not have been unknown to them.

H. Fitzpatrick mentions a group of hornists active in Bohemia and Austria who doubled on the trumpet and horn. <sup>99</sup> But these musicians were active

<sup>93</sup> Mattheson, *Grundlage einer Ehrenpforte...* (Hamburg 1740; Neudruck Berlin 1910).

<sup>94</sup> Marpurge, F.W., *Historisch-Kritische Beyträge zur Aufnahme der Musik*, 1 (1754), pp. 199sq.

<sup>95</sup> Werner, A., *Städtische und fürstliche Musikpflege in Zeitz* (Bückeburg & Leipzig 1922), p. 47sq.

<sup>96</sup> *Ibid.*, p. 90. Already in 1704 G. Pepusch and seven other *Hautboisten* from Berlin visited London and played „Hautbois, Flutes and Hunting Horns“. (In another concert advertisement the latter were referred to as „German Horns“.) Dart, T., „Bach's ‚Fiauti d'echo‘“, *Music and Letters* 41 (1960) p. 339.

<sup>97</sup> Sachs, C., *Musik und Oper am kurbrandenburgischen Hof* (Berlin 1910), p. 128; Werner, A., *Städtische und fürstliche Musikpflege in Zeitz*, pp. 98ssq.

<sup>98</sup> *Abhandlung, von den Trompeten, und ihren besonderen Rechten, in Ansehung der Erlernung ihrer Kunst.* (Der Prüfenden Gesellschaft zu Halle herausgegebene Schriften. vol. 2) (Halle 1743), p. 337. Facsimile in Altenburg, D., *Untersuchungen zur Geschichte der Trompete im Zeitalter der Clarinblaskunst (1500-1800)*, vol. 2 (Regensburg 1973), p. 198.

<sup>99</sup> Fitzpatrick, H., *The Horn and Horn-Playing and the Austro-Bohemian Tradition* (London 1970), p. 157: „only in terms of the reciprocal horn-and-trumpet technique are the clarino (!!) horn parts of this era (1700-1760) to be explained“.



during the second part of the 18th century, when the orchestral trumpet parts, except in solo concertos, seldom reached above the 12th harmonic. There are no reports that they played solo concertos as well (although some of them might have done so). Doubling on trumpet and horn continued well into the 19th century in Bohemia and especially Prague. The great Bohemian horn virtuoso J. Matiegka (1728-1804) taught both horn and trumpet. He taught the later horn virtuoso W. Zaluzan (b. 1767) on both instruments. Matiegka had studied with H. Smeykal, who was known as one of the foremost trombonists.<sup>100</sup>

Practically all the hornists in the more important Austrian and German orchestras came from Bohemia. They may have got their training on the trumpet too, but in the court orchestras they had only to play the horn and had nothing to do with the trumpet corps. These hornists then taught pupils on the horn; and later horn tutors like those of H. Domnich (1808) and J. Fröhlich (1811, 1829) treat the development of the high range, but they do not claim that training on the trumpet is a condition for mastering the high range.

#### 9. *True horn virtuosos and their conquest of the altissimo register*

The large number of works written for the altissimo register of the horn in the second half of the 18th century, then, was performed by specialists on that instrument. Many courts had at least one horn virtuoso, and many well-known court composers wrote spectacular music for these gentlemen.

Below we will discuss these works in order. Some of the composers were Zelenka, Neruda, J. Stamitz, Pokorny, Veichtner, Sperger, Mozart and Haydn, Reicha, Koch, and Schumann. The virtuosos, performing in a register generally no longer utilized today, were J. A. Schindler, Johann Georg Knechtel, J. Ziwni, J. Türschmiedt, J. A. Rudolf, Carl Franz, and E. Pohle.

<sup>100</sup> Dlabacz, G. J., *Allgemeines historisches Künstler-Lexikon für Böhmen und zum Theil auch für Mähren und Schlesien* (Prague 1815), vol. 2, col. 277sq.; vol. 3, col. 430 resp. 123sq.

C.M. von Weber reported that when he was in Prague (1813-1816), the trumpeters at the *Ständetheater* were A. Wanierzowsky and F. Weiss. (The latter was stated by Dlabacz, *op. cit.*, vol. 3, col. 344, to be a very good *Klarinist*.) Weber continued: „Wenn die Besetzung Posaunen erheischt, so werden andere Trompeter bestellt und Herr Hlava spielt dann die Altposaune, Herr Wanierzowsky die Tenor- und Herr Weiss die Bassposaune.“ [Meier, A., „Die Pressburger Hofkapelle des Fürstprimas von Ungarn, Fürst Joseph von Batthyany, in den Jahren 1776 bis 1784“, *The Haydn Yearbook* 10 (1978)]. We must keep in mind that „Klarinist“ meant orchestral trumpeter as opposed to field (or military) trumpeter, especially in the later decades of the 18th century in Austria and Bohemia.



## *Zelenka's Horn Parts*

The high horn parts by J.D. Zelenka in his capriccios have been regarded, besides those by J.S. Bach, as the summit of writing in the altissimo range, since they go as high as g''' on the horn in D and d''' on the horn in A. Bach's parts have been connected with G. Reiche and Zelenka's with J. A. Schindler, first horn in Dresden between 1723 and 1733 or 1734. However, only one of Zelenka's Capriccios was composed in Dresden, HZWV 186 in G and dated „18. Majo 1729“. The others were composed for Kurprinz Friedrich August's (chamber) orchestra in Vienna, which consisted of 12 musicians recruited in September 1717 from Dresden including their leader J.G. Pisendel and Zelenka. Among these musicians, however, there were no horn players.<sup>101</sup>

In the preface to J. V. Kummel's *Neuer musikalischer Vorrath*, printed in Hamburg in 1715, it is stated that the hornists in Vienna are known for their great ability. Those who played the horn parts in the Capriccios which Zelenka composed in Vienna were no doubt engaged from the Viennese hornists. The degree of difficulty in horn parts in the capriccio from 1729 is the same as in those composed in Vienna, but the orchestral horn parts in Zelenka's masses are less demanding.

## *Horn-playing in Dresden: J. G. Knechtel*

In 1731 J. A. Hasse was offered the post of *Kapellmeister* in Dresden. Hasse was an advocate of the new type of orchestration in which the function of the horns was to mark the rhythm, fill out the harmony, sustain long notes, increase the volume in tutti sections, avoid melodies and perform only figures or phrases of short duration. The first part could still reach the 16th harmonic, even on a horn in G or A, but the use of the range above the 12th harmonic became more moderate. This type of orchestration became more and more universally employed during the following decades, but obbligati could still be melodic and florid. A case in point is the obbligato for horn in (low) D, reaching f''' and with wide skips, in Hasse's first opera for Dresden, *Cleofide* (Alexander's aria, III:6). Solo and concerted parts of course continued to be melodic and of virtuoso character.

<sup>101</sup> Fürstenau, M., *Zur Geschichte der Musik und des Theaters* (Dresden 1862), vol. II, p. 86. As the hornists were rather seldom used in the orchestra, there was no reason to send hornists from Dresden to Vienna. It should be noted that A. Vivaldi, in his concerto for two horns in F, RV 539 (composed during the 1720's? or earlier?), at first wrote for the first horn up to the 24th harmonic (concert c'''), which he then changed, as he did with a passage reaching the 22nd. The highest harmonic in this work is the 20th. The 16th is very frequent. [Turin, Biblioteca Nazionale Universitaria, Giordano 31, fols. 176r-188v.] It is not known whether Zelenka heard such hornists in Venice.



J. A. Schindler's successor as first hornist was Johann Georg Knechtel, who entered the royal orchestra in Dresden in 1733 and held that post until 1755 or early in 1756, according to the *Hof- und Staats-Calender* for 1734-1756. He was apparently a worthy successor of Schindler, for in a report on the development of musical life in Russia (1770) it was stated that two Bohemian hornists, Schmidt and Kittel, who joined the orchestra in St. Petersburg ca. 1735/36, were „pupils of the famous hornists from Vienna, and former second-chair players to the still more famous Knechtel from Dresden“. <sup>102</sup>

In a manuscript with 18 compositions for horn preserved in the University Library in Lund (Sweden), which was most probably compiled during the 1740's, <sup>103</sup> there is a „Concerto ex D dur del Sigr. Knechtel“. This Knechtel will be identical with J. G. Knechtel in Dresden. In the first movement the solo part often reaches d''' and in the last solo entrance frequently f'''. This note also occurs once in the second movement, and in the third g''' is reached through a scale.



Bsp. 1: Knechtel, Concerto ex D-dur, I, (Allegro), 56-60; Cornu Concerto in D.

The following concerto in the collection (No. 11) has the title „Concerto ex Dis dur“. It is anonymous but might well have also been written by Knechtel, especially since it is written in the same style and was copied for the same collection. The solo part is still more demanding than in the first work: d''' and e''' occur frequently, and g''' is reached three times (twice in the last movement). There are also difficult skips.

<sup>102</sup> „Schüler des berühmten Waldhornisten aus Wien, und vormalige Secundanten des noch berühmteren Knechtel aus Dresden“. *Musikalische Nachrichten und Anmerkungen* (Wöchentliche Nachrichten und Anmerkungen die Musik betreffend) 4 (1770), p. 165.

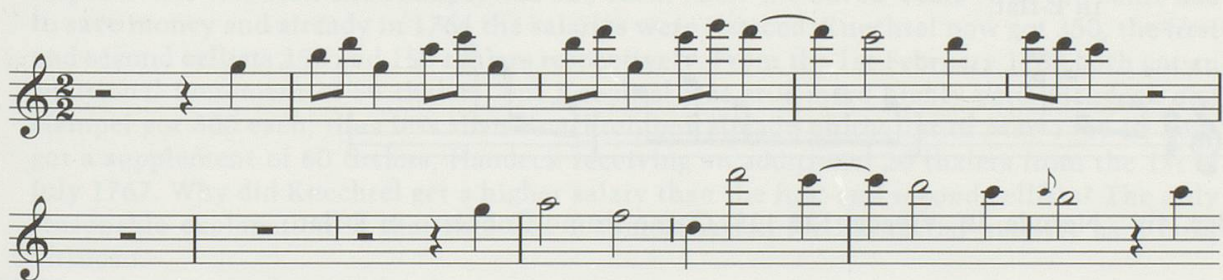
<sup>103</sup> Lund, Universitetsbiblioteket, Saml. Wenster Litt. I/1-17b. As regards style the works were probably composed during the 1730's and 1740's (first half?). The 18 works are by (J. A.) Scheibe, Graun, (J. J.) Quantz, (Chr.) Förster (d. 1745), etc., including a composition by one Reinhard. This is probably one of the Reinhard brothers who were hornists in Köthen. One of them visited Zerbst in 1750, both in 1753. (Wäschke, H., „Die Zerbster Hofkapelle unter Fasch“, *Zerbster Jahrbuch* 3 (1907), p. 62.) The manuscript was probably copied from scores or sets of parts by a hornist from Prussia or Saxony, or a hornist visiting these parts of Germany.





Bsp. 2: Anonymus (Knechtel?), Concerto ex Dis dur, I, Allegro, 29-37; Cornu Concertato in E-flat.

In Dresden (Sächsische Landesbibliothek, Musikabteilung) some group concertos (*Gruppenkonzerte*) by J. F. Fasch with or without concertato violin are preserved, No. 37, 38, 39, 46 and 47 respectively in G. Küntzel's list. All of them are autograph scores except for No. 46, which is preserved only in parts written by Dresden copyists.<sup>104</sup> In No. 46 in D,  $e'''$  and  $f'''$  is reached several times, and in 37 and 47  $e'''$ , concert  $a''$ , is reached on the F horn several times. The most remarkable horn part occurs in No. 39 for „violino concertino“, 2 horns, 2 oboes, 2 violins, viola, bassoon and harpsichord in D. In the last movement (No. 3) the first horn has to reach  $g'''$  and also has an adventure-some skip.



Bsp. 3: Fasch, Concerto f. „Violino concertino“, 2 horns, 2 oboes, bassoon, strings and cembalo in D. III, Allegro, 93-99; Cornu I in D.

<sup>104</sup> Küntzel, G., *Die Instrumentalkonzerte von Johann Friedrich Fasch (1688-1758)* (Diss. Frankfurt an Main 1965), pp. 197sq.



By comparing the parts written by copyists in Dresden, M. Fechner has found that the works mentioned belong to the period from ca. 1735 to ca. 1745, while No. 38 belongs to a later period (ca. 1745 to after 1755).<sup>105</sup> This, however, only concerns the period when they were copied, not composed.<sup>106</sup> They were in any case performed in Dresden when Knechtel was first horn, but they also show that Fasch must have had a very competent hornist in Zerbst.

During the last 10-15 years a concerto for horn by J. B. Neruda has become known, owing to its very high tessitura. This work is preserved in Prague,<sup>107</sup> but was previously in the monastery of Osek. Neruda was employed in Dresden from 1750, and the parts of his horn concerto were most likely written by the copyist D, who was active there between 1733 and 1750.<sup>108</sup> It is therefore reasonable to suppose that the work was written there and for Knechtel. As regards style it was probably written about the middle of the 18th century. In this concerto for „Corno primo“ in E-flat the high range is still more used, principally through the frequent use of f''', than in the anonymous concerto in E-flat mentioned above which was probably composed by Knechtel. There are also several adventurous skips (one from f''-f'''), even a trill on f'''; g''' is reached twice.



Bsp. 4a: Neruda, Concerto a Corno primo in E-flat. II, Largo, 29-32, Corno Primo Concerto in E-flat.



Bsp. 4b: Neruda, III, Vivace, 126-128, Corno Primo Concerto in E-flat.

<sup>105</sup> Fechner, M., „Einige Bemerkungen zu Chronologie und Datierung der in Dresden überlieferten Instrumentalkonzerte von J. F. Fasch“, *Johann Friedrich Fasch (1688-1758). Wissenschaftliche Konferenz in Zerbst am 5. Dezember 1983* (Gräfenhainichen 1984). (*Studien zur Auführungspraxis und Interpretation von Instrumentalmusik des 18. Jahrhunderts*, 24.)

<sup>106</sup> No. 38, with Violino concertato, 2 horns, 2 flutes, 2 oboes, 2 bassoons, strings and Bc, was apparently copied in 1745 or later in Dresden. However a work with the same instrumentation appears in an inventory made at Zerbst in 1743. This work might be identical with the one in Dresden. (Engelke, B., *Johann Friedrich Fasch* (Leipzig 1908), p. 63.)

<sup>107</sup> Prague, Narodni muzeum v Praze. Muzeum ceske hudby, Sign. XXXII-A-52. Modern edition by E. H. Tarr (Bulle, Editions BIM, 1990).

<sup>108</sup> Letter from the Sächsische Landesbibliothek, Musikabteilung, from March 14, 1989.



Third hornist after Knechtel and A. J. Hampel in the *Hof- und Staats-Calender* from 1748-1756 was Carl Haudeck. In the list of *Die Königl. Capell- und Cammer-Musik zu Dresden 1756*, published by Marpurg,<sup>109</sup> Haudeck is first horn and Hampel still second. As third cello, however, there is a player named Joh. George Knechtel, who was consistently paid more than the first and second cellists from this time through 1767, after which he is not mentioned in the court records any more.<sup>110</sup> It does not seem likely that a cellist with the same name was hired in Dresden, immediately after the disappearance of a hornist named Johann Georg Knechtel. It is more reasonable to assume that the hornist Knechtel got problems with either his lips or his teeth and retired as a cellist.<sup>111</sup>

### *Other high horn parts: Stamitz and the horn-player Ziwini*

High horn parts are met with in works by other composers from the middle of the 18th century, e.g. F. J. Habermann,<sup>112</sup> J. M. Molter<sup>113</sup> and L. Mozart.<sup>114</sup> Difficult solos for horns are also met with in symphonies around and after the middle of the 18th century. Fairly well-known are the symphonies nos. 31 and 72 from about 1765 and no. 51 from the first half of the 1770's by Joseph Haydn. But other composers wrote still more difficult and spectacular parts in their symphonies.

<sup>109</sup> Marpurg, F.W., *Historisch-Kritische Beyträge ...*, 2 (1756), p. 476.

<sup>110</sup> In a *Tabellarisches Verzeichnis ... die Personen der Churf. Orch. bis mit 1763 ...* [Richter, P. E., „Das Personal der kurfürstlichen Hofmusik zu Dresden, – Kirche und Oper, – und seine Gehälter im Jahre 1763 und später“, *Dresdner Geschichtsblätter*, 28 (1918), pp. 108-109.], Knechtel had a salary of 500 thalers while the first and second cellists had 400 and 200 respectively; Haudeck and Hampel had 500 each. After the Seven Years' War the court had to save money and already in 1764 the salaries were reduced. Knechtel now got 350, the first and second cellists 250 and 150 thalers respectively. From the 1st February 1765 both got an additional increment of 50 thalers, but Knechtel was still more highly paid. Haudeck and Hampel got 300 each, thus less than Knechtel; but already on the 1st of May 1766 (?) both got a supplement of 60 thalers, Haudeck receiving an additional 20 thalers from the 1st of July 1767. Why did Knechtel get a higher salary than the first and second cellists? The only reasonable explanation is that this was a compensation for his earlier activity as a horn virtuoso.

<sup>111</sup> The hornist and inventor of the Russian hunting music, J. A. Maresch, learnt to play the violoncello when he was forced to retire from horn playing owing to health problems. He was both a hornist and cellist in the Imperial orchestra in St. Petersburg from 1756 to 1792. Hinrichs, J. C., *Entstehung, Fortgang und ietzige Beschaffenheit der Russischen Jagdmusik* (St. Petersburg 1796), p. VIII.

<sup>112</sup> *Concerto per due Corni da Caccia in Re*, published by Edition Hans Pizka München. The first part often reaches c''' and d'''; e''' occurs not infrequently in the first movement where the highest note, f''', occurs three times.

<sup>113</sup> Karlsruhe, Badische Landesbibliothek, Musikabteilung, Mus. Hs. 336. The solo part for „Corno“ is partly high, with f''' once as the highest tone.

<sup>114</sup> The highest known parts are written in his *Sinfonia da Camera*, composed in or before 1755 [*Denkmäler der Tonkunst in Bayern*, vol. 9:2 (1908)].



Very high parts for horn are to be found in two of J. Stamitz' symphonies, G-7 (ca. 1750-1752/54) and Eb-6 (1754-57).<sup>115</sup> In the symphony in G there is a solo in the first movement reaching d''' several times. In the minuet, the e''' is reached by a skip from g'', and in the trio, f''' (concert b'''-flat) is reached once<sup>116</sup>.

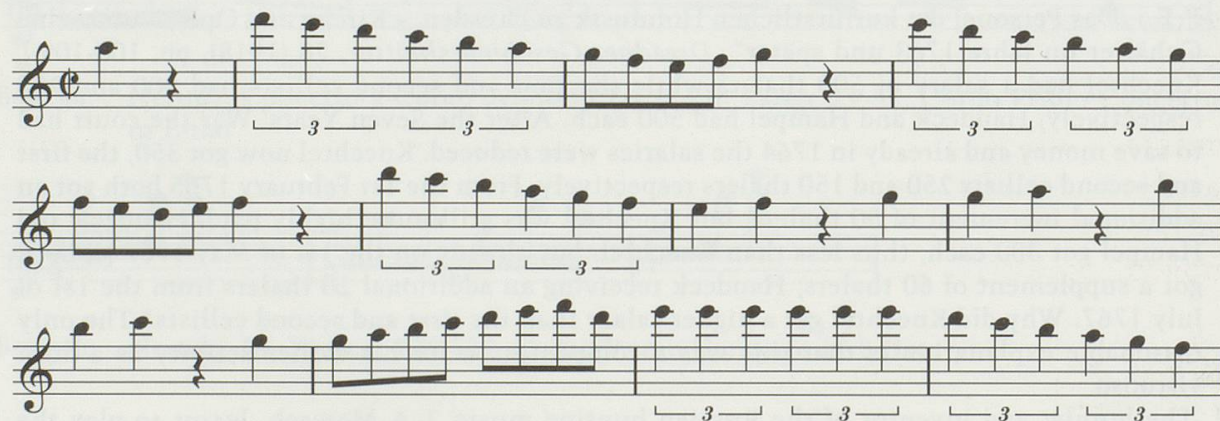


Bsp. 5a: Stamitz, Symphony G-7, III, Menuet, 1-8, Corno Primo ex G.



Bsp. 5b: Stamitz, III, (Menuet), Trio, 14-18, Corno Primo ex G.

The symphony in E-flat exists in two versions, one with solo parts for horn in manuscript, the other with average orchestral parts in print. Both in the first movement and in the trio of the minuet, g''' is reached on the horn in E-flat<sup>117</sup>.

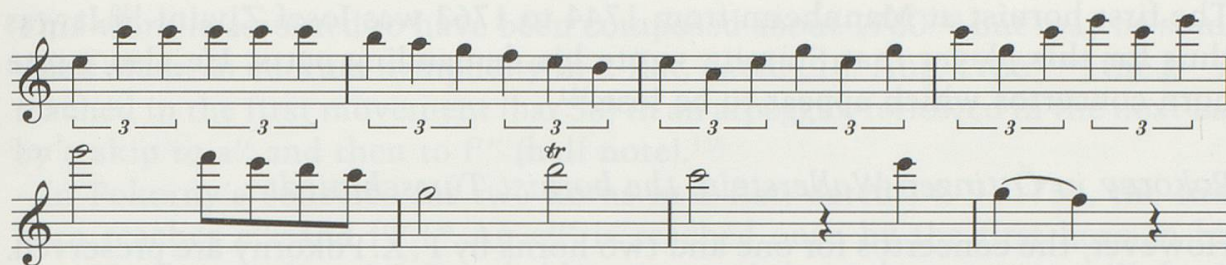


<sup>115</sup> The dates after Wolf, E., *The Symphonies of Johann Stamitz* (The Hague/Boston 1981), p. 78.

<sup>116</sup> Berlin, Deutsche Staatsbibliothek, Musikabteilung, Kgl. Hausbibl., M 5322.

<sup>117</sup> Regensburg, Fürstlich Thurn und Taxissche Hofbibliothek, Stamitz 18.





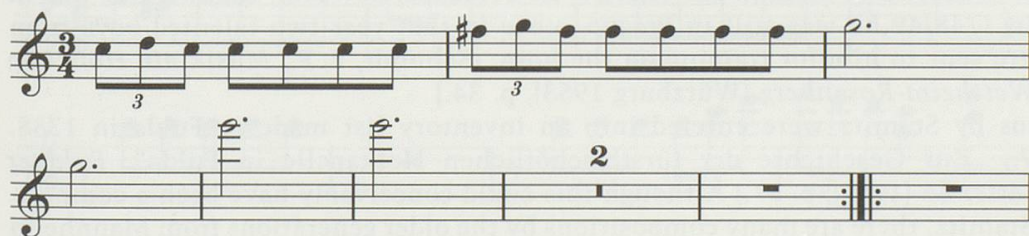
Bsp. 6a: Stamitz, Symphony Eb-6a, I, Presto, 186-205, Corno I in E-flat.



Bsp. 6b: Stamitz, III, (Menuet), Trio, 9-16, Corno in E-flat.

In both works, the solos are in the first movement at the beginning of the recapitulation.

The symphony D-18 (ca. 1742-1745/48) exists in two versions, one with fairly simple horn parts, the other with more elaborate ones. Since the performing material of the latter was apparently written out at the court of Öttingen-Wallerstein (located between Regensburg and Nördlingen), E. Wolf believes that the horn parts were also added and written there by F. X. Pokorny, who is otherwise known as having written difficult works for horn (cf. below).<sup>118</sup> This is possible, but the performing material of the symphonies in E-flat and G was written out in Mannheim, and the hornists there were quite eminent indeed, a fact which Wolf also admits. The first horn in D is in the range  $c''$ - $c'''$  and the part is not remarkably difficult, save for some unprepared entrances on  $c'''$ . There is, however, an exception in the third and final movement, a skip from  $g''$  to  $g'''$  which has to be repeated!<sup>119</sup>



Bsp. 7: Stamitz, Symphony in D, D-18, III, Presto, 21-26, Cornu primo in D.

<sup>118</sup> Wolf, E., *op.cit.*, p. 169.

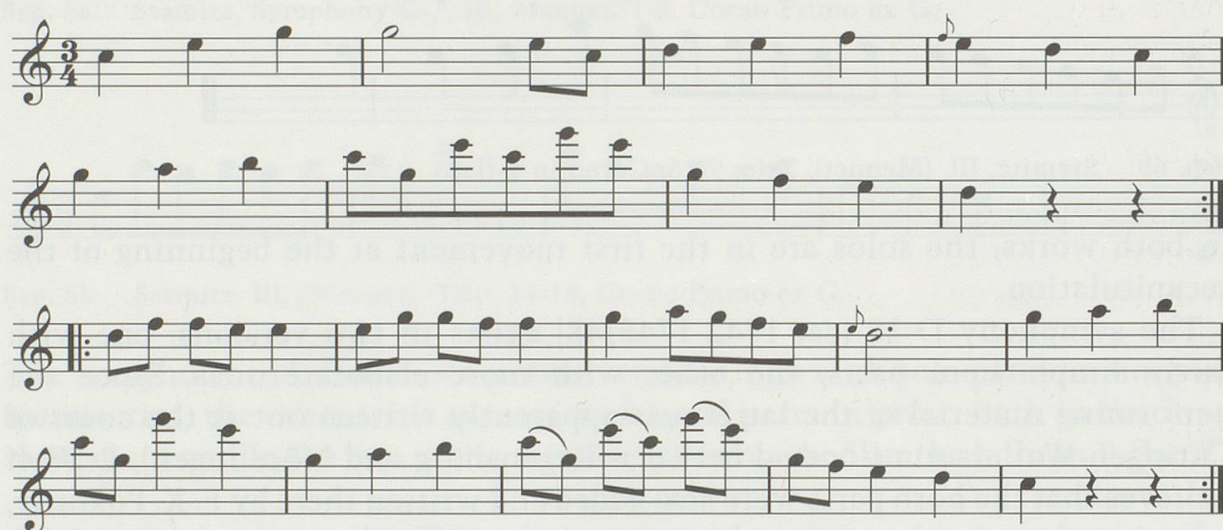
<sup>119</sup> Augsburg, Universitätsbibliothek, Sign. III, 42/2 4°, 562.



The first hornist at Mannheim from 1744 to 1763 was Josef Ziwini.<sup>120</sup> It was thus for this player that Stamitz wrote his demanding parts. He also wrote horn concertos which appear to be lost.<sup>121</sup>

*Pokorny in Öttingen-Wallerstein; the hornist Türschmiedt*

However, the concertos for one and two horns by F. X. Pokorny are preserved. Pokorny came to Öttingen-Wallerstein (Harburg) in about 1750 and studied with J. Stamitz in 1754. The highest parts are not to be found in his solo concertos but in his symphonies. He was probably inspired by Stamitz. The most remarkable part is to be found in a symphony in E-flat where the first horn has to reach g''' three times, once through a skip from g'', in the trio of the minuet, which is repeated.<sup>122</sup>



Bsp. 8: Pokorny, Symphony in E-flat, III, (Menuet), Trio, Corno I in E-flat.

<sup>120</sup> Würtz, R., *Verzeichnis und Ikonographie der kurpfälzischen Hofmusiker zu Mannheim nebst darstellendem Theaterpersonal, 1723-1803* (Wilhelmshaven, 1975), p. 57; Wolf, E., *op. cit.*, p. 169. Dlabacz, *Künstler-Lexikon für Böhmen*, vol. 3, col. 42 sq., stated that Johann Schindelarz, who in 1738 was „Primärwaldhornist“ to the Prince of Mansfeld, was appointed to the orchestra in Mannheim. There is no evidence, however, that he ever was in Mannheim. In 1748/49 he was still in Prague, since in that year two talented boys from Wertheim were sent to him for training on the horn. [Schmidt, E. F., *Musik am Hofe von Löwenstein-Wertheim-Rosenberg* (Würzburg 1953), p. 34.]

<sup>121</sup> Two concertos by Stamitz were entered into an inventory list made in Fulda in 1788. (Lewalter, W., „Zur Geschichte der fürstbischöflichen Hofkapelle in Fulda“, *Fuldaer Geschichtsblätter* 35 (1959), p. 87.) Although this could conceivably have been a composition by Carl Stamitz, there are many compositions by the older generations from Mannheim in this inventory, so that Johann Stamitz seems to be the most probable composer, all the more so since they also had his trumpet concerto in Fulda (recently recorded by Håkan Hardenberger, Philips CD 420 203-2).

<sup>122</sup> Regensburg, Fürstlich Thurn und Taxissche Hofbibliothek, Pokorny 92.

<sup>123</sup> Haberkamp, G., *Die Musikhandschriften der Fürst Thurn und Taxis Hofbibliothek Regensburg* (München 1981), p. 222.

<sup>124</sup> Haberkamp, *op. cit.*, p. 222.



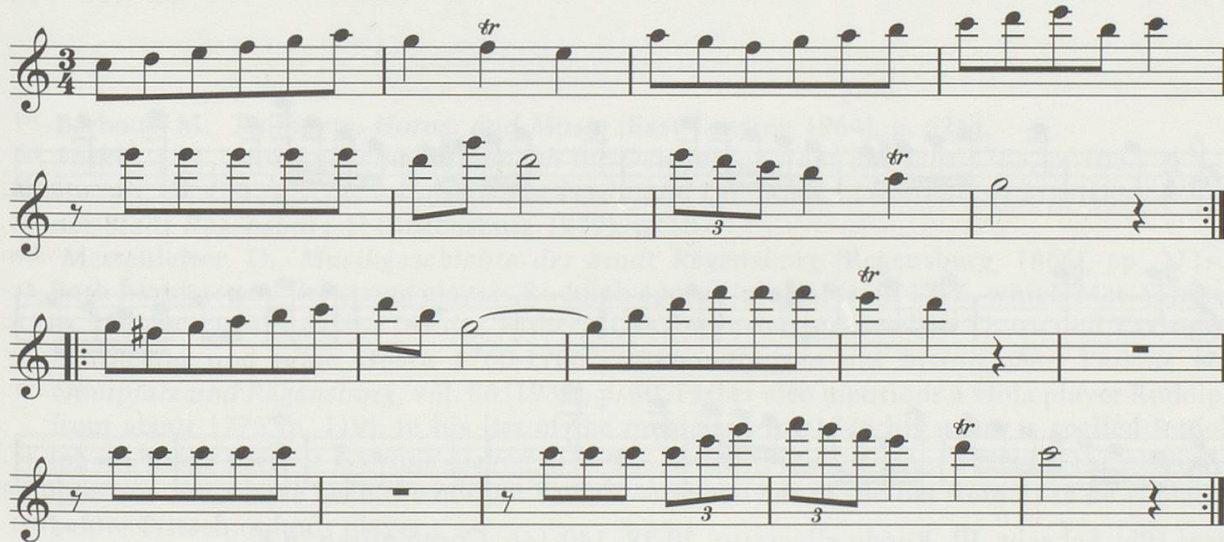
This work is assumed to have been composed about 1760<sup>123</sup> but may be some years older. In another symphony in E-flat, dated „10. Aug. 1756“<sup>124</sup>, the g''' is reached in the first movement (bar 58) in an arpeggio, followed in the next bar by a skip to a'' and then to f''' (half note).<sup>125</sup>

In Pokorny's concerto for two horns in E-flat, dated 14. 9. 1754, the first horn reaches e''' and f'''.<sup>126</sup> An e''' is reached once by the first horn in his concerto for two horns in F probably composed about the same time;<sup>127</sup> this is also the highest note in his horn concerto in D,<sup>128</sup> which for stylistic reasons was probably composed about 1760. Moreover, the part requires very great flexibility and security of attack.

First hornist in Öttingen-Wallerstein from 1752 to 1766 was Johann(es) Türschmiedt,<sup>129</sup> who thus must have performed Pokorny's difficult horn parts and the one in Stamitz's symphony in D-18 (which, as we have explained, might in fact have been an arrangement by Pokorny).

### Veichtner

Another remarkable horn part in a symphony occurs in J.A. Veichtner's *Sinfonie Russienne* published in Riga (Hartknoch) in 1771. It was also published later in Berlin by Hummel. Veichtner (b. 1741) became leader of the orchestra at Mitau in 1765. The symphony in C has four movements. In the first movement, the first horn reaches f''' and in the trio of the minuet a''', the highest known harmonic ever written for a brass instrument. A more remarkable fact, however, is perhaps that this work was printed and even reprinted.



Bsp. 9: Veichtner, *Simphonie Russienne*, III, (Menuet), Trio, Corno Primo in C.

<sup>125</sup> Regensburg, Fürstlich Thurn und Taxissche Hofbibliothek, Pokorny 88.

<sup>126</sup> Regensburg, Fürstlich Thurn und Taxissche Hofbibliothek, Pokorny 159.

<sup>127</sup> Regensburg, Fürstlich Thurn und Taxissche Hofbibliothek, Pokorny 162.

<sup>128</sup> Regensburg, Fürstlich Thurn und Taxissche Hofbibliothek, Pokorny 161.

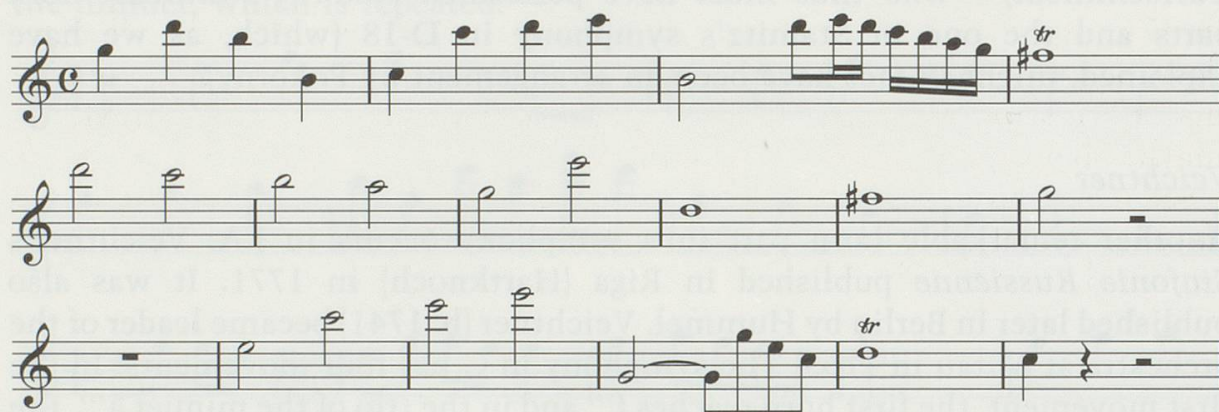
<sup>129</sup> Communication from Dr. Volker v. Volckamer, Harburg, dated May 16, 1983.



*Regensburg: Schacht and the hornist Rudolf*

Veichtner was born in Regensburg, Pokorny joined the orchestra in 1766 as did J. Türschmiedt at the dissolution of the orchestra in nearby Öttingen-Wallerstein in that year. The latter returned in late 1773 when a new orchestra was formed.

Pokorny does not seem to have written any concertos or symphonies with high horn parts in Regensburg, but T. von Schacht wrote a concerto for two horns in E which has been dated around 1780.<sup>130</sup> The first horn has several passages in the high range reaching c''', d''' and e''' several times. Even g''' is prescribed.



Bsp. 10a: Schacht, Concerto a 2 Corni principale in E, I, Allegro tempo giusto, 82-91, 192-197, Corno primo in E.



Bsp. 10b: Schacht, III, Rondo allegretto, 20-28, 140-146, Corno primo in E.

<sup>130</sup> Regensburg, Fürstlich Thurn und Taxische Hofbibliothek, Schacht 29.



The first hornist about 1780 was Johann Anton Rudolf (not to be confused with Jean-Joseph Rodolphe). He wrote his name on the first horn part of a symphony with four horns in D by Schacht from 1779, the first horn reaching e''' (and his colleagues wrote their names on their respective parts: Fritsch, Weiss and Stumm).<sup>131</sup> The same hornists appear in the list published by Forkel in 1783.<sup>132</sup> In a *Music-Rechnung* for the financial year from 1st April 1776 to 31st March 1777 Rudolf is met with for the first time.<sup>133</sup> When he left the orchestra is uncertain, but in a list from 1787 there were two string players named Rudolph, Zeh was *I. Concert-Waldhornist* and Stumm *II. Concert-Waldhornist* (Weiss was 1st and Miny 2nd *Orchester-Waldhornist*).<sup>134</sup>

In an appendix with corrections and additions to both his dictionaries, E. L. Gerber mentions that an A. Rodolphe was born in Tüschau in Bohemia in 1742, that he was taught by his brother in Dresden, and that his first position was in Regensburg.<sup>135</sup> Even if Gerber confused Rudolf with Rodolphe, his information about the year and place of his birth is probably right, and maybe about his post in Regensburg too.

Schacht's concerto for two horns show that Rudolf had a very highly developed ability in the high range, even if Zeh cannot be completely excluded as we do not know the year of composition.

<sup>131</sup> Barbour, M., *Trumpets, Horns, and Music* (East Lansing 1964), p. 62sq.

<sup>132</sup> Forkel, J. N., *Musikalischer Almanach für Deutschland auf das Jahr 1783*, p. 103.

<sup>133</sup> Hauser, H., *Der fürstliche Hofmusiker Ferdinand Donninger*. (*Studien zur Musikgeschichte der Stadt Regensburg* 1) (Regensburg 1979), p. 187.

<sup>134</sup> Mettenleiter, D., *Musikgeschichte der Stadt Regensburg* (Regensburg, 1866), pp. 271sq. Both hornists and the string players Rudolph appear in a list from 1796, which Mettenleiter (p. 270) by mistake dates 1769. (cf. Färber, „Das Regensburger fürstlich Thurn und Taxissche Hoftheater und seine Opern 1760-1786“, *Verhandlungen des historischen Vereins von Oberpfalz und Regensburg*, vol. 86 (1936), p. 30. Färber also mentions a viola player Rudolph from about 1775 (p. 119). In his list of the musicians for 1775 his name is spelled Rudolf (p. 49). Since there is no viola player with this name in the list from 1776-77, the player in question must have been the hornist Rudolf, especially as in the list from 1775 he is placed before Fritsch, a horn player.

<sup>135</sup> Gerber, E. L., *Neues historisch-biographisches Lexikon der Tonkünstler*, vol. 4 (Leipzig 1814), col. 822. His predecessor, who apparently had to play the parts in J. Stamitz' symphonies in E-flat and G, must also have been a hornist with a great command of the high range. This hornist was probably Joseph Vogel, since Lipovsky (*Bayerisches Musiklexikon* München 1811, p. 24sq.) writes that he trained the Boeck brothers (from about 1764) and that he was one of the best hornists of his day. This will also have been the Vogel in the list from 1755 (Mettenleiter, p. 270; Färber, p. 19). In the list for 1776-1777 a Vogel is also mentioned, but without any information as to his instrument (Hauser, p. 187).



*Sperger in Pressburg and Vienna; the hornist Carl Franz*

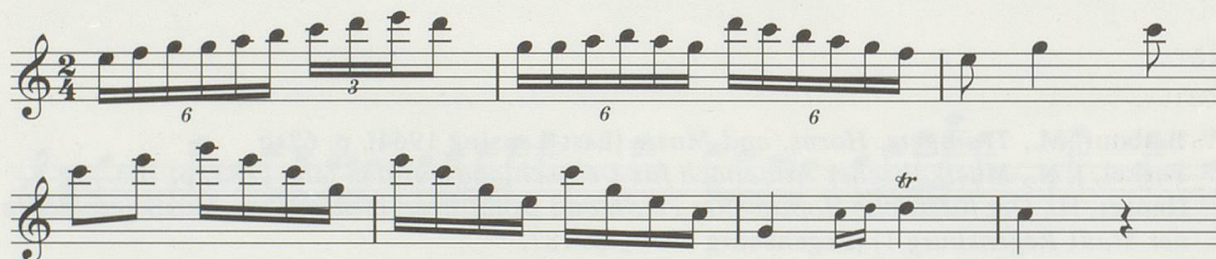
The range above the 16th harmonic was also used by other composers about the same time. It is frequently used in J. M. Sperger's two concertos for horn in D and E-flat, especially in the first. Sperger, a double-bass virtuoso, was employed at Pressburg in the orchestra of the archbishop from 1777 to 1783, then in the orchestra of count Erdödy in Fidischn near Eberau (Burgenland). He was active in Vienna and made journeys during the years 1786 to 1789, when he was finally employed at the court of Mecklenburg-Schwerin.

The concerto in D is preserved as a score<sup>136</sup> and the concerto in E-flat in parts<sup>137</sup> as well as in a score lacking the third movement;<sup>138</sup> all are autographs. Judging from the style, the concerto in E-flat is a later work. This dating is also corroborated by the watermarks.<sup>139</sup> The concerto in D was thus composed in Pressburg around 1779 and the other in Vienna around 1787.

In the concerto in D the solo part often reaches e''' and several times even g'''. The latter note is reached by either a run or an arpeggio. In the second movement e''' is less frequent, partially also in the third, but here the g''' is written again. Almost no use is made of stopped notes: there are only a few b' and a' as minims, notes which could in fact be lipped.



Bsp. 11a: Sperger, Concerto per il Corno primo in D, I, Allegro moderato, 42-43, (+ 106-107), Corno Principale in D.



Bsp. 11b: Sperger, III, Rondo, Allegro moderato, 86-92 (+ 96-102) Corno Principale in D.

<sup>136</sup> Schwerin, Mecklenburgische Landesbibliothek, Musikaliensammlung, Mus. 5174/9.

<sup>137</sup> Schwerin, Mecklenburgische Landesbibliothek, Musikaliensammlung, Mus. 5174/10.

<sup>138</sup> Vienna, Gesellschaft der Musikfreunde in Wien, Archiv, Sign. Q 16411.

<sup>139</sup> The concerto in D has the same watermarks (PS / three crescents / REAL) as the fourth concerto for double bass, composed in spring 1779. [I am grateful to the Mecklenburgische Landesbibliothek in Schwerin for supplying me with photocopies showing the watermarks on the horn concertos. For watermarks in the double-bass concertos by Sperger, see Meier, A., *Konzertante Musik für Kontrabass in der Wiener Klassik* (Giebing über Prien am Chiemsee 1969), in this case p. 132.] The concerto in E-flat has the same watermarks (A / HF / REAL / three stars in an ornament with a crown / both in parts and score) as the 10th concerto for double bass, which was composed about 1787 in Vienna. [Communication from Dr. Otto Biba, Gesellschaft der Musikfreunde in Wien, dated June 25, 1981; Meier, A., *op. cit.*, p. 138.]



The hornists for the years 1778-79 in the orchestra at Pressburg were Anton Boeck and Paul Rau; and for 1780-82 A. Boeck, Ignaz Boeck and P. Rau, according to records in the Batthyany archives.<sup>140</sup> In a list for 1782 (or 1783) published by Forkel, the hornists were Carl Franz and A. Boeck.<sup>141</sup> In the previous lists, however, Franz was mentioned as playing the baryton.

Anton (b. 1757) and Ignaz (b. 1754) Boeck were two famous duetists on the horn and were often praised for their performance, but the hornist C. Türschmiedt was less impressed and criticized their tone and intonation.<sup>142</sup> The concerto in D could have been written for Anton Boeck, but Carl Franz, who had previously been first hornist at Esterhaza, was noted for his wide range on the horn and is perhaps the more likely candidate.

Franz was born in Silesia. From his 9th to his 18th year he was brought up by his uncle in Falkenberg, who taught him music and horn-playing as well as *Land- und Hauswirtschaft*. In 1758 he became a hornist with the Prince-Bishop von Egk at Olmütz. Here he began to play with stopped notes and developed a range of 5 C's.<sup>143</sup> From April 1763 to November 1776 he was first hornist at Esterhaza, and it was no doubt for him that Haydn wrote his most difficult horn parts (e.g. *Divertimento a tre*, Hob. IV 5 (1767) and symphony no. 51).<sup>144</sup> During his employment at Esterhaza he taught himself to play the baryton and became one of the very best musicians, if not the best, on that instrument.

In the issue of the 7th December 1776 there was a report in the *Pressburger Zeitung* of a concert which had been held on the 4th of December: „Among the virtuosos who performed with exceptional delicacy was Mr. Karl Franz with his baryton and then in a trio with his horn.“<sup>145</sup> The second horn was played by „Herr Rausch“, apparently P. Rau. The fact that Franz played both horn and baryton in 1782 or 83 shows that he continued to double on both instruments. As we know that Franz had a very strong high range, it is reasonable to suppose that the concerto in D was in fact written for him.

<sup>140</sup> Meier, A., *op.cit.*, p. 164-165.

<sup>141</sup> *Musikalischer Almanach für Deutschland auf das Jahr 1783*, p. 103.

<sup>142</sup> Gerber, E. L., *Neues historisch-biographisches Lexikon der Tonkünstler*, vol. 1 (Leipzig 1812), col. 444; vol. 4 (Leipzig 1814), col. 78 sqq.

<sup>143</sup> Meusel, J. G., *Museum für Künstler und Kunstliebhaber*, vol. 1:4 (Mannheim 1788).

<sup>144</sup> Concerning J. Haydn's hornists, see Bryan, P., „Haydn's Hornists“, *Haydn-Studien* (Veröffentlichungen des Joseph Haydn-Instituts Köln, Vol. 31, 1 Köln 1973); on Franz, see Bryan, P., „Carl Franz, Eighteenth Century Virtuoso: A Reappraisal“, *Alta Musica* 4 (1979) p. 67-73.

<sup>145</sup> „Unter den Virtuosen, die sich dabei mit ausserordentlicher Annehmlichkeit hören liessen, war Herr Karl Franz mit seinem Paridon, und sodann bey einem a tres mit seinem Waldhorn“. Meier, A., *op.cit.* (see FN 138), p. 167.



After he had left Pressburg in 1783 or 84, Franz stayed for two years in Vienna, where he gave six concerts (recitals) annually. Then he toured with his baryton for three years in Germany.<sup>146</sup> According to the article on Franz in Schilling's dictionary (publ. 1840), he appeared „one of the most excellent virtuosos on both of his chosen instruments“.<sup>147</sup> However, in the report given by himself (at least partly) in 1787 or early 1788 (cf. FN 138/139) there is no information that he played the horn too during his tour. If he was first hornist in 1782/83, however, it is very probable that he continued to play the horn.

In Sperger's concerto in E-flat, the range above the 16th harmonic is not so frequently used as in the concerto in D, but instead the part is considerably longer. In the first movement, the d''' is rather frequent but e''' somewhat less so; g''' occurs once in the part, but not in the score. In the second movement, e''' occurs twice but in the third movement not at all. The use of stopped notes is on the contrary much more frequent in this work than in the D major concerto.



Bsp. 12: Sperger, Concerto ex Eb a Corno Primo, I, Allegro maestoso, 191-202, Corno Primo in E-flat.

<sup>146</sup> Meusel, J. G., *op.cit.* (see FN 142), vol. 1:4, p. 101.

<sup>147</sup> „Als einer der ausgezeichnetsten Virtuosen auf seinen beiden genannten Instrumenten“. Schilling, G., *Encyclopädie der gesamten musikalischen Wissenschaften oder Universal-Lexikon der Tonkunst. Neue Ausgabe*, vol. 3 (Stuttgart 1840), p. 44. J. Sehnal („Das Musikinventar des Olmützer Bischofs Leopold Egk aus dem Jahre 1760 als Quelle der vorklassischer Instrumentalmusik“, *Archiv für Musikwissenschaft* 24 (1972) p. 294) writes: „Dann bereiste er (Franz) 3 Jahre lang Deutschland und feierte mit seinem virtuoson Spiel auf dem Baryton und Waldhorn wahre Triumphe“. Sehnal does not give any source for his statement, but he probably takes his stand on Schilling.



There must have been at least one player in Vienna with a very strong „altissimo“ register, as testified by works by one A. Teyber and by W. A. Mozart. In Teyber's first concerto in E-flat, composed in the 1780's or a few years earlier, there is a run to g''' on the E-flat horn (3rd movement, bar 67). The range above c''' is otherwise not used except at the end of the first solo entrance in the first movement, where some d'''s and an e''' occur, but c''' is frequently written.<sup>148</sup>

Interesting in this respect are the otherwise musically unpretentious duets (KV 487/496<sup>a</sup>) written by W. A. Mozart. In 1786 (on the 27th of July) Mozart „unterm Kegelschieben“ – while bowling – wrote three duets for horns; these were later expanded to a dozen and were published by Imbault (Paris) as *Douze pieces pour deux cors*. No pitch is given, but D or rather E-flat is the most likely. No. 1, 3 and 6 were composed in 1786, and in each the first horn reaches g'', which is also the case with no. 7. In the other duets the first part does not go above c'' or even a''.<sup>149</sup>

The duets 1, 3, 6 and 7 are in binary form with a repetition of each section, and in no. 6 there is also a „Trio“. In 1, 3 and 7 the g'' is reached by a run. As no. 1 (Allegro) and 7 (Adagio) are short, no. 3 (Andante) is a little longer, they are not especially difficult to perform, but the hornist must of course be able to reach g''. No. 6 (Menuetto & Trio) on the contrary is much more demanding if it is to be performed with all the repeats – g'' occurs in both parts of the minuet – and as the minuet is to be repeated after the „Trio“, which is also in binary form with repetitions. The hornist thus has to reach g'' eight times.

The reason why Mozart wrote his duets must have been that there was a player who could perform such parts. Did he and the second hornist even take part in the bowling game, or did the participants discuss the abilities of a certain hornist, perhaps living in Vienna, who could perform such parts, and persuade Mozart to write some pieces for the player in question?

This leads us to another composition by J. Haydn, *Pietà di me* (Hob. XXVb:5) for 2 sopranos, tenor, and orchestra with obbligato horn, English horn, and bassoon, in E-flat. The work exists in parts written by the copyist Anonymus 63, who copied works during the 1780's to about 1795.<sup>150</sup> It also occurs at the end of the first act of the pasticcio *Alessandro il Grande* (Hob. XXXII:3), compiled about 1790 or later. The solo part ascends to g'' in four runs and to

<sup>148</sup> *Concerto per il Corno*, ed. by F. Gabler (Doblinger, Vienna & Munich) (*Diletto Musicale*, No. 591).

<sup>149</sup> *Neue Ausgabe sämtlicher Werke*, Vol. VIII:21.

<sup>150</sup> London, The British Library, Department of Manuscripts, Add. 34073.



e''' and f''' in several other passages. The fact that the tempo is swift (*Allegro molto*) and that every passage is proportionately short makes the task a little easier, but the part is still very demanding. There are also unprepared entrances on c''' and one on a semiquaver on d'''. It is remarkable that there is no use of stopped notes. The work is therefore very similar to Sperger's concerto in D and Mozart's duets no. 1, 3 and 7 – less so to no. 6, in which there are more stopped notes.



Bsp. 13: Haydn, *Pietà di me*, *Allegro molto*, 49-53 (+ 305-307), 57-59, 183-186, Corno.

It is hardly likely that it was primarily written for a performance in London, despite certain information to this effect to be found in the parts.<sup>151</sup> When the work was written is uncertain; possibly it was originally an insertion in an opera. Could this work have been composed before 1777, when Carl Franz was first hornist at Esterhaza, or was it composed during the 1780's? Franz's activities during the 1780's have been dealt with above, and he appears to have continued to play the horn at least up to 1783/84; he may well have

<sup>151</sup> Besides the parts, there is a vocal score with a part for bass, and a score. According to remarks by V. Novello on the vocal score and the score, he had got them (or the original of the score?) from W. Shield. He further remarked that Haydn had presented the work to Shield and that it was intended for Mrs. Billington; on the score it is written that Haydn had composed it expressly for her. In the upper right corner of the vocal score the name Mrs. Billington appears.

It is quite possible that Elisabeth Billington did sing this piece, but it was certainly not composed for her nor for the instrumental soloists. The English horn was hardly used by English musicians then, and we have no evidence whatsoever that there was a London hornist who could cope with the horn part. On the last page of the part for English horn there is a note that this part should be played on a viola and the „Corno for the Clarinett“ (in B-flat). As Haydn apparently brought this work with him to England, he must also have taken an alteration of the solo instruments for performance there into consideration.



continued as a horn-player after this date even if he was in Munich and wanted to find a court which would support him. Later it was mentioned by Meusel that he became a „Baritonist and Waldhornist zu München“. <sup>152</sup> There is, however, no information that he was employed in the court orchestra in Munich. <sup>153</sup>

J. Haydn is also said to have composed *Er ist nicht mehr. Deutschlands Klage auf den Tod des grossen Friedrichs, Borussens König* for soprano, baryton (and orchestra?) for Franz in 1787. It was performed in Leipzig and Nuremberg in 1788 by Franz, but its authenticity has been questioned (cf. Hob. XXVib:1). If authentic, it shows that Haydn could still write for Franz, a fact which would render still more plausible that he had in fact written the part in *Pietà di me* for Franz as well. Franz was apparently in Vienna when Mozart wrote his duets. Mozart could have had this player in mind, but there may well have been still another horn player in Vienna, still unknown to us, who excelled in the altissimo register. This is partially shown in Sperger's concerto in E-flat – unless it too was written for Franz.

#### *Other works with high notes: Reicha, Koch, Schumann*

Unexpected high passages can also be found in individual movements while in the others even the range g''-c''' is used fairly moderately. This is the case in J. Reicha's *Concerto concertant pour deux cors avec accompagnement d'orchestre ... op. 5*. Reicha (b. 1752) died in 1795, but his concerto was not published until 1819 or 1820. <sup>154</sup> In the first movement the first horn in E twice reaches g''' through a run from g'' (bars 91 & 198), and e''' is reached four times, while d''' is reached in a skip from g'', once tied. The parts may have been written for Nikolaus Simrock (who later published the work) and Andreas Bamberger <sup>155</sup> in Bonn, where Reicha worked from 1785 to his death. It could perhaps also have been written when he was in Öttingen-Wallerstein for the hornists Joseph Nagel and Franz Zwierzina, the hornists for whom A. Rosetti wrote several concertos.

<sup>152</sup> Meusel, J.-G., *Deutsches Künstler-Lexicon. Neue Ausgabe*, vol. 1 (1808), p. 251.

<sup>153</sup> Communication from Dr. Robert Münster, München, from March 19, 1990.

<sup>154</sup> Reicha's horn concerto has the publisher's number 1695. According to Deutsch, O. E., *Music Publisher's Numbers* (London 1946), p. 24, no. 1661 was published in 1819 and no. 1747 in 1820. Modern edition: Eulenburg octavo edition no. 10088 (Zürich, n.d.).

<sup>155</sup> Thayer, W. A., *Ludwig van Beethovens Leben. Nach dem Original-Manuscript bearbeitet von H. Deiters*. 3. Auflage. Revision der von H. Deiters bewirkten Neubearbeitung (1901) von H. Riemann, vol. 1 (Leipzig 1917), p. 239.



The music which has been dealt with above shows that there were still players towards the end of the 18th century who mastered the range above the 16th harmonic on the horn. In his *Musikalisches Lexikon*, published in 1802, H. C. Koch gives the range of the first horn up to d''', but adds:

„Skilled hornists can ascend still another fourth, and formerly these very high notes were often used in concertos. However, since [composers] have noticed that they had to be forced from the instrument too much to be able to produce a good effect, they [now] avoid them, hardly ascending in concertos to the above-mentioned tones“ (i.e. to d''').<sup>156</sup>

However, there are exceptions, and a remarkable one is Charles Koch's *Concert pour deux cors principales* in F (printed by Gombert, Augsburg), which may be identical with a *Grand Concert p. 2 Cors avec Orchestre* announced as published before Easter 1819.<sup>157</sup> The work was „composé et dédié à son ami Leye“. Charles (Karl) Koch and Ludwig Leye appear as first and second hornists in a list from the beginning of 1841 of the *Herzogl. S. Coburg-Gothaischen Hofkapelle*.<sup>158</sup> Both were probably there about 20 years earlier: in 1823 Leye had advertised that he had compositions for horn and military music for sale,<sup>159</sup> and on another composition which can be dated from about 1825, Koch had already stated that he was a member of the same orchestra.<sup>160</sup>

The „Corno primo principale“ not only reaches c''' and d''' in runs, arpeggios and skips, but also e''' and g''', the f''' also being reached in a very difficult skip. The most demanding passages, figures, and high notes are supplied in the print with simplified alternatives. The hornist must also master the technique of hand-stopping. This is a very remarkable composition, requiring an equally remarkable first hornist. As it was dedicated to Ludwig Leye we are initially tempted to ask if he was the first hornist at that time. On the contrary, the second horn part is also very difficult; there are difficult skips, and the player must master his hand technique to produce a good sound.

<sup>156</sup> „Geschickte Waldhornisten können noch eine Quarte höher steigen, und ehemals bediente man sich im Concertspielen sehr oft dieser hohen Töne. Nachdem man aber bemerkt hat, daß sie dem Instrumente zu sehr abgezwungen werden müssen, als daß sie gute Wirkung thun könnten, vermeidet man sie, und steigt anjetzt im Concertspiele selten höher, als in die oben angezeigten Töne.“ Koch, H.C., *Musikalisches Lexikon*, vol. 1 (Frankfurt am Main 1802), col. 763.

<sup>157</sup> *Allgemeine musikalische Zeitung* (AMZ) 21 (1819) *Intelligenzblatt* IV (May) p. 16.

<sup>158</sup> AMZ 43 (1841) col. 85.

<sup>159</sup> AMZ 25 (1823) *Intelligenzblatt* V (August) p. 20.

<sup>160</sup> Koch's *Rondeau sur des airs russes originaux pour deux Cors principaux* (op. 8) was published by J. André in Offenbach and has the number 4697. According to Deutsch (c.f. FN 128), p. 6, no. 4487 was published in 1823 and no. 5018 in 1827.





Bsp. 14a: Koch, Concert pour deux cors principales, I, Allegro non tanto, 217-220, 326-344, Corno Primo Principale in F.



Bsp. 14b: Koch, III, Rondo Scherzando, 304, 334-338, Corno Primo Principale in F.

This was not the last work in which the horn had to play above written  $c'''$  in the pitch of F. Rather well-known is R. Schumann's *Concertstück* for 4 horns (op. 86), which he composed in 1849. Even if the first horn part is comparatively moderate in the high range (to  $g''$  and  $a''$ ) there are high portions. The  $c'''$  occurs not unfrequently,  $d'''$  is prescribed, and  $e'''$  is reached three times, once through a skip from  $g''$ .



Schumann first let the *Kapellhornisten* in Dresden play the solo parts for him, but the work was first played in public with the orchestra in Leipzig, on 25. 2. 1850. The first part was played by Eduard Pohle.<sup>161</sup> A critic wrote that the splendid but „exceptionally difficult work was performed very admirably by Mssrs. Pohle, Jehnichen, Leichsenring, and Wilke, and brought them deserved applause.“<sup>162</sup>

Pohle left Leipzig and its Gewandhaus in February 1852 for Sondershausen.<sup>163</sup> At a concert on 7. 12. 1872 the orchestra from Sondershausen (reinforced with other musicians) played in Leipzig. The hornists Pohle, Bauer, Franke and Bartel played this most rarely („äusserst selten“) heard concert-piece, and the reviewer continued: „This wonderful work is a challenge for all hornists, for it contains figures whose difficulty can only be overcome by horn virtuosos of the first rank. It must therefore be acknowledged with still greater thanks that the [above-]mentioned brilliant artists took the risk upon themselves, performing the work in an almost perfect rendition.“<sup>164</sup>

## 10. Summary

As has been shown above, the foundation for the performance of horn parts in the *altissimo* range, or parts at least ascending to high f''', was not that hornists had training on the trumpet. To be sure, certain musicians had, especially the *Stadt Pfeifer*. However, concerning these musicians, who played the horn together with several other instruments, we must ask if they developed an idiomatic sound on the horn. I believe not; this must have been the contribution of the specialists, the hornists at the courts. In Bohemia, mainly in Prague, there were also musicians who played both horn and

<sup>161</sup> See Bröchle, B. & Janetzky, K., *Kulturgeschichte des Horns* (Tutzing 1976), pp. 229-230, with the poster for the concert and a lithograph of E. Pohle. Pohle played the part on natural horn, while his colleagues used the valved instrument. Cf. Ahrens, C., *Eine Erfindung und ihre Folgen* (Kassel et al. 1986) p. 31.

<sup>162</sup> „[Das] ausserordentlich schwierige Stück wurde sehr wacker von den HH. Pohle, Jehnichen, Leichsenring, und Wilke, ausgeführt, und brachte denselben verdienten Beifall.“ *Neue Zeitschrift für Musik (NZfM)* 32 (1850) p. 142.

<sup>163</sup> Dörffel, A., *Die Gewandhauskonzerte zu Leipzig 1781-1881* (Leipzig 1884), p. 240.

<sup>164</sup> „Das wunderbare Werk ist ein Prüfstein für alle Hornisten, denn es enthält Figuren, deren Schwierigkeiten nur von Hornvirtuosen ersten Ranges zu überwinden sind, um so dankender muss es anerkannt werden, dass die genannten trefflichen Künstler sich dem Wagnis unterzogen und das Werk in fast vollendeter Darstellung zu Gehör brachten.“ *NZfM* 68 (1872) p. 523.



trumpet as well as even trombone. Several eminent hornists in Austrian and German orchestras came from Bohemia, and some of them might have been trained on the trumpet too, but it is uncertain if this was especially advanced. As members of a court orchestra they only played the horn. Some could even play a string instrument.<sup>165</sup> There is no evidence that true virtuosos such as Carl Franz ever played the trumpet.

Nor did the high range cease to be trained and written after the middle of the 18th century. This continued well into the 19th century and was upheld by a few players, those who were later able to play Schumann's *Concertstück*. The parts in some of J. S. Bach's works are very high, especially those for a horn in G, often reaching concert g'' and even a''. (There is also the part for horn in A in BWV 67 with the remark „Corno da tirarsi“.) The short pauses in some of these works make them very difficult to perform, for reasons of endurance. The greatest technical difficulties, however, are found in parts written by other composers for lower-pitched horns (in D, E-flat, E, and F), in which the harmonics above the 16th are more or less frequently used.

For modern hornists and theorists it would appear that the art of horn-playing has declined since the 18th century. However, hornists then only played contemporary music, their instruments required less air and effort, and the pitch was about a half-tone lower than today (an important fact). The modern hornist must be much more versatile. He has to play music from the 18th to the 20th centuries, from the lowest to the highest register, and with chromaticism and difficult figures. The security of attack is, to be sure, aided by the use of higher-pitched instruments (in Bb, high F, and even high Bb). However, the modern horn is built to produce a powerful sound, since the dynamic level is much greater than then, a fact which adds to the difficulty of modern horn-playing. The demands on endurance are thus very great today. This is not said to belittle the abilities of the horn players of the 18th century, since those who had such a secure attack that they mastered the extremely high parts and apparently also played fairly well in tune (before the stopped notes were more generally used) deserve our highest respect; but it is very important to emphasize the differences in working conditions between then and now.

In all of the above remarks, it may seem that the lower horn parts were neglected; it may also appear that the high range, or *altissimo* range, is the real art of playing the horn. However, in some of the works mentioned above,

<sup>165</sup> The hornists in Salzburg mentioned by L. Mozart in 1757, Wenzel Sadlo and Franz Drasil, also played stringed instruments. Sadlo played the violin very well and Franz Drasil was also a cellist. [Marpurg, F. W., *Historisch-Kritische Beiträge*, 3 (1757) p. 189.]



the second horn parts often have extremely difficult and adventuresome skips and very fast figures which may be described as pure acrobatics or pyrotechnics. Today, a second hornist must change between the low, the middle, and even the high range and also has to play difficult skips which are not always easy to hear.<sup>166</sup> These parts are also musically important.

Finally it should be mentioned that some of the most difficult parts written in the 18th and 19th centuries have been played by modern hornists, but only after long preparation.<sup>167</sup>

<sup>166</sup> Certain hornists could master both the low and the high registers. One of these players was Carl Franz, mentioned above, who could play 5 C's. In J. Haydn's *Trio per il Corno da Caccia* (Hob. IV 5) the range is from c to f''' on a horn in E-flat, so he might have even reached c'''' in that pitch (mainly in improvisations).

Another hornist with a wide range was Jean-Joseph Rodolphe. When he was in Stuttgart N. Jommelli wrote some parts for him. In *L'Olimpiade* (1761), III:3, there is a solo for horn in F. The part once reaches c''' and in the low register c is rather frequently written. The factitious notes B, A, G and F-sharp also occur. G also occurs from skips from g or e in *Demofonte* (1764), III:6 on a horn in E-flat. (See *Italian Opera 1640-1770. Selected with Introduction by H. M. Brown* (New York, 1977-), vol. 46 and 48.) In the *altissimo* range he probably did not play above the 18th harmonic. This is the highest note in J. C. Trial's one-act-opera, *La Fête de Flore* (Paris 1771), where a horn in E has an obbligato in an *Ariette*. (Cf. Francoeur, L. J., *Diapason générale de tous les instruments à vent* (Paris 1772), pp. 47-50, partly reproduced in Morley-Pegge, R., *The French Horn* (London 1960), p. 206.)

<sup>167</sup> Barry Tuckwell has played the first horn part in the capriccios by J. D. Zelenka (*Die Orchesterwerke*, Archiv 2723 059 – recorded in 1977) and Hermann Baumann the horn part in Bb in BWV 14 (*Das Kantatenwerk*, vol. 4, Telefunken 6.35030-1-2 – recorded in 1972?). Prof. Baumann told me (in Gothenburg in November 1979) that it had taken him all his life to master the part, one which must, however, have been intended for a trumpet. He performed the part on a natural horn in high Bb about half a tone lower than modern pitch.