Historical Developments in Writing for Low Horn

by

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Declarations

Declaration of Originality
This thesis contains no material which has been accepted for a degree or diploma by the University or any other institution, except by way of background information and duly acknowledged in the thesis, and to the best of my knowledge and belief no material previously published or written by another person except where due acknowledgement is made in the text of the thesis, nor does the thesis contain any material that infringes copyright.

Statement of Ethical Conduct
The research associated with this thesis abides by the international and Australian codes on human and animal experimentation, the guidelines by the Australian Government's Office of the Gene Technology Regulator and the rulings of the Safety, Ethics and Institutional Biosafety Committees of the University. All interviews have been conducted with Ethics Approval (Reference No.H0011745).

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Signed: ________________
    Robert James Stonestreet

Date: ________________
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Abstract

Playing in the lower register forms a vital part of every horn player’s skill set, however the fact that this is no longer considered a specialised skill has led to it becoming a neglected facet in both the practice and teaching of many students. There are significant benefits to low register work on the horn, as well as many challenges, yet teaching resources that emphasize and develop the ‘low horn’ skill set are rather uncommon and somewhat limited. Similarly, solo works that truly feature the low register appear to be few and far between; most are rarely performed or recognized for their specific difficulties. However, there are a number of new low horn works that have become available in previous years and these contributions, in addition to the older works that do include challenging low horn passages, add up to a considerable amount of repertoire. Many of these works remain largely unknown amongst horn players although they are certainly capable of filling the currently existing void.

This research explores these works, investigating their musical and technical challenges and their historical context through a series of public recitals where solo works were performed. This has resulted in a folio of recordings and an accompanying exegesis. The written component contextualises the works performed within the developments made to the instruments manufacture and how these changes influenced composers, performers and pedagogues alike towards the technique and virtuosity that is now generally expected. This account extends form the historical natural instrument of the seventeenth and eighteenth centuries, through the implementation of the valve to the well-known solos of Carl Nielsen (1865-1931) and Hermann Neuling (1897-1967) from the mid part of the twentieth century and beyond to include the most recent compositions becoming available. Through their performance and greater exposure it is hoped that an increased focus will be placed on this very necessary aspect of horn technique in the future development of students.
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Guide to Notation

When referring to the notes of the harmonic series that are available on the natural instrument, the partials are numbered according to their place in the series, rather than their position above the fundamental (as below).

For the modern instrument, octaves are designated according to the following system, which progresses in ascending order from C,D to c,d then c’, d’ and c’”, d’” as illustrated below.

All examples are for the Horn pitched in F, unless otherwise indicated.
Introduction and Literature Review

This research explores the developments that have been made in writing for the horn’s lower register through an examination of the musical and technical challenges encountered by performers within a number of solo works. In the folio of recordings that forms part of this PhD submission I have performed key works for low horn such as Ludwig van Beethoven’s Sonata for Horn and Piano Op.17, concerti by Haydn, Mozart, Rosetti and von Weber, as well as Hermann Neuling’s Bagatelle für Tiefes Horn und Piano to investigate these challenges through performance. An investigation into the historical context of these works has resulted in an account that extends from the historical natural instrument of the seventeenth and eighteenth centuries, through the implementation of the valve and beyond to include the most recent compositions becoming available.¹ It includes research into the developments that were made in the instrument’s manufacture, and how these changes influenced composers, performers and pedagogues alike in moving towards the technique and virtuosity that is now generally expected of all players. These expectations in the lower register have emerged despite the fact that it is no longer considered a specialised skill for horn players. Consequently the low register has become a neglected facet in both the practice and teaching of many students even though there are significant benefits to low register work on the horn, as well as many challenges. It should form a vital part of every horn player’s skill set.

When the natural horn was first introduced into the orchestra at the beginning of the eighteenth century, composers had little option but to write fanfare-like lines for the instrument using the available notes of the harmonic series. If more melodic possibilities were desired, then it was necessary to use the higher register notes of the harmonic series

¹ The written component contextualises the works performed by the author in a series of public recitals. Through their performance and greater exposure it is hoped that an increased focus will be placed on this very necessary aspect of horn technique in the future development of students.
where the partials lay closer together. This was also the case with the natural trumpet, and the parts written for both of these instruments using the notes above the tenth or twelfth harmonic became known as ‘clarino.’ The parts written by composers such as Johann Sebastian Bach (1685-1750), George Frideric Handel (1685-1759), Johann Adolph Hasse (1699-1783), Georg Philipp Telemann (1681-1767) and Jan Dismas Zelenka (1679-1745),\(^2\) clearly demonstrate the virtuosic abilities of the performers at the time. However, with the development of hand stopping technique towards the end of the century, the use of this extreme register was no longer required when writing for the horn, as it was now possible to play the notes in between the open partials by manipulating the pitch with the right hand in the bell and still maintain good tone quality. The use of hand horn technique was quickly accepted throughout Europe, and although it reduced the horn to playing a more harmonic role in ensemble settings, it opened up a world of possibilities in solo repertoire as the instrument now had chromatic capabilities.

Due to the large range that the horn was now able to cover effectively, horn players began specialising at playing in either the upper register or lower register, known as ‘cor alto’ and ‘cor basse.’ These terms were predominantly used to avoid labelling the players as ‘first horn’ and ‘second horn,’ as in many cases the lower cor basse part not only included solo lines but was in fact more complicated due to the larger register that it covered and because the hand stopping technique required to negotiate the wider intervals between open harmonics was more complex. Cor basse players also had several techniques available beyond their normal hand stopping technique and were regarded as having a

superior tone, so many of the solos written at the time were composed specifically with cor
basse players and their right hand virtuosity in mind.³

The practice of separating the horns into high and low parts continued until the
development of the valve revolutionised the horn and indeed all brass instruments early in
the nineteenth century, discussed in Chapter 2. Composers such as Robert Schumann
(1810-1856), Richard Wagner (1813-1883), Gustav Mahler (1860-1911) and Richard
Strauss (1864-1949) pushed the newly developed instrument and its players to their limits,
and made full use of the horn’s new capabilities. It became impossible to specialise in only
the upper or lower register as the parts being composed now required skilful technique
over the entire range available on the instrument, covering upwards of four octaves.

Although low register playing still forms a vital part of every horn player’s
 technique, the fact that it is no longer considered a specialised skill has led to it becoming
an often neglected facet in both the practice and teaching of students. A large part of this
issue is no doubt due to the student’s development, where the more talented students are
placed on first horn and required to play higher rather than lower, and it tends to be these
students that pursue further study on the instrument. The horn’s place within the orchestra,
band or chamber ensemble as a middle voice results in players spending much of their time
filling in the harmonies and adding depth to the texture of the music, a role which
predominantly makes use the instrument’s middle register. When solo lines or exposed
passages are included they usually allude to the horn’s more iconic role where, due to its
hunting origins, it has long been used to symbolise heroism, the outdoors and make the
association with all things noble, royal and courtly in nature. This character, which the
horn has played so well throughout history, generally makes use of the upper register
where the tone is full, bright and soloistic, rather than the lower register where it is less

³ Many of the leading soloists at the time were regarded as cor bass specialists. Two of the most significant
were Louis Francois Dauprat (1781-1868) and Giovanni Punto (1746-1803).
focussed and penetrating, and more inclined to blend into the texture of the ensemble. Despite these factors, there are many instances of exploitation of the low register, thus requiring that this facet of playing receives due care and attention from all students.

Considering that the horn has long been regarded as a very difficult instrument to learn and master, and that progress can be quite slow and time-consuming, it perhaps comes as no surprise to find a weakness in the teaching curriculum that is currently popular. However, the many benefits of low register work are widely recognised. Playing in the lower register encourages good breath control and support, improves tone as well as embouchure flexibility and strength. Clear articulation is even more necessary than usual due to the less projecting nature of lower pitches, and students often find this difficult. The ability to read parts written in bass clef and using both old and new notation is also necessary, as is fluent transposition. The ability to execute the many extended techniques that are used in more modern music correctly means that this is also increasingly becoming a challenge in the lower register of the instrument. By developing these aspects in the low register, improvements are certainly made to the student’s overall technique and competence as a horn player. Furthermore, the rapid arpeggiated passages and large register leaps typical of traditional cor basse writing from the eighteenth and nineteenth centuries remains difficult today, even with the addition of valves and the invention of the double horn. The technical aspects of playing in the lower register and pedagogical works that are currently available are discussed in Chapter 3.

Most horn students and teachers would be familiar with Georg Kopprasch’s Studies for French Horn Op.6 and Henri Kling’s 40 Characteristic Etudes for French Horn, as

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4 Bertil van Boer, “Laßt Lustig die Hörner Erschallen: Resolutions to Two Problems in Horn Performance Practice of the Late Eighteenth Century,” 113.

these etude books have long formed the foundation of the teaching syllabus. However, there are many other resources available from the nineteenth century that are worth examination and evaluation as teaching resources, especially the method books that were written by the succession of leading horn players who were appointed Professor of Horn at the Paris Conservatoire following its opening in 1796. Although these resources are not focussed primarily on the lower register they do contain many exercises aimed at the development of the cor basse technique and therefore have significant value technically as well as offering an invaluable insight into the expectations and possibilities of hand horn technique.⁶ Some of these publications, which have now been translated and become readily available, include Seule et Vraie Methode pour apprendre facilement les Elements des Premier et Second Cors by Anton Joseph Hampel (1710-1771), which was revised and published in 1794 by his famous pupil Giovanni Punto (1746-1803), and the methods by Frédéric Nicolas Duvernoy (1765-1838), Heinrich Domnich (1767-1844), Louis-François Dauprat (1781-1868) and Jacques-François Gallay (1795-1864).⁷

More recently composed etude books such as McCoy’s 46 Progressive Exercises for Low Horn, Martin Hackleman’s 34 Characteristic Etudes for Low Horn Playing, Patrick Miles’ Low Horn Etudes and Drills for the Intermediate Horn Player, Low Range for the Horn Player by Douglas Hill, and John Ericson’s Ultimate Low Horn have endeavoured to fill the void in low register teaching materials,⁸ which had previously

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⁶ These resources are discussed further in Chapter 1.
rested almost solely on the *30 Special Etudes for Low Horn* by Hermann Neuling (1897-1967). These newer method books all contain very useful exercises for the development of a good low range and are appropriate for both younger and less advanced players as musically they are fairly straight forward. Although these exercises do provide plenty of challenges they do not compare to the technical requirements or low register facility required by the Neuling etudes. Few of these publications have as yet broken into the esteemed company of their higher register counterparts in terms of widespread awareness, use or acknowledgement, perhaps with the exception of the Hackleman. As far as technical discussions, it is really only Douglas Hill’s book *Low Range for the Horn Player* and Randy Gardner’s *Mastering the Horn’s Low Register* that include any in depth information on technical approach. It is hoped that through the course of this research further new resources will be found and explored, and that the wider horn playing community may benefit from this as there are undoubtedly a number of other publications from around the world that need to be discovered and assessed, and there is clearly a need both for them and for lower register playing in general to be encouraged.

It certainly appears that only a small number of resources are available to the teacher or student that really emphasize the importance of a good low register and actually discuss the technical difficulties associated with playing down in that register, and even fewer that suggest an approach to achieving results through the correct methods. Through a series of interviews with leading horn players and teachers from around the world an insight will be gained not only into the approach, but also into the materials that are currently being used to teach low register skills, as the limited resources written specifically for the horn which are available are often supplemented with other materials. These borrowed resources will be evaluated and discussed in Chapter 5.

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10 These resources are discussed further in Chapter 3.
Even though the lower register used to be favoured for solo works, there are unfortunately relatively few recognised solos that can be performed to display a student’s low register skills as they are developed. Similarly, these are also yet to break into the standard performance repertoire of the horn as they are predominantly composed by lesser known composers and in a less iconic style. Of the traditional cor basse works being performed today the most well-known works are clearly the series of sonatas for horn and piano that began with the Sonata for Horn and Piano Op.17 of 1800 by Ludwig van Beethoven (1770-1827).\(^{12}\) Equally significant are the concerti of Franz Josef Haydn (1732-1809), Carl Maria von Weber (1786-1826), Francesco Antonio Rosetti (c.1750-1792) and the famous horn player Giovanni Punto (1746-1803). These resources are discussed further in Chapter 1. *Canto Serioso* by Carl Nielsen (1865-1931) and the *Bagatelle für Tiefes Horn und Piano* by Hermann Neuling (1897-1967)\(^{13}\) are really the only frequently performed works for low horn that are composed in a more modern style. More recent additions to the horn’s solo repertoire will be sourced, assessed and performed during the course of my research, to illustrate that numerous other alternatives that genuinely emphasize the lower register exist. These works will be discussed in Chapter 4.

Transcriptions will also be investigated as an underutilised but very legitimate performance option as there are an ever increasing number of these works being published and readily available, which are predominantly sourced from the solo repertoire of the cello, bassoon and trombone. Some of these are in the form of small scale character pieces, whilst others are large, substantial works such as the sonatas for cello and piano of Johann Nepomuk Hummel (1778-1837) and Johannes Brahms (1833-1897),\(^{14}\) or the six Suites for

\(^{12}\) Later works for the natural horn include the sonatas by Ferdinand Ries (1784-1838), Franz Danzi (1763-1826) and Luigi Cherubini (1760-1842).


Unaccompanied Cello by Johann Sebastian Bach (1685-1750)\textsuperscript{15} that have long been a popular solo option amongst many different instrumentalists. Pedagogical works will also be examined, along with these performance options in Chapter 5. Solo works for the horn will also be investigated, as many of the frequently performed works include low register moments without providing any genuine low register virtuosity.\textsuperscript{16} Throughout the candidature a series of public recitals including both key historical works and newly discovered pieces that feature the horn’s lower register were performed, covering different periods, genres, styles and ensemble composition.\textsuperscript{17}

There are many recordings currently available for the traditional cor basse repertoire options listed above. Performances of these works are able to be found on historical instruments, although the majority of recordings use modern instruments. The more recent compositions are unfortunately less well represented as they attempt to gain greater prominence, often being available from only a single recording. The Nielsen has been recorded a number of times but somewhat surprisingly Hermann Neuling’s Bagatelle, which has frequently been used as a low horn audition test piece, is only available on a couple of recordings; one by J. Bernardo Silva called Lunar Songs and another titled It’s All Relative where it is performed by Jesse McCormick.\textsuperscript{18}

Since the emergence of the historically informed performance practice movement there have been several informative journal articles published on the hand horn. A good starting point is the informative annotated bibliography by Jennie Blomster, Thomas

\textsuperscript{15} There are now several different publications for horn, including: Johann Sebastian Bach, \textit{Suites for Unaccompanied Cello} Ed. Wendell Hoss (San Antonio, TX: Southern Music Company, 1950); Johann Sebastian Bach, \textit{Suites for Unaccompanied Cello} Ed. Francis Orval (Crans-Montana, Switzerland: Editions Marc Reift, 1993).

\textsuperscript{16} These are included in Chapter 4.

\textsuperscript{17} Details of these recitals are included in Appendix 1.

Hiebert and Trevor Reid that was published in The Horn Call, as it contains information on resources dedicated to the horn’s history as well as methods, etudes, solo pieces, duets and trios. Maurice W. Riley’s bibliography from the Journal of Research in Music Education also contains a list of significant early music methods as well as horn specific tutors. In addition to these, the reference text The Early Horn: A Practical Guide by British horn player, teacher and historian John Humphries offers extensive historical information and practical advice as a part of the Cambridge Handbooks to the Historical Performance of Music series. These historic sources provide an insight into previous ideas and tactics for learning the instrument and also a great deal of information on composers, their works, performers and performance practice issues, which even the modern performer must consider.

A large number of journal articles can also be found regarding the development of the instrument; from the traditional Baroque style of playing, through the implementation of hand horn technique and later the development and adoption of valve technology.

These include articles by renowned horn players such as Bertil van Boer, Andrew Clark, Horace Fitzpatrick, Reginald Morley-Pegge and John Ericson, as well as those by W.F.H.

22 I have also dedicated a significant amount of time to learning the historic natural instrument for performance in the recitals that accompany this research project, with the help of Wendy Page and Richard Seraphinoff.
Reference books such as those by Christian Ahrens, Anthony Baines, Adam Carse, Horace Fitzpatrick, Reginald Morley-Pegge, Barry Tuckwell, Kurt Janetzky and Bernhard Brüchle also provide valuable information regarding the instrument’s history and development, as do the two self published works by Birchard Coar.

Douglas Hill’s book *Extended Techniques for the Horn* discusses the use of extended techniques in contemporary music composed for the horn and gives practical advice. It includes a good repertoire list and bibliography, as well as a recording by Hill of over seventy different effects that were discussed in the book, including articulations, unusual muting options and tonal variations. *Horn Technique* by Gunther Schuller also contains a fairly extensive repertoire list, although it mainly consists of chamber music, and covers all the standard horn techniques as well as having a section aimed specifically at composers. In a similar fashion, Edward Deskur attempts to set out some guidelines to what can be expected from low horn performers by composers today in regards to range, register shifts, articulation, hand stopping and stylistic ideas in his article from *The Horn*.

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27 Birchard Coar, *A Critical Study of the Nineteenth Century Horn Virtuosi in France* (DeKalb, IL: Self Published, 1952); Birchard Coar, *The French Horn*.


He makes the point of composing for the horn’s character and exploiting its nature, rather than using it as a colour in some abstract musical idea. It is hoped that these books by Douglas Hill and Gunther Schuller, and journal articles such as the one by Edward Deskur will encourage further experimentation and exploitation of the horn’s lower register in solo compositions. These three sources go considerably further than the basic fundamentals that are contained in the composition texts frequently assigned to composition students who need to be informed of the instrument’s capabilities, which are also discussed in Chapter 2.

There are two further journal articles from *The Horn Call* written by Edward Deskur that also offer significant insights into different aspects of the horn’s lower register. The second of these articles, published in 1992, delivers some very important points on performing as a low horn player through a discussion on low horn auditions and standard orchestral excerpts, whilst the first discusses the different approach to playing low horn and makes the argument for returning to specialized high and low players. Standard orchestral excerpts also provide the inspiration for articles by Richard Dunn, Eli Epstein, Jean Martin, Patrick Stevens and Randy Gardner, offering further insight into the role of the lower horn when playing in the section. The latter, by Gardner, can be viewed as a continuation of his excellent book *Mastering the Horn's Low Register* and includes discussion on intonation, balance, listening, articulation and the preparation of orchestral excerpts. Indeed the orchestral repertoire has inspired a number of informative journal articles regarding low horn playing, predominantly focused on historical performance

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issues, performers, composers or specific repertoire such as Beethoven’s Symphony No.9 in D Minor Op.125. Further articles by Thomas Bacon, Philip W. L. Cox Jr. and Julius Erlenbach\(^{33}\) are targeted towards the teaching and development of the lower register in horn students, covering many key points, which are also reinforced in Harold Meek’s book.\(^{34}\)

Another very important resource for all horn players is the book *Collected Thoughts on Teaching and Learning, Creativity, and Horn Performance* by Douglas Hill.\(^{35}\) It is an incredibly detailed collection of thoughts and analysis, covering topics from basic technique and practice ideas through to the mental approach when playing, lists of solo repertoire, chamber music, etudes, excerpts, books and more. More general practical guides by great horn players such as *Thoughts on Playing the Horn Well* by Frøydis Ree Wekre, *Playing the Horn* by Barry Tuckwell, *The Horn Handbook* by Verne Reynolds and *The Art of French Horn Playing* by Philip Farkas are also required, and all contain some low register information and exercises.\(^{36}\)

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Chapter 1 - Traditional ‘Cor Basse’ Writing and Treatises

Although the date frequently quoted as marking the entrance of the horn into the orchestra is often given as 1705 in Reinhard Keiser’s opera Octavia,¹ there are numerous examples of the instrument’s use prior to this, most notably in the stage works of Francesco Cavalli (1602-1676), Jean-Baptiste Lully (1632-1687) and Carlo Agostino Badia (1672-1738). There is no way of determining the actual date definitively as there were without doubt improvised hunting scenes on the stage long before these more formal roles. Solo works were also composed featuring the horn prior to this date, the most famous of which is the Concerto a4 by Johann Beer (1655-1700).² However, the two most significant figures in this early stage of the instrument’s history were Johann Sebastian Bach (1685-1750) and George Frideric Handel (1685-1759),³ who began moving away from the fanfare-like melodies of the middle register and instead wrote for the instrument in a more soloistic capacity. Due to the restrictions of the natural instrument this meant that it was necessary to use the higher register notes of the harmonic series where the partials lay closer together, as was also the case with the natural trumpet. The parts written for both of these instruments using the notes above the tenth or twelfth harmonic became known as ‘clarino,’ and essentially generated a new school in playing (see Figure 1.1).⁴

¹ Octavia by Reinhard Keiser (1674-1739) is however believed to be the first German score to include horns.
³ Many of Bach’s cantatas include solo horn parts, as does the Mass in B Minor BWV 232 and Brandenburg Concerto No.1 in F Major BWV 1046. Handel features the horn in a number of his instrumental pieces as well as several operas, most famously in Giulio Cesare in Egitto.
⁴ Other composers of interest from this period include Johann Adolph Hasse (1699-1783) and Georg Philipp Telemann (1681-1767). The Capriccios of Jan Dismas Zelenka (1679-1745) also provide a great example of the ‘clarino’ style of writing; they were famously recorded by Barry Tuckwell and Robert Rouch in 1977: Jan Dismas Zelenka, Capriccio No.1-5, Barry Tuckwell and Robert Rouch with Camerata Bern and Alexander van Wijnkoop, Zelenka: Orchestral Works and Trio Sonatas, Brilliant Classics 93785, 2008.
One of the most important contributory factors was the growing desire for better tone quality throughout the orchestra...There was a tendency not only to increase the number of horns to four but to make greater use of the extreme lower notes of the instrument. The fact that neither Bach in his second horn parts nor Handel, even when four horns were used, made use of the extreme lower notes, is almost conclusive evidence that their players practically ignored their existence.6

The horns being manufactured at this time were of a fixed length design and therefore could not be tuned and were only capable of playing in a single key, requiring multiple instruments to be purchased and maintained. The expense and logistics of this were somewhat prohibitive and limited the instrument’s use until the later development of ‘crooks’ came into use. These additional lengths of tubing inserted between the

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6 Birchard Coar, The French Horn 2nd ed. (DeKalb, IL: Self Published, 1971), 35.
mouthpiece and body of the instrument, known as the Waldhorn with ‘terminal crooks’ was developed by the Viennese horn maker Michael Leichnamschner around 1705, and allowed a high pitched horn to be lowered into a number of alternate keys. The body of the horn was generally built in high c, and this could be lowered down as far as b flat basso satisfactorily. This significant improvement in the instrument’s flexibility and ease of use meant that its value within the ensemble was greatly enhanced, and it became commonplace to have horns affiliated with every orchestra. The horn and trumpet players were no longer servants of the hunt or part of the military, but were instead musicians who were generally required to play an alternate instrument for the works where the brass were not involved or in the case of injury.

During the early part of the eighteenth century and these early stages of the horn’s orchestral involvement, experiments were already being undertaken to further the technical possibilities and applications of the instrument. ‘Hand stopping’ techniques were being developed in Dresden in the first half of the eighteenth century, however it is also believed that the technique was already widely used by trumpeters for correcting the intonation of the open harmonics on their instruments. Horn players found that by manoeuvring the right hand inside the horn’s bell, in addition to slight embouchure and air adjustments, it was possible to raise or lower any of the open harmonics and fill in the gaps of the harmonic series. This essentially allowed the horn to play a fully chromatic scale through the middle register, and therefore the parts no longer needed to be written in the extreme upper register. The range was extended down to include the second harmonic and through the embouchure additional notes could even be produced below this, which were known as ‘factitious tones.’ By 1740 the notes created through this ‘hand horn’ technique and the additional factitious tones available at the bottom of the instrument’s range were being

8 The technique is also often referred to as ‘artificial tones,’ and also as ‘falsetto’ in several resources.
included in compositions, creating a massive separation between horn and trumpet technique. By 1750 the renowned horn player Anton Joseph Hampel (1710-1771) had perfected the technique and the new school of horn playing was developed.  

The range that the instrument was now able to cover effectively was so vast, spanning over four octaves, that the players began specialising at playing in either the upper register or lower register, known as ‘cor alto’ and ‘cor basse’ respectively. These terms were predominantly used to avoid labelling the players as ‘first horn’ and ‘second horn,’ as in many cases the lower cor basse part was in fact more complicated. Cor alto parts were effectively a continuation of the clarino technique, with players specialising in the upper register where stepwise movement was generally possible using the open notes of the harmonic series and therefore they specialised in playing more lyrical lines. Cor basse players had to develop much more advanced right hand technique to negotiate the lower octaves of the instrument where the intervals between the open notes of the harmonic series are far wider. In addition to this, the flexibility to move rapidly around the harmonic series between the third and twelfth harmonics became a feature of cor basse technique. In addition to covering a significantly wider range than that of the cor alto and being considered to have a superior quality of tone, the cor basse school of playing also developed several specialised techniques, most notably the factitious tones previously mentioned.

By changing the playing position to include the hand in the bell, the horn’s tone was also mellowed somewhat from its raucous hunting origins where the bell was pointed into the air. Although that beautiful mellow tone of the instrument was affected somewhat by the movements of the hand in the bell, composers not only accepted this as

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9 Hampel’s life, compositions and general contributions to the horn are discussed in depth later in this chapter.
10 The terms *Corno Primo* and *Corno Secundo* did eventually take over, however the divide between cor alto and cor basse players basically extended through until the invention of the valve in the nineteenth century.
adding to the charm and expressive quality of the instrument, but also composed music that could exploit the tonal variations. The horn quickly gained an important role, as both a solo instrument and within the ensemble. It became common for orchestras to employ full-time horn players, initially a single pair, however this number quickly grew to four or more.\(^\text{12}\) The four horn section that became standard still employed the players in pairs, often using the first pair in the tonic key and the second in the dominant, or in the case of minor keys the tonic and relative major. Another interesting practice at the time was that in addition to separating the horns into cor alto and cor basse players, there was the employment of high and low pairs of players. This allowed one pair to specialise on the shorter horns where the tone quality is quite bright and upper harmonics difficult to achieve, and an alternate pair to specialise on the longer horns where the tone quality is darker and the instrument requires a greater control of breath.\(^\text{13}\) It also removed the need to interrupt the music for players to modify their instruments and retune.

There are several treatises on horn playing written in the nineteenth century that are now translated, readily available and clearly worth examining to gain an insight into this traditional approach to playing the horn in the lower register. The most significant of these works are without doubt the method books that were written by the succession of leading horn players who held the post of Professor of Horn at the Paris Conservatoire following its opening in 1796.\(^\text{14}\) In chronological order, these publications include the method by Anton Joseph Hampel that was revised and published by Giovanni Punto *Seule et Vraie Methode pour apprendre facilement les Elements des Premier et Second Cors*, Frédéric


\(^{14}\) Although earlier instructional works do exist.
Nicolas Duvernoy’s *Methode pour le Cor*, Heinrich Domnich’s *Methode de Premiere et de Second Cor*, Louis-François Dauprat’s *Methode de Cor Alto et Cor Bass* and Jacques-François Gallay’s *Methode Pour le Cor* op.54.

The Dresden based cor basse player and teacher Anton Joseph Hampel (1710-1771) is widely credited with three extremely important developments in the horn’s history. The first was the development of the *Inventionshorn* with Dresden instrument manufacturer Johann Georg Werner (active 1728-1772) in 1755. This modification of the traditional *Waldhorn* had the benefit of including the crooks within the body of the instrument rather than between the mouthpiece and body as well as the incorporation of a slide-like attachment, which proved to be a far superior tuning method than the small tuning crooks that had previously been required. The second, and without doubt most important was the perfection of hand stopping, and finally, he is also credited with the important invention of the non-transposing mute.

Initially titled *Lection pro Cornui* and published c.1762, the method book that Hampel composed was “improved” by his former student, the famous horn player Giovanni Punto (1746-1803) and published as *Seule et Vrai e Methode pour apprendre facilement les Elements des Premier et Second Cors* in three separate editions between the years 1792 and 1798. In this method, Hampel and Punto suggest the range of the cor alto to be from harmonic six to beyond harmonic sixteen and fully chromatic, whilst the cor basse range is given as harmonic two to twelve, fully chromatic above harmonic four but with gaps below that. They also include the factitious tones that are derived from the

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16 This mute apparently also allowed for hand stopping technique to be used to alter the pitch. See: Nicholas Smith, “History of the Horn Mute,” *The Horn Call Annual* 2 (1990): 77-96.

17 Giovanni Punto (1746-1803) had studied under Hampel and was a cor basse player himself. He changed his name from Jan Václav or Johann Wenzel Stich after escaping serfdom under the Count Joseph Johann von Thun in Bohemia, and was one of the most celebrated horn players in Europe. He travelled throughout Europe performing, often works of his own composition which include concerti for horn, études, duets and chamber music. These are discussed later in this chapter.

second harmonic, which extends the cor basse range down another fourth to the written low G. There is however no explanation of how to accomplish this procedure or any description of hand stopping technique included, suggesting that these were skills to be learnt from a master teacher rather than from reading a book.\footnote{The earliest description of hand stopping and factitious tones appear in Essai d’Instruction a l’usage de ceux qui composent pour la Clarinette et le Cor by Valentin Roeser (c.1735-1782), published in Paris in 1764. Labeled “the first true instrumentation treatise.” Barry S. Brook, et al. “Roeser, Valentin.” Grove Music Online. Oxford Music Online. Oxford University Press, accessed 15/09/2011. http://www.oxfordmusiconline.com/subscriber/article/grove/music/23658}

The exercises begin in common time and a reasonably comfortable register, between harmonics three and ten for the cor basse and eight to twelve for the cor alto, using only open notes with the exception of the eleventh harmonic which needs to be flattened from $f\#$ to $f'$. After a couple of exercises a theme is generated, which then forms the basis of the majority of the remainder of the work (see Figure 1.2).

![Figure 1.2: Anton Joseph Hampel Ed. Punto, Seule et Vraie Methode pour apprendre facilement les Elements des Premier et Second Cors, Theme.\footnote{Anton Joseph Hampel, Seule et Vraie Methode pour apprendre facilement les Elements des Premier et Second Cors Ed. Giovanni Punto (Paris: H. Naderman, c.1794), 6.}](image)

Throughout the remainder of the method the exercises become increasingly complex, gradually progressing through smaller and smaller note values, different articulation patterns, slurs, dotted rhythms, syncopation and even triplets against duplets.\footnote{As well as through the use of alternate time signatures (both simple and compound), the addition of grace notes, trills and several additional notes that are available through the manipulation of the seventh and fourth harmonics.} The cor basse part becomes increasingly acrobatic, covering wider intervals far more rapidly and
also a slightly larger range (see Figure 1.3), whilst the cor alto part is more frequently pushed further above the stave. In the later exercises the cor alto part becomes quite virtuosic above the steady harmony being provided by the cor basse, and at the conclusion of the method there are even several exercises in the tonic minor.

Figure 1.3: Anton Joseph Hampel Ed. Punto, *Seule et Vraie Methode pour apprendre facilement les Elements des Premier et Second Cors.*

Although these exercises become rather repetitive due to the same recurring ideas and harmonies they are well written and in an idiomatic style where the cor alto plays lyrical melodies or virtuosic interpretations of the melody full of ornamentation in a fairly small range at the top of the stave, whilst the cor basse jumps around arpeggios and provides the harmony.

22 By the closing stages of the method, the intervals have grown to almost two octaves, and the range has expanded down to include the second harmonic as well as up to the twelfth.
23 Generally not past the fourteenth harmonic (written a'') but occasionally up as high as the twentieth harmonic (written e'').
24 The final work is an additional *Menuetto en Variation pour le Second Cor* that provides six increasingly difficult variations of the initial accompaniment for the cor basse player.
26 The hand stopping required is not particularly difficult, so they would be a good starting point when learning the natural horn for centring the pitch and gaining accuracy within the harmonic series. On the modern instrument they could definitely be used to improve agility and endurance with students, without concerning them with complex ideas, and would work equally well when played as duets where they would allow for the practice of intonation as well as the chance to practice matching stylistically.
Frédéric Nicolas Duvernoy (1765-1838) was a celebrated soloist and teacher in Paris where he played in the Paris Opera and taught at the Conservatoire.\textsuperscript{27} He was also a somewhat controversial figure as he was neither a cor alto nor cor basse player, but instead considered a ‘cor mixte,’ a school of playing that arose in France near the end of the eighteenth century.\textsuperscript{28} Players of this type did not include the highest or lowest pitches available on the horn or learn the specialised techniques required to play in those registers, essentially choosing instead to play lyrical melodies in the middle register from harmonic four to twelve, and focusing on purity and evenness of tone between the open and stopped notes.\textsuperscript{29} They also favoured what had become known as the ‘solo keys,’\textsuperscript{30} where the hand horn sounds its most soloistic, and used them exclusively meaning that they were often required to transpose orchestral parts.\textsuperscript{31} In addition to twelve concerti for horn, solo concert pieces, etudes, horn ensemble pieces and chamber music, Duvernoy also wrote a \textit{Methode pour le Cor}, which was published in 1802. It is perhaps surprising given Duvernoy’s preference for the cor mixte style of playing that in his method he continues to separate the horns into cor alto and cor basse, giving the shape of the mouth as the determining factor to then choosing the appropriate mouthpiece and register. He includes diagrams of a suitable cor alto and cor basse mouthpiece (see Figure 1.4), and also of the correct hand position in the bell and posture.

\textsuperscript{27} Duvernoy was employed in the Comédie-Italienne from 1788, Paris Opera from 1797 and later with the “Chapelle Musique,” where he remained as solo hornist until 1830. He was the Professor of Horn at the Conservatoire from 1796 until 1816. Robert Ostermeyer Musikedition website, accessed 18/09/2011. Available at: \url{http://www.corno.de/shop/index.php}

\textsuperscript{28} Two other famous exponents of this school of playing are Luigi Belloli (1770-1817) in Italy and Giovanni Puzzi (1792-1876) in England. Eric Brummitt, “Cor Mixte,” \textit{The Horn Call} 38/3 (May, 2008): 41-44.

\textsuperscript{29} Eric Brummitt, “Cor Mixte,” 41-44.

\textsuperscript{30} Generally accepted as being the keys F, E, E flat and D.

\textsuperscript{31} This approach has the effect of displacing the open and stopped notes from the original key, notes that were often chosen for a specific result or balance and frequently used to great effect. These displacements, along with the incomplete technique, were the chief annoyances amongst other horn players. Eventually cor mixte players began using the horn in F almost exclusively. See: Eric Brummitt, “Cor Mixte,” 41-44.
The practical sections of the method that follow are well thought out in that Duvernoy makes the logical progression from using the open harmonics as arpeggios, through to the addition of hand stopping within the diatonic scale, and finally expanding to include the entire chromatic scale. The method often refers to the horn’s register as being in three octaves; the first being harmonic two through four, the second from harmonic four through to eight, and finally the third from harmonic eight to sixteen. Duvernoy includes a brief explanation of factitious tones with the advice that although these notes occur rarely the technique should be known by the cor basse player, and also identifies several notes beyond the sixteenth harmonic that may be required by cor alto players; however neither of these techniques or abilities are utilised in the method. The lessons that follow take the form of short pieces written in a range of different characters with a simple basso continuo.

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33 The three octave range perhaps adds a little weight to the alternate opinion of cor mixte players; that although they did not learn the specialised techniques of a cor alto or cor basse player, they believed it was possible for a single player to cover the majority of the horn’s range.
accompaniment, covering different time signatures, rhythms and articulations (see Figure 1.5).³⁴

Figure 1.5: Frédéric Nicolas Duvernoy, *Methode pour le Cor*, Exercise 7 in Part Two.³⁵

Duvernoy also includes a guide to the types of difficult passages and articulation requirements that may be encountered by the horn player. The series of thirty examples sit predominantly between harmonic three and fourteen,³⁶ and are typical of the traditional style of writing for the cor basse; including rapid arpeggio movement, wide intervals and also requiring fluent hand stopping technique (see Figure 1.6).

³⁴ Eventually these progress into horn duets and later trios. The four trios that conclude the method are well designed, as all three voices are equally important and include both melodic and harmonic roles. First horn covers the cor alto range of harmonics six to sixteen, second horn covers the traditional cor mixte range of harmonics four through twelve, and third horn is a traditional cor basse part between the second and eleventh harmonics.
³⁵ Frédéric Nicolas Duvernoy, *Methode pour le Cor*, 18.
³⁶ Harmonic two is only used once, and there is also one run from the sixteenth harmonic down included.
As a method, the Duvernoy is well thought out and could be used as a starting point for learning the natural horn. However, it is slightly flawed through the irregularities in etude difficulty and sometimes-limited range that does tend to favour the upper register. The chamber pieces for two or three horns that conclude this method are certainly viable options not only for study, but also for performance pieces as they are well written and idiomatic in style.

The Bavarian cor basse player Heinrich Domnich (1767-1844) came from a family of horn players; he was not only the son of a horn player but also had two brothers who played the horn professionally.\(^{38}\) He studied with Punto and Kenn in Paris, and after several orchestral postings began playing second horn next to Lebrun in the Paris Opera in 1787.\(^{39}\) Several years later, in 1796 he began teaching at the conservatoire, a post that he

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\(^{37}\) Frédéric Nicolas Duvernoy, *Methode pour le Cor*, 31.


\(^{39}\) Lebrun was a virtuosic cor alto who later played alongside Charles Türrschmidt (1753-1797) in the service of the King of Prussia. Türrschmidt had joined the chapel orchestra in 1785 along with his long time partner Jean Palsa (1752-1792). Birchard Coar, *A Critical Study of the Nineteenth Century Horn Virtuosi in France*, 143.
held until 1816.\textsuperscript{40} He wrote several concerti and many smaller works for the horn, as well as a famous method that was first published in 1808 as the \textit{Methode de Premiere et de Second Cor}.\textsuperscript{41}

The Domnich method begins with several pages of historical notes, which are followed by a number of brief articles on the various aspects of playing the horn.\textsuperscript{42} When it comes to intonation, Domnich puts a big emphasis on singing and having a firm inner concept before attempting to play on the horn.\textsuperscript{43} As the extensive range of the instrument makes it impossible for a single player to cover all of the notes, Domnich continues to advocate the separation of players into cor alto and cor basse, disregarding the theory of thin flat lips being better suited for cor alto and thicker protruding lips for cor basse. Instead he suggests that the key difference is in the selection of the mouthpiece, claiming that once the decision to play either first or second is made by the student there is no going back. He includes diagrams of a suitable mouthpiece for each type of horn playing (see Figure 1.7) and later goes on to say that the traditional mouthpiece position used by cor basse players of two thirds upper lip, one third lower is ideal and should be encouraged in cor alto players as well as it is responsible for the cor basse’s improved tone and improved agility, which allows for easier coverage of the required range. Domnich continues by


\textsuperscript{41} “Two very different editions of the \textit{Méthode} appeared in Domnich’s lifetime. The original Le Roy edition in French, which appeared in 1808, contains extensive introductory materials on the history and technique of the horn which do not appear in Schott’s French and German edition of 1832. This later edition does, however, contain materials which were either revised by Domnich or altered editorially; this is most clear with regard to the subject of crooks and transposition, and in itself sheds some light on the rapid changes occurring in performing techniques employed on the horn.” John Ericson, “Heinrich Domnich and the Natural Horn,” \textit{Horn Articles Online}. Available at: \url{http://www.public.asu.edu/~jqerics/articles_online.htm}

\textsuperscript{42} All of which are very informative and well worth reading: Heinrich Domnich, \textit{Methode de Premiere et de Second Cor}, rev. Hans Pizka, trans. Darryl Poulsen, 1-32.

\textsuperscript{43} There is also an interesting discussion on how the chosen crook affects the available range of the instrument; Domnich includes factitious tones down to the written low G, and then on the lower C and B flat basso crooks extends the range up a full four octaves to the twenty fourth harmonic. In comparison, the F crook’s range is given as up to the seventeenth harmonic, and the high B flat and C crooks as up to harmonic fourteen. Domnich also includes an in depth examination of the horns different crooks, their properties, uses and how they affect the character of the instrument, where he suggests E, E flat and F as the least restricted keys for the horn, and also that E flat is the ideal starting point or tonality for students.
breaking down the horn’s range and setting out guidelines for composers as to both the extreme and general ranges of the cor alto and cor basse, before moving onto the technique of hand stopping and other technical aspects of playing such as articulation, dynamics and ornamentation.

Figure 1.7: Heinrich Domnich, mouthpiece diagram from article eight, pg.8.

The exercises that make up the Domnich method can be separated into three basic sections aimed initially towards cor alto, then cor basse, and concluding with a set of etudes. Fundamentally, the lessons for cor alto and cor basse follow the same arrangement;

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44 For the horn in F, he gives the cor alto a general range between harmonic four and harmonic fifteen, and an extreme range up to harmonic seventeen. For the cor basse he includes factitious tones below the second harmonic down to a low G and extends it up to the twelfth harmonic in general, and to the fourteenth harmonic in extreme cases. Domnich makes several further recommendations towards composers including the way they start pieces and phrases written for the horn. He warns against the use of certain notes in the first octave and beginning of the second octave during composition, but also suggests how to use these notes successfully. He also identifies high f#'' and a'' (harmonics eleven and fourteen) as the two most difficult notes to play in tune.

45 Domnich includes a guide for the full four octave range, advocating hand stopping graduations ranging from fully stopped to one quarter stopped, half stopped, three quarters stopped, the normal open position and raised, but states that all of these positions must ultimately be subordinate to the ear’s judgment. Hand stopping is to be accomplished using the wrist, never insertion or removal of the hand, and not requiring movement in the elbow or upper arm. John Ericson, “Heinrich Domnich and the Natural Horn,” *Horn Articles Online*. Available at: http://www.public.asu.edu/~jerics/articles_online.htm

each section beginning with fairly simple exercises based on intervals and the diatonic scale for building breath control and intonation,\textsuperscript{47} which gradually become increasingly complex through wider intervals, decreasing note values, dotted rhythms, syncopation, different articulation patterns and sequence patterns that continually require more accomplished hand stopping technique (see Figure 1.8).

Figure 1.8: Heinrich Domnich, \textit{Methode de Premiere et de Second Cor}, Part Two: cor basse exercise No.49.\textsuperscript{48}

Domnich then takes the hand stopping technique to another level of difficulty by including two exercises that call for diatonic scales to be played beginning on all chromatic pitches, aimed at further developing the student’s intonation and hand technique, which must be played slowly at first.\textsuperscript{49} Finally, there are some short exercises to show the type of ‘difficulties’ that can be expected (see Figure 1.9).\textsuperscript{50} These are limited to a good range for

\footnotesize

\begin{itemize}
  \item Cor alto begins in the range or harmonic four through sixteen, while cor basse covers harmonics two to twelve. These exercises include negotiating intervals that gradually increase in size, until the register is pushed up to harmonic twenty (high \textit{e}’’’) for the cor alto and harmonic sixteen for the cor basse. The intervals continue to widen through the use of a scale pattern until both the cor alto and the cor basse are dealing with two octave leaps. Following these extreme intervals there are arpeggio exercises covering the entire range for each horn, with cor alto covering harmonics four to twenty and the cor basse from harmonic two to twelve, and also including factitious tones below the second harmonic down to the low G.
  \item Heinrich Domnich, \textit{Methode de Premiere et de Second Cor}, 70.
  \item Included in this exercise, for both the cor alto and cor basse, is the famous A flat Major scale often quoted in arguments regarding the fourth horn solo in Ludwig van Beethoven’s Symphony No.9 in D Minor “Choral,” Op.125 composed in 1824. Discussed further in Chapter 2.
  \item For the cor alto, the corresponding exercises offer similar difficulties as again there are large interval leaps and rapid arpeggio figures to be overcome, the range here being harmonic four through to sixteen.
\end{itemize}
the cor basse player and are dominated by typical cor basse harmonic function style writing; including large interval jumps and rapid arpeggiated movement.

The concluding section of the method is a selection of etudes, which includes four studies for the cor alto, four studies for the cor basse (see Figure 1.10), and four studies for both cor alto and cor basse players. The range of each group is well conceived and the writing is idiomatic, with Domnich managing to achieve an enjoyable balance between the required flexibility around the harmonic series and the amount of hand technique necessary.

Figure 1.9: Heinrich Domnich, Methode de Premiere et de Second Cor, Part Two: cor basse exercises 116 and 117.51

The concluding section of the method is a selection of etudes, which includes four studies for the cor alto, four studies for the cor basse (see Figure 1.10), and four studies for both cor alto and cor basse players. The range of each group is well conceived and the writing is idiomatic, with Domnich managing to achieve an enjoyable balance between the required flexibility around the harmonic series and the amount of hand technique necessary.

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51 Heinrich Domnich, Methode de Premiere et de Second Cor, 84.
52 Before the set of etudes at the conclusion of the method, there are several further articles regarding playing the horn. The first of these articles is titled “How to Practice,” and suggests alternating fast exercises with slow ones, high with low, the use of different crooks, and to practice phrasing with continuity rather than in a detached style. The second article is on “Taste and Expression,” and implores the student to now move on from the pursuit of technical mastery to that of musicality. Here Domnich makes special note of the horn’s affinity with the voice.
53 All are written for horn in F with basso accompaniment and include ornamentation, dynamics and some chromatic movement.
54 The cor alto etudes cover harmonics five to sixteen, the shared etudes cover harmonics four to fifteen but usually only extend to harmonic twelve, and the cor basse etudes cover harmonics two through twelve as well as factitious tones down to G.
The written sections of this treatise are almost certainly more beneficial to the student than the exercises, most of which are quite basic in concept, composed around intervals, scales and sequences, however these too have their place. The exceptions to this are the progressions of ‘difficulties’ and concluding etudes, which have many more practical applications. Domnich does require accomplished hand stopping technique to be developed and utilized in several studies that go above and beyond what is normally required, as evident in those two infamous exercises that call for diatonic scales to be played beginning on all chromatic pitches.

Louis-François Dauprat (1781-1868) was born in Paris and introduced to music at an early age as a member of the choir at the Notre-Dame Cathedral. He later became a

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55 Heinrich Domnich, *Methode de Premiere et de Second Cor*, 106.
composition student of Franz Ignaz Danzi (1763-1826)\textsuperscript{57} and as a gifted horn player entered the Paris Conservatoire when it opened in 1796, studying with Jean-Joseph Kenn.\textsuperscript{58} The following year, at the age of sixteen, Dauprat became the first student to win the \textit{premier prix} for horn and was presented with a new silver Raoux horn for his achievement, which is still housed in the Conservatoire’s museum.\textsuperscript{59} Dauprat later studied composition with Francois-Joseph Gossec (1734-1829) and Antoine Reicha (1770-1836) before succeeding Kenn at the Paris Opera in 1808 and later Duvernoy as the solo horn there.\textsuperscript{60} In 1816 he was appointed Adjunct Professor of Horn at the Paris Conservatoire. Two years later he was appointed Professor of Horn, a post which he held until 1842. Most notable amongst his students were Jacques-François Gallay and Joseph Émile Meifred.

Dauprat himself wrote numerous compositions, including operas, symphonies, chamber music and a method for horn that was published as \textit{Methode de Cor Alto et Cor Bass} in 1824 as part of a series by the Paris Conservatoire professors.\textsuperscript{61}

In a similar fashion to Duvernoy’s method, Dauprat begins his method with a number of brief articles. Almost the entire range of the horn is explored in the first practical lesson of the method through a rather lengthy progression of sustained notes that is well planned out.\textsuperscript{62} Dauprat uses hand stopping graduations of one quarter stopped, half stopped, three quarters stopped, fully stopped and raised from the normal position,

\begin{itemize}
  \item Many of the horn parts in the wind quintets composed by Danzi were intended for Dauprat. The sonatas and concerti of Danzi are also discussed later in this chapter.
  \item Jean-Joseph Kenn (1757-c.1819) was a famous cor basse player in the Paris Opera and Professor of Horn at the Conservatoire from 1795 until the reforms of 1802. He retired from the opera in 1808, with Dauprat replacing him there. Robert Ostermeyer Musikedition website, accessed 18/09/2011. Available at: http://www.corno.de/shop/index.php
  \item Louis-Francois Dauprat, \textit{Sonata for Horn and Piano in F Major Op.2}, preface.
  \item Louis-Francois Dauprat, \textit{Sonata for Horn and Piano in F Major Op.2}, preface.
  \item Later publications also include a guide to the chromatic valved horn that was added to by Francois Bremond (1844-1925). For further information refer to: Jeffrey Snedeker. “Hand or Valve (or both): Horn Teaching, Technique, and Technology at the Paris Conservatoire, ca 1840-1903,” (Paper presented at The Historic Brass Society, Paris, June 29, 2007).
  \item The range is gradually extended out from harmonic six: up to harmonic sixteen, then down to harmonic two and beyond through the use of factitious tones to the low F#. Stopped notes are added in one at a time, with the tonic note changing so that the inclusion of b naturals and b flats, as well as f naturals and f#s, is more understandable harmonically.
\end{itemize}
however he does not cover all of the chromatic notes possible in this exercise and also neglects the notoriously difficult low d above the second harmonic. The following lessons are based around the diatonic scale and gradually move through diminishing note values, dotted rhythms and syncopation, dynamics, trills and different articulation patterns, before progressing onto intervals ranging from a second through to two octaves, and also including mixed interval exercises based on several ‘home notes.’ The technical work continues in lesson nineteen where the exercises move through major, minor and diminished arpeggios up to four sharps or flats (see Figure 1.11).

![Figure 1.11](image)

Figure 1.11: Louis-François Dauprat Ed. Bremond, *Methode de Cor Alto et Cor Bass*, Exercise no.1 from Lesson 19.

This is followed by dominant and diminished sevenths, arpeggios based off a pedal point and sequence patterns using the chromatic scale. Significant portions of this very technique-based method have practical applications today. For a student learning hand horn it includes all of the techniques necessary, but does so in a very technique based fashion rather than being musically inspired. Lessons twenty-four and twenty-five would be very useful in the preparation of early Classical solo repertoire as they are a guide to the

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64 Covering the entire range between harmonics two and sixteen.
65 The pattern used in major keys is I-vi-IV-ii-V-I, and then for the relative minor i-VI-iv-ii-V-i.
67 Initially based off harmonic four, then five, six, three, etc.
use of ornamentation and small cadenza-like improvisations at cadence points. In addition to this section, the scale and articulation patterns, interval exercises, and mixed arpeggio exercises could all be used effectively on the modern horn. The duets that occasionally appear are fairly basic, and could therefore be employed as intonation studies.

As previously mentioned, Jacques-François Gallay (1795-1864) studied under Dauprat at the Paris Conservatoire, entering in 1820 despite being over-age. He won the premier prix the following year and played a piece of his own composition at his laureate concert. In 1842, Gallay succeeded Dauprat as the Professor of Horn at the conservatoire, assuming a post that he held until his death in 1864. As one of the final hand horn masters of France, Gallay is probably the best known of these early professors today through his large output of concerti, sonatas, preludes, studies and etudes for the natural horn, which are still frequently studied. His Methode Pour le Cor Op.54 was published in 1845 and contains a large amount of both music and information.

The introduction to Gallay’s method discusses the horn’s history, its entry into the orchestra, many of the instrument’s technical considerations as well as several of the earlier methods produced at the Paris Conservatoire. Gallay moves away from the designations ‘cor alto’ and ‘cor basse’ in favour of ‘premiere’ and ‘second.’ The short exercises that follow progress slowly from simple repeated notes to include the addition of basic hand stopping technique and then through various articulations and time

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69 Gallay was considered a cor alto player, however of particular interest amongst his compositional output are the 12 Studies for Second Horn Op.57, which are discussed in Chapter 3.

70 Including posture, hand position, mouthpieces, articulation, syllables, the range and differences between the two types of instrument; the cor solo and the cor d’orchestre.

71 Gallay continues to recommend the hand stopping graduations of one quarter stopped, half stopped, three quarters stopped, fully stopped and raised from the normal position. However he also recommends different approaches to enharmonic applications.
signatures. All of the exercises in this first section of the method are based on the diatonic scale, frequently built on sequences and therefore somewhat repetitive. Gallay often puts an emphasis on equalling out the tone, and regularly includes crescendos that follow rapid rises in tessitura. The second section of the method is a set of ‘difficulties’ that follows a similar evolution in terms of range as the earlier section (see Figure 1.12). The final ten exercises in this section (numbers 61-70) are built on chord progressions in several keys of both major and minor tonalities and are quite enjoyable to play.

Figure 1.12: Jacques-François Gallay, Methode Pour le Cor Op.54, Exercises 7 and 8 from Second Section.

These are followed by some basic articulation patterns on major scales up to four sharps and flats, some chromatic exercises, and finally a series of seventy further exercises. Contained within the method at various points there are a number of brief articles and also a set of sixteen duets, six ‘melodies’ and finally six etudes (see Figure 1.13). Whilst the melodies cover a similar range to the rest of the method, the range that the duets cover is noticeably different, sitting entirely between harmonics three and fourteen.

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72 The range also expands to cover the harmonics four to fourteen, having begun initially between harmonics six and twelve. Following the first interruption of duets the range further expands, all the way up to harmonic sixteen (high c″″) and in number 81 to harmonic seventeen (high d″″).
73 Harmonic four to twelve initially, then up to the fourteenth, and finally up to the sixteenth.
75 Topics include trills, ornamentation and articulations.
76 These smaller groupings of works are probably more enjoyable to play than much of the other material in the method.
Figure 1.13: Jacques-François Gallay, *Methode Pour le Cor Op.54, Etude No.5, Andante non troppo lento.*
Solo Repertoire

During the eighteenth century the horn became a favoured voice not only within the orchestra, but also for solo compositions. The two surviving horn concerti of Franz Joseph Haydn (1732-1809) are well known, although many doubt his authorship of the Second Concerto. 77 It was composed in 1781, whilst the First Concerto was composed almost twenty years prior to this in 1762, just one year after he entered the service of the Esterházy family. Probably written for the horn player Thaddäus Steinmüller. 78 The horn part of his Concerto No.1 for Horn and Orchestra in D Major, Hob.VIIId:3 predominantly sits in the two octaves between the fourth harmonic and sixteenth harmonic, however it is not without some lower register and cor basse style moments. The arpeggio-like theme of the opening movement and rapid arpeggiated motifs throughout the third movement are the best examples of these techniques (see Figure 1.14). 79

77 It has been suggested that some of the work attributed to Franz Joseph Haydn may in fact have been composed by his younger brother Johann Michael Haydn (1737-1806), including this work. See: John Jay Hilfiger, “Who Composed "Haydn’s Second Horn Concerto?,” The Horn Call Annual 5 (1993): 1-6.

78 According to the liner notes of Horn Concertos, EMI Classics 5 69395 2 (1996), Haydn claimed to have written the work in his sleep.

79 Leutgeb is discussed further regarding Mozart’s concerti later in this chapter. For more information refer to: Michael Lorenz, “A Little Leitgeb Research,” The Horn Call 44/2 (February, 2014): 65-70.

The second harmonic is utilised once as a sustained pitch in the opening Allegro movement. The melody of the beautifully lyrical second movement, marked Adagio, which begins on the twelfth harmonic for the solo horn is also partially repeated a full two octaves lower, thus again requiring the second harmonic before it returns to the upper register midway through (jumping from the second harmonic to the tenth).
The Concerto No.2 for Horn and Orchestra in D Major, Hob.VII:4 is strongly established as one of the foundation works in the cor basse player’s repertoire as it sits in a slightly lower tessitura than the First Concerto. The bouncy first movement marked *Allegro moderato* often features arpeggiated motifs and rapid octave leaps, as well as a number of much larger intervals (see Figure 1.15). Unlike the remaining two movements, the first movement also jumps down to the second harmonic.

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Figure 1.15: Franz Joseph Haydn, Conerto No.2 for Horn and Orchestra in D Major, Hob.VIIId:4, Movement I. *Allegro moderato*, mm. 1-35.\(^{81}\)

The second movement is a lyrical and quite eloquent *Adagio*, requiring a strong and refined upper register as there are few rests and the accompaniment is somewhat sparse. Hermann Baumann said of this movement:

> The slow movement of the Second Concerto, for example, is a jewel…one does not “perform” this movement, one simply meditates on it. I must be at one in heart and soul with the orchestra, in order simply to let the horn sing with gently flowing breath.\(^{82}\)

The energetic *Allegro* finale is once again characterised by rapid shifts in the tessitura, and again, like the previous movement sits almost entirely in the two octaves between the third and twelfth harmonics.


The Concertino for Horn and Orchestra in E Minor Op.45 by Carl Maria von Weber (1786-1826) has similarly established itself as a foundation work in the repertoire of the natural horn, and is widely regarded as being perhaps the last ‘great’ solo work for hand horn.\(^83\) Weber is well known today as a composer, largely due to his impact on both opera and orchestral music, where his exploration of orchestral sounds and colours had a huge and lasting influence.\(^84\) Weber always stressed the melodic line and focussed on the distinctive qualities of each instrument at his disposal, however he also extended the virtuosic techniques of the period, often composing with a certain skilled performer in mind and very rarely for less talented musicians. This was certainly the case with the Concertino, which was composed for an upcoming concert of significance in the year 1806 for the Carlsruhe horn player C. Dautrevaux.\(^85\) Unfortunately Weber revised the piece in 1815 for his virtuoso friend Sebastian Rauch from Munich and discarded the earlier edition of the work. As suggested by its title the concertino is not a full-scale concerto, but rather a single movement work in which the solo horn is challenged by one obstacle after another. In this case the work can be broken down into four sections; the sombre opening *Andante* is contrasted by the jovial nature of the *Andante con moto* theme, which is then transformed through four increasingly elaborate and virtuosic variations before the horn’s recitative-like *Cadenza* (see Figure 1.16).

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83 The work is probably not performed as frequently as it should be due to the technical challenges when the F horn is used to play in e and also due to the expansive range that extends from the factitious low F# up to written high e’’. Barry Tuckwell, *Horn*, 74.


85 Although a horn virtuoso, Dautrevaux was also a trained string player and often involved in the impromptu evening sessions of music at the court in this capacity. Max Maria Weber, *Carl Maria von Weber. A Biography* vol.1 (London: Ernst Keil, 1864), 111-115.
Figure 1.16: Carl Maria von Weber Ed. Kling, Concertino for Horn and Orchestra in E Minor Op.45, Variation Two, *Con fuoco*, mm. 76-98.86

Figure 1.17: Carl Maria von Weber Ed. Kling, Concertino for Horn and Orchestra in E Minor Op.45, Cadenza (*Adagio*) and *Alla Polacca*, mm. 154-184.

The operatic nature of the solo line is always present, however the cadenza is truly unique amongst the horn’s repertoire due to its use of multiphonics (see Figure 1.17). Although this technique of producing multiple notes on what is essentially a single pitch instrument was well known at the time, serious horn players and composers rarely used it. The work concludes with a lively Polacca characterised by wide leaps, rapid runs and ornamentation.

The Concerto No.3 for Horn and Orchestra in E flat Major, KV.447 by Wolfgang Amadeus Mozart (1756-1791) is often used as the solo piece for low horn auditions today. Composed in 1787 and using clarinets and bassoons in the orchestra rather than the usual oboes and horns, the Third Horn Concerto is the only one of Mozart’s four horn concerti for which the entire autograph survives. The opening movement of the work is a cheerful Allegro (see Figure 1.18) that includes some witty hand stopping moments before a brief but somewhat menacing moment at the end of the development section, utilising minor tonalities. However the recapitulation soon returns the more jovial mood. The Larghetto that follows, titled Romanza, is in A flat Major and made up of lyrical melodies allowing the soloist to really sing, before the traditional high-energy 6/8 Rondo: Allegro concludes the work.

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87 Little needs to be said regarding Mozart’s genius and his legacy to classical music. In addition to the horn concerti and Quintet for Horn and Strings in E flat Major KV.407 he also wrote numerous other chamber music and orchestral works that feature the instrument.

88 Graham Rogers, liner notes to Mozart Horn Concertos Ab Koster. CD Newton Classics 8802160.

89 This pattern is followed to some extent in both of the following movements.
Figure 1.18: Wolfgang Amadeus Mozart Ed. Tuckwell, Concerto No.3 for Horn and Orchestra in E flat Major, KV.447, Movement I. Allegro, mm. 28-51.\(^90\)

The four concerti and Concert Rondo in E flat Major, KV.371 are still very much considered central works in the solo repertoire of the horn. Most were composed for the famous horn player and family friend Joseph Leutgeb (1732-1811) in the final decade of Mozart’s life, although some uncertainty and speculation remains.\(^91\) Born in Vienna, Wolfgang Amadeus Mozart, *Concerto No.3 for Horn and Orchestra in E flat Major KV.447* Ed. Barry Tuckwell (New York, NY: Schirmer, 1994).

\(^{90}\) At the age of 55, Leutgeb may have been losing some of his virtuosity on the instrument, and this may account for the lower tessitura of this Third Concerto. All of the concerti and surviving fragments by Mozart were composed around this time: The first completed concerto, Concerto No.2 in E flat Major, KV.417 is dated 1783. Concerto No.3 in E flat Major, KV.447 is dated 1787 and Concerto No.4 in E flat Major, KV.495 is dated 1786. It is believed that the fragments pre date these completed works. The material that makes up Concerto No.1 in D Major, KV.412 was composed later, in 1791, and completed the following year by Franz Xaver Süßmayr (1766-1803). This version of the work is commonly known as KV.514. Its range is...
Leutgeb settled in Salzburg in 1763 having been appointed principal horn with the Prince-Archbishop’s orchestra. This followed a brief appointment to the court orchestra at Esterházy where he was on the same salary as Franz Joseph Haydn.\(^92\) He famously returned to Vienna in 1777 to run his father-in-law’s cheese shop, with the support of the Mozart family.

A number of other horn concerti survive from this same period, but these are far less established in the horn’s solo repertoire and therefore much less frequently performed.

There were a great many composers working in the mid to late 18th century musical world beyond the familiar ones we know like Mozart and Joseph Haydn. Composers such as Dittersdorf, Michael Haydn, Kraus, Vanhal and Carl Stamitz, nearly forgotten for about 200 years, have seen their music come back into the concert halls of the world. While on the whole these composers are not likely to come up to the level of Mozart or Haydn, a select few have been found to be exceptionally creative and original, with individual works that can proudly stand close comparison with works by the great masters. One such composer produced music that had imaginative instrumentations, melodies rich with ideas, contrapuntal sophistication and notable structural unity. Many contemporaries ranked him with Mozart and Haydn as masters of music. However, his music alone fell into obscurity after the year 1800. Such a composer is Antonio Rosetti.\(^93\)

František Xaver Rösler or Franz Anton Rössler (c.1750-1792) was born in Leitmeritz and educated by the Jesuits in Prague before turning to music and Italianising his name to Francesco Antonio Rosetti.\(^94\) From 1773 he was employed as a double bass player in the service of Prince Kraft Ernst of Oettingen-Wallerstein (1748-1802), before quite restricted compared to the earlier works. The Rondo KV.371 was written in 1781, possibly for the second horn at Vienna’s National Theatre, Jakob Eisen.


succeeding Josef Reicha (1752-1795) as Kapellmeister there in 1785. Rosetti became well known as a composer, heavily influenced by Franz Joseph Haydn, Wolfgang Amadeus Mozart and Johann Stamitz (1717-1757), as evident in his extensive catalogue of chamber music and many symphonies, oratorios and operas. The wind ensemble at Wallerestein was regarded as the best of its period, and it was here that Rosetti composed many of his works for wind instruments. In 1789 Rosetti accepted the Kapellmeister position at the court of Duke Friedrich Franz I of Mecklenburg-Schwerin, dying there in 1792.

Rosetti composed a large number of concerti for solo horn as well as a number of works for two solo horns during his time in Wallerstein, and although many of these works have been recorded by various horn players they are yet to become truly popular. As with much of Rosetti’s work, his reputation following his death and through to today fails to show the importance of these compositions or his great influence on other composers, especially in the genre of horn concerti.

Writing in *The Mozart Companion*, noted scholar H.C. Robbins Landon suggests that “Mozart's model for these E flat works [K.417, 447, and 495] seems to have been a series of horn concertos by Anton Rosetti…Rosetti’s form has the same general lay-out, with a ‘Romance’…as a slow movement and a finale in the favourite ‘hunting’ metre of 6/8: even the melodies are strikingly similar.

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The most well-known horn concerti by Rosetti are the Concerto in D Minor (Kaul.III no.43 or Murray C.38) and the Concerto in E flat (Kaul.III no.36 or Murray C.49). Rosetti composed his concerti and orchestral works for some of the world’s best horn players, and despite any suggested ‘shortcomings’ musically, the modulations and creativity displayed by Rosetti mean that the hand horn technique required is quite technically advanced. He favours the ‘solo keys’ of F, E and in particular E flat Major, although also experimenting with D Minor on a couple of occasions. The use of minor tonalities, florid ornamentation and the inclusion of beautifully lyrical slow movements are particularly attractive components in many of Rosetti’s horn concerti, as is the creative orchestration. The concerti are also quite substantial, with several spanning over twenty minutes in length, which is unusual for this early period.

Amongst the Rosetti concerti several are of particular interest to low horn players, although many carry the designation “per il Corno seconde” or a similar reference to low horn playing in the title. The Concerto for Horn and Orchestra in F Major (Kaul.III

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99 This Concerto shares many similarities to an earlier Concerto in D Minor C.39, which may have been an earlier version of the work. “One of the remarkable aspects of both early and later versions, largely lost on modern ears, is that they were conceived as concertos in a minor key. For even though one finds parts of movements and even whole movements in minor keys, attempts at composing an entire horn concerto in minor is almost unheard of in the 18th century,” Thomas Hiebert, “Book and Music Reviews: Rosetti Concertos,” 85-87.

100 Rosetti’s preference for the key of E flat means that catalogue numbers are particularly important when referring to his horn concerti, although this has not always been done by publishers or recording companies. Two systems are used; the Murray Catalogue and the Kaul Catalogue, which appears to correspond with the “Denkmäler der Tonkunst in Bayern” or D.T.B. used by some publishers. For conversion table see: Sterling E Murray, The Music of Antonio Rosetti (Anton Rössler) ca.1750-1792: A Thematic Catalogue. However, as an example of the potential for confusion, the Concerto in E flat (Kaul.III no.36 or Murray C.49) mentioned above is published by several companies, as well as: Antonio Rosetti, Concerto in E flat Major for Horn and Piano Ed. James Chambers (New York, NY: International Music Company, 1960); Antonio Rosetti, Concerto No.2 in E flat Major for Horn and Piano Ed. Edmond Leloir (Amsterdam: Edition KaWe, 1972). The “Concerto No.2” refers to the series of six concerti for one horn and four concerti for two horns that Leloir edited for publication by Edition KaWe, which are now published by Hans Pizka Edition. The titles Concerto da Camera and Symphonie Concertante have also been used on occasion when referring to Rosetti’s horn concerti.

101 Some of the concerti, such as Murray C.54 and C.52 (Kaul.III no.45) have only recently been republished as they had been thought to be incomplete concerti “for 2 horns” rather than complete concerti “for 2nd Horn.” Robert Ostermeyer Musikedition website, accessed 19/09/2011. http://www.corno.de/shop/index.php?language=en

Hiebert lists the range of C.54 as low G up to a”, describing it as including “many arpeggios and impressive leaps back and forth between the middle and the lower registers, this work is a showpiece for the second horn (cor basse) player, and very good agility is needed to pull off a decent performance.” However he also
no.38 or Murray C.53)\textsuperscript{102} is one of his earlier horn concerti, composed around 1780, and although it regularly ascends beyond the stave it also frequently uses pitches adapted from the third harmonic and often descends to include the second harmonic. There are also two optional low Gs in the second movement, an \textit{Adagio ma non tanto} titled \textit{Romance}, which would be factitious tones on the natural instrument.\textsuperscript{103} The solo part is characterised by octave leaps and rapid harmonic patterns requiring good flexibility across the range of the instrument, as well as long lyrical lines (see Figure 1.19).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure19.png}
\caption{Figure 1.19: Antonio Rosetti Ed. Leloir, Concerto for Horn and Orchestra in F Major (Kaul.III no.38 or Murray C.53), Movement I. \textit{Allegro vivace}, mm. 102-116.}
\end{figure}

The Concerto for Horn and Orchestra in E Major (Kaul.III no.44 or Murray C.50)\textsuperscript{104} is a much later composition, yet the solo horn part contains many of the same


\textsuperscript{103} Overall range is written low G up to high b”.

\textsuperscript{104} Antonio Rosetti, Concerto No.5 in E Major Ed. Edmond Leloir (Kirchheim: Hans Pizka Edition, 1989). Recording: Antonio Rosetti, Concerto for Horn and Orchestra in E Major (Kaul.III no.44 or Murray C.50),
challenges, albeit taken a step further in terms of cor basse technique. One of the most striking features appears shortly after the horn’s initial entry where there are two, two octave scale runs descending into the lower register (see Figure 1.20).

![Figure 1.20: Antonio Rosetti Ed. Leloir, Concerto for Horn and Orchestra in E Major (Kaul.III no.44 or Murray C.50), Movement I, Allegro, mm. 90-103.](image)

Later in the opening movement there are certainly a number of moments that display truly virtuosic cor basse technique, including factitious tones, wide intervals and rapid arpeggiation figures over a range that extends from low A up to g'' (see Figure 1.21).

![Figure 1.21: Antonio Rosetti, Concerto for Horn and Orchestra in E Major (Kaul.III no.44 or Murray C.50), Movement I, Allegro, mm. 123-131.](image)

The slow second movement is another Romanza, which again utilizes factitious tones down to the written low G and minor tonalities, before an energetic Rondo finale with a rather unexpected ending. The Concerto was written for, and dedicated to the 2nd horn-player in the orchestra of Court Oettingen-Wallenstein in Harburg, Franz Anton Zwierzina (1751-1825).\textsuperscript{105} Zwierzina played second horn to Joseph Nagel (1751-1802) at the court, and the pair are certainly responsible for the many fine compositions that Rosetti wrote featuring the horn. They were amongst the highest paid members of the court ensemble, with their salaries of 475 guldens each, having replaced an equally famous duo of Johann Türrschmidt (1725-1800) and Johannes Georg Nisle (c.1735-1788) in 1780.\textsuperscript{106}

The symphonies, concerti and wind partitas that Rosetti composed between 1782 and 1789 provide clear testimony to the quality of the Wallerstein ensembles, most notably the winds. The remarkable solo and double horn concertos created especially for the Bohemian duo Franz Zwierzina and Joseph Nagel are a highpoint in this regard...As a genre they are probably the best works overall that Rosetti composed, certainly standing all comparisons with Mozart’s better known efforts here.\textsuperscript{107}

Another of Rosetti’s concerti to feature the cor basse style of playing is the relatively short Concerto ex Dis per corno secundo principale (Kaul.III no.41 or Murray C.42),\textsuperscript{108} completed in 1787. The solo part in the opening two movements, an Allegro followed by an Adagio, is characterised by octave jumps and brief moments of arpeggiated brilliance within the longer lines, whilst the Rondo Allegretto finale takes the form of a theme and

105 Edmond Leloir, preface to Antonio Rosetti, Concerto No.5 in E Major. It has also been suggested that the Concerto was written for Carl Türrschmidt (1753-1797), who was known as a virtuosic cor basse player in a duo with Johann Palsa (1752-1792) and was also the son of the famous horn player Johann Türrschmidt. Antonio Rosetti Horn Concertos, CPO 777 288-2 (2009) liner notes.
variations (see Figure 2.22). The short duration and comfortable range of this Concerto\textsuperscript{109} makes it a very accessible option for recital performances where a display of traditional techniques is desired.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure122.png}
\caption{Antonio Rosetti, Concerto ex Dis per corno secundo principale (Kaul.III no.41 or Murray C.42), Movement III. \textit{Rondo: Allegretto}, Variation One, mm. 17-32.}
\end{figure}

The horn concerti by Franz Xaver Pokorny (1729-1794) make up a small portion of a rather extensive output by the Bohemian composer, which includes around one hundred and forty symphonies, many of which were wrongly attributed to alternate composers in the years following his death.\textsuperscript{110} Pokorny accepted a position in the orchestra of Count Philipp Karl Oettingen-Wallerstein in 1753 as a violinist, and the following year went to study with Johann Stamitz, Franz Xaver Richter (1709-1789) and Ignaz Holzbauer (1711-

\textsuperscript{109} Overall the range spans two and a half octaves, from low c up to g\textsuperscript{\prime\prime}.

\url{http://oxfordmusiconline.com/subscriber/article/grove/music/21992}

\url{http://oxfordmusiconline.com/subscriber/article/grove/music/21992}
1783) in Mannheim. Following the count’s death in 1766 Pokorny entered the service of the Prince Alexander Ferdinand of Thurn und Taxis in Regensburg. Like Rosetti, Pokorny had some of the best horn players in the world to compose for, and yet he suffered a similar fate as his double horn concerti are occasionally performed whilst his solo concerti remain relatively unknown. This is despite the fact that the Concerto for Horn and Orchestra in D Major has been recorded by a number of performers including both Radek Baborák and Hermann Baumann, however this is clearly a high horn concerto.

The two low horn concerti of note by Pokorny are the Concerto per il Corno Secundo in E flat Major, and the Concerto per Corno secondo principale in E Major. As suggested by the titles, the standard cor basse techniques are utilised throughout both of these works, with factitious tones, rapid arpeggios and wide leaps constantly being featured. In the first movement of the Concerto per il Corno Secundo in E flat Major, Pokorny includes a two octave descending G Major scale, written between the twelfth harmonic and the third, requiring several non-harmonic tones and suggesting the early use of hand stopping technique. Whilst the later Concerto does not require this technique, it is certainly not without its challenges (see Figure 1.23).

115 Dated April 19, 1755 it is preserved in manuscript at the Thurn und Taxis’sche Hofbibliothek in Regensburg. This library entry is where the number 160 comes from. Franz Xaver Pokorny Ed. Allen Badley, Horn Concerto in E Major, preface.
Another relatively unknown work of note is the Concerto ex Dis-Dur fur Corno concertato, 2 Violinen, Viola & Basso, possibly by Johann Christian Reinhardt (1691-?), about whom very little is known. He was born in Leipzig and was the son of a shoemaker, receiving some musical training on the oboe in his early years before moving to Dresden at age sixteen where he was employed as a page to Count Wackerbat. Ten years later his service changed to that of a musician, a role that he held for seven years before leaving the

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count’s patronage and joining that of Prince Ernst-Augustin. Alternatively, William Scharnberg suggests the work could belong to:

Carl Reinhardt (1730-9?), who is known to have been a horn player in the band of the Prince of Schwarzburg-Sondershausen in 1757; local records show that he brought with him a pair of horns made in Dresden and dated 1755. A few years later he became principal horn to the Duke of Mecklenburg at Schwein.

This largely unheard-of Concerto in D# Major is as virtuosic as it is unique amongst Baroque horn concerti, due to its use of primitive hand stopping technique and early date of the composition. The stylistic strengths of the cor basse player, including the rapid execution of arpeggios, wide leaps and use of factitious tones, are experimented with here to a level not found in other early solo compositions for the horn. In all of the popular Baroque horn concerti the solo horn part is written is in the upper register, where the notes of the harmonic series are close together. Consequently, this Concerto is essentially the singular example of cor basse technique during that period of the instrument’s development.

As expected, the melodic material of the Concerto is heavily based on arpeggios and rarely moves away from the tonic key. Wide intervals are a recurring feature of the solo part in all three movements, but particular virtuosity is shown in the faster outside movements where they are surrounded by rapid arpeggiated figures (see Figure 1.24).

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117 This followed a couple of other short appointments in 1724 and 1725. Ostermeyer also mentions an Andreas Reinhardt, who was hired as a high horn player in Schwerin in 1750, but states that the spelling is questionable. Robert Ostermeyer Musikedition website, accessed 22/09/2011. Available at: http://www.corno.de/shop/index.php?language=en
118 William Scharnberg, “The manuscript Katalog Wenster Littertur I/1-17b,” The Horn Call 8/1 (May, 1978), 81.
119 Such as the Horn Concerto in D Major by Georg Philipp Telemann (1681-1767) or the Horn Concerto in E flat Major by Christoph Förster (1693-1745).
In the second movement, a *Siciliano* in simple binary form, the melody and accompaniment roles switch between the soloist and accompanying ensemble (see Figure 1.25). The horn player is required to bend the third harmonic down to written f# and f on several occasions to fulfill this role.
Mary Rasmussen describes the work as “forward-looking” and as an “attractive piece, with a brisk first movement, a graceful Siciliano, and a gay finale.”\textsuperscript{120} She concludes by stating that:

Reinhardt’s horn part is distinguished by a judicious and very sophisticated melodic use of what were probably stopped notes, a venturesome use of low notes, and some prescient cor basse figurations.\textsuperscript{121}

As Reinhardt was based in the Dresden area, there is possibly a connection to the famed horn player, teacher, designer and composer Anton Joseph Hampel, who was renowned as a second horn player and pushed the instrument’s technique in the lower register to new levels. The handwritten manuscript of the Reinhardt Concerto was discovered in a collection of scores that is now housed at the library of Lund University in Sweden, along with seventeen other Baroque horn concerti from the early and mid eighteenth century by various composers.\textsuperscript{122} Believed to be the work of a traveling horn player or composition student, Scharnberg suggests that these eighteen concerti represented in the Lund manuscript actually represent “approximately one third of the known horn concertos from that period.”\textsuperscript{123} The significance of the collection is obvious. All of the composers represented in the collection have been linked to the Dresden area, and of the two anonymous concerti included in the collection Hampel has been suggested


\textsuperscript{121} Mary Rasmussen, “The Manuscript Kat.Wenster Litt. I/1-17b (Universitetsbiblioteket, Lund) A Contribution to the History of the Baroque Horn Concerto,” 150.

\textsuperscript{122} Most of the eighteen concerti are in D or D\# Major. The Lund collection includes two works by each of Christoph Förster (1693-1745), Johann George Knechtel (c.1715-c.1766) who was Hampel’s first horn, the renowned Dresden flautist Johann Joachim Quantz (1697-1773), Johann Georg Röllig (1710-1790) and three works by Carl Heinrich Graun (1703-1759). The Reinhardt Concerto is number seventeen in the collection. For more information refer to: William Scharnberg, “The manuscript Katalog Wenster Littertur I/1-17b:” 79-83; Mary Rasmussen, “The Manuscript Kat.Wenster Litt. I/1-17b (Universitetsbiblioteket, Lund) A Contribution to the History of the Baroque Horn Concerto,” 135-152.

\textsuperscript{123} William Scharnberg, “The manuscript Katalog Wenster Littertur I/1-17b,” 79.
as the composer of one, adding further weight to the possibility of a more intense connection.\footnote{The author of the remaining anonymous work, number two in the collection which is a \textit{Concerto ex Dis für Horn, 2 Oboen und Streicher}, is suggested as being either the Leipzig based organist Georg Melchior Hofmann (1685-1715) or the organist in Breslau Johann Georg Hoffmann (1700-1780).}

Believed to have been composed between 1750 and 1760,\footnote{William Scharnberg, “The manuscript Katalog Wenster Litt. 1/1-17b,” 80.} the \textit{Concerto ex D für Horn und Streicher},\footnote{Anton Joseph Hampel, \textit{Concerto ex D für Horn und Streicher} (Leipzig: Robert Ostermeyer Musikedition, 2005).} the thirteenth in the Lund collection, certainly presents as another cor basse concerto. The range is slightly higher than the Reinhardt; often descending to the second harmonic but failing to utilize factitious tones and also extending up to high c’’’. The melodic material is once again heavily based on arpeggios and wide intervals within the tonic key, with very few notes outside the natural harmonic series being used. One exception to this occurs at the conclusion of the second movement, an \textit{Adagio}, where a two octave G Major scale is included. Written between the twelfth harmonic and the third, it requires several non-harmonic tones and therefore suggests the early use of hand stopping technique (see Figure 1.26). Mary Rasmussen describes this as Hampel’s “\textit{passage de resistance},” which “takes on all the drama of a full-fledged cadenza.”\footnote{Mary Rasmussen, “The Manuscript Kat.Wenster Litt. 1/1-17b (Universitetsbiblioteket, Lund) A Contribution to the History of the Baroque Horn Concerto,” 148.}

![Figure 1.26: Anton Joseph Hampel, Concerto ex D für Horn und Streicher, Movement II. Adagio, mm. 30-39.](image-url)
Rasmussen also describes the final work of the collection, the Concerto ex D by Gehra as a cor basse concerto, which in addition to being “forward-looking” and innovative, is also “far and away the most peculiar piece in the entire collection.” This opinion is due to its use of a wide variety of textures, dynamics and tonal colours, which are “all very clever, but the effect is all to often that of undirected patchwork.” The horn part features many rapid leaps, the use of factitious tones and perhaps most surprisingly, a small group of pitches that carry the direction con sordini. Scharnberg suggests that the composer of the work may be Johann Michael Gehring (1755-1833):

A child prodigy from the Dresden vicinity who began playing the horn at about age fifteen, quickly became a virtuoso, and departed shortly thereafter from Vienna.

Of course no discussion of eighteenth century horn music is complete without looking at the compositions of the famous Czech virtuoso Giovanni Punto (1746-1803), undoubtedly the most famous horn player prior to the twentieth century. Punto was born Jan Václav or Johann Wenzel Stich in Žehušice, near Čáslav, and showed exceptional musical talent from an early age on both the violin and horn. Under the patronage of Count Joseph Johann von Thun, he was initially sent to Prague to study horn with Josef Matějka but later went to Munich to study with Jan Šindelář and then Dresden, where he learnt

130 Refer to: Mary Rasmussen, “The Manuscript Kat.Wenster Litt. 1/1-17b (Universitetsbiblioteket, Lund) A Contribution to the History of the Baroque Horn Concerto,” 135-152.
hand horn technique with Hampel. Three years after returning to the count’s service in Bohemia in 1763, Stich escaped with four fellow musicians and fled across the border into the Holy Roman Empire, Italianised his name and began a highly successful solo career that took him throughout Europe. He was praised for his artistry and musicality. Punto’s talent and virtuosity is evident not only through his remarkable reputation and influence on some of the periods leading composers and performers, but also through surviving works that include sixteen horn concerti and a large amount of chamber music. He also had pieces composed for him by leading composers including Wolfgang Amadeus Mozart and Ludwig van Beethoven.

The Concerto No.5 for Horn and Orchestra in F Major is probably his best known work, having been recorded by several influential artists in recent years. Rapid semiquaver runs utilising notes outside the natural harmonic series of the horn are a feature of the opening movement, an Allegro moderato, that also features several scale runs and some factitious tones (see Figure 1.27). The Adagio movement that follows is striking in its use of a minor tonality and dramatic outbursts from the orchestra, however the beautiful melancholic horn melody remains the most significant element (see Figure 1.28), whilst the closing Allegretto movement is a raucous rondo in 6/8 time.

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133 “A principal horn, two clarinetists, and a bassoonist...Scarcely had Count Thun been informed about their escape, when he ordered immediately that they be pursued and found, especially Stich; and if they could not actually capture him, they were at least to try to knock out his front teeth.” Kurt Janetzky and Bernhard Brüchle, A Pictorial History of the Horn trans. Cecilia Baumann (Tutzing: Hans Schneider, 1976), 167.
134 Some of the works that he had published during his lifetime were actually composed by other renowned artists, such as Carl Stamitz and Antonio Rosetti, but reworked by Punto. Kurt Janetzky and Bernhard Brüchle, A Pictorial History of the Horn trans. Cecilia Baumann, 168.
135 Giovanni Punto, Horn Concerto No.5 for Horn and Orchestra in F Major Ed. Edmond Leloir & Hans Pizka (Kirchheim: Hans Pizka Edition, 1966). Recordings include: Giovanni Punto, Concerto No.5 for Horn and Orchestra in F Major, Barry Tuckwell with the Academy of St Martin-in-the-Fields and Neville Marriner, Horn Concertos, EMI Classics 5 69395 2, 1996; Giovanni Punto, Concerto No.5 for Horn and Orchestra in F Major, Radek Baborák with the Prague Chamber Orchestra, Horn Concertos, Supraphon 4017-2, 2010. Giovanni Punto, Concerto No.5 for Horn and Orchestra in F Major, Steven Gross with Camerata Filarmonica Bohemia and Jiří Havlík, Bohemian Horn Concertos, Summit Records DCD 546, 2010.
136 Overall the range extends three octaves from the factitious low G up to high a’’.
Figure 1.27: Giovanni Punto Ed. Leloir and Pizka, Horn Concerto No.5 for Horn and Orchestra in F Major, Movement I. *Allegro moderato*, mm. 40-68.

Figure 1.28: Giovanni Punto Ed. Leloir and Pizka, Horn Concerto No.5 for Horn and Orchestra in F Major, Movement II. *Adagio*, mm. 1-30.
In most of Punto’s concerti the elements of cor basse technique and his training are clearly evident, without ever being the principal feature of the work. Presumably this approach was to highlight his musicality and exceptional control of hand horn technique through interesting modulations, florid ornamentation and rapid scales and chromatic passages, with the traditional cor basse ‘difficulties’ being used for technical flourishes (see Figure 1.29). As Pizka suggested:

Punto’s concertos are typical "concerti di corno secundo principale". He has a speciality, also shown in Beethoven’s sonata: He has two three notes in the real bass region, but in medium dynamic, to relax the embouchure seconds before a rapid final passage leading to the climax.137

Figure 1.29: Giovanni Punto, Concerto No.6 for Horn and Orchestra in E flat Major, Movement III. *Rondo moderato*, mm. 64-109.138

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137 Private correspondence with Hans Pizka, 18/11/2013.
138 Giovanni Punto, Concerto No.6 for Horn and Orchestra in E flat Major (Paris: Naderman, 1796). The range of this Concerto is significantly smaller as the second harmonic is not used, therefore it only extends a little beyond two octaves, from g to a**”. This actually occurs in several of Punto’s concerti, which is somewhat surprising given his reputation. There are however many places available to the soloist for improvisation and cadenzas.
Also deserving mention is the Concerto no.11 for Horn and Orchestra in E Major, the final movement of which is a *Minuetto cantabile con variation*. The theme is introduced by the violins (see Figure 1.30) with some backing from the winds within the orchestra, and performed several times throughout the movement giving the horn soloist some respite between the four difficult variations.

![Minuetto](image.png)

Figure 1.30: Giovanni Punto, Concerto No.11 for Horn and Orchestra in E Major, Movement III. Theme, first violin part, mm. 1-18.\(^\text{139}\)

The first variation of this theme played by the horn is characterised by triplet arpeggios, the second by an excess of rapid ornamentation, the third by its many octave jumps, and then this final variation consisting of mixed intervals (see Figure 1.31). The horn player’s technique is certainly tested throughout this movement, which concludes with a final extended rendition of the *Minuetto*, this time with the horn soloist joining in with the melody.

At the beginning of the nineteenth century another genre of solo composition for horn was created, as on April 18, 1800 Ludwig van Beethoven (1770-1827) premiered his Sonata for Horn and Piano in F Major Op.17. According to Beethoven’s biographer Ferdinand Ries (1784-1838), a concert was announced in Vienna for which Beethoven had promised to compose a sonata for horn and piano, to be performed by the virtuoso horn player Giovanni Punto (1746-1803) with Beethoven at the keyboard, but twenty-four hours before the concert Beethoven had still not started to compose it. Punto’s fame far outweighed Beethoven’s at this point in their respective careers, put into perspective by one critic who prior to the performance wrote: “Who is this Beethovener? His name is not

Figure 1.31: Giovanni Punto, Concerto No.11 for Horn and Orchestra in E Major, Movement III. Variation Four, mm. 1-18.

140 Little needs to be said regarding the influence of Beethoven on classical music, however in terms of horn music he was responsible for several important developments and showed a clear understanding of horn technique from his earliest works. This was perhaps due to his childhood friendship with horn player, and later publisher, Nikolaus Simrock (1751-1832).
well known in musical circles. Of course Punto is very well known.” 143 Nevertheless, the Sonata was well received and owing to the enthusiastic applause was immediately repeated, and also performed on multiple other occasions by the pair. 144

Although the first movement of the Sonata, an Allegro moderato, opens and closes with fanfares in the horn part and includes many octave leaps and larger intervals, it is predominantly lyrical in nature. The range often extends down to the second harmonic, and also includes some factitious tones, but the horn does not ever ascend beyond the twelfth.

Figure 1.32: Ludwig van Beethoven Ed. Tuckwell, Sonata for Horn and Piano in F Major Op.17, Movement III. Rondo – Allegro moderato, mm. 120-148.

143 Barry Tuckwell, Horn, 126.
144 Alexander Wheelock Thayer, Thayer’s Life of Beethoven, 256.
Beethoven experiments a little with the tonality in the brief development section of the first movement, providing some striking contrasts between open and stopped pitches, and also in the equally short second movement, a *Poco adagio, quasi andante*. In the third movement, *Rondo: Allegro*, the rapid octave leaps are again very prominent before a couple of fanfare motives finish the work off in a rather dramatic flourish (see Figure 1.32).

The Beethoven *Horn Sonata* was clearly regarded as the pinnacle of the genre through until the middle part of the twentieth century, as it was in 1939 that Paul Hindemith (1895-1963) composed his Sonata for Horn in F and Piano,\(^\text{145}\) however it remains one of the standard works in the repertoire of the instrument. There are however several other early sonatas that are reasonably popular amongst horn players, and worthy of both study and performance.\(^\text{146}\) The *Grande Sonata* for Horn and Piano Op.34 of Ferdinand Ries shares many similarities with the Beethoven. The horn part covers a similar range and is again predominantly lyrical in nature, albeit with a number of octave leaps and larger intervals. The fanfare that concludes the first movement, an *Allegro molto* that follows a brief *Larghetto* introduction, almost covers the entire range employed in the work (see Figure 1.33).

\(^\text{145}\) Paul Hindemith, *Sonata for Horn in F and Piano* (Mainz: Schott Music, 1940).
\(^\text{146}\) One of the more well known works from this early period is the Sonata for Horn and Piano in E Major by Nicolas von Krufft (1779-1818), who was regarded as a talented pianist and composer, perhaps most importantly composing a large number of lied. The Sonata for Horn and Piano in E Major was first published in 1812 and “is considered a great addition to the repertoire. It is unknown if it was written for a specific horn player, though it is possible that it was written for Friedrich Bode, principal horn player at the Court Chapel in Mecklenburg-Schwerin, as Krufft later composed a set of Variations for horn and piano for Bode.” Anneke Scott, liner notes to her CD with Kathryn Cok: *Sonatas for Horn and Fortepiano* (2011: Challenge Records CC72515). As expected the tessitura of this Sonata sits a little too high for this project, covering the two and a half octaves between the third harmonic g and sixteenth harmonic c'''. Nicolas von Krufft, *Sonata for Horn and Piano in E Major* (Leipzig: Breitkopf & Härtel, 1836).
Ries is a little more adventurous with his modulations throughout the entire work than Beethoven was, however it is in the second movement, an Andante that begins in D Minor, that he first displays some quite creative writing. Here the tonality changes quite often, and the horn part includes an interesting lower register passage between bars twenty-seven and twenty-nine that moves chromatically from the a flat above the third harmonic down to the e below it (see Figure 1.34).

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There are some difficult moments in this movement, such as where the horn part extends down to include the factitious low B before jumping to the f’’ at the top of the stave in bar twenty-three, requiring good control and agility across the entire range. This exact interval is repeated in the third movement, a Rondo: Allegro, where once again several notes around the second and third harmonics are utilised. In the middle of the third movement there is a quite dramatic fugal section, however overall the movement maintains an energetic yet lyrical quality, with the horn part again characterised by large intervals and the occasional scale-like run of semiquavers or rapid flourish across the notes of the harmonic series.

Another work of interest is the Sonata for Horn and Piano in E flat Major Op.164,148 by Maximillian Joseph Leidesdorf (1787-1840) and Camillo Bellonci (1781-?). Leidesdorf was born in Vienna and studied with Johann Georg Albrechtsberger (1736-1809), Antonio Salieri (1750-1825), E.A. Forester and Beethoven before founding a publishing house with Ignaz Sauer in 1822. He later moved to Florence, where he was appointed chamber virtuoso by the Grand Duke of Tuscany and Professor at the Conservatory.149 Leidesdorf was highly regarded as a pianist, guitarist, teacher and composer during his lifetime, but is not particularly well-known today.150 Little is known about the Italian horn player Bellonci, although it is believed that he studied in France and

150 Anneke Scott, liner notes to her CD with Kathryn Cok: Sonatas for Horn and Fortepiano (2011: Challenge Records CC72515).
Germany prior to 1808, when he settled in Vienna to play in the Kärntnertor Theatre, Hofballorchester and Imperial Hofkapelle.\textsuperscript{151}

This Sonata was dedicated to Cathérine Stöger, and published in 1823 by Leidesdorf’s publishing company. The range is almost three octaves, extending from low c up to high b flat’’ and certainly contains some challenging passages for both instrumentalists. The opening movement, an \textit{Allegro con Brio ma non troppo}, includes a full double exposition before moving into a rather creative development section. The movement remains highly lyrical despite the inclusion of numerous wide intervals and the occasional moment of technical virtuosity (see Figure 1.35).

Figure 1.35: Maximillian Joseph Leidesdorf and Camillo Bellonci, Sonata for Horn and Piano in E flat Major Op.248, Movement I. \textit{Allegro con Brio ma non troppo}, mm. 222-254.

\textsuperscript{151} Anneke Scott, liner notes to her CD with Kathryn Cok: \textit{Sonatas for Horn and Fortepiano} (2011: Challenge Records CC72515).
Believed to be a low horn player, at least in the Kärntnertor Theatre according to: Theodore Albrecht, “Elias (Eduard Constantin) Lewy and the Firsts Performance of Beethoven’s Ninth Symphony,” \textit{The Horn Call} 29/3 (May, 1999).
The movement that follows, titled *Tempo di Marcia*, is not only less compelling, but due to its different character it basically fails as a slow movement. It is also followed by another movement carrying a descriptive title, an energetic *Rondo Pastorale: Allegretto* that features some very virtuosic scale patterns (see Figure 1.36).\(^{152}\)

![Figure 1.36: Maximillian Joseph Leidesdorf and Camillo Bellonci, Sonata for Horn and Piano in E flat Major Op.248, Movement III. *Rondo Pastorale: Allegretto*, mm. 63-81.](image)

Perhaps the best known sonatas for horn from the period immediately following Beethoven’s work are the two sonatas composed in 1804 by Luigi Cherubini (1760-1842).\(^{153}\) Born in Florence, Cherubini began his musical training with his father, who was an accompanist at the Teatro della Pergola.\(^{154}\) After teaching at the Paris Conservatoire from its opening in 1796, Cherubini was named the director of the institution in 1822, a post he held until retiring a year before his death. During his lifetime he gained much fame

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\(^{152}\) Another feature of this final movement is the following motif, which occurs several times leading to the conclusion of the movement.


\(^{154}\) Luigi Cherubini Ed. Johannes Wojciechowski, *Two Sonatas for Horn and Strings*, preface.
for his compositions, predominantly through his sacred compositions and operas. As Duvernoy was employed at both the Paris Opera and Conservatoire, he undoubtedly had some influence on Cherubini’s horn writing.\textsuperscript{155}

The first, Sonata No.1 for Horn and Strings in F Major is actually a brief single movement \textit{Larghetto}. Although quite beautiful, it is also fairly straightforward owing to the relaxed tempo and small range, which extends from middle c’ up to high g’’. The Sonata No.2 for Horn and Strings in F Major opens with a brief \textit{Largo} introduction from the strings before the horn solo enters in a recitative-like section where the instrument’s lyrical and vocal qualities can really be displayed. This is followed by a high energy \textit{Allegro moderato} that makes use of chromatic runs and fanfare-like motifs as well as syncopated rhythms and some rapid, large intervals that are reminiscent of cor basse style writing (see Figure 1.37).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure137.png}
\caption{Luigi Cherubini: Sonata No.2 for Horn and Strings in F Major, \textit{Allegro moderato}, mm. 64-76.\textsuperscript{156}}
\end{figure}

\textsuperscript{155} Discussed in: Eric Brummitt, “Cor Mixte,” 41-44.
\textsuperscript{156} Luigi Cherubini, Two Sonatas for Horn and Strings Ed. Johannes Wojciechowski (Hamburg: Musikverlag Hans Sikorski, 1954).
Both of the horn sonatas of Franz Ignaz Danzi (1763-1826) were written shortly after that of Beethoven. The first, the Sonata for Horn and Piano in E flat Major Op.28, was composed in 1804. It opens with a rather long Adagio introduction before moving into the main Allegro, which is light and tuneful whilst remaining heavily based on the open notes of the harmonic series. The second movement is a beautiful Larghetto that is quite substantial musically with traces of Romantic harmony, although not providing any great challenges for the horn. The third movement, a brisk Allegretto, certainly does contain challenges with its wide register leaps and rapid arpeggiated passages (see Figure 1.38). Factitious tones derived from both the second and third harmonics are used repeatedly, giving the work a three octave range, from the factitious low G up to the twelfth harmonic g’’ at the top of the stave.

![Figure 1.38: Franz Danzi, Sonata for Horn and Piano in E flat Major Op.28, Movement III. Allegretto, mm. 189-218.](image)

157 Well known amongst wind players due to his large output of wind music, most notably the wind quintets Op.56, 67 and 68.

When Breitkopf and Härtel advertised Danzi’s *Sonata for Horn and Piano in E flat, Op.28* in the November 1804 edition of Allgemeine Musikalische Zeitung, they also offered a cello part as an alternative to the horn line. This canny sales pitch was probably adopted because of the sheer novelty of the medium; although the horn was well established as a concerto soloist, there was no tradition of it being accompanied by piano. Franz Süßmayr had abandoned a work for the two instruments, but Beethoven had found their contrasting characteristics easier to cope with and it is likely that his sonata for horn and piano which had been published in 1801 was the model for Danzi’s own work in the genre.159

A similar advertisement appeared for the Sonata for Horn and Piano in E Minor Op.44 that was composed by Danzi almost a decade later, in 1813.160 The opening movement *Allegro* is fairly straightforward, often using the second harmonic but not containing any particularly challenging moments until the arpeggios in the final twenty bars (see Figure 1.39).

![Figure 1.39: Franz Danzi, Sonata for Horn and Piano in E Minor Op.44, Movement I. Allegro, mm. 249-268.](image)


160 “The Sonata for piano with accompaniment for obligato horn or violoncello, Op.44, was first advertised for sale by Breitkopf and Härtel in November 1813. This type of sales pitch was not uncommon in the late eighteenth and early nineteenth centuries, when it was conventional to regard the piano as the “main” instrument rather than the accompanist, and to offer a choice of “accompanying” instruments to boost sales…That Danzi’s Op.44, like his earlier sonata, Op.28 in E flat, was written for horn is clear.” From: John Humphries, liner notes to Michael Thompson Wind Quintet cd: *Franz Danzi Wind Quintets Op.68, Sonata for Horn and Piano in E Minor, Op.44* (2001: NAXOS 8.554694).

A beautifully lyrical *Larghetto* follows, before a stately *Allegretto* finale that is a series of variations on a theme. Many of the standard techniques are used in creating the variations including arpeggio style motifs in triplet patterns, octave leaps, syncopated rhythms, a change to chromatic harmonies in the accompaniment and also into the tonic minor. Following a brief piano cadenza the movement also changes from common time to a 3/8 rondo style finale, before returning to one final variation in the original time signature (see Figure 1.40). In this movement, once again, the excitement is largely contained until a couple of rapid flourishes across the harmonic series that take place towards the end of the movement.

![Musical notation](image)

**Figure 1.40**: Franz Danzi, Sonata for Horn and Piano in E Minor Op.44, Movement III, *Allegretto*, Variation Seven, mm. 113-196.

The difficulty in using a minor tonality for the natural instrument in this work is quite obvious, as the piano is required to carry much of the melodic material and both of

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162 This final variation is highly reminiscent of the second variation.
the latter two movements are essentially composed in E Major rather than E Minor.\textsuperscript{163} Overall the work is a little simpler and less interesting than the earlier sonata, and also covers a slightly smaller range as factitious tones are not utilised, however it is certainly not without its own challenges.

Danzi also composed two horn concerti, the first of which is quite well known; the Concerto for Horn and Orchestra in E Major (P239).\textsuperscript{164} Although this Concerto sits too high in the horn’s range to be considered in this study, the Concerto for Horn and Orchestra in F Major (P240)\textsuperscript{165} that was recently discovered in the Herzoglichen Hofkapelle Meiningen certainly fits the requirements.

Its technical demands are mostly for the flexibility typically expected of the low horn in classical period horn writing (and more similar to those of the Sonata in E-flat, opus 28). The hand technique demanded seems a little more chromatic and colourful, but definitely overall slower.\textsuperscript{166}

The work’s opening two movements, a rather substantial \textit{Allegro vivace} and highly ornamented \textit{Adagio non troppo}, make use of the instrument’s middle register and include some colourful hand stopping. The \textit{Allegretto} finale takes the form of a theme and variations, each of increasing virtuosity and including all of the usual techniques (see Figure 1.41 and 1.42): moving through duplets, triplets and quadruplets, syncopated rhythms, octave jumps, arpeggiated motifs and a switch to the tonic minor. Due to this

\textsuperscript{163} In the middle sections of both movements the tonality returns to E Minor. This was the first ever minor key sonata for the instrument according to John Humphries, liner notes to Michael Thompson Wind Quintet CD: \textit{Franz Danzi Wind Quintets Op.68, Sonata for Horn and Piano in E Minor, Op.44} (2001: NAXOS 8.554694).
\textsuperscript{164} Also available in the key of E flat.
\textsuperscript{165} Franz Danzi, Concerto for Horn and Orchestra in F Major P240 (Göttingen: Hainholz Verlag, 1998).
\textsuperscript{166} Virginia Thompson, “Music and Book Reviews: Konzert in F für tiefes Horn und Orchester,” \textit{The Horn Call} 30/2 (February, 2000): 85-86.
final movement the range of the work is extended by almost an entire octave, achieved through the use of the second harmonic and factitious tones during the third variation.167

Figure 1.41: Franz Danzi, Concerto for Horn and Orchestra in F Major (P240), Movement III Allegretto (Theme), mm. 1-20.

Figure 1.42: Franz Danzi, Concerto for Horn and Orchestra in F Major (P240), Movement III. Allegretto (Variation V), mm. 117-136.

167 In the opening two movements the range only extends from f# up to a flat”, the final movement expands the lower limit of this down to the factitious low G.
There are also a large number of solo works by horn players that are worthy of further study, especially the renowned professors from the Paris Conservatoire at the beginning of the nineteenth century in Duvernoy, Domnich and Dauprat. Amongst the compositional output of each of these are numerous sonatas and concerti as well as smaller pieces, however perhaps due to their teaching responsibilities the nature of these works can change quite substantially. The Concerto No.5 for Horn and Orchestra in F Major by Frédéric Nicolas Duvernoy perhaps displays his own preference towards cor mixte technique as the range is quite restricted; only extending a little beyond two octaves, between g and a flat”. Moments of cor basse style ‘difficulties’ are included within this range, but due to the early date of composition this particular work is somewhat lacking in creative hand stopping and harmonic direction (see Figure 1.43).

Figure 1.43: Frédéric Nicolas Duvernoy, Concerto No.5 for Horn and Orchestra in F Major, Movement I. Allegro, mm. 113-128.

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168 Other composers of horn music from this period who are of interest include Friedrich Kuhlau (1786-1832), Carl Oestreich (1800-1840), Martin-Joseph Mengal (1784-1851) etc. See: Kristin Thelander, “Carl Oestreich: A Study of His Life, Historical Position and Solo Music for Horn,” The Horn Call Annual 2 (1990): 49-76; Eric James, “Who is Carl Oestreich and Why is He Important to Horn Players?,” The Horn Call 14/2 (April, 1984): 53.

169 Composed with the famous French musician François Devienne (1759-1803) around 1788. Frédéric Nicolas Duvernoy, Concerto No.5 for Horn and Orchestra in F Major (Paris: Imbault, n.d.).
Heinrich Domnich also composed three horn concerti at the beginning of the nineteenth century, although their exact dates of composition are unknown. It can be assumed that these works were composed as either study or examination pieces for Domnich’s students at the Paris Conservatoire, and therefore of particular interest is the brief but challenging Concerto No.2 for Second Horn and Orchestra in F Major, originally scored for winds and strings. The solo part of this Concerto is quite acrobatic in the middle and lower registers, frequently including large intervals that need to be executed very rapidly (see Figure 1.44). There are also several sections of challenging cor basse ‘difficulties’ and other recurring patterns and ornaments that correlate with the Domnich method.

Figure 1.44: Heinrich Domnich, Concerto No.2 for Second Horn and Orchestra in F Major, Movement I. *Maestoso*, mm. 92-120.

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The first and third concerti are both for high horn. Domnich’s concerti usually include long orchestral introductions, followed by a standard three movement structure played without breaks. In Chancellor’s opinion, Domnich’s knowledge of low horn technique results in this Second Concerto being a “more elegant and crafted” work, that is also more “melodically interesting” than the high horn concerti. For further information refer to Chancellor’s dissertation. Private correspondence with Evan Chancellor, 31/07/2013.

171 The chromatic movement found in the Concerto also requires fluid hand technique, adding a further technical challenge, and yet the range remains quite accessible for the cor basse player, approaching three octaves between the second harmonic low c and extending up to high b”.
Louis-François Dauprat studied as a cor basse player with Jean-Joseph Kenn upon entering the Paris Conservatoire and also studied composition with Danzi, so it is not surprising that a number of fantastic compositions exist amongst his output. He composed five concerti, however it is only No.2 and No.5 that are intended for cor basse players. The Concerto No.2 for Horn and Orchestra in F Major Op.9 was dedicated to the French nobleman Comte Naubert de la Ferté-Meun, and clearly displays Dauprat’s compositional flair and knowledge of the instrument’s capabilities as he moves freely between major and minor tonalities, including scale and arpeggio runs through the middle register and chromatic hand stopping (see Figure 1.45), and yet the range is somewhat surprising as it extends from low c up to high b flat”. The middle movement of the Concerto, marked Poco adagio, is quite striking. It is a beautifully lyrical movement full of ornamentation and written in ternary form, with the outside sections being composed in the dominant major and the middle section in the dominant minor (see Figure 1.46). The conclusion of the movement moves back into the tonic key and leads attacca into the finale, a traditional hunting-style Rondo in 6/8 time signature.

Robert Ostermeyer suggests that the original version of the Concerto No.1 was also for cor basse but later adapted for cor alto by Dauprat. It was also dedicated to his previous teacher, Jean-Joseph Kenn. It appears that alternate cor basso or cor alto parts are available for most of Dauprat’s concerti. For more information regarding the compositions of Louis-François Dauprat and their dedications refer to: Robert Ostermeyer Musikedition website, accessed 18/09/2011. Available at: http://www.corno.de/shop/index.php

172 Louis-François Dauprat Ed. Daniel Bourgue, Concerto No.2 for Horn and Orchestra in F Major Op.9, preface.
175 This technique is also used in the Sonata for Horn and Piano in F Major Op.2, which coincidently has a very similar range; extending from low c up to high a”. Dauprat, Sonata for Horn and Piano in F Major Op.2 Ed. Daniel Bourgue. Recording: Dauprat, Sonata for Horn and Piano in F Major Op.2, Kirstin Pederson Thelander and Carol lei Post, Music of the Early 19th Century, Crystal Records, 1992.
Figure 1.45: Louis-François Dauprat, Concerto No.2 for Horn and Orchestra in F Major Op.9, Movement I. *Allegro fieramente*, mm. 70-90.

Figure 1.46: Louis-François Dauprat, Concerto No.2 for Horn and Orchestra in F Major Op.9, Movement II, *Poco adagio*, mm. 27-44.
Many of these works show great value, despite remaining relatively unknown amongst a majority of horn players who instead return repeatedly to old well-known classics to represent this hand horn period. It is hoped that these lesser known compositions and composers will continue to gain greater prominence amongst the performance repertoire, and that publishers such as Robert Ostermeyer and Hans Pizka will continue to unearth, prepare and distribute these fantastic scores. Many other works are already available from this early period of the horn’s history, including a large number of smaller solo works and chamber music that could not be included in this study. Some of these have even been recorded. Students and teachers alike are encouraged to explore and experiment with these resources.
Chapter 2 - Developments in Instruments and Composition During the Nineteenth Century

At the beginning of the nineteenth century there were significant developments made in the design and manufacture of brass instruments. Although the horn was capable of playing chromatic passages in the middle and upper registers through the use of hand stopping technique, the instrument was still limited due to its reliance on the harmonic series, which resulted in some unevenness of both dynamics and tone. Playing chromatically was also somewhat inconvenient because of the system of crooks required to change the instrument’s key; yet despite these restrictions the horn became a favoured solo instrument during the late eighteenth century. The progression from terminal crooks\(^1\) to the Inventionshorn that was designed by Anton Joseph Hampel (1710-1771) and made by the famous Dresden instrument maker Johann Georg Werner (active 1728-1772) in 1755 was a design improvement where the crooks were housed within the body of the horn. This was later improved upon by Johann Gottfried Haltenhof (c.1701-1783) of Hanau-am-Main who essentially created a tuning slide by lengthening the joining sections,\(^2\) an improvement that was quickly added to all horns being made, even those that retained terminal crooks.\(^3\)

These and later developments in design improved the natural instrument's response and ease of use however this instrument, now known as the Waldhorn, was still limited to a single key unless ample time was allowed for crook changes.\(^4\)

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1 The crooks added between mouthpiece and body of the horn, as used in the early eighteenth century.
3 Orchestral players in Vienna, Salzburg and England retained the system of terminal crooks and couplers until much later, the instrument becoming known as the Cor d’orchestre or Orchesterhorn. Horn Central webpage. Available at: [http://horncentral.com/Home.html](http://horncentral.com/Home.html)
4 Another version of the instrument, the Cor Solo, was developed around 1780 by the renowned horn player Karl Türrschmidt and instrument makers Joseph Raoux (c.1730-1800) and Lucien-Joseph Raoux (1753-1821). Horn Central webpage. Available at: [http://horncentral.com/Home.html](http://horncentral.com/Home.html); John Ericson, “The Natural Horn and Its Technique,” *Horn Articles Online*, accessed 11/05/2013. Available at: [http://www.public.asu.edu/~jqerics/articles_online.htm](http://www.public.asu.edu/~jqerics/articles_online.htm)
Beginning in the 1760s, a multitude of manufacturers and players throughout Europe began searching for a solution to this problem, essentially looking for a way to both expand the instrument’s fully chromatic possibilities and at the same time remove the restriction of only playing in a single key. This led to numerous experiments including a trombone-like slide, woodwind-type keys and tone holes and even a pitch lowering bell cover; however all of these methods altered the tone and thus provided little advantage, if any, over the hand stopping technique already in use. An early attempt to combine two natural horns pitched a semitone apart (E flat and D) by Irish violinist, composer and instrument maker, Charles Clagget (1740-c.1820) in 1788 won little support from the players due to intonation issues. It can be considered the forerunner to the Omnitone horn, which, perhaps surprisingly, was not developed until much later by Jean-Baptiste Dupont (1785-1865) in Paris, around 1815. This horn was constructed in such a way that several lengths of pipe or keys were available to be selected through the use of a central

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5 Developed by the Mannheim court musician horn player Christian Dikhuth in 1811 or 1812, the slide was controlled with the thumb of the left hand and capable of dropping the pitch of the horn by a semitone. Christian Ahrens, *Valved Brass: The History of an Invention*, trans. Steven Plank. Bucina the Historic Brass Society Series No.7 (Hillsdale, NY: Pendragon Press, 2008), 7; Birchard Coar, *The French Horn* 2nd ed. (DeKalb, IL: Self Published, 1971), 45.

“One of the last attempts at devising a new valve system was made by Samson in 1862. It was known as the ‘finger slide.’” Birchard Coar, *The French Horn* 2nd ed., 52.


“Several contemporary artists also tried to apply keys to the horn. Following his success with the keyed trumpet, the Viennese trumpeter Anton Weidinger (1767-1852) designed a keyed horn for his twelve-year-old son Joseph, who performed on the new instrument on a concert with his father on February 28, 1813. A report in Allgemeine musikalische Zeitung in 1815 also states that Schugt, a hornist from Cologne, had successfully demonstrated a keyed horn in the fall of 1813.” John Ericson, “Heinrich Stoezel and Early Valved Horn Technique,” *Historic Brass Society Journal Annual* (1997), 65.


8 Fountayne Editions website, accessed 05/05/2013. Available at: http://www.fountayneditions.co.uk/shop/category/clagget-charles/

9 Barry Tuckwell, *Horn*, 35.

slide, however this deign also caused serious weight issues. Numerous instrument makers improved on Dupont’s secondary design of 1818 by using a valve or plunger mechanism to remove some of the additional pipe, including the Belgian makers Jacques-Charles Labbaye (1815-1848) and Charles-Joseph Sax (1790-1865).\textsuperscript{11} It proved a popular concept amongst both French and Bohemian instrument makers, and the idea remained under constant development by a number of makers including Jean-Baptiste Tabbard (1779-1845), Ludwig Embach (1783-1842), Giuseppe Peliti (1811-1865), Pierre-Louis Gautrot (1812-1882), Adolph Sax (1814-1894) and Václav František Červený (1819-1896)\textsuperscript{12} through until the 1870s, however by this time there had already been significant progress made in the construction and application of the valve mechanism.\textsuperscript{13}

While the mechanism of the omnitonic horn outwardly has the same function as the valve, that of changing the length of the horn, the ultimate purpose of the mechanism was different. The omnitonic horn is not a fully chromatic instrument, and could not be performed upon as such. The key changing mechanism was not designed to be operated instantaneously while playing and the instrument could not perform music more complicated than that of the natural horn, as it relied on the usage of the right hand in the bell to perform chromatic passages. The valved horn, on the other hand, is fully chromatic and can be used to perform any pitch as an open tone without resorting to hand-horn technique.\textsuperscript{14}

\textsuperscript{11} An omnitonic horn made by Stukens that was exhibited in 1826 also featured the inclusion of an early water key.
\textsuperscript{12} Červený also played an important role in the development of the Wagner Tuba. For further information refer to: William Melton, \textit{The Wagner Tuba: A History} (Aachen: Edition Ebenos, 2008).
\textsuperscript{14} As further proof of these different functions, Ericson also cites evidence that suggested adding valves to the omnitonic horn. John Ericson, “What Was the Omnitonic Horn?” \textit{Horn Articles Online}, accessed 11/05/2013. Available at: http://www.public.asu.edu/~jqerics/articles_online.htm
Červený developed a rather useful version of the omnitonic horn in 1846, known as the *Tonwechselmaschine*, which featured one large rotary valve that had the ability to place the horn in any of several different keys.\(^{15}\)

Another creative solution to the problem was designed by English horn player John Callcott (1801-1882), whose prototype won him a prize medal at the Great Exhibition of 1851.\(^{16}\) Known as the *Radius French Horn*, it had a central telescopic slide that rotated and locked into a one way valve-like mechanism effectively bypassing a section of the pipe and bringing the horn up in pitch, with the keys available corresponding to any of the crooks of the natural horn between B flat Basso and B flat Alto.\(^{17}\) Played with standard hand stopping technique, one can imagine that following further development the different keys could effectively have been selected and changed almost instantaneously.\(^{18}\) Although slightly lacking in the lower keys due to the significant amount of cylindrical tuning required in the design, the horn retained the traditional tone of the higher keys and played quite well.\(^{19}\)

The crucial development that took place during the nineteenth century and which affected all brass instruments was the development of several different valve mechanisms. Due to the lack of surviving instruments, illustrations and records available for study the progression that took place, as natural instruments were adapted and modified to utilise this new ground breaking technology, is somewhat confusing. The fact that patents for new technology did not protect inventions across all of the German-speaking states meant that

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15 John Ericson, “Early Valve Designs” *Horn Articles Online*, accessed 11/05/2013. Available at: [http://www.public.asu.edu/~jqerics/articles_online.htm](http://www.public.asu.edu/~jqerics/articles_online.htm)
17 Reginald Morley-Pegge, “Callcott’s Radius French Horn,” *The Galpin Society Journal* 3 (March, 1950), 49. In Bate’s article, which is the earliest of the three (Bate 1949, Morley-Pegg 1950 and Barton 1990), he suggests B natural alto as the highest key but then neglects to mention B flat Alto. This may be due to the ‘makeshift’ connecting central slide or replacement tuning slide.
designs were quickly imitated and improved upon,\textsuperscript{20} sometimes leaving little more than local rumour as to how events transpired. Matters are further complicated by the curious names and non-standardised terms that are frequently used. Yet despite these challenges a reasonably linear timeline has been constructed and is well documented in several sources.\textsuperscript{21}

The revolutionary invention is generally credited to the German horn player Heinrich Stölzel (1777-1844), who developed a tubular or early piston type valve in 1814 but was unable to secure a patent for the discovery until teaming up with coal miner and musician Friedrich Blühmel (?-c.1845) who had independently been working on a square block or box type valve.\textsuperscript{22} According to his own testimony, “Blühmel was inspired between 1810 and 1813 by the ventilating pipes and faucets of Silesian blast furnaces.”\textsuperscript{23}

In 1818 a joint patent was issued for a horn equipped with two valves played by the right hand,\textsuperscript{24} one lowering the pitch by a semitone and the other by a tone, however the patent was not specifically for the valve mechanism that they had developed and presented but rather for the concept of applying valves to brass instruments. This prevented many later inventions receiving patents. Evidence suggests that Stözel immediately bought the rights

\textsuperscript{20} “The International Patents Convention, by which a number of nations agreed to respect each other’s patents, was not signed until 1883. Prior to that date there was nothing to prevent an invention, fully protected in the country of its origin, being freely copied once it had crossed the frontier. Before 1870 also, the various independent German-speaking states granted their own patents or privileges, but would not necessarily recognise one another’s unless specific trade agreements were in force.” Philip Bate, \textit{The Trumpet and Trombone}, 2\textsuperscript{nd} ed. (London: E. Benn, 1978), 194. Reproduced in: John Ericson, “Heinrich Stoelzel and Early Valved Horn Technique,” 81. Also discussed in: Reine Dahlqvist, “Some Notes on The Early Valve,” \textit{The Galpin Society Journal} 33 (March, 1980), 112.


\textsuperscript{22} Christian Ahrens, \textit{Valved Brass: The History of an Invention}, trans. Steven Plank, 1.


\textsuperscript{24} Using the right hand to manipulate the valves, rather than having it in the bell, would obviously have had a negative effect on the tone of the instrument. This trend appears to have had a detrimental effect in Germany where the two valve horn was considered incapable of playing all the tones below middle c’ whilst Meifred and his contemporaries in France retained the use of hand stopping technique and thus achieved a complete chromatic range down to the lowest notes of the instrument. For a larger discussion of this phenomenon see John Ericson, “Heinrich Stoelzel and Early Valved Horn Technique.”
from Blühmel for 400 thalers and that the joint patent was more for expediency than due to a friendship or close working arrangement.\textsuperscript{25} The following year in Leipzig Christian Friedrich Sattler (1778-1842) improved the \textit{Chromatic Waldhorn with Valves} in two important ways; firstly by switching the valves so that they were played with the left hand and also by adding a third valve that lowered the pitch by one and a half tones and thus filled in the remaining gaps between the wider partials of the harmonic series in the lower register.\textsuperscript{26} Although the Stözel valves were the most popular and widely used prior to 1850,\textsuperscript{27} the early piston type valve went through a series of improvements; such as the \textit{Berlin Valve} or \textit{Berlinerpumpen} manufactured by Wilhelm Friedrich Wieprecht (1802-1872) from 1833\textsuperscript{28} before finally arriving at the \textit{Périnet Valve} developed by Etienne François Périnet (c.1801-?) in 1839.\textsuperscript{29}

An important stage in the development of the piston valve included experimentation with the \textit{Double-piston valve}, the invention of which has also been attributed to Heinrich Stözel although the exact year is unclear. Trumpets with less refined valves of this type have been discovered that were manufactured by Christian Friedrich Sattler and dated 1821, as well as by Michael Saurle (1772-1845) of Munich dated 1829. However the landmark patent for the improved \textit{Vienna Valves} was awarded to Leopold Uhlmann (1806-1878) of Vienna in 1830.\textsuperscript{30} This type of valve is still used on some horns in Vienna and remains almost unchanged from the original patent.\textsuperscript{31}

\begin{thebibliography}{99}
\bibitem{tuckwell} Barry Tuckwell, \textit{Horn}, 41.
\bibitem{horncentral} Horn Central webpage. Available at: \url{http://horncentral.com/Home.html}
\bibitem{wieprecht} Similar to a design that is believed to have been developed independently by Stözel several years earlier, in 1827. Philip Bate and Edward H. Tarr, "Valve (i)," \textit{Grove Music Online}. \textit{Oxford Music Online}. Oxford University Press. Accessed 05/05/2013. \url{http://www.oxfordmusiconline.com/subscriber/article/grove/music/28961}
\bibitem{ericson} John Ericson, “Early Valve Designs” \textit{Horn Articles Online}, accessed 11/05/2013. Available at: \url{http://www.public.asu.edu/~jqerics/articles_online.htm}
\bibitem{tuckwell3} Barry Tuckwell, \textit{Horn}, 45.
\bibitem{dahlqvist} Reine Dahlqvist, “Some Notes on The Early Valve,” 111-114.
\bibitem{muller} Despite several later efforts such as the ‘Mainz Valves’ made by C.A. Müller, a Hanoverian model released in the 1840’s and also an English patent applied for by Richard Garrett in 1849. Philip Bate and
\end{thebibliography}
On horns today the standard valve is the rotary or cylindrical valve, reportedly developed by Joseph Kail (or Keil, 1795-1871) and Josef Felix Riedl (1785-1849) between 1827 and 1835, when the patent was issued, however conflicting evidence exists. An early version of the rotary valve has survived on a horn by Italian Luigi Pinni from 1822, and also on trumpets from before 1825 by the Boston instrument maker Nathan Adams (1783-1864) and an unknown Swiss maker named Schupbach & Guichard in Yverdon. When Blühmel and Stölzel applied for their new patent in 1828 they included rotary valves, although they had apparently developed them much earlier, perhaps as early as 1811. The Czech firm of Václav František Červený also claim to have invented the rotary valve, before it was immediately ‘borrowed’ by Gautrot in 1846.

Nevertheless, it is the story of Kail’s invention, inspired by the opening and closing of beer taps in Prague that has entered horn history. Kail took the idea to his “friend and countryman” Riedl who made instruments in Leopoldstadt in Vienna, only to be deceived into divulging his idea fully prior to any formal arrangement or contract being discussed. Following Kail’s departure the next day Riedl immediately began manufacturing and marketing the new valves, without ever attaching his name directly to the invention. This
perhaps explains the conflicting details regarding the initial development of the rotary valve.

Another inventor deserving mention in the development of valve technology is John Shaw from Derbyshire, who designed several alternate valve mechanisms including *Transverse Spring Slides* in 1824 and *Swivel Valves* in 1838. In 1825 Jean-Louis Antoine (1788-1861) left Courtois and joined the manufacturing firm Halary in Paris, where he designed a *Disk Valve* in 1835. More importantly, it was his son Jules-Léon Antoine (1827-after 1873) who devised the ascending third valve system around 1845 that is still used today, albeit predominantly in France by high horn players.

The breakthrough technology of the valve was not immediately accepted. The valve horn was rejected as intolerable and soulless by several leading composers including Carl Maria von Weber (1786-1826) and Johannes Brahms (1833-1897), both of whom wrote superbly for the natural instrument. Other composers adopted the instrument, albeit with some caution, to play alongside the natural instrument, possibly fearing a backlash.

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41 Depressing the third valve raises the fundamental pitch of the horn by a tone through the omission of pipe, rather than lowering the fundamental by adding pipe as is the case with the other two valves (or all three valves in the standard design). This design was adopted by Meifred as well as numerous leading French players since then. John Humphries, *The Early Horn: A Practical Guide.* Cambridge Handbooks to the Historical Performance of Music (Cambridge: Cambridge University Press, 2000), 36.

42 Jules-Léon Antoine (often referred to as Halary) was a student of Meifred. John Ericson, “The Valve Horn and Its Performing Techniques in the Nineteenth Century: An Overview,” 8.

43 Valves remained under development, a good example being the ‘Thayer axial valve’ invented in 1976 by Orla Ed Thayer (b.1920) in Oregon, which has become very popular on trombones. A somewhat similar design, the ‘Free-flow valve’ by René Hagmann of Geneva was developed with Courtois during the 1990’s and is now found on instruments made by Boosey & Hawkes and Vincent Bach, amongst others. Instrument design has also remained under constant development, the most obvious examples being the development of double, triple and descant horns of various combinations during the twentieth century. Philip Bate and Edward H. Tarr. "Valve (i)." *Grove Music Online.* Oxford University Press. Accessed 05/05/2013. [http://www.oxfordmusiconline.com/subscriber/article/grove/music/28961](http://www.oxfordmusiconline.com/subscriber/article/grove/music/28961)
from the public or performers had the traditional *waldhorn* been replaced altogether.\(^{44}\) The first recorded use of valve horns being used alongside *waldhorns* was in the opera *La Juive*\(^{45}\) (to a libretto by Eugène Scribe) by the French composer Jacques-François Halévy\(^{46}\) (1799-1862), which premiered in Paris on the February 23, 1835.\(^{47}\) Halévy studied at the Paris Conservatoire with Luigi Cherubini (1760-1842) and later taught there, where his students included Charles-François Gounod (1818-1893), Georges Bizet (1838-1875) and Camille Saint-Saëns (1835-1921). Considered an innovator for his use of chromatic brass instruments, the works of Halévy were admired by both Hector Berlioz (1803-1869) and Richard Wagner (1813-1883).\(^{48}\) Several parallels can be found between these three composers in their experimental brass writing, whilst all maintained a compromise through the retention of the older instruments and more importantly, their characters.

In his earlier operas, including *Rienzi, The Flying Dutchman* and *Tannhäuser*, Richard Wagner used a similar approach to Halévy, using two valved horns alongside two natural horns.\(^{49}\) In *Lohengrin* however, the horn received some interesting treatment. Wagner appears to have returned to the original concept of valves being used as a quicker method for changing crooks, as there are numerous quick changes between multiple keys as discussed in detail by Blandford (see Figure 2.1).\(^{50}\)

\(^{44}\) It has been suggested that conductors also chose their repertoire a little more carefully.

\(^{45}\) Other sources suggest all four instruments were in fact valve horns, these include: Kurt Janetzky & Bernhard Brüchle, *The Horn*, trans. James Chater, 94; Kurt Janetzky & Bernhard Brüchle, *A Pictorial History of the Horn*, trans. Cecilia Baumann, 244.

\(^{46}\) Birchard Coar, *The French Horn* 2nd ed., 60.

\(^{47}\) The valve horns are pitched in several different keys and used primarily to play notes in the lower register, without the need for hand stopping. For further information refer to: Jeffrey Snedeker, “The Early Valved Horn and Its Proponents in Paris 1826-1840,” 11-12; John Ericson, “The First Orchestral Use of the Valved Horn: La Juive,” *Horn Articles Online*, accessed 11/05/2013. Available at: http://www.public.asu.edu/~jqerics/articles_online.htm


Wagner continued to experiment with his brass writing, which included the development and implementation of new instruments such as the Contrabass Trombone, Bass Trumpet and Wagner Tuba. The Wagner Tuben were designed to be played by horn players and with the aim of filling the gap between the horns and trombones. It was not until the 1868 premiere of Die Meistersinger von Nürnberg that valved trumpets and horns finally prevailed, largely due to Wagner’s persistence and use of effective yet more chromatic brass writing.

A key figure in the notational intrigue of Lohengrin was the famous horn player Joseph Rudolphe Lewy (1802-1881) who was principal horn in Dresden from 1837 until

This theory is widely disputed, with several sources citing evidence that Stoelzel and Blühmel were indeed aiming to make the instrument fully chromatic rather than achieving a change of key as with the omnitonic horn. John Ericson, “Why Was the Valve Invented?” Horn Articles Online, accessed 11/05/2013. Available at: http://www.public.asu.edu/~jqerics/articles_online.htm

52 Barry Tuckwell, Horn, 90.
54 Kurt Janetzky & Bernhard Brüchle, A Pictorial History of the Horn, trans. Cecilia Baumann, 244.
his retirement in 1851. This period included the premiere of Wagner’s opera *Rienzi* on October 20, 1842 and also the premiere of *The Flying Dutchman* on January 2, 1843; Lewy performing the first valved horn part on both occasions. Lewy’s playing was praised by Wagner, as was his leadership of the horn section. At about the same time as Wagner was composing *Lohengrin*, Lewy used a very similar approach in several of the set of studies that he published as *Douze Etudes pour le Cor chromatique et le Cor simple avec accompagnement de piano* in 1850 (see Figure 2.2). The publication opens with the following instructions:

> These Studies are to be played on the chromatic F horn, but the valves are to be employed only when the natural horn is inadequate for the bright and distinct emission of the sounds. Moreover, what is written for the simple horn is also to be played on the chromatic horn, the valves being used only for playing in other keys without changing the crook. When the part is marked 'In Es,' the first valve is to be used; when 'In E,' the second; and when 'In D,' the third. In this way alone will the beauty of tone of the natural horn be retained, and the instrument acquire increased capabilities.

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55 This followed positions in Stuttgart and Vienna. French-horn website, accessed 09/05/2013. Available at: http://www.thefrenchhorn.net/
Figure 2.2: Joseph Rudolphe Lewy, *12 Etudes pour le cor chromatique et le cor simple avec accompagnement de piano*, Etude No.11 *Moderato*, mm. 29-39.

In addition to alternating between the natural horn and the use of valves, Lewy also explores the lower register in these studies, often including large intervals, rapid arpeggios, scale runs and lots of chromatic movement (see Figure 2.3). The range covered is expansive, extending from pedal F up to high d’’’’.

A similar approach was also used by Henri Kling (1842-1918) in twelve of his *Twenty-Five Studies and Preludes*, dedicated to Friedrich Gumpert (1841-1906) and published in 1881, where the valves are used to change the key of the horn and hand stopping technique used thereafter.
The name Lewy is also connected to another interesting part of horn history from this transitional period, however in the case of Beethoven’s Symphony No.9 in D Minor Op.125 it is Joseph Rudolphe’s older brother Eduard Constantin Lewy (1796-1846) that is concerned.\textsuperscript{64} Ludwig van Beethoven (1770-1827) clearly understood the techniques

\textsuperscript{64} Eduard Constantin Lewy’s son Richard Lewy (1827-1883) was also an active performer on the valved horn. John Ericson, “E. C. Lewy and Beethoven’s Symphony No.9,” \textit{Horn Articles Online}, accessed 11/05/2013. Available at: http://www.public.asu.edu/~jqerics/articles_online.htm

Richard Lewy also composed a Concertino for the valved horn. John Ericson, “Joseph Rudolphe Lewy and Valved Horn Technique in Germany 1837-1851,” 32.

applicable on the natural horn long before his famous collaboration with the virtuosic Giovanni Punto in 1800 that resulted in the Sonata for Horn and Piano in F Op.17.\textsuperscript{65} Perhaps this knowledge was due to the childhood friendship he had in Bonn with the horn player Nikolaus Simrock (1751-1832), who later became his publisher.\textsuperscript{66} Throughout the symphonies and chamber music of Beethoven the horn parts remain quite Classical in style and may not be considered to be ground breaking, but they are not without innovation.\textsuperscript{67} Beethoven used the instrument’s entire range, used muted effects and also provided the horns with some extended and exposed solo passages, for example the famous scherzo movement of his Symphony No.3 in E flat Major Op.55. In this symphony he also added a third horn, which is quite unusual. Initially this was done to cover for a crook change in the first horn before the recapitulation of the first movement, however Beethoven had the foresight to compose the third horn part in the style of a cor mixte, and therefore it was also playable by specialist cor alto or cor basse players without pushing their respective ranges.\textsuperscript{68}

Beethoven clearly had an equally good understanding of the cor basse and often made use of the player’s specialised techniques, including the typical wide intervals and register shifts as well as the use of factitious tones. He also frequently required great agility across the range in rapid arpeggiated patterns. All of these traits are evident in the somewhat unusual solo for fourth horn found in the Ninth Symphony (see Figure 2.4). The extended solo passage is not unusual because it is written for fourth horn, although few if any other occurrences of this happening come close to rivalling the solo. As previously stated, cor basse players were widely regarded as having a superior tone and indeed most

\textsuperscript{65} Discussed in the previous chapter.
\textsuperscript{66} Barry Tuckwell, \textit{Horn}, 135.
\textsuperscript{67} For example, the Septet in E flat Major Op.20, Quintet for Piano and Winds Op.16 and the Sextet in E flat Major for Two Horns and Strings Op.81b.
\textsuperscript{68} In the scherzo, for example, horn one plays harmonics four to sixteen, horn two plays harmonics two to eleven, horn three plays harmonics four to twelve.
of the soloists at the time were trained as cor basse players, so when the music changed key and the second pair of horns were called upon they functioned in the same fashion as the first pair, and fourth horn became the preferred soloist in the middle register.

Where the speculation enters is that several sources have suggested that this solo was in fact composed specifically for Eduard Constantin Lewy, who was one of the first renowned valve horn players. Eduard Constantin Lewy had moved to Vienna sometime in 1823 to play in the theatre that later held the premiere performance of the work on May 7, 1824. Details of the size and make up of the orchestra are unknown so we will probably never know who played what, however there are several issues with the suggestion that it was Lewy playing the fourth horn solo on a valve horn. If Eduard Constantin Lewy did indeed have a valve horn at this relatively early stage of their development, to play the solo would have required a fairly advanced model with three valves rather than two as constructed originally.69 There is no information that suggests Beethoven ever actually heard a valve horn due to his poor health and increasing deafness,70 and as he was also under some financial stress it seems unlikely that he would write for a somewhat experimental instrument that would also then require every orchestra to have a valve horn specialist in the section or the piece would not be able to be performed. Finally, it must be considered very unlikely that the movement was not at least sketched out prior to Eduard Constantin Lewy’s arrival in Vienna and if so, it is unlikely that it would be changed upon his arrival and appointment to the theatre orchestra. This is especially notable considering that it is unknown if Lewy and Beethoven ever actually met,71 and that initially Beethoven had planned to hold the premiere in Berlin. Even today the solo is sometimes broken up and played by two horn players, or taken by the first horn as they are more accustomed to

69 It has been suggested that one of the Lewy brothers owned a three valve horn as early as 1825. John Humphries, *The Early Horn: A Practical Guide*, 93.
70 Birchard Coar, *The French Horn 2nd ed.*, 43.
71 Birchard Coar, *The French Horn 2nd ed.*, 42.
the solo role. So then, it remains possible and perhaps most likely that one of the more senior horn players of the section formed in Vienna before the premier may have chosen to play fourth horn specifically for the solo, or may have taken the solo instead of leaving it to the newest addition to the section.

Figure 2.4: Ludwig van Beethoven, Symphony No.9 in D Minor Op.125, Movement III.

*Adagio molto e cantabile*, Horn 4, mm. 65-127.\(^2\)

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Whenever this solo is discussed the essential piece of evidence that is presented is a scale taken from the method of Heinrich Domnich, yet it is often shown without the necessary context. Although this example (see Figure 2.5) is taken from a cor basse exercise, similar examples can be found in the cor alto section of the book. The preface reads:

The two following exercises, which depart from the natural gamut of the instrument, present difficulties in respect of intonation and the use of the hand in the bell. It should be observed that they cannot be executed as rapidly as the preceding ones and it follows that they can only produce a good effect in moderate time.\textsuperscript{73}

Eduard Constantin Lewy was known primarily as a low horn player, although he reportedly had good control over the entire range, and he studied with Domnich so clearly he would have had the technique to perform a solo such as this using the hand horn. The stopped notes in the scale ensure a soft and delicate sound when the horn’s role changes from duet accompaniment to unaccompanied solo, with the orchestra sitting in silence for the measure. It has also been suggested that the solo in fact works better on a horn in E rather than E flat and that perhaps the valve was used to accomplish this change in key.

74 Heinrich Domnich, Methode de Premiere et de Second Cor (Paris: Le Roy, 1808), 82-83.
however this would still result in the use of several stopped tones. In any case it begs the question, if Beethoven was attempting to exploit the new technology of valves why didn’t he compose something clearly un-playable on hand horn as Schuman or Wagner later composed? As Ericson states:

> While one could perhaps argue that the solo might sound better on the valved horn, the fact is that this is idiomatic, if virtuosic, low horn writing for the natural horn and well within the bounds of the technique of a conservatory-trained natural hornist such as E. C. Lewy.  

Although the orchestral writing for horn by Franz Schubert (1797-1828) contains many notes that would require hand stopping, similar to that of Beethoven, it is generally accepted that he only ever composed for the natural instrument. There are however several works that are worthy of discussion due to his interesting and somewhat unconventional use of the natural instrument. The first is Schubert’s Octet in F, Op.166 or D.803, which was composed in 1824 but was not published in its entirety until 1889. Even in the more difficult sections the horn part only requires agility within the harmonic series. This was followed in 1827 by a setting of the text *Nachtgesang im Walde* by Johann Gabriel Seidl (1804-1875), which remained unpublished until 1846 (as Op.139b or D.913). The work was composed for a benefit concert being held by the Lewy brothers, and they continued to perform the work regularly in the years that followed. In *Nachtgesang im Walde* Schubert

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75 John Ericson, “E. C. Lewy and Beethoven’s Symphony No.9,” *Horn Articles Online*, accessed 11/05/2013. Available at: [http://www.public.asu.edu/~jqerics/articles_online.htm](http://www.public.asu.edu/~jqerics/articles_online.htm)


uses a quartet of horns pitched in E to accompany the male chorus and although the first three horn parts are very idiomatic for the hand horn the fourth part is unusual in its frequent use of the notes between low c and g (see Figure 2.6). Although playable on the natural horn, these notes would not usually be used in this manner, suggesting the limited use of a valved instrument.

Figure 2.6: Franz Schubert *Nachtgesang im Walde* Op.139b or D.913, mm. 1-19.


Ericson speculates that E.C. Lewy played 4th horn and J. R Lewy 1st horn, and that both of these parts were in fact played on valve horns even though the work was conceived for natural horns. John Ericson, “Beethoven’s Symphony No.9, Schubert’s Nachtgesang im Walde and Auf dem Strom, and the Horn Technique of the Lewy Brothers in the 1820s,” 9-10; John Ericson, “Schubert and the Lewy Brothers,” *Horn Articles Online*, accessed 11/05/2013. Available at: http://www.public.asu.edu/~jqeric/articles_online.htm

The final work is Schubert’s *Auf dem Strom* (On the Stream) Op.109 or D.943, which is a setting of a poem by Ludwig Rellstab (1799-1860) for horn in E, voice and piano. Composed for the tenor Ludwig Tietze and the horn player Eduard Constantin Lewy whom Schubert admired, it was premiered on March 26, 1828 in Vienna with the composer at the piano and published the following year. There are a couple of brief lower register moments in the work (see Figure 2.7) and interestingly this has led to several sources suggesting that a valve horn is actually required and that this was the first work composed for valve horn. Both these claims are however incorrect, as the work is completely playable on the natural instrument. As Ericson states:

> When performed on the natural horn there are several low heavily stopped notes to be dealt with, the most difficult pitches being the written f, a and c-sharp’. While difficult on the natural horn, the way in which these pitches are used by Schubert permitted effective performance: that is, the difficult heavily stopped notes in the low range passages are pianissimo and double the vocal line, and thus do not require a great deal of projection.

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83 It has also been suggested this work was a tribute to Beethoven who had died exactly one year before the premiere performance, a claim that is enhanced by the suggestion that it contains “apparent quotations” from the funeral march of Beethoven’s Symphony No.3 in verses two and four. The work influenced the composition of further pieces for this combination by the three brothers Franz Paul Lachner (1803-1890), Ignaz Lachner (1807-1895) and Vinzenz Lachner (1811-1893), as well as Heinrich Proch (1809-1878), Conradin Kreutzer (1780-1849), Otto Nicolai (1810-1849), Giuseppe Donizetti (1788-1856) and Hector Berlioz. Further information in: John Humphries, *The Early Horn: A Practical Guide*, 93-95.


85 Andrew Clarke has suggested that the horn part seems to require a similar approach to that suggested at the beginning of Lewy’s set of etudes, that is, the use of valves to change crook when necessary. Andrew Clarke, “The Heyday of the Hand Horn and the Birth of the Valved Horn: A Study of the 19th-Century Technique as Revealed in the Solo Works for Horn by Carl Czerny,” *Historic Brass Society Journal* 13 (2001): 120. Humphries states that although “all of these notes are available to a hand horn player, they are strangely unidiomatic in this configuration, and bar 132 is virtually impossible to play convincingly.” John Humphries, *The Early Horn: A Practical Guide*, 93. However Richard Seraphinoff demonstrated this passage to me on several occasions in a very convincing fashion.

86 Ericson continues by stating that Lewy is known to have been performing on the valve horn by 1826 and that he may indeed have played the work using a valve horn, however it appears that Schubert composed the work in such a way that it would be playable on the natural instrument. John Ericson, “Beethoven’s Symphony No.9, Schubert’s Nachtgesang im Walde and Auf dem Strom, and the Horn Technique of the Lewy Brothers in the 1820s,” 10-11. John Ericson, “Schubert and the Lewy Brothers,” *Horn Articles Online*, accessed 11/05/2013. Available at: [http://www.public.asu.edu/~jqerics/articles_online.htm](http://www.public.asu.edu/~jqerics/articles_online.htm)
The Austrian pianist and theorist Carl Czerny (1791-1857) wrote several very soloistic compositions for the combination of horn and piano, predominantly using the natural horn. Without doubt the best known of these works is the *Andante e polacca* that was written in 1848 but remained unpublished until after the composer’s death, although the three *Brilliant Fantasies* Op.339 composed around the year 1836 and based on the lieder of Franz Schubert are also performed regularly. Prior to all of these works however, in about 1830 Czerny composed an *Introduction et variations concertantes sur un air tirolienne* for horn (or cello) and piano Op.248, one of the first solo works ever written for the valved horn. Authorship is credited to Czerny and Joseph Rudolf Lewy; with the piano part containing all the “hallmarks of Czerny’s virtuosic style” whilst the horn part

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89 Andrew Clarke, “The Heyday of the Hand Horn and the Birth of the Valved Horn: A Study of the 19th-Century Technique as Revealed in the Solo Works for Horn by Carl Czerny,” 118. All five of these works were recorded by Clark with pianist Geoffrey Gover on the disc *Carl Czerny: Music for horn and fortepiano* Helios CDH55074, 2000.
contains “several notes and key changes that would be unplayable on the natural horn, even with the advanced technique of hand stopping the bell of the instrument with the right hand, prevalent at this time in Europe.”90 This clearly indicates Lewy’s influence of the work, particularly evident in the Adagio espressivo following the fourth variation, which Clark highlights through the following example (see Figure 2.8) and statement, that although the section is

predominantly in C minor and E♭ major, it is really playable only on an F horn, using at least one valve and preferably more. For the first time ever in a solo horn part, bass notes are written in a key that would have been unthinkable in a natural horn part. These are the two b♭s; the f, and the e♭ (all below middle C). While the notes are conceivable on an E♭ horn, one would not expect a phrase to continue immediately from the last of these bass notes, then leap up two octaves without a rest to notes that are clearly designed for the F horn.91

![Figure 2.8](image-url)

Figure 2.8: Carl Czerny, *Introduction et variations concertantes sur un air tirolienne* for Horn and Piano Op.248, *Adagio espressivo*, mm. 220-226.

The reason for Czerny returning to the natural horn in subsequent compositions is unknown. In addition to the previously mentioned solo works he also wrote a number of chamber music pieces featuring the horn, including a trio for horn, violin and piano titled


In contrast, the capabilities of the valved instruments were quickly accepted and exploited by Schumann, Bruckner, Mahler and Strauss. Robert Schumann (1810-1856) was known for being a pioneer, committed to development and to progress, and he soon not only experimented with the new valved horn but also advocated its use for a more melodic role. This resulted in the composition of three substantial pieces for the instrument in the year 1849 where in each case the horn is featured as a solo instrument with lyrical melodies that are able to move freely through tonalities and in which the lower register has finally been made available. The first was the now famous Adagio and Allegro in A flat Major, Op.70 for Horn in F and piano, which was completed in three days and features a low passage in the Adagio section as well as extending up to a high c’’. (see Figure 2.9).

This was followed by the concerto for four horns and orchestra Konzertstuck Op.86, which Schumann considered to be one of his best pieces, however for many years before the invention of the double horn the piece was considered almost unplayable and was rarely heard. It was premiered with orchestra in 1850 in Leipzig by the Gewandhaus Orchestra, however an earlier private performance with piano took place on October 15, 1949 featuring the horn players Josef Rudolf Lewy, Julius Schlitt Eger, William Lawrence and Carl Heinrich Hübler.

92 Birchard Coar, A Critical Study of the Nineteenth Century Horn Virtuosi in France, 128.
97 Kurt Janetzky & Bernhard Brüchle, The Horn, trans. James Chater, 93.
98 French-horn website, accessed 09/05/2013. Available at: http://www.thefrenchhorn.net/
Despite the difficult first horn part, which often extends up to high c''' and beyond, it has now become extremely popular and is frequently performed. The fourth horn part contains some wonderful chromatic lines in the octave below middle c’, utilizing every note now available on the horn, and anchors the quartet in the beautiful chorale of the final movement (see Figure 2.10).

Instead of using the recommended valve horn, the virtuoso first horn Pohle stubbornly played his old and trusted stopped *Inventionshorn* at the premiere in Leipzig. In doing so, he acted like an experienced traveller, believing that he would reach his destination more safely with the old, reliable horse-drawn mail coach than with the new train.\(^\text{100}\)


\(^{100}\) Kurt Janetzky and Bernhard Brüchle, *A Pictorial History of the Horn* trans. Cecilia Baumann, 244.
The horn quartet was again utilised in the third work composed that year, this time with a male choir in *Jagdbrevier* Op.137, a counterpart to Franz Schubert’s *Nachtgesang im Walde*. A single valved horn is used as the bass of the horn quartet accompanying the voices throughout this set of five songs, the valves allowing it to provide a strong and sonorous bass line that is also capable of including more melodic lines in the accompaniment than was previously achievable. Whilst all four of the horn parts require the performers to play in a couple of keys and include multiple accidentals and plenty of chromatic movement, the fourth horn part shows the new capabilities by including most of the notes between the second and fourth harmonics, which were previously unable to be used (see Figure 2.11).

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102 Kurt Janetzky & Bernhard Brüchle, *The Horn*, trans. James Chater, 92. Perhaps adding weight to the idea that Schubert’s composition also requires the use of at least one valved horn.
103 In the second song *Habet Acht!* and third song *Jadgmorgen*, the third horn part is written in a different key to the remaining three horns, which allows for the filling in of some of the chords and through this, some depth is added in the middle register.
Anton Bruckner (1824-1896) and Gustav Mahler (1860-1911) were responsible for some of the most significant orchestral horn parts, often writing for expanded sections in their symphonies. In his final three symphonies Bruckner also included a quartet of Wagner Tuben, played by horns five through eight. Also of special significance are Bruckner’s “Romantic” Symphony No.4 in E flat Major and Mahler’s Symphony No.5 in C# Minor, with its obligato horn solo running throughout the third movement Scherzo. Orchestral horn writing reached a high point during the second half of the nineteenth century, with numerous other composers such as Antonín Dvořák (1841-1904) and Peter

105 Symphony No.7 in E Major, Symphony No.8 in C Minor and Symphony No.9 in D Minor.
Ilyich Tchaikovsky (1840-1893) also writing exceptional parts for the instrument.\textsuperscript{106}

Another key figure in the history of the horn and its role within the orchestra was Richard Strauss (1864-1949). In addition to his Serenade for Winds Op.7 and two horn concerti, which are still considered amongst the most significant in the genre, he also wrote a number of tone poems that not only feature the instrument, but also display the increased expectations being placed upon horn players. These include *Don Juan* Op.20, *Till Eulenspiegels lustige Streiche* Op.28, *Also Sprach Zarathustra* Op.30, *Don Quixote* Op.35, *Ein Heldenleben* Op.40, *Salome* Op.54, *Der Rosenkavalier* Op.59 and *Eine Alpensinfonie* Op.64 (see Figure 2.1). In these works Strauss removes any boundaries that may have still been in existence between high and low horn players, expecting all players to cover the full range of the instrument.

With the advent of valved instruments, the orchestra acquired the full spectrum of the sonorous brass register. Only with its horns and trumpets at last made chromatic could “high Romanticism” reach its highest peak of sound. Without this, the masterworks of Wagner, the symphonies of Bruckner and Mahler, or the tone poems of Richard Strauss would be inconceivable.\textsuperscript{107}

\textsuperscript{106} Unfortunately these composers, as well as many that followed, failed to write solo works specifically for the horn and thus fall outside the parameters of this study. The orchestral writing of Bela Bartok (1881-1945), Leonard Bernstein (1918-1990), Benjamin Britten (1913-1976), Paul Hindemith (1895-1963), Serge Rachmaninov (1873-1943), Maurice Ravel (1875-1937), Dmitri Shostakovich (1906-1975), Igor Stravinsky (1882-1971) etc. place great expectations on the horn section.

\textsuperscript{107} Kurt Janetzky and Bernhard Brüchle, *A Pictorial History of the Horn* trans. Cecilia Baumann, 16.
Richard Strauss was obviously influenced by his father, the virtuosic horn player Franz Strauss (1822-1903), who played in the Bavarian Court Orchestra and was the Professor of Horn at the Munich Academy of Music. Franz Strauss also composed a number of works that were popular during his lifetime, including two horn concerti, five works for horn and piano, a book of horn quartets and a number of smaller pieces featuring the instrument. These works remain popular amongst horn players today as they are not only well written and technically accessible, but also represent the true nature of the horn as a romantic instrument (see Figure 2.13).

Figure 2.12: Richard Strauss, *Till Eulenspiegels lustige Streiche* Op.28, Horn 1, mm. 1-45.108


Another influence on Richard Strauss was certainly Oscar Franz (1843-1886), who was “one of the most prominent teachers and performers of the horn in the late nineteenth century.” John Ericson, “Oscar Franz and Richard Strauss on the Horn in the Late Nineteenth Century,” *Horn Articles Online*, accessed 11/05/2013. Available at: [http://www.public.asu.edu/~jqerics/articles_online.htm](http://www.public.asu.edu/~jqerics/articles_online.htm) Oscar Franz composed an important method for the horn as well as numerous solo works. For further information refer to: John Ericson, “The Valve Horn and Its Performing Techniques in the Nineteenth Century: An Overview,” 23-25.

109 Another influence on Richard Strauss was certainly Oscar Franz (1843-1886), who was “one of the most prominent teachers and performers of the horn in the late nineteenth century.” John Ericson, “Oscar Franz and Richard Strauss on the Horn in the Late Nineteenth Century,” *Horn Articles Online*, accessed 11/05/2013. Available at: [http://www.public.asu.edu/~jqerics/articles_online.htm](http://www.public.asu.edu/~jqerics/articles_online.htm) Oscar Franz composed an important method for the horn as well as numerous solo works. For further information refer to: John Ericson, “The Valve Horn and Its Performing Techniques in the Nineteenth Century: An Overview,” 23-25.

Large scale works were unfortunately composed less frequently than they had been in the eighteenth century, with the better known options being the concerti of Franz Strauss and the Sonata in E flat Major Op.178 by Joseph Rheinberger (1839-1901), composed in 1894. Considering the wealth of large scale Romantic works written for the families of string and woodwind instruments, it seems that the development of the valve and changing nature of brass instruments prevented composers from exploring their capabilities in solo works to some extent.

Several large scale solo works for the valve horn, which predate those already discussed, are known today yet these are not readily available or performed. The first known work is a Concertino for three natural horns and chromatic horn by Georg Abraham Schneider (1770-1839), which was premiered in Berlin on October 16, 1818 with a hornist named Friedrich Bode playing the valved horn. The work was performed three further times.

times prior to 1820. Another Concerto for three horns by the horn player Lenss was premiered November 26, 1819 with Andreas Schunke playing the chromatic horn part.\textsuperscript{113}

France was probably the least willing of all European nations to adapt the new technology of the valve horn. The valve may have been introduced to France as early as 1823 by Gaspare Spontini (1774-1851)\textsuperscript{114} who sent several valved instruments manufactured by Schuster of Carlruhe from Berlin to Paris, including valve horns to the Conservatoire for Dauprat to inspect.\textsuperscript{115} However, it was Dauprat’s student Joseph Emile Meifred (1791-1867)\textsuperscript{116} who seems to have adopted the instrument most quickly and eventually made his solo debut at the Paris Conservatoire on March 9, 1828 performing his \textit{Premier Solo} for horn and piano.\textsuperscript{117} Meifred was also involved in making various improvements to the valve horn with maker Jacques Charles Labbayé, winning a silver medal at the Paris Industrial Product Exposition in 1827.\textsuperscript{118} After becoming quite renowned as a soloist on the instrument, he became the first valve horn professor at the Conservatoire in 1832, starting his valve horn class with the main goal of training low horn players for the opera orchestra. The instrument made its first orchestral appearance in Paris

\textsuperscript{113} John Ericson, “The First Works for the Valved Horn” \textit{Horn Articles Online}, accessed 11/05/2013. Available at: http://www.public.asu.edu/~jqerics/articles_online.htm
\textsuperscript{116} Dauprat was somewhat interested in the new instrument and wrote a supplement for his method discussing the two valved horn, although this seems to have remained unpublished. Ken Moore, “The persistence of the natural horn in the romantic period.” \textit{Moore Music}. http://www.mooremusic.org.uk/nathorn/nathorn.htm
shortly thereafter in 1835, with Meifred believed to be playing valve horn alongside Dauprat in Halévy’s opera. Following a performance on April 28, 1833 of a piece by Georg Jakob Strunz for three horns, trumpet and valved cornet, the famous journalist and music critic François Joseph Fétis (1784-1871) commented:

As for Mr. Meifred, his bass part on the horn revealed to us the existence of an instrument in a way unknown. The power of this instrument is something that resembles neither trombone nor ophicleide. It is a bass horn and that is the only way one can give to this instrument a perfect analogy for the quality of sound. It does not concern notes in the middle of the horn that have more of less volume; it concerns sounds that in a way did not exist and have only just been found.

In 1840 Meifred published the first method for valved horn by a major performer, his Méthode pour le Cor Chromatique ou á Pistons, which was intended to complement Dauprat’s Méthod de Cor Alto et Cor Basse from 1824. In the introduction to the work, Meifred lists his five goals as:

1. To restore to the horn the notes it lacks.
2. To restore accuracy (of intonation) to some notes. (i.e., those notes not well in tune on the natural horn, such as f#*, a”).
3. To render muted notes sonorous, while preserving the desirable timbre of lightly stopped ones.
4. To give the leading tone in every key or mode the “countenance” it has in the natural range.
5. Not to deprive composers of changes of crook, each of which has a

special color (i.e., to retain the character of the different crooks, each of which has a special color—using valves to obtain the equivalent length of the crook).  

This resulted in a compromise approach that included the continued use of both crooks and hand stopping technique where musically beneficial, whilst also incorporating the obvious benefits of the valved instrument in the lower register, for intonation, musical effects and for modulations. Of particular importance to Meifred was the use of hand technique for leading tones. In addition to preferring the horn pitched in F rather than Dauprat’s preference for E flat, one of the other key points found in Meifred’s method was the preference for a two-valved instrument rather than three, as this was the minimum amount of new technology needed. Meifred discusses the application of the valved instrument to traditional repertoire and also encouraged students to learn the entire range of the instrument, rather than specialising as a cor alto or cor basse.

Following the opening text, Meifred’s Méthode pour le Cor Chromatique ou á Pistons begins in the octave between written middle c’ and c’’, immediately utilising the valves and quickly adding chromatic movement. Additional transpositions are suggested for cor alto and cor basse players rather than separate exercises. The second lesson moves into the lower octave, between written c and c’. As the instrument recommended by Meifred was of two valve design, the low d must be produced with the addition of some hand stopping and lip adjustment (see Figure 2.1).

In the third lesson Meifred turns to the upper register, focussing on the octave between written c'' and c''', and then continues with a general review of this opening section of the method including scales, mixed intervals and fourteen short etudes. The second section of the method consists of short exercises in a multitude of different keys, and then includes twelve short etudes in major keys and an additional twelve etudes in minor keys. Exercises for learning musical ornaments follow, before further technical exercises based on arpeggios, scales and modulations. After a brief section on the use of echo horn effects and a series of natural horn style flexibilities, Meifred continues with cadenzas to some of the early horn concerti, which would obviously be of great interest to performers playing these works (see Figure 2.15).

Written above the notes, ‘S’ indicates use of the superior valve (lowers the pitch by a tone) and ‘I’ the inferior valve (lowers the pitch by a semitone). The half circle written below the notes in the final example indicates the use of hand stopping (half stopped) for the leading tone. Jeffrey Snedeker, “The Early Valved Horn and Its Proponents in Paris 1826-1840,” 12.
The third section of the method includes a *March Funèbre* for horn quartet by Dauprat, which is followed by ten vocalises by Bordogni and Panseron arranged for horn and piano (see Figure 2.16).

Prior to this method, in 1829, Meifred also composed a text that was intended mainly for composers. Titled *De l’étendue, de l’emploi et des resources du cor en general et de ses corps de recharge in particulier*, Meifred again strongly advocates the continued use of crooks for achieving different tone colours on the horn.\(^\text{126}\)

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Figure 2.16: Joseph Emile Meifred, *Méthode pour le Cor Chromatique ou à Pistons*, Vocalise No.4 (from Bordogni), mm. 1-22.
Following Dauprat’s retirement from teaching at the Paris Conservatoire in 1842, Meifred taught alongside another of Dauprat’s students, the celebrated cor alto player Jacques Francois Gallay (1795-1864). However just weeks before the death of the natural horn professor on October 18, 1864 Meifred retired from the Paris Conservatoire and for unknown reasons his position was not retained by the administration. This decision caused the valve horn class to cease operating for over thirty years. During this period the natural horn continued as the primary instrument of the institution under the instruction of Gallay’s pupil, Jean Baptiste Victor Mohr (1823-1891). It was only following the appointment of Mohr’s student Francois Bremond (1844-1925) as his successor in 1892 that a path back towards the valve horn was set in motion. In the ten years that followed, Bremond first gained support from the Conservatoire Director Ambroise Thomas (1811-1896) to reinstate the valve horn class, which occurred in 1896. He then gradually increased the requirement for students to use the valve horn at the end of year examinations to include using it for the sight reading test and later for the solo piece.

129 At an early age Francois Brémond went to live with his uncle Joseph Rousselot in Paris, who was serving as solo horn in the opera, and whilst there also met Dauprat. He entered the Paris Conservatoire in 1868 and won the concours a year later. After several prominent playing positions he was appointed as horn professor at the Paris Conservatoire in 1891, a post which he held until 1922 He also preferred the ascending third valve, which remained popular in France. Jeffrey Snedeker. “Brémond, François.” *Grove Music Online.* Oxford University Press. Accessed 12/05/2013. http://www.oxfordmusiconline.com/subscriber/article/grove/music/03927
130 Brémond also compiled several important books of etudes, “often borrowing from Dauprat, Mohr and Gallay, and adapting their etudes for thevalved instrument. His most important publication is *Exercises journaliers* for the valved horn (125 pages, Paris: Leduc, 1900).” Jeffrey Snedeker. “Hand or Valve (or both): Horn Teaching, Technique, and Technology at the Paris Conservatoire, ca 1840-1903,” (Paper presented at The Historic Brass Society, Paris, June 29, 2007), 216-217.
131 It is during this transitional period that the curious horns with detachable valve sections come from, although Moore suggests that this design was due to the negative attitude directed towards valved horns and that some makers even went as far as constructing “cases for these instruments with false panels in the lids behind which such valves could be concealed.” Ken Moore, “The persistence of the natural horn in the romantic period.” *Moore Music.* http://www.mooremusic.org.uk/nathorn/nathorn.htm
however it was not until 1903 that the valve horn finally supplanted the natural horn at the institution. For many years following this change hand horn technique was still taught and used at the Paris Conservatoire, as is evident in the solos written for the valve horn and the concours in the years that followed\textsuperscript{132} such as Villanelle by Paul Dukas (1865-1935), which was dedicated to Brémont and used as the end of year examination piece in 1906.

Considering the immense talent of the horn graduates of the Paris Conservatoire and the superiority of their hand horn technique compared to the slightly problematic early valve systems\textsuperscript{133} it is perhaps not surprising that valves found little support there. It is likely that the performers and teachers using the natural horn held a prejudice and negative view towards the device, which was supposed to allow the same effects that they had trained and practised for years to achieve, to be obtained with seemingly less effort. Hand horn technique had already allowed the horn to be a fully chromatic instrument above the sixth harmonic and thus opened up the world of solo opportunities. The difference in tone, which the virtuosic players of the day minimized as far as possible, was accepted as part of the sound and indeed the charm of the instrument, deliberately used by composers for shadings and nuances in contrast with the natural sounds.\textsuperscript{134} As Jeffrey Snedeker states, the natural horn

was seen as having a kaleidoscope of timbral colors, whether in its handstopping or in its crook changes, and composers and performers were

\textsuperscript{133} Christian Ahrens, Valved Brass: The History of an Invention, trans. Steven Plank, 10. It has been suggested in several sources that the addition of valves disrupted the winds path within the instrument and that this resulted in an inferior tone, whilst others suggest that due to the lack of good instruction and teaching materials the players were just inferior.
\textsuperscript{134} There are numerous quotes available regarding the horns character suffering due to the valved instrument, such as: John Ericson, “K. G. Reissinger on the Valved Horn – 1837,” Horn Articles Online, accessed 11/05/2013. Available at: http://www.public.asu.edu/~jgerics/articles_online.htm; John Ericson, “Dauprat and the Tone of the Natural Horn,” Horn Articles Online, accessed 11/05/2013. Available at: http://www.public.asu.edu/~jgerics/articles_online.htm Also refer to John Ericson, “Joseph Rudolphe Lewy and Valved Horn Technique in Germany 1837-1851,” 24-25.
encouraged to develop technique that acknowledged and even celebrated this color palette, while achieving even higher sophistication in musical expression.\textsuperscript{135}

Another consideration is the fact that the valved instruments of Sax had been experimented with in the French military bands for over a decade, yet they never gained acceptance in orchestral settings.\textsuperscript{136} Somewhat confusing though is the fact that the earlier solo works composed for these talented students as the end of year exam pieces, many of which were composed by recognized horn players and composers, are seldom performed today and therefore remain quite difficult to find and largely unknown. Dauprat is somewhat of an exception, having studied composition at the Paris Conservatoire with Antonine Reicha. His chamber music and concerti, which were praised during his lifetime,\textsuperscript{137} are widely available even if they are not frequently performed.\textsuperscript{138}

The solos by Victorin de Joncières (1839-1903)\textsuperscript{139} and Raoul Pugno (1852-1914)\textsuperscript{140}, as well as the Sonata by Xavier Leroux (1863-1919)\textsuperscript{141} from 1897 are readily available, but for the most part remain unheard. Recently, the \textit{1er Solo pour Cor} by Professor Bremond

\begin{footnotesize}
\begin{enumerate}
\item Birchard Coar, \textit{A Critical Study of the Nineteenth Century Horn Virtuosi in France}, 66.
\item Dauprat composed for the natural horn. Several of his compositions were discussed in the previous chapter.
\item French composer and later critic, Victorin de Joncières’ \textit{Solo for Horn and Piano in F} was the solo in 1898. He was best known as a composer of operas, and was also a founder-member of the Institut International de Musique (with Gounod, Chabrier, Reyer and others) and president of the Société des Compositeurs de Musique. Cormac Newark. ”Joncières, Victorin de.” \textit{Grove Music Online. Oxford Music Online.} Oxford University Press. Accessed 12/05/2013. \url{http://www.oxfordmusiconline.com/subscriber/article/grove/music/14441}
\item Raoul Pugno studied at the Paris conservatoire where he won the concours in piano (1866), harmony (1867) and organ (1869). He later returned to teach harmony and then piano there for brief periods of time, before resuming his career as a concert pianist in 1893. Pugno composed a number of stage works, whilst his \textit{Solo pour Cor en Fa et Piano} was used as the solo in 1900. Guy Bourligueux. ”Pugno, Raoul.” \textit{Grove Music Online. Oxford Music Online.} Oxford University Press. Accessed 13/05/2013. \url{http://www.oxfordmusiconline.com/subscriber/article/grove/music/22528}
\item The composer Xavier Leroux won the famous \textit{Prix de Rome} in 1885 with his cantata \textit{Endymion}, and is certainly best known for his vocal compositions. He studied at the conservatoire with Dubois and Massenet, and in 1896 returned to teach there as a Professor of Harmony. Richard Langham Smith. “Leroux, Xavier.” \textit{Grove Music Online. Oxford Music Online.} Oxford University Press. Accessed 13/05/2013. \url{http://www.oxfordmusiconline.com/subscriber/article/grove/music/16466}
\end{enumerate}
\end{footnotesize}
has become available through Sempre piú Editions. Although the etudes of Gallay are well known and frequently used, the fourteen concerti that he composed as well as the numerous fantasies and other solo pieces that he wrote for the concours are little known. It is a similar case with the valve horn graduate Alexandre Clement Cugnot (1826-?, winner of the concours in 1842), whose studies are widely available and frequently used, yet his fantasies appear to be unknown. Several pieces featuring the horn are available by Martin-Joseph Mengal (1784-1851, winner of the concours in 1809) yet the Concerto No.1 used in 1887 is not, and the sizeable number of works by both professors Meifred and Mohr are difficult to find. This is also the case regarding lesser known Paris Conservatoire natural horn graduate Joseph Rousselot (1803-1880, winner of the concours in 1823) and valve horn graduate Léopold Dancla (1822-1895, winner of the concours in 1838). The list of compositions and winners of the concours in horn that is included as an appendix in Coar’s *A Critical Study of the Nineteenth Century Horn Virtuosi in France* also includes a work by Kaiser, as well as works by Michele Carafa (1787-1872) and

142 Presumable this is the work that was used as the set piece in 1895. François Brémond, *1er Solo pour Cor* Ed. Pascal Prout (Paris: Sempre piú Editions, 2012).

143 The Belgian composer and horn player Martin-Joseph Mengal was later the director of the conservatory in Ghent where his pupils included Gevaert. He studied with Reicha and wrote a number of operas and instrumental works, including three horn concerti and a *Symphonie concertante for Two Horns and Orchestra*. Martin-Joseph’s younger brother Jean-Baptiste (1792-1878) was also a distinguished horn player, winning the concours in 1814, and also composed several works featuring the horn which can be found. John Lade. "Mengal, Martin-Joseph." *Grove Music Online. Oxford Music Online*. Oxford University Press. Accessed 12/05/2013. [http://www.oxfordmusiconline.com/subscriber/article/grove/music/44258](http://www.oxfordmusiconline.com/subscriber/article/grove/music/44258)


145 *Air Varié* was the solo work in 1836, whilst a *Solo de Concert* was the solo piece in 1892.


147 Kaiser’s *Solo* was the set piece in 1888.

148 Michele Carafa was a renowned opera composer who studied with Cherubini and was a lifelong friend of Rossini. His *Air varte de la Violette* was used for the valve horn examination in 1836. Later he taught counterpoint at the Conservatoire. Julian Budden. "Carafa, Michele." *Grove Music Online. Oxford Music Online*. Oxford University Press. Accessed 13/05/2013. [http://www.oxfordmusiconline.com/subscriber/article/grove/music/04894](http://www.oxfordmusiconline.com/subscriber/article/grove/music/04894)
Henri Maréchal (1842-1924), which appear to be unavailable currently.

It was within this setting that Charles-François Gounod (1818-1893) matured as a composer. Having earlier studied harmony and counterpoint with Antoine Reicha and winning the first Prix de Rome in 1829, he enrolled at the Paris Conservatoire and studied with Halévy. Gounod is still regarded as a very important musical figure in French music today, renowned for his vocal compositions in the genres of opera, church music and secular songs where he was slightly conservative and continued to write for the natural horn. Unfortunately he only composed a small amount of instrumental chamber music, however his output in this genre does include a set of Six Melodies pour le Cor a Pistons. The exact date of this early work is unknown, however it is believed to have been composed between 1840 and 1848. It was dedicated to Marcel Auguste Raoux (1795-1871), the last of the famous horn makers, who was second horn in the Theatre des Italiens at the time.

There are two modern publications of these works, which are significantly different

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150 A number of other composers and works are mentioned in the text, many of which are unknown to this author, and certainly deserve further research. An exception to all of these lesser known works is the Concertino for Horn and Orchestra in E Minor Op.45 by Carl Maria von Weber, which was composed in 1806 but later revised, in 1815. It was used as the set piece at the Paris Conservatoire in 1885. This work was discussed in Chapter 1.

151 Antonine Reicha (1770-1836) was a friend of both Haydn and Beethoven. Following his appointment as professor of counterpoint and fugue at the Paris Conservatoire in 1818 his students included eight other professors at the institution, including Louis Francois Dauprat. Later students included Hector Berlioz, Franz Liszt and Cesar Franck. Renowned for his wind quintets and other wind chamber music, Reicha also composed several solo works for horn and orchestra and horn and piano, as well as a large number of chamber music pieces combining strings and winds, which includes a quintet for horn and strings in E Major Op.106. Peter Eliot Stone. "Reicha, Antoine." Grove Music Online. Oxford University Press. Accessed 02/05/2013. http://www.oxfordmusiconline.com/subscriber/article/grove/music/23093


from one another. The first, *Six Melodies for Horn and Piano*,\(^{155}\) was edited by renowned horn player Daniel Bourgue, who discovered the pieces in a Parisian library and has also recorded them on his album *Musique Francaise pour Cor*.\(^{156}\) It is a well published edition of the originals, with a brief but informative preface explaining the significance of the works included. The second version, *6 Pieces Melodiques Originales pour Cor a Pistons et Piano*,\(^{157}\) is an arrangement by Edmond Leloir where dynamics, accents and articulations have been added, and several large changes have also been made.\(^{158}\)

The first 'melodie' is marked *Larghetto Bien Pose* and opens with dramatic chords in G Minor before the melancholic melody is introduced by the piano and then repeated by the horn, clearly demonstrating from the outset the open tones now available in the lower middle register. This feature is expanded upon by Leloir who moves several notes down the octave, such as the final four notes of the horn’s first entry (see Figure 2.17). The *Andantino* that follows in E flat Major has an almost pastoral feel, and includes the interesting addition of an echo effect at the beginning in the version edited by Leloir, which is also transposed into D Major.\(^{159}\) The short third song, a lyrical *Andante*, is noteworthy as it includes a small cadenza at its conclusion. This movement has also been transposed by Leloir from B flat Major down into A flat Major, and the end of the cadenza slightly altered (see Figures 2.18 and 2.19). If the final note is played down the octave it results in a pedal E flat, which would have been unavailable on the single F horn equipped with three valves as used during Gounod’s time.


\(^{158}\) Randall Faust, “Music and Book Reviews,” *The Horn Call* 14/1 (October, 1983), 89.

\(^{159}\) The order of the following movements has also been altered by Leloir, with movements five and six being presented as three and four respectively.
The fourth song, *Larghetto*, contrasts a melancholic C Minor melody with a heroic sounding second theme, which is in C Major. This is followed by a peaceful *Andante Cantabile* in F Major, with a more light-hearted middle section, and a sentimental *Andante*.
sostenuto finale in B flat Major, where Gounod extends the range up to the written a’’ above the stave.

Gounod consulted Raoux regarding his compositions for the horn, which also include a quintet with strings, method book and a set of etudes. In Dix etudes pour le cor à pistons en Fa several of the etudes are inspired by the works of operatic composers,\textsuperscript{160} and although they do not extend into more demanding technique they do cover various styles and challenges within the middle register.

Camille Saint-Saëns entered the Paris Conservatoire in 1848 as a student of the organ, but also studied composition and orchestration with Halévy from 1851. Upon finishing his studies Saint-Saëns’ earliest appointments were as an organist, most notably at La Madeleine from 1858 until 1877, and it was there that “Liszt heard him improvising and hailed him as the greatest organist in the world.”\textsuperscript{161} Amongst his diverse compositional output are numerous operas and vocal works, symphonies, concerti and a large amount of both chamber music and piano works.

In his hugely popular Romance in F Major Op.36, which was both composed and published in 1874, Saint-Saëns does not explore the lower register of the horn at all and it is certain that the work was intended for the natural horn. Several years later in 1885 Saint-Saëns released another Romance in E Major Op.67,\textsuperscript{162} composed for Henri Chaussier (1854-1914),\textsuperscript{163} where despite composing for the valved instrument he again failed to


\textsuperscript{163} Chaussier was a student of Mohr’s at the Paris Conservatoire, renowned for his solo playing. He was dedicated to the use of the hand horn, although he later developed his own unique valve horn. John
genuinely explore this facet of technique. The lower register is only briefly visited at the conclusion of the piece where he includes an arpeggio starting on the second harmonic and extending up to the sixteenth. *Morceau de Concert* Op.94 was composed in 1887 and published in 1893. In this work Saint-Saëns also exploits the harmonic series in arpeggio style runs throughout the finale section, however in the slow movement preceding it there are not only low passages but also the use of a hand stopped echo effect, clearly showing some signs of innovation and the application of valve technology (see Figure 2.20). It is suggested that this work was again composed for Chaussier and premiered using an omnitonic horn.

Considering the seemingly logical progression of these three works when compared chronologically, it is somewhat surprising to learn that Saint-Saëns also composed an *Andante* for horn and organ that precedes all three.164 Believed to have been composed in 1854 it was not rediscovered until 1980 and remained unpublished for several additional years. The *Andante* was clearly composed for a cor basse player, most likely Meifred or one of his students at the Paris Conservatoire.165 Saint-Saëns explores the lower register and the possibilities of using the valve to change the key of the horn as he moves through several different tonal centres during the work (see Figure 2.21).

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165 At this time, Meifred’s valve horn class included Carment, Liouville, Mimard and Carre. Due to the notation of the accompaniment the organ part may have originally been intended for the harmonium. Camille Saint-Saëns, *Andante for horn and organ* Ed. Christopher Larkin, preface. Referred to by William Scharnberg in “Music and Book Reviews,” *The Horn Call* 24/2 (February, 1994), 72.

In *A Critical Study of the Nineteenth Century Horn Virtuosi in France* pg. 163, Birchard Coar lists A. P. Carmont as winning the *premier prix* and F. F. Liouville the *second prix* of the valve horn concours in 1853. Paul A. Mimard won the *second prix* in 1854, Francois Carre the *second prix* in 1856 and then the *premier prix* the following year. There are no other prize winners for the valved horn listed during these years. Meifred composed the set piece used for each of the valve horn examination recitals between the years 1846 and 1863.
Figure 2.20: Camille Saint-Saëns, *Morceau de Concert* Op.94, *Adagio*, mm. 137-168.\textsuperscript{166}

Figure 2.21: Camille Saint-Saëns, *Andante* for Horn and Organ, mm. 1-25.

There are surprisingly few horn solos from the nineteenth century that are regularly performed today, with the exception of those already discussed and much later compositions such as the *Larghetto* for Horn and Orchestra Op. post. Composed by Emmanuel Chabrier (1841-1894) in 1875 and the *Rêverie* for Horn and Piano Op.24, composed in 1890 by Alexander Glazunov (1865-1936). There are however a large number of other works worthy of study and performance, including several works by Bernhard Eduard Müller (1842-1920), the *Sonate en la mineur pour Cor et Piano* by Henri Kling,¹⁶⁷ the *Concerto per Corno e Orchestra da camera* by Saverio Raffaele Mercadante (1795-1870)¹⁶⁸ and the *Fantasie Heroique* for Horn and Piano Op.25 by Heinrich Gottwald (1821-1876).¹⁶⁹

The German pianist, conductor and composer Carl Heinrich Carsten Reinecke (1824-1910) was based in Leipzig during the later part of his life, conducting the Gewandhaus Orchestra from 1860 until 1895. He also taught piano and composition at the conservatory from 1865 through until 1897 when he accepted the position of director at the institution, a position which he held until 1902. Reinecke is best known for his piano compositions, however he also composed several interesting solo and chamber works for the horn, most notable amongst them being the *Notturno* for Horn and Piano Op.112 and the Trio for Oboe, Horn and Piano Op.188 from 1887.¹⁷⁰


¹⁶⁹ Heinrich Gottwald, *Fantasie Heroique for Horn and Piano* Op.25 (Boston, MA: Cundy-Bettoney, n.d.). Gottwald is also represented through the inclusion of his *Tyroler Jagdscene für Horn mit Pianoforte* Op.32, composed c.1886 in the recently released volume: *The Romantic Album for Horn and Piano* Ed. William Melton (Aachen: Edition Ebenos, 2014). This volume contains sixteen works that were composed between the years 1860 and 1905, all of which are by different composers. Amongst these other works, it includes compositions by the German composers Salomon Jadassohn (1831-1902) and Nicolai von Wilm (1834-1911), as well as the *Moment triste pour Corno in F avec accompagnement de Piano* Op.8, No.3 composed by the Russian composer Vladimir Ivanovich Rebikov (1866-1920) around the year 1902.

Another composer of interest is the relatively unknown Carl Matys (1835-1908), known for his cello compositions. Matys also composed four concerti for the valved horn in F, all of which were initially published by Schott in Mainz with the opus numbers 12, 24, 39 and 44 (see Figure 2.22). These works are now available through Hans Pizka, who recommends them highly as Romantic showpieces for the horn, which demonstrate all of the best qualities of the instrument whilst remaining accessible.\textsuperscript{171}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure22.png}
\caption{Karl Matys, Concerto for Horn and Orchestra No.4 Op.44, Movement I. \textit{Allegro ma non troppo}, mm. 1-70.\textsuperscript{172}}
\end{figure}

In addition to the concerti, Matys also composed \textit{Zwei Salonstücke für Waldhorn mit Begleitung des Pianoforte} Op.15, where the first movement \textit{Romance} is followed by a lyrical \textit{Gondellied}.

Both of these works (in addition to Gounod’s \textit{Six Melodies} and Schumann’s \textit{Adagio and Allegro} Op.70) are included on the recording: \textit{Chamber Music for Horn}, James Sommerville with Rena Sharon and James Mason, Marquis Classics MAR 157, 1994.
\textsuperscript{171} Private correspondence with Hans Pizka 18/11/2013.
\textsuperscript{172} Karl Matys, \textit{Concerto for Horn and Orchestra No.4 Op.44} (Mainz: Schott, n.d.)
Another work of note is by the Bohemian composer and violinist Johann Wenzel Kalliwoda (1801-1866), who was a highly regarded performer in central Europe during the first half of the nineteenth century. Even after he accepted the position of Kapellmeister at the court of Prince Karl Egon II von Fürstenberg in Donaueschingen his concert tours continued, with Kalliwoda performing on a Stradivarius violin given to him by his employer. During his years of service at the court, Kalliwoda was also very active as a composer, composing some 450 works. Amongst his most popular works were seven symphonies, which were composed between 1825 and 1843, in which Kalliwoda’s Classical themes, structures and textures are combined with highly Romantic orchestration. These traits are evident in the Introduction et Rondo pour le Cor de chasse ou le Cor chromatique avec accompagnement d’Orchestre Op.51 where the orchestration of the original version for strings and woodwinds is both dramatic and colourful, often featuring the wind instruments in solo passages and duets with the solo horn.

176 The original orchestration consists of two flutes, two clarinets, two bassoons and strings.
The work was composed in 1834, making it relatively early in the development of valved instruments, and therefore Kalliwoda included two versions of the solo part; one for valved horn and one for the natural horn. The major difference between the two versions is the inclusion of slightly more chromatic ornamentation in the valve horn part, as well as arpeggiated figures that are extended into the octave below middle c’ (see Figure 2.23). Ultimately the thematic material in this short yet challenging piece is very traditional and characteristic of natural horn compositions, albeit pushing the boundaries of technique, and so it is unfortunate that the work is not better known amongst horn players and more frequently performed.

Figure 2.23: Johann Wenzel Kalliwoda Ed. Kaucky, Introduction et Rondo pour le Cor de chasse ou le Cor chromatique avec accompagnement d’Orchestre Op.51, mm. 1-20.
The renowned French composer and theorist Hector Berlioz (1803-1869) was quite traditional in his use of the horn, preferring the natural instrument in both orchestral and chamber music settings. He was also responsible for what is perhaps the most notable of all orchestration texts is his *Treatise on Instrumentation,*\(^\text{177}\) which was later updated by Richard Strauss. In the section regarding the horn Berlioz initially discusses the natural instrument and includes a lot of insightful information in the text regarding the harmonic series, the division into high and low horns, on using horns pitched in different keys and also the fact that the mouthpiece and key of the horn being used makes a huge difference to the available range.\(^\text{178}\) He then moves on to the valve horn, a system which offers “great advantages, especially for the second horns, by filling in the great gaps between their low natural tones”\(^\text{179}\) Berlioz first attempts to give an indication as to the quality of the notes throughout the entire range of the instrument and makes a brief acoustical argument for the effective use of the lower pitches, essentially warning about the delay in producing the slower vibration within the air column. The range for the valve horn is suggested as the same as that of the natural horn, with the valve mechanism being used to obtain the notes below the second harmonic.\(^\text{180}\) In his ‘additions,’ Strauss makes a point of saying that the development of the valve horn is one of the most important developments in the modern orchestra, with its blending properties and the versatility of tone, the horn is capable of expressing numerous characters and fulfilling a multitude of roles within the ensemble.\(^\text{181}\)


\(^{178}\) For horn in F, Berlioz gives the first horn range as middle c’ up to high c’’’, and the second horn a range from low G (a factitious tone) to high e’’, so overall the range of the instrument covers harmonics two through to sixteen.


\(^{180}\) “We know from Berlioz’ Memoirs that he was acquainted with Meifred as well as with Lewy.” Andrew Clarke, “The Heyday of the Hand Horn and the Birth of the Valved Horn: A Study of the 19th-Century Technique as Revealed in the Solo Works for Horn by Carl Czerny,” 119. For further information refer to: John Ericson, “Berlioz on the Valved Horn” *Horn Articles Online*, Accessed 11/05/2013. Available at: http://www.public.asu.edu/~jqeric/articles_online.htm


It was in fact one of the three points highlighted by Strauss in his introduction; that the use of the valve horn was a key point in Wagner’s superiority in orchestration. Hector Berlioz, *Treatise on Instrumentation* Ed. Richard Strauss, II.
Unfortunately the orchestration and composition text books rarely give encouragement to composers in writing for the horn’s lower register, often describing it as being ineffective, indistinct, dark, softer and lacking in brilliance, power and projection compared to the middle and upper registers and therefore suitable only for long notes. In his book *The Technique of Orchestration*, Kent Kennan (1913-2003) describes the lower register as:

Inclined to be a bit unsolid in quality, somewhat lacking in focus, and often doubtful in intonation. This register is used chiefly for sustained tones; melodic passages at this level are generally awkward and ineffective.

The horn’s full range when pitched in F is usually given as extending from low F# (factitious tone or lowest possible note on a standard F horn with three valves) upwards to high c’’’ (harmonic sixteen), but a note is always made that the actual working compass is much smaller, often suggested as being from low c up to high g’’. Occasionally this is further broken down to include suggestions for elementary and high school students, or amateur ranges. If the pedal tones (fundamentals) that are readily available on the B flat horn are mentioned at all, they are usually discounted as rarely being used and having little practical value. Bass clef is nearly always discussed, however it too is often deemed as an unnecessary complication due to the confusion between old and new notation and the fact that the horn is rarely required to play technical passages down so low that it is actually required. The use of mutes and hand stopping as well as multiple tonguing is usually discouraged below middle c’ or low g.

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182 As in Alfred Blatter, *Instrumentation and Orchestration* (Belmont, CA: Schirmer, 1997); Gary White, *Instrumental Arranging* (Dubuque, IA: Brown & Benchmark, 1992); etc.
184 As in Alfred Blatter, *Instrumentation and Orchestration*; Kent Kennan, *The Technique of Orchestration*.
185 Kent Kennan, *The Technique of Orchestration*. In the revised edition with Donald Grantham this phrase is changed to “seldom been exploited.”
Of the more modern texts, *The Study of Orchestration* by Samuel Adler (b.1928) provides a good introduction to brass instruments and their capabilities before moving on to the history of the horn and its techniques, including the harmonic series and hand stopping, crooks, valves and transpositions. The range of the valve horn is given as pedal D up to high c‴, however these lower pedal notes available from the B flat horn are described as “hard to control and most effectively used in sustained or slow moving passages.”\(^{186}\) Whilst the practice of writing for high and low horns is maintained and encouraged, Adler does not make any range suggestions in the valve horn section of the text. He describes the tone between middle c’ and low g as being deep and solid, with the remainder of the octave being dark and a bit unfocussed.\(^{187}\)

In his book *Orchestration*, Walter Piston (1894-1976) highlights the tradition of horn players specialising and either playing high or low parts and that historically the lower horns were regarded as having superior tone and were favoured for important parts. He also briefly mentions the use of factitious tones on the natural horn and discusses bass clef, stopping, trills and glissandi as well as warning composers against requiring fast articulation in the lower register. For the modern valve horn in F the range is suggested as pedal D through to the high c‴. The “most comfortable harmonic range is from the third or fourth harmonic to about the twelfth.”\(^{188}\) Composers are advised to double soft notes in the extreme low register as in Mahler’s first symphony\(^{189}\) for added steadiness and tone quality without necessarily more volume. Although the separation into high and low horns continues, Piston suggests that all players can play throughout the entire range and that the

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\(^{189}\) Mahler Symphony No.1 in D Major ‘Titan.’ Low phrases and sustained chords are often doubled, most notable is the excerpt that is often taken from the third movement of the work, between figures 13 and 15 where horns two, four and seven have the thematic material.
low horns “may be taken up to the top of the horn range occasionally,” particularly when doubling.  

Another fairly standard orchestration text is *Orchestral Technique* by Gordon Jacob (1895-1984), where the author recommends the use of horns in pairs, with the 1st horn “rarely” going below middle c’ and the 2nd horn “rarely” going above d’’ in the stave, due to the different embouchures required. He gives the full range of the instrument as being low F# up to high c’’’, but with the normal working compass of low c up to high g’’. Below g the student is advised to “write only long holding notes. Moving parts low down in the horn’s compass are ineffective.”

The book *Horn Technique* by Gunther Schuller (b.1925) includes a chapter titled *Some notes for Composers and Conductors* where the horn’s range and playing techniques are discussed further. In regards to the lower register it is Schuller’s opinion that it is a facet “greatly overused by composers” as below the stave the horn loses its “true horn colour and its unusual carrying power.” Below a written low e “the composer is advised to avoid using the horn altogether, except for sustained notes or special effects,” and he also describes the octave above as being “slightly unwieldy and colourless.” Schuller justifies this opinion by stating that acoustically the notes take longer to ‘speak’ and lack projection, and also that the embouchure movements required are larger and therefore take more time to accomplish.

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Clearly this opinion, that the lower register of the horn is not worthy of technically challenging lines or melodic solo writing is not newly formed, and has unfortunately been reiterated numerous times. In many of the orchestration manuals and composition text books of the twentieth century it seems many of the authors were unaware of the horn’s true potential, apparently lacking the knowledge of techniques that were included in nineteenth century treatises for the instrument and were in every day use, as well as failing to grasp the developments that were being made to the instrument with the addition of valves. The lower register is rarely praised in these texts, if it is considered at all. One can only hope that in the future more composers are encouraged to explore this facet of technique and extend the solo repertoire beyond the works we currently enjoy, those which demonstrate the horn’s noble character in the middle and upper registers.196

Chapter 3 - Technical Considerations

There are many factors that influence a horn player’s suitability for and effectiveness when playing in the lower register. Physiological factors such as the shape and volume of the lips, teeth formation and relative jaw positions obviously play a huge role in the formation of the embouchure and whether it is best suited to a particular range of the instrument, and therefore where a player’s natural strengths will exist. Having said that, many fine high horn players started out as low horn players, and the reverse is equally true, so these can not be considered a limiting factor. Playing any wind instrument also requires good control over breathing and blowing, especially in maintaining a solid support of the air column as it passes along what is hopefully a mostly unobstructed course from the lungs through the larynx and oral cavity to the embouchure and thence to the instrument. Other factors including equipment choices and mental approaches are also discussed in this chapter in specific regard to playing in the lower register, as well as some ideas for practicing, learning and developing the necessary skills and the pedagogical resources currently available.

Horns

The materials and design of manufacture will obviously have a huge impact on the way an instrument plays and sounds, however within the broader similarities of a single make and model, every horn will also have its own individual characteristics and some horns may indeed be better suited to playing in the upper or lower registers than others. If there were a general consensus amongst horn players it would likely be that open, ‘free blowing’ horns will respond better in the low register, whether this is achieved through the
basic design, a larger bell flare or a larger overall bore.\(^1\) Given the personal nature of playing the horn it is foolish to think that the same thing will work for everyone, and many other factors must be considered when choosing an instrument for a more advanced student of the horn, including their style of playing and desired tone as well as their involvement in ensembles and the makeup of these, any associated traditions and the actual physical strength and size of the player, their lungs and their hand which must be able to adequately stop the bell. These factors will determine what is necessary, what is desired, and what is practical.

The benefits that are found in having students learn and play on the F side of the horn have been documented numerous times, and most notably include developing a good tonal concept of the instrument and understanding how to control the air through the longer horn, as well as in pitching and developing agility over the closer notes of the F horn’s harmonic series. Sometimes, especially with younger students, this is achieved on a single F horn or compensating model as opposed to the standard double horn to reduce any weight issues. Regardless of the instrument at hand it should never be considered as a limiting factor that prevents the student from working on the necessary technique to play throughout the low register or in developing these hugely important skills.\(^2\)

**Mouthpieces**

As discussed in chapter one, in the early eighteenth century when the horn was making its way into the orchestra, horn players were being classified as either high ‘cor alto’ or low ‘cor basse’ players. In several of the early treatises produced at the Paris


\(^2\) The lowest notes of the horn’s range are known as ‘pedal’ notes. They are the fundamental pitches from each of the harmonic series available and therefore most readily available on the higher pitched B flat horn, which results in pedal F to C. These notes are actually unplayable on a single F horn with the exception of pedal C, which is the first fundamental of the F side of the horn. Similarly there is a small section of the range that is impossible to play on the single B flat horn, extending from low b flat down to F#. 134
Conservatoire the difference between these two types of player was not based entirely on technique but also on the choice of mouthpiece, with cor basse players using a mouthpiece with a slightly wider diameter. Several of the early treatises, including those by Domnich, Duvernay and Gallay include diagrams or measurements for mouthpieces that are considered suitable for the two types of player.\(^3\) In his *Method de cor alto et cor basse*, Dauprat even goes so far as to say that the only difference between the two types of player is this choice of mouthpiece, but having made the choice there is no going back.\(^4\) Switching between mouthpieces of differing diameter would obviously cause some uncertainty in the feel and response of the embouchure and have a negative effect on playing, so this is generally not attempted by horn players.\(^5\)

Due to the expanded range and general expectations that are placed on horn players today, the approach of choosing specialised equipment that favours one end of the register or the other is not really acceptable for everyday use, and therefore somewhat of a compromise must instead be suggested. Today most horns come supplied with a ‘standard’ mouthpiece of average diameter and although these standard mouthpieces do not take a student’s physical attributes into account, which is a key aspect in choosing a mouthpiece,\(^6\) they do provide a good starting point. An experienced teacher’s opinion should be sought before moving away from one of these standard mouthpieces, as well as referring to reference books such as Gunther Schuller’s *Horn Technique* and Philip Farkas’ *The Art of French Horn Playing* for further information.\(^7\) As Philip Farkas suggests:

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\(^3\) See Chapter 1.
\(^5\) Domnich states that “it has already been said that it is impossible for the same player to play all the notes of the horn from the low register to the high register using only one mouthpiece. It is equally impossible for him to use in turn two mouthpieces of different diameters.” Heinrich Domnich, *Methode de Premiere et de Second Cor* Ed. Hans Pizka, trans. Darryl Poulsen, 9.
\(^6\) Lips, teeth, jaw and facial musculature will all have some influence on the formation of the embouchure and suitability of the chosen mouthpiece.
While we try to find the best mouthpiece for our individual physical requirements, we have an unchangeable factor in the horn. No matter what sort of freak mouthpiece we may be tempted to use, we must keep within the bounds of what is good for the instrument: proper response, characteristic tone, and good intonation.\(^8\)

The search for the ‘perfect’ mouthpiece can be a long and frustrating procedure as any mouthpiece that encourages one aspect of playing will tend to have a negative effect on another, so that the ‘ideal’ or at least the most practical mouthpiece is by necessity a compromise. The aim of this compromise should be to find a balance between the physical and musical requirements of the player,\(^9\) to find something that feels comfortable on the face, allows for good endurance and as much flexibility in tone, style and technique as possible. The following properties of the horn’s mouthpiece can be experimented with in an attempt to aid the lower register:

1. The width of the inner diameter
2. The depth of the cup
3. The shape of the cup
4. The bore and backbore

Ideally, the width of the mouthpiece is predetermined by the player’s physical characteristics in terms of comfortable placement on the face and in achieving the standard 2/3 to 1/3 ratio between the upper and lower lips when the embouchure is formed. However, if the low register is problematic then moving to a mouthpiece with a slightly larger diameter will certainly aid in the production of lower notes. A mouthpiece with a

\(^9\) Gunther Schuller, *Horn Technique*, 3.
deeper cup will also encourage the lower notes, as will a more traditional ‘funnel’ shaped design, but again by altering the depth or shape to favour the low notes the ease of obtaining higher notes will necessarily be compromised. The bore and backbore are closely linked to the cup depth and design, and whilst a more open and ‘free blowing’ mouthpiece can aid in the response and the volume produced,\textsuperscript{10} it will require more air to be used, and this in turn can become an issue when the player is required to sustain low notes or play quietly. If the bore’s width exceeds a certain point the tone will also tend to spread and become airy, resulting in a lack of weight and penetration and making it of far less value.\textsuperscript{11} Gunther Schuller sums it up by stating that a large bore “makes for a fatter tuba-like sound that easily loses concentration, tonal purity and therefore projection.”\textsuperscript{12} Given the less projecting nature of low pitches, this is clearly of limited benefit. Some professionals will recommend ‘drilling out’ a mouthpiece to increase its bore as this can aid in tone production and also reduce resistance, whilst others maintain that this practice is usually of very limited benefit given the research and development that has gone into creating the original design. Altering any one of these components of the mouthpiece will have some effect on its feel, its response and on the tone being produced. Needless to say that with so many different combinations available and tiny variations possible, the quest to find that ‘perfect’ mouthpiece is quite a formidable one. Gunther Schuller warns that “the truth of the matter is that there is no mouthpiece that is going to solve all of one’s problems. Only practise and perseverance can accomplish that.”\textsuperscript{13} Similarly, Philip Farkas has recommended that “it would be far better to spend the time, too often dissipated in hunting a cure-all mouthpiece, for practising and correcting embouchure faults.”\textsuperscript{14}

\textsuperscript{10} Created through a wider bore and flaring backbore.
\textsuperscript{11} Philip Farkas, \textit{The Art of French Horn Playing}, 4.
\textsuperscript{12} Gunther Schuller, \textit{Horn Technique}, 6.
\textsuperscript{13} Gunther Schuller, \textit{Horn Technique}, 6.
\textsuperscript{14} Philip Farkas \textit{The Art of French Horn Playing}, 5.
Embouchure

The vast majority of brass pedagogues agree that the ideal placement of the mouthpiece is centred horizontally, however unlike the other brass instruments, when playing the horn, musicians tend to favour the ratio of 2/3 to 1/3 between the upper and lower lips in the embouchure's formation as well as a slight downward angle rather than holding the instrument so that the mouthpiece is perpendicular to the face. The corners of the mouth are crucial in the formation of the embouchure, ensuring that the lips are not too ‘stretched’ or too ‘puckered,’ and the chin should not ‘bunch up’ but remain down and flat. In his method titled *Playing the Horn: A Practical Guide*, Barry Tuckwell states:

The correct embouchure is that which enables one to resonate all the harmonics of the horn without having to change the position of the mouthpiece on the lips at all. Only experiment will enable one to find this position, but care should be taken to avoid any freak contortions, and above all the mouthpiece should not be used as a crutch.

From this basic position it sometimes appears as though the approach, or perhaps more correctly the explanation given to students when attempting to play in the lower register is one of ‘relaxing’ the embouchure, which is often implemented to a point where the embouchure loses its basic structure and clearly this should not be encouraged. Although the embouchure will need to open up in order to achieve a full tone in the lower register, this is predominantly achieved within the mouthpiece, and therefore the muscles

15 Many horn players and teachers use somewhat of an ‘anchor’ mentality when placing the mouthpiece upon the lips, attempting to return it to an identical position and angle every time, however slight variations in the positioning of the mouthpiece are acknowledged as providing some respite to the muscles at the centre of the embouchure and worth considering if endurance is an issue. Much useful information on embouchure formation can be found in Gunther Schuller’s *Horn Technique*.

16 Excessive puckering of the lips is as detrimental in the low register as an overly stretched or ‘smiling’ embouchure is in the upper register. Refer to the Chapter 5 – Embouchure in Philip Farkas’ *The Art of French Horn Playing*.


18 Also discussed in private conversation with Julian Baker, 09/07/2013.
forming the corners of the embouchure should maintain both their form and firmness throughout the lower register. The cheeks should not be allowed to ‘puff out,’ no air should escape through the corners of the embouchure, and the chin should stay down and flat as this will allow for a solid, centred and unwavering tone at all dynamic levels.

These three points of reference, both corners of the mouth and the point of the chin, form a triangle that clearly displays correct technique.

‘The Break’

The only complication in this approach is ‘the break,’ which can be found in the embouchure of most horn players, and considering that the instrument has a working range of over four octaves a break is to be expected. The break is usually found somewhere between middle c’ and f below, and put simply, this is the point at which the embouchure is forced to undergo a change so as to continue producing a useable buzz. It may require a small or large movement, the aim when playing the horn is to minimise its impact on the resulting music, to move through the break as seamlessly and discreetly as possible. It is largely due to the difficulties students face when playing around the break, and the lack of specialised teaching resources available that deal with it, that has led to the composition and publication of new resources for ‘low horn’ by horn teachers in recent years.

21 This ‘triangle’ description is advocated by Sarah Willis.
22 In the first newsletter from Frank Lloyd, he suggests that the higher you go through the embouchure ‘break’ the more likely you are to be suited to playing low. However he mentions that this is only a generalisation “as there are many different embouchures, and many different physical factors, which decide in the end where your strengths are.” Frank Lloyd, *Newsletter 1, 09/08/2012*.
23 Douglas Hill and Randy Gardner refer to it as ‘the shift’ in their books. I prefer this label as it seems to more clearly indicate a physical action, and also feels more positive than ‘the break’ which implies a problematic or incomplete aspect of technique. However, I will continue to use the more widely accepted designation of ‘the break’ in this text.
24 Discussed later in this chapter.
There are several resources that recommend approaches to dealing with the break and ways to minimise its impact on playing. The player usually achieves this through the combined efforts of trying to play lower on the ‘high’ setting and higher on the ‘low’ setting until the actual point of the physical shift becomes somewhat variable and controllable. Having a flexible ‘break point’ allows for improved agility in the break register as alternating between the two settings occurs less frequently. Once this adaptation has occurred, the motion used to navigate the break becomes less of an issue, and instead becomes a useful tool in judging and executing the rapid leaps over wide intervals typical of traditional cor basse writing. This is a skill that can easily be developed through mixed interval exercises, as well as through flexibility drills covering the lower parts of the harmonic series (i.e. between harmonics two and six).

In her book *Thoughts on Playing the Horn Well*, Frøydis Ree Wekre offers two theories on the embouchure in the break register, and lists the benefits that can be realised through each approach. The first, aiming for one position and one set amount of muscle tension whilst only making minimal changes is said to provide a more solid base to work from, which should translate into the improved accuracy of both pitch and articulations. The second method however is essentially doing whatever is necessary to make things work. This should allow for greater endurance as the muscles have more varied uses, and would also translate into increased flexibility and a greater variety of available sounds. I do not think that these two theories are dissimilar, practically speaking, but more so in the eye

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25 The reason that many horn teachers use the Kopprasch etudes played an octave lower than written or use a transposition to take them lower than written is because they then deal with this break register and require the same agility as found in the more comfortable middle register. Forty-seven Kopprasch etudes are now available transposed into this lower register and using both old and new notation in: Georg Kopprasch, *Kopprasch Down Under* Ed. Corbin Wagner (East Lansing, MI: Cornopub, 2013). Randy Gardner also advises that various teachers also recommend playing them at loud dynamic in this lower register or entirely hand stopped in the resources section of his fantastic book *Mastering the Horn’s Low Register*, which is a highly recommend book for all horn players, as it contains a wealth of information and exercises.


27 This is the method most often recommended in horn and brass tutors.
of the observer. Although less movement is certainly preferable, somewhat of a compromise method is required. Rather than ‘relaxing’ the embouchure to play in the low register or manipulating it to get some semblance of a buzz, I believe that the standard ‘correct’ embouchure structure should be maintained as much as possible, especially regarding the corners as previously mentioned. The lower frequency vibrations necessary in the lips to create lower pitches can then be achieved through careful control of the air in combination with moving the jaw down and forwards. The aim of this is to enlarge the aperture at the centre of the embouchure as well as the oral cavity. This gradual jaw movement should be done as smoothly and discreetly as possible whilst descending through the instrument’s range, not at a certain ‘shift point’ and preferably without the performance of any unnecessary movements. Ideally this movement should be effortless and more of an instinctive adjustment than a preconceived strategy. If the embouchure is not being required to make any substantial adjustments between notes then surely the accuracy and agility required for rapid leaps and wide intervals should be enhanced. As Barry Tuckwell states in his method Playing the Horn: A Practical Guide, “a two-embouchure technique is obviously defective: there are so many passages in the repertoire that slur over three octaves.” As previously mentioned, the break is to be found in some size, shape or form in almost all horn players’ embouchures and is not an issue as long as it has the smallest negative impact on playing as possible. Everyone is slightly different, and if it isn’t broken, don’t fix it.

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28 All players need to work on accuracy, stamina, agility etc. regardless of their embouchure setup.
29 Playing high feels less natural to me, I had to work at it, and my embouchure certainly functions slightly differently above the stave, so personally I find that I need to start moving the jaw well above middle c in order to achieve a seamless progression into the lower register and maintain just intonation if I have previously been playing significantly higher in the instruments range. It is however very important to remember not to do too much too soon, so as to leave some room to move further down in the instrument’s range. See Bending.
31 An idea related in several resources, such as: Frank Lloyd, Newsletter 1, 09/08/2012; Fergus McWilliams, Blow Your Own Horn (Ontario, Canada: Mosaic Press, 2011); Frøydis Ree Wekre, Thoughts on Playing the Horn Well.
Due to the expansive range and relatively small size of the mouthpiece there are some further techniques that have been developed by horn players to assist with playing in the lower register. The first requires changing this angle between the horn and the player, known as a ‘pivot.’ The theory here is that through raising the body of the horn and playing with the angle more towards the perpendicular, the pressure being placed on the lower lip is reduced and through this the lower register is aided. This pivot action becomes part of the physical shift required to bypass the break. Gunther Schuller also discusses the direction of the air stream in his book *Horn Technique*, suggesting quite correctly that it is an aspect of tone production “seldom discussed or taught.” Essentially Schuller’s idea is that for high notes the air stream is directed down into the wall of the mouthpiece, whilst for a low pitch it is directed more horizontally, deeper into the cup and closer towards the bore. Hill also summarises this technique in his “Detailed Checklist for the Low Register:”

Allow for a very gradual ascending of the air-stream through the aperture, feeling as if it is going straighter into the mouthpiece around middle c’ and moving upward as you descend into the second octave. The air stream continues to ascend to more of an extreme in the first octave especially into the lowest fundamentals.

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32 Perhaps more accurately: done to prevent a significant increase in pressure on the lower lip being caused by the movement of the jaw forward, or to maintain even levels of pressure as suggested in Douglas Hill’s *Low Range for the Horn Player*, 2. Although the amount of pressure being used in normal playing (even without implementing this pivot system) is variable, I feel that suggesting it as a method for navigating the instruments range is a dangerous path and believe that all brass teachers would certainly agree that playing with excessive pressure is dangerous long term. Randy Gardner also briefly discusses the pivot, stating that “a subtle pivot placing slightly more upper lip in contact with the mouthpiece is beneficial to quality sound production in the low register.” Randy Gardner, *Mastering the Horn’s Low Register*, 17.

33 Douglas Hill, *Low Range for the Horn Player*, 10. I was not taught using this method, and having witnessed it numerous times (often with quite extreme movements between relatively close pitches) question its benefit.

34 Gunther Schuller, *Horn Technique*, 21.

35 Also discussed in private conversation with Julian Baker, 09/07/2013.

On some level I feel that these two methods of ‘production’ are in essence just alternate ways to describe or achieve the physical shifts happening within the embouchure, but if they achieve the desired outcomes then their use should not be discouraged. This should remove the need for any repositioning of the mouthpiece or further disturbances to the embouchure such as ‘curling’ or ‘rolling’ of the lower lip outwards.37

**Buzzing**

Buzzing can be a somewhat controversial part of the warm up and practice routine, whether it is done with or without the mouthpiece or through the use of a specialised practice aid, several of which are now available.38 The most important piece of guidance that can be given for buzzing work is that the approach should remain the same as when playing the instrument, especially regarding the management of air.39 When this is remembered there are some benefits to be found in buzzing for all players, even though it is somewhat different in nature to playing the actual instrument.

Buzzing is also a very useful tool in developing and strengthening the embouchure in the lower register. Without the use of valves to lower the pitch of the note being produced, buzzing requires the embouchure to work,40 and when practised in front of a mirror the player receives instant visual feedback on the movements taking place in the embouchure as well as audible feedback as to the quality of the buzz being produced. Long tones and simple slurs covering smaller intervals can be used to enlarge the range in which buzzing feels comfortable at first, and then to push the limits of what is possible. As the agility and range improve larger intervals become a more practical option. The aim of

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37 Discouraged in several sources.
39 Breathe, support and exhale properly. Always listen to the tone that is being produced, as a full, rich buzz will be amplified through the horn into a beautiful big sound. Refer to *Air, Support and Tone*.
40 These are relatively small adjustments, but are perhaps something that we take a little for granted with the modern mechanism of descending valves.
these exercises should always be for the minimal amount of physical movement between the upper and lower notes, and to glide as smoothly as possible across the break between the middle and lower registers. Ideally they should be done as part of the warm up routine first thing in the day to help loosen the muscles of the embouchure before moving on to more demanding exercises.

**Bending**

During the research stage of this project, while teachers and performers were being interviewed regarding their approaches to playing in the low register, Julian Baker made some particularly insightful comments regarding his methodology.\(^{41}\) Inspired by the Swedish trumpeter Håkan Hardenberger (b.1961),\(^ {42}\) primarily this ‘bending’ approach is focussed around developing control of the aperture and building up its strength and flexibility. The muscles located within the mouthpiece are required to make minute changes\(^ {43}\) that in addition to changes in the oral cavity allow the pitch of any note to be bent in either direction, to some extent, before it flicks over to the next note of the harmonic series. The embouchure as a whole, and especially the corners and the jaw, should hardly move. If this technique is worked on, the fourth harmonic of the F horn (written middle c’) can be bent down as low as a b flat before it changes to the third harmonic (written g). The lower harmonic can be produced with basically the same embouchure setting as the higher harmonic. In a similar fashion, this g can then be bent

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42 Renowned trumpet soloist and conductor Hardenberger “began studying the trumpet at the age of eight with Bo Nilsson in Malmö and continued his studies at the Paris Conservatoire with Pierre Thibaud and in Los Angeles with Thomas Stevens.” Håkan Hardenberger website, accessed 15/07/2013. Available at: http://www.hakanhardenberger.com/site/biography.html
43 Aperture becomes more open/more circular, at least imaginarily, with the tongue and jaw falling naturally! Private conversation with Julian Baker, 09/07/2013.
down to a low e before it changes over to the second harmonic low c.\textsuperscript{44} If this can be achieved without significantly altering the embouchure then essentially the lower octave c is being produced on what is, more or less, the same embouchure as the middle c’ was.\textsuperscript{45}

The only way to do the ‘bending down’ successfully is don’t slur immediately to the pitch you think you can reach, and then see if it gets better. Rather, keep the air going (either consistently or actually increasing) and go through every fraction of every semitone on the way to the lowest pitch you can get to. Each semitone (in a piano-tuner’s equal temperament) consists of 100 cents, and one should try to use every one! And never let the pitch slip onto the harmonic below, which shows a lack of control. That way we get our lip both stronger and more flexible, with the least possible movement.\textsuperscript{46}

If the basic ‘correct’ embouchure can be maintained this far down in the register, then the remaining octave can be achieved using some of the techniques already discussed such as jaw movement, and the production of pedal tones becomes quite straightforward.

Being able to play effectively and fluently down through the pedal notes (at least on the Bb side of the horn) serves as a strong indication that you have done as little as necessary in the second octave, and have saved room inside your oral cavity, not overdone the pivot, and kept your embouchure/aperture firm and available for effective slower vibrations.\textsuperscript{47}

\textsuperscript{44} As was written in numerous works for the natural horn, where it was produced in combination by lip, air and some hand movement. This technique is similar to the production of factitious tones discussed earlier; indeed the low c can be bent down to low F#.

\textsuperscript{45} “The same exercise can just as well be done on the B flat side. In fact you have, on a double horn, 12 different ‘open’ fingerings on which to do flexibility and bending exercises.” Private conversation with Julian Baker, 09/07/2013.

\textsuperscript{46} Private conversation with Julian Baker, 09/07/2013.

\textsuperscript{47} Douglas Hill, \textit{Low Range for the Horn Player}, 18.
**Air, Support and Tone**

The traditional cor basse players were always favoured above their cor alto counterparts for their tone. It is widely accepted amongst horn players that this was due to the more highly developed hand stopping technique that they required and cultivated, but perhaps this was also in combination with an inclination to use the slower and warmer air stream that is used when playing in the low register much higher in the instrument’s range as well. This slow, warm air generates a rich, full and generally darker tone.\(^{48}\) It is also quite an uncomplicated approach for teaching the differences in air pressure and speed that are required in the different registers to students; that for low playing warm slow air is used as if attempting to fog up a window, as opposed to using cold fast air for up higher.\(^{49}\) This slower air is the other factor in getting the lips to vibrate at the lower frequencies required to play in the lower register. The fact that the air is moving more slowly should not impact on the volume of air being used; if anything, more air will be required to sustain and support the lower pitches. Randy Gardner suggests that:

> The cornerstone for building a superior low register is the ability to fill the horn with a great volume of air that flows through the instrument under lessened pressure.\(^{50}\)

There are many fine resources specifically written for brass and wind players that horn players can access for information regarding ‘correct’ breathing technique.\(^{51}\) The basic approach should be similar to yawning when inhaling; extending the abdominal

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\(^{48}\) “Lower players generally use a slower, warmer air column, so that gets a specific sound…I think of it very vocally—rather than the directness of a soprano voice (i.e., first horn) he wants the less direct, more mellow sound from a mezzo-soprano voice (i.e., second horn).” Jean Martin, “Mahler’s Use of the Second Horn in the Ninth Symphony: A Conversation with Allen Spanjer,” *The Horn Call* 30/2 (February, 2000), 73.

\(^{49}\) Randy Gardner, *Mastering the Horn’s Low Register*, 8.

\(^{50}\) Randy Gardner, *Mastering the Horn’s Low Register*, 5.

\(^{51}\) Arnold Jacobs, Brian Frederiksen, David Brubeck, Dee Stewart etc.
muscles as well as those of the lower back outwards as this provides the lungs with much more room for expansion than ‘chest breathing’ ever could provide through expansion of just the rib cage, even in conjunction with other ‘bad habits’ such as raising the shoulders.

There is however one key component that is seemingly overlooked in most of the breathing manuals and it concerns the nature of supporting the exhalation through the abdominal muscles. These muscle groups provide the control in exhalation that cannot be provided by the diaphragm or indeed the lungs themselves as these function involuntarily. Maintaining a solid support as low as possible in the abdominal muscles is preferable as it provides greater control and helps facilitate a full, well-rounded tone, and in the extreme lower register this low support is especially necessary. As the air supply is depleted, or having ascended into the middle and upper registers, the abdominal muscles have the ability to exert additional pressure on the air and maintain or increase its speed. The ‘support level’ also has the ability to rise if necessary to provide greater control, and allows for the ‘kick’ motion often used in fortepiano attacks and in leaping into the higher register. The other side of this technique, which appears to be far less prevalent, is of course that by reversing the procedure and expanding or ‘dropping’ the level of support to be seated lower in the abdominal cavity, the air speed and pressure are reduced. This can assist rapid movement into the lower register when combined with the physical aspects associated with the embouchure, such as moving the jaw. Douglas Hill suggests that “as

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54 This leaves the throat as the only point of resistance before the embouchure itself that is under our control and capable of changing the air speed and volume passing through it and ‘feeding’ the embouchure. Attempting to manipulate the air through the throat is ill advised for both physical and musical reasons, as ‘choking up’ or using unnecessary tension in the throat will affect the tone negatively, and playing with a wide-open throat will ultimately become a limiting factor in dynamics and range. For more information I highly recommend Fergus McWilliams’ book *Blow Your Own Horn*. 
one descends, air compression lessens, it gradually slows down in speed while still requiring a substantial constancy.”

Whilst striving for a full, well-rounded tone across the entire range of the instrument it is important to guard against the fact that the low register projects less and can sound somewhat muffled. This can have a negative effect on the evenness of the notes within the phrase, the clarity of musical ideas being expressed, make the articulation quite indistinct and affect the balance within the horn section or ensemble. Although playing louder and articulating slightly more aggressively may sometimes be required to combat these issues often all that is necessary is to open the right hand in the bell a little as the pitches descend. The analogies in Gunther Schuller’s book *Horn Technique* are always enjoyable and usually quite compelling. Regarding the right hand he writes that “If breath control can be said to determine the basic inner nature, the core of a tone, the hand position can, like a garment, alter the external characteristic, the sheen of the tone.”

**Hand Position and Intonation**

As well as influencing the tone, the position of the right hand in the bell has a huge effect on the pitch of the note. Many players have the tendency to drift flatter and flatter as they move lower in the horn’s range, so by opening the hand, a very small degree of this may be mitigated. Unfortunately the longer valve combinations required to play certain notes in the lower register will always have the tendency to be sharp, so there is really no absolute method beyond constantly listening objectively to the pitch being produced and adjusting. Practising with a tuner, drone or at the piano is invaluable in developing good

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56 For further information refer to Randy Gardner’s *Mastering the Horn’s Low Register*. As he explains in the opening section of the book the perception is that if a loud sound is coming out of our bell that it will project, however this is deceiving, a centred and well-focused tone is far more powerful. In the second part of the book when discussing the preparation of orchestral excerpts he frequently recommends recording and listening to the evenness of the sound being achieved for this reason.
57 Gunther Schuller, *Horn Technique*, 15.
58 Although less so in the lower register.
intonation and really is quite necessary. Recording and listening back is also a fantastic tool as listening back and focusing only on what has been produced is far simpler than the complicated exercise of playing the horn and trying to listen to what is being produced simultaneously.59

It is crucial for the horn section to have a solid bass, so some compromise must then be reached in the low horn players mind between following the principal’s lead and at the same time laying down the firm and somewhat uncompromising foundation that they and the rest of the section need to build on.60 “Allied with good intonation is optimal balance…The human ear perceives low frequencies as being weaker than high frequencies.”61 Finding this balance is one of the true skills of the low horn player and can make the section sound quite amazing.

Not everyone has the ears to judge how well the low horn players are playing. Nonetheless, just as, without knowing exactly why, most people will prefer wine aged in oak vats over wine aged in aluminium, so will listeners unknowingly appreciate quality low horn playing as that “special something” that makes a horn section sound full bodied, balanced and special.62

The four horn section is still often required to function as two pairs of horns, with each pair consisting of a high and low player. Playing one of these low horn roles is not a ‘safe haven’ for less gifted players or those who experience difficulty in the upper register, however it does require making a genuine effort to complement the higher voice.

59 This is especially important for horn players as the sound is generally reflected off a surface, rather than direct to the audience. With modern smartphone and computer technology recording is also very feasible, as it no longer requires the purchase of expensive recording gear to get a recording adequate for study purposes.

60 Regarding sitting positions/set up and the importance of a solid 4th horn in the orchestra or band situation see: Jeffrey Powers, “Direct or Reflected? That is the Question,” The Horn Call 34/3 (May, 2004): 59-60.

61 Randy Gardner, “Performance Considerations of the Second Horn Role in Selected Works by Haydn, Mozart, and Beethoven,” The Horn Call 35/3 (May, 2005), 72.

Following the lead of a 1st horn player, when done properly, is a dignified art rather than an ignoble act of subservience. In this context the analogy with a dancing couple is very apt. The subtle nuances of movement between dancers can only come about if one partner follows the lead of the other. Though at first glance this may seem like an example of an unegalitarian master–servant relationship, the reality is quite different. Any other system would simply cause coordination conflicts that would bog down the flow of communication and of the dance itself. In order to achieve the best results both partners must be, if you will, servants of the higher goal of good dancing, or in our case, good music.63

I particularly like the description that Randy Gardner offers as the introduction to his article Performance Considerations of the Second Horn Role in Selected Works by Haydn, Mozart and Beethoven from The Horn Call, which can be viewed as a continuation of his book:

Each position in a horn section has an artistic and technical role that is unique in many aspects. An ideal second hornist is the chameleon of a section – changing colors and making instant adjustments of pitch, balance, articulation, phrasing, breathing, and more (primarily with one or two principal players) while performing the full dynamic spectrum from the low range to the high range…A skilled second hornist enhances the quality of a section leader and a horn section.64

**The B flat Horn**

Another approach that can aid intonation and projection in the low register is the use of the B flat side of the horn, although some horn players who teach students to use the F side exclusively below the stave would certainly frown upon this, and as Barry Tuckwell

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64 Randy Gardner, “Performance Considerations of the Second Horn Role in Selected Works by Haydn, Mozart, and Beethoven,” 72.
warns, “the shorter tube can be more difficult to control tonally in the middle and lower registers.” The longer valve combinations on the F side, especially those required for low c# (valves one, two and three) and d (valves one and three) are often quite sharp and uncomfortable to centre unless the music is fairly straightforward technically and in an accessible dynamic range. The longer horn is also less responsive and makes clear articulation difficult, especially when this is combined with the less projecting nature of the lower register and that a little ‘front’ to the note is often desirable. Obviously practice using these longer valve combinations in the low register will improve capabilities. However, if the B flat horn is used as a substitute in loud, fast and articulated passages, then the clarity of articulation, more immediate response and power obtainable when the note is centred and in tune, makes it a very satisfactory and perhaps even superior substitute for the F side. As John Ericson has stated:

Above all you are not breaking some great rule of horn playing to use the Bb horn in this range. Any pro would do the same, professional low horn players use more Bb horn than many audience members would ever guess. In the end it is more about how it sounds in the hall rather than being true to some perceived tradition of fingerings for the low horn.

The challenge for the player then becomes more about blending these notes from the B flat side of the instrument into the more user friendly notes being used from the F side, rather than being quite so concerned about just getting the note. Gunther Schuller also

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66 Whist discussing the way that the valves add tubing and change the fundamental pitch of the horn in his book, Gunther Schuller states: “due to the compromise construction of the double horn, both intonation and tone produced with all three valves is very poor. In fact, it is at all times advisable, for the sake of tonal purity, to use the minimum tubing necessary for a given pitch.” Gunther Schuller, *Horn Technique*, 10.
67 Also discussed with Hans Pizka, private correspondence, 18/11/2013
69 For further reading and suggested exercises aimed at evening out the tone differences between the B flat and F sides of the horn I recommend Douglas Hill’s *Low Range for the Horn Player* and Randy Gardner’s *Mastering the Horn’s Low Register*. 
recommends at least considering the B flat horn possibilities in the middle two octaves of the instrument’s range for options in intonation and tone, and states that “in the hands of the sensitive player, the theoretical ‘break’ in quality between the two sections of the double horn can easily be bridged.”

If this approach of substituting the B flat horn is taken a step further to include the playing of the low d# (valves two and three on the F horn) then the use of the F horn’s third valve and the tuning of its slide can be held in reserve specifically for the notes below low c that must be played on the F side. The slide can be positioned to give the player the best possible chance of hitting any of these notes in tune: the low A can be played using the third valve if the combination of first and second is sharp as it often can be, or the A flat (valves two and three), G (valves one and three) and F# (valves one, two and three) can be tuned as required.

**Practice**

The working range of the horn is accepted as being about four octaves and playing in the lower register is often a weakness in students, so perhaps the most important point to consider in regards to this neglected skill is the approach to teaching, practicing and learning it. Unfortunately many horn students are unable to take lessons from a specialist horn teacher, and perhaps it is a lack of knowledge amongst other brass professionals who teach the instrument that leaves this gaping hole in many a student’s technique. Another issue is that many tutors begin from middle c’ and work upwards, and that once the student has a reached a reasonable capability in this register they start playing solos and participating in ensembles where their non-existent low register is less apparent. If the student displays real talent and progresses through high school predominantly playing ‘first

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chair’ before beginning further studies at a conservatory or university, as it is often the case, it is sometimes only then that they are really tested out under the meticulous eye of a horn lecturer and the flaws in their technique become evident.\textsuperscript{71}

In the lower register, producing a strong note with solid pitch is crucial, and although this may take time and effort the only logical way to improve this basic component is through the playing of long tones and gradually descending as the embouchure strengthens and the airflow becomes more controlled.\textsuperscript{72} It is crucial that this systematic approach is carried out with a tuner or drone to ensure accurate intonation, whilst also remaining conscious of whether the desired outcome is being achieved through the correct processes.\textsuperscript{73} Some level of persistence is necessary, but as Barry Tuckwell warns “above all, whatever practice is done must be with 100 per cent. [sic.] concentration, as just to plough through a set of exercises and studies does no good and can be positively harmful.”\textsuperscript{74}

It is not just a question of whether you can hit the low notes or note (everyone can), but more a question of whether you can make them “sound.” A note only makes sense when it is played with a solid and healthy sounding core to it. A clean \textit{pp} delivery, a thunderously driving \textit{ff} attack and crisp tonguing in the lower registers are prerequisites to fine low horn playing.\textsuperscript{75}

\textsuperscript{71} Early in a horn player’s training, the targeted range might be considered to be the two octaves between \textit{g} and \textit{g''}, as this is certainly where the majority of methods and intermediate studies are situated within the range. If this were extended towards three octaves, I expect far more students would be approaching \textit{c} to \textit{c'''}, rather than developing the notes of the horn’s lowest octave.

\textsuperscript{72} On practicing long notes: “Each note should be held for around 10 seconds, beginning as softly as possible with an immediate crescendo to as loud as possible, then an immediate and somewhat longer diminuendo to as soft as possible. The tone should be steady and even and the pitch should not fluctuate. Always try to maintain a beautiful sound at all times. (Long notes are tiring and care should be taken not to play beyond certain limits.) If at all possible, every note from pedal \textit{F} to top \textit{C} should be played each day, but if undue strain is felt it may be a good idea to curtail this exercise.” Barry Tuckwell, \textit{Playing the Horn: A Practical Guide}, 32. Playing long tones using only breath attacks is also greatly beneficial.

\textsuperscript{73} A recurring theme during my lessons with Andrew Bain, currently Principal Horn with the Los Angeles Philharmonic.

\textsuperscript{74} Barry Tuckwell, \textit{Playing the Horn: A Practical Guide}, 30.

Exercises to build low range facility follow, with even simple exercises such as arpeggios and scale patterns proving beneficial. If these become a part of the daily practice routine they are encouraging for students who are attempting to obtain low register skills, as progress and results are very obvious and higher standards can continually be pursued. The use of a scale or flexibility pattern that can be applied across the entire range of the instrument is a good way to approach range expansion, especially since this approach necessitates the same basic level of technical proficiency throughout all registers. The following (see Figure 3.1) has formed the starting point for my own daily routine sessions since I studied with Professor Jeffrey Powers whilst undertaking a Masters degree at Baylor University.\textsuperscript{76}

![Figure 3.1: Jeffrey Powers, Warm Up for Horn, Exercise No.2.](image)

Initial progress is often fairly straight-forward and rapidly achieved, so subsequent exercises being considered for study should challenge the student’s agility and increasingly develop proficiency in the use of varied dynamic levels, articulations and timbres before progressing to simple lyrical studies that will develop musicality and characteristic playing styles as the skill set is developed and the student’s control improves.\textsuperscript{77} Again, a systematic

\textsuperscript{76} I always do this exercise in front of a tuner or mirror, or occasionally seated at a piano.

\textsuperscript{77} Suggested teaching resources are contained later in this chapter. Also refer to Chapter 5.
approach can prove beneficial; once exercises are comfortable over a single octave, reconstruct them or find new material that extends to include an extra third, fourth or fifth, then two octaves, and so on. Three octave scale and arpeggio patterns are not only completely possible but also absolutely necessary to approaching some of the more challenging orchestral and solo horn parts. If covering such large portions of the instrument’s range is avoided in daily practice sessions, and playing in the lower register is neglected, then these skills cannot be expected to develop, improve or function magically when called upon.78 I often recall Philip Farkas’ advice to brass players in regards to the many technical components that make up a solid technique and that require diligent practice; that “one day’s neglect on a brass instrument requires at least two day’s work to bring the embouchure back to its former condition.”79 He then continues:

When one decides to master a wind instrument, he dedicates a large part of his life to that instrument; he devotes many hours as the instrument’s slave before becoming its master. Even then the master must always be a partial slave.80

Another way of looking at it is as Fergus McWilliams quips in his book Blow your own Horn: “After one day without practice I know it, after two days the orchestra knows it, and after three days everyone knows it!”81

78 Ideally the daily routine of more advanced students should aim to at least cover, if not continually attempt to expand beyond the instrument’s four octave working range.
80 Philip Farkas, The Art of French Horn Playing, 46.
81 Fergus McWilliams, Blow Your Own Horn, 25.
Range and Flexibility

Whilst the higher horns may occasionally venture down into the lower register and be able to get away with ‘manufacturing’ a couple of low notes, it is not uncommon for all horns to play at the top of the stave in what are considered the more idiomatic and heroic middle and upper registers.\(^{82}\) Therefore it remains very important for low horn players to have good control over their upper registers, even if their endurance is somewhat limited.\(^{83}\) As far as possible it is necessary to try to maintain the same approach to playing in the high register as would be employed in the middle and lower registers; remain as open and as free of tension as possible, allowing the air to do the work rather than ‘forcing’ or resorting to mouthpiece pressure. Remember to listen to the tone, as Randy Gardner suggests: “keep in mind that each register demands its appropriate quantity and speed of air, and that the horn’s sound will inform you when you are correct. Constantly listen for your ideal tone quality.”\(^{84}\) Try to gradually extend the upper register, semitone at a time if necessary, and remember that the only way to familiarise yourself with the upper register is to practice up there.

Beyond covering such an expansive range, the two most difficult facets of playing low horn are almost certainly the rapid flexibility requirements and the wide leaps that are frequently included, often over awkward intervals. Simple mixed interval exercises are good for practicing these skills, and once a single octave is accomplished they are also easily expanded upon to widen the range. Deskur suggests that:

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\(^{82}\) This is especially prevalent in wind ensemble music. Gunther Schuller warns against it in the section of Notes for Composers and Conductors in his book *Horn Technique*, stating that it is a “common fault of modern composers” and that due to the equipment being used by the lower players, intonation issues that are likely to occur between four players and acoustical issues in the section it rarely turns out as planned.

\(^{83}\) When I began my Masters degree at Baylor University with Jeffrey Powers I remember him telling me that it was ok for me to consider myself as a low horn player and somewhat specialise, but it had to be by choice and not through necessity. In the following two years my high register improved dramatically.

\(^{84}\) Randy Gardner, *Mastering the Horn’s Low Register*, 11.
Large register jumps are one of the special tasks of the low horn players and constitutes one of the principal differences distinguishing low horn from high horn playing. A flexible embouchure able to skip a few octaves in no time is the trademark of a first rate low horn player.\(^{85}\)

Simple lip slurs over the notes of the harmonic series are also greatly beneficial for securing the lower register and really should form a fundamental part of every horn player’s warm up or daily routine, as navigating the harmonic series is at the very core of playing the horn. Being able to distinguish and select the correct partial from those surrounding it when the margins for error are so slim is paramount to becoming a successful horn player. Patterns between harmonics three and eight, for example, are very useful in building the flexibility to move rapidly around the harmonic series that is required to confront some of the more difficult cor basse passages and also to strengthen the awkward break area. These begin very similar in design to the exercises frequently used when learning how to lip trill (see Figure 3.2); alternating between two neighbouring tones of the harmonic series without rearticulating and gradually increasing the speed and/or range.\(^{86}\)

![Figure 3.2: Basic flexibility patterns.](image)

These patterns are easily created by the teacher or student by gradually adding notes to increase the range being covered or diminishing the note values being used to


\(^{86}\) Perhaps culminating with excerpts taken from orchestral or solo repertoire that target these skills, or patterns based upon a memorable motif or phrase.
create more rapidly moving patterns. Alternatively, Dr. David Ware’s *Low Horn Flexibility Studies* comprises thirty-two fairly basic flexibility studies that begin by alternating between the second and third harmonics and eventually extend up to the sixth harmonic. The patterns are a single bar in length and repeated on each valve combination of the F horn first descending (from open, to second, first, first and second, and so on through to all three valves) and then ascending back through to open (see Figure 3.3).

![Figure 3.3](image)

Figure 3.3: David Ware, *Low Horn Flexibility Studies*, Study No.8, mm. 1-13.

**Articulation**

Producing clear and precise articulation is yet another difficulty in the horn’s lower register. Anticipating the actual pitch and supporting correctly remains vital, however achieving good accuracy is made slightly easier due to the wider spaces between the partials of the harmonic series. The position of the tongue “is closely tied to air speed, and is a crucial element of tone production.”

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87 Dr. David Ware, *Low Horn Flexibility Studies* (Salem, CT: Cimarron Press, 2006).
88 Also see Chapter 5 for further ideas.
89 Regarding articulation: “It complicates breathing inasmuch as we tend to think of the sound starting with the mouth when we should be thinking of it starting at the pit of the stomach.” Barry Tuckwell, *Playing the Horn: A Practical Guide*, 14.
90 Randy Gardner *Mastering the Horn’s Low Register*, 9.
recommend keeping the tongue low and forward when playing in the lower register.\textsuperscript{91} Several leading resources recommend a change in the vowel sound being used for articulation when players leave the middle register, with the basic ‘taa’ or ‘daa’ sound morphing gradually into ‘tee’ or ‘dee’ for the upper register and towards a ‘too’ (‘tuu’) or ‘doo’ (‘duu’) sound in the lower.\textsuperscript{92} These vowel sounds promote an unrestricted air passage and constantly moving air stream, whilst the shift towards an ‘oo’ or ‘uu’ vowel also encourages the dropping of the jaw for the lower register as previously discussed.\textsuperscript{93} This approach works well with students, eventually becoming incorporated into the basic process of attacking any note. It is crucial, regardless of which consonant or vowel is being used, that the air and support are in place to both produce and sustain the note on time (that is, instantly!) and for the required duration. This can be especially challenging in the lower register where a degree of anticipation is often necessary and sustaining loud or long notes can be difficult.\textsuperscript{94}

It is important even when practising basic exercises that the style of articulation as well as the note lengths are varied and consciously worked on, perhaps through alternating slurred and articulated patterns, or legato with staccato attacks. There are of course a multitude of options and variations.

If explosive attacks are required, or in the extreme low register, articulating with a front to back motion of the tongue instead of the usual up and down approach can be utilized with good effect. This technique does have some drawbacks, but it is commonly used by leading low horn players, and although it may be frowned upon by idealist

\textsuperscript{91} John Ericson, \textit{Ultimate Low Horn}, iii; Gunther Schuller \textit{Horn Technique}, 30.
\textsuperscript{92} ‘t’ sound used for normal and stronger articulations, whilst ‘d’ sound is employed when a more legato approach is necessary. This is a common approach amongst brass teachers. Also refer to Douglas Hill, \textit{Low Range for the Horn Player}.
\textsuperscript{93} See: Douglas Hill, \textit{Low Range for the Horn Player}, 9.
\textsuperscript{94} Pizka also suggests that “in English speaking countries we find another difficulty for the low region: the sloppy pronunciation of the consonants and the vowels. The vowels are not clear as in Italian or German, the consonants are anything else than clear. The tongue is "not sharp enough" for clear attacks.” Private correspondence, 18/11/2013
teachers and seldom encouraged, the results justify the action when implemented in the correct situation and carried out appropriately.\textsuperscript{95} Eli Epstein suggested:

We need to think of articulation in the low register differently from articulation in other registers...I have found it very effective to articulate by lightly touching the tongue along the bottom edge of the two front teeth; this happens when we say “thoh” (pronounced like “though”). In my experience, starting low notes with “thoh” produces the quickest, clearest response.\textsuperscript{96}

As leading pedagogue Milan Yancich states in his \textit{Method for French Horn}: “there is no one way to attack – on the contrary, there are various types of attacks ranging from the very heavy attack to the very legato or soft attack.”\textsuperscript{97}

\textbf{‘Blasting’ or ‘Cultivated Loud’}

As already discussed, the aperture at the centre of the embouchure will generally be required to increase in size when playing in the lower register. This is also the case when playing at loud dynamic levels, as once again more air is required to maintain the necessary vibration. It is not surprising then, that playing in the low register at a loud dynamic level can become quite physically taxing and therefore this aspect of playing should also be practised to develop both strength and endurance. In the lower register this ‘cultivated loud’ playing, or perhaps more accurately termed ‘blasting,’ has many benefits,

\textsuperscript{95} Special care again being provided to the air stream immediately following the attack, so as not to allow any interruption in the sound following the start of the note or variation in quality due to a lack of air or support. Care must also be taken that a ‘bubble’ in sound is not created from excessive air building up behind the tongue prior to the release.


most importantly in developing breath control and in finding the centre of the pitch. Farkas even states that “the lowest notes have to be actually ‘broken in.’”

**Playing Techniques**

Using a mute can prove to be somewhat challenging in the lower register of the horn, predominantly due to pitch and projection issues. The cone shaped mute that is most popular amongst professional horn players today is considered less problematic in both of these areas as they extend further into the instrument, which causes less interference to the harmonics of the horn, and also because the majority of them are tuneable. The Geyer design of a cylinder and cone combination is still widely available and indeed favoured by many leading players, so the best advice when choosing a mute is to try as many different options as possible until a suitable and sustainable option is discovered. Possessing a variety of mutes, constructed from different materials and in slightly differing designs will allow for further options, depending on the requirements of the playing situation. If obtaining volume is an issue, then the mute can be partially removed from the bell of the horn without negatively affecting the resulting tone.

Playing stopped horn in the low register is physically demanding and difficult to both achieve and control, as it requires good control over a large volume of rapidly diminishing air. Therefore it requires conscientious practice. Being able to produce hand stopped notes below the stave with good tone and intonation will prove beneficial throughout the rest of the instrument’s range as it almost guarantees more than proficient

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98 Randy Gardner, *Mastering the Horn’s Low Register*, 78. Also advocated by Douglas Hill, Sarah Willis, Denise Tryon, etc.

99 Such as those made by Lewis, Balu, and Ritich etc.

100 Douglas Hill, *Low Range for the Horn Player*, 27.

101 Done by constantly assessing the potential of the mute to produce the desired sound and achieve acceptable results in terms of intonation, dynamics, projection etc. across the entire range of the instrument.
hand stopping technique as well as good hand shape and position. In some passages the use of a brass ‘stopping’ mute may prove necessary in order to obtain the desired volume, tone or clarity. Several manufacturers are now making these mutes with interchangeable flares and from different materials, which provide further tonal variations. Two exercises composed specifically for stopped horn are included in Hill’s book, where he states that:

Loud practice in the lower two octaves using a brass mute (stopped mute) also provides exceptional exercise for focusing the air and for controlling the aperture against an added resistance.

Teaching Resources - Beginner

The 30 leichte melodische Übungen für Waldhorn Op.33 by Franz Nauber (1876-1953) provides an entry level work that deals with the lower register of the instrument, and is quite an early work compared to most of the works contained in this section. The range covered in the exercises is quite restrained, extending two and a half octaves from high g” down to low c, and therefore only a small amount of music is notated using the bass clef. Each exercise is one page long, usually in a basic ternary form and in a relatively simple key, with those ranging from three sharps through to three flats being utilised. The majority of the exercises target sustained lyrical playing, although both articulated and legato playing are included as well as a good variety of articulations, note lengths, dynamics and musical styles (see Figure 3.4).

102 Douglas Hill, Low Range for the Horn Player, 15.
103 Douglas Hill, Low Range for the Horn Player, 16.
104 Franz Nauber, 30 leichte melodische Übungen für Waldhorn Op.33 (Frankfurt; Musikverlag Wilhelm Zimmermann, 1929).
105 Old notation is used when in bass clef.
Figure 3.4: Franz Nauber, *30 leichte melodische Übungen für Waldhorn* Op.33, Exercise No.4 *Maestoso*, mm. 1-32.

The *Studies for Low Horn* by Australian horn player and composer Graeme Wright Denniss (b.1954) were composed in 1993, while the composer was employed as the Principal Third Horn of the Melbourne Symphony Orchestra, a position that he held for fourteen years. Denniss states in the opening of the publication:

The low register is an area commonly neglected by students of the French Horn, yet when the student comes to play in a band, orchestra or ensemble, the low notes are often required, as they are in the more advanced solo repertoire.
Having observed this weakness in the technique of advanced students who were getting work with professional orchestras, Denniss was inspired to write the book of studies in an attempt to encourage this facet of playing. Denniss also makes a point of highlighting the benefits in lower register work for students; specifically the development of “a richer and fuller sound” that should extend across the entire register of the instrument.

The studies are well graded, beginning quite simply in nature and covering a two octave range that extends from c to c’’, before gradually expanding to include almost an entire extra octave; extending from an optional pedal F up to e flat’’. The keys used in the book range from four flats through to four sharps and both the treble and bass clefs are utilised, with new notation being favoured. The studies contain numerous musical and technical challenges, including varied articulations and dynamics, wide intervals and rapid passages. They also cover a wide variety of styles that range from classical through to jazz, and become quite challenging in the final third of the book (See Figure 3.5). These studies by Denniss are more modern sounding than many of the other beginner and intermediate etudes due to the inclusion of several different systems of tonality as well as some rhythmic ambiguity and the occasional use of multimetre, making them a valuable resource.

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109 Private correspondence with Graeme Wright Denniss (13/08/2014).
110 Publication foreword.
The fifty *Etüden für tiefes Horn* by Friedrich Weingärtner\(^{111}\) are well conceived as beginner studies for specifically working on the development of a solid low register. The etudes gradually increase in difficulty, range and length although the melodies remain fairly straightforward, relying heavily on sequences and predominantly consisting of stepwise motion or simple intervals of a fifth or less.\(^{112}\)

Despite the range extending down as low as d, the treble clef is used exclusively until the twelfth etude (see Figure 3.6) and is perhaps favoured a little too much throughout

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\(^{111}\) Friedrich Weingärtner, *Etüden für tiefes Horn* 3 vols. (Freiburg: Möhlin Verlag, 2005).

\(^{112}\) Etudes are generally a half page long in book one, extending to a full page in the two following books. The range gradually expands from a single octave between f and f’ in the opening etudes to cover just beyond two octaves, extending from low A to c’’. This range is further expanded in the final book to a full three octaves from pedal F to high f’’. There is also a good fingering chart at the end of book 1 which extends from high c#’’’ down to pedal E.
all three volumes.\textsuperscript{113} The very gradual progression found in the first two volumes is occasionally interrupted through the addition of a more complex time signature or rhythmic pattern, but it is not until the third book that the etudes move beyond their rather simplistic construction to include greater musical and rhythmic complexity and in requiring greater flexibility and technical facility. Unfortunately the keys used by Weingärtner never progress beyond the relatively simple,\textsuperscript{114} and the etudes themselves contain very few markings for dynamics, articulations or phrasing and only basic directions for tempo and style that remain quite vague; essentially \textit{Lento, Adagio, Andante, Moderato, Allegro} or \textit{Maestoso}.

![Figure 3.6: Friedrich Weingärtner, \textit{Etüden für tiefes Horn}, Etude No.12 \textit{Moderato}, mm. 1-32.](image)

\textsuperscript{113} The reliance on treble clef requires a lot of ledger lines and this creates some rather untidy bars and the occasional moment where the layout and editing decisions must be questioned, which is a little unfortunate in what is otherwise a very good looking publication. Although slight inconsistencies in clef choice are certainly not a negative, it occasionally results in unnecessary switches being made for as little as a single bar, when maintaining the prior clef would have worked fine and certainly would not have been without precedence for the lower notes in question. When the bass clef is used notes are written in new notation.

\textsuperscript{114} Major and minor tonalities are used from two flats to one sharp, however the vast majority of etudes do not include a key signature at all.
Published in 2009, the *Low Range Studies* for Horn by Eric Allen is a volume of short etudes aimed at developing the fundamental skills of the instrument and improving performance. Many of the studies have been extracted from Allen’s *Success in All Keys* for Horn and then transposed into the lower register and alternate keys, which is especially noticeable in the recurring “All Keys Etude” and “Famous Excerpts” that appear in each key. Although the range extends down to low c in this book, Allen does not utilise bass clef. Whilst there is a good mix of articulations and styles contained within these studies, there is a lack of dynamics and playing instructions, and the sheer abundance of repeated material gets tedious (see Figure 3.7).

![Mozart: Eine Kleine Nachtmusik](image)

Figure 3.7: Eric Allen, *Low Range Studies* for Horn, Famous Excerpt No.4 in E flat Major


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117 The range is fairly accessible, only ascending to e”.
Patrick Miles’ *Low Horn Etudes and Drills for the Intermediate Horn Player* provides a brief but informative entry-level work for students approaching the horns lower register. The two-page foreword recognises that the low register is a weakness in many students and that there are a lack of resources available for younger students, before proceeding to identify several key components in approaching the lower register and issue concise directions for the student to take in.

1. Firm and focussed corners
2. Moving the lower jaw forwards
3. Centring the pitch
4. Experimenting with different fingering options
5. Articulation
6. Dynamic levels

Four out of the five exercises that follow are simple drills, which should be familiar to all teachers: a simple flexibility exercise between the fourth and second harmonics, long tones, mixed intervals and chromatic scales. The fifth exercise is inspired by the opening horn solo from *Till Eulenspiegels lustige Streiche* by Richard Strauss (1864-1949), and is therefore significantly more difficult. The remainder of the publication comprises of twenty-two short lyrical etudes by Giuseppe Concone (1801-1861) and Raymond Milford Endresen (1897-1980) that “have been transposed to various keys and transcribed in bass clef” (see Figure 3.8). These etudes gradually progress in difficulty,

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120 The Concone Vocalises are discussed further in Chapter 5.
121 Refer to: Raymond Milford Endresen, *Supplementary Studies for French Horn, E flat Alto or Mellophone: to be used with or to follow any method* (Chicago, IL: Rubank, 1965).
through various styles and keys ranging from five flats to four sharps. The importance of proper breathing and support as well as clear articulation is emphasised by this approach.

Miles’s method offers an excellent introduction to the low register for pre-college hornists. While the exercises allow the student to extend the low range, the etudes provide melodic opportunities to use this register.\textsuperscript{123}

The book is written entirely in bass clef using new notation with the exception of the Strauss exercise, which retains the original treble clef usage above middle c’ and old notation in the bass clef for c’ and lower notes. Lyrical etudes have long been favoured amongst horn players for developing tone, phrasing and a cantabile style of playing, and this book certainly provides a good option for taking this approach into the lower register of the instrument as well as for developing the skill of reading music in bass clef.

\textbf{Figure 3.8:} Patrick Miles, \textit{Low Horn Etudes and Drills for the Intermediate Horn Player}, Etude No.1 \textit{Moderato}, mm. 1-24.

\textsuperscript{123} Heather Suchodolski, “Music and Book Reviews,” \textit{The Horn Call} 40/3 (May, 2012): 80.
Douglas Hill’s *Low Range for the Horn Player*\(^{124}\) is a fantastic work. The text is wide-ranging and informative, covering the majority of topics discussed earlier in this chapter as well as including several further sections where techniques such as multiphonics, flutter tonguing and *tremolo* are also utilised as tools to develop the lower register. *Low Range for the Horn Player* also includes a brief list of suggested literature at its conclusion, consisting of well-known etudes, solos and orchestral excerpts that feature the lower register, as well as several other horn related books for further reading.

The exercises that are included in *Low Range for the Horn Player* are brief and technical, targeted towards applying a specific technique and developing skills rather than being musically stimulating. However, it is by taking this approach that Hill has provided such a useful and thorough guide to the fundamental skills that are necessary for students to learn, which is largely unavailable from other resources. These exercises, and the corresponding text, make up the book that needed to be written and which should be compulsory reading for all serious students and teachers of the instrument. It is very highly recommended, such as the following review by Jeffrey Snedeker:

> As usual, Hill’s thoughtful, comprehensive approach is informed by years of successful teaching. The exercises that accompany the topic discussions resonate with anyone who has really struggled with and subsequently succeeded in developing a low range...As a teacher, I know the ultimate challenge will not be to get students to read this book but to get them to actually do the exercises that are prescribed so they can make systematic progress that sticks. This is a valuable book for low horn study.\(^{125}\)


\(^{125}\) Jeffrey Snedeker, “Music and Book Reviews,” *The Horn Call* 41/3 (May, 2011): 75-76.
One of the more recent publications is *Rangesongs for Horn* by horn player and teacher Rose French. The volume contains original études that are organised into nineteen groups of five études, with each group being based on a specific target note. This structure was devised to help students develop both their upper and lower registers through systematically working through ascending or descending pitches whilst maintaining good air support and musical phrasing.

The idea for *Rangesongs* came from playing Bordogni/Rochut *Melodious Etudes* in Tenor Clef. Doing this works pretty well because it transposes all the études up a perfect fifth; however, it creates some problems as well. Some of the études end up being too high and some are too low; some are too long and some aren’t quite long enough. *Rangesongs* solves these problems: every song is one page long – no more than about a minute of playing. Every song has a designated target note and never goes above this target. *Rangesongs* provides a systematic way to build range and endurance slowly but surely over time.

The range of the first étude is an octave and a half, ranging from g to c” (see Figure 3.9), and this is gradually built upon towards high c”” in the first two thirds of the book. Then the lower register is targeted in the final third, with the target note moving gradually down from low c to low G.

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126 Rose French, *Rangesongs for Horn* (Flagstaff, AZ: Mountain Peak Music, 2012). Favourably reviewed by Jeffrey Snedeker in *The Horn Call*, who stated “I especially liked the low range études and the work on flexibility between the middle and low registers. In some ways, the concept and approach is reminiscent of Robert Getchell’s first and second books of Practical Studies, or Concone legato studies (i.e., studies that are more musically inclined), but these are more organic to the horn, more advanced, and more musically satisfying.” Jeffrey Snedeker, “Music and Book Reviews,” *The Horn Call*43/2 (February, 2013), 78.

127 Also available in a version for Trumpet by Cindy Gould, and versions for Tenor Trombone, Bass Trombone and two different versions for Euphonium (one in treble clef and the other in bass and tenor clefs) by David Vining. “Each edition of Rangongs uses the same set of études. The octaves may have changed according to the individual needs of each instrument but the content remains the same.” Rangesongs website, accessed 20/01/2014. Available at: [http://rangesongs.com/](http://rangesongs.com/)


130 Written using new notation bass clef.
Although composed for the natural horn, the *12 Studies for Second Horn Op.57* by Jacques Francois Gallay (1795-1864)\(^{131}\) still provide challenges for the intermediate horn player. The technical challenges and keys used are somewhat restricted in comparison to more modern works due to the limitations of the natural instrument,\(^{132}\) however they do require excellent flexibility and control as they are full of wide intervals, rapid shifts and long lines. Musically the studies are very rewarding to play (see Figure 3.10).

\[^{131}\text{Jacques Francois Gallay, *12 Studies for Second Horn Op.57* Ed. James Chambers (New York, NY: International Music Company, 1960). In this edition there are many directions for dynamics, articulations and style, as well as the occasional breath mark, and this obviously helps in the interpretation and preparation of each etude.}\]

\[^{132}\text{The most frequently used keys are C Major and G Major along with their tonic minors, however F Major and E Minor are also used.}\]
The range covered is the typical cor basse register from low B up to high a’’ and because of this, the studies are written almost exclusively in the treble clef.¹³³ The works of Gallay certainly hold a significant place amongst the horn’s repertoire, and these twelve studies are of considerable value.

Figure 3.10: Jacques Francois Gallay Ed. Chambers, *12 Studies for Second Horn* Op.57, Study No.4 *Allegro maestoso*, mm. 1-27.

Eleven of the twelve studies are also reproduced in John Ericson’s *Ultimate Low Horn*.¹³⁴ Ericson’s book begins with twenty-two vocalises by the famous Italian tenor Marco Bordogni (1788-1856) that have been transposed into a lower key than the popular Rochut version for trombone¹³⁵ so that they cover a “more effective range than the

¹³³ The only exception being the final three bars of the second etude, where the low B is written using old notation bass clef.
standard trombone version, but also if played on horn in F they are at the same sounding pitch level as if played from the standard Rochut version on trombone or tuba, with which they may be performed."\textsuperscript{136} The Bordogni vocalises are followed by the Gallay studies, and then seventeen etudes from the \textit{20 Études pour le Cor grave} by A. De Pré (1841-1912).\textsuperscript{137}

The etudes by De Pré are reasonably well known amongst horn players. They range in length from one to two pages, utilise old notation in the bass clef and cover a range that extends over three octaves from pedal F up to high a”. Predominantly targeting articulation, the De Pré etudes include a lot of octave jumps as well as wider intervals, and moments reminiscent of traditional cor basse arpeggios such as in the eighth etude (see Figure 3.11).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure3.png}
\caption{De Pré Ed. Leloir, \textit{20 Études pour le Cor grave}, Etude No.8 \textit{Allegro Moderato}, mm. 1-19.}
\end{figure}

\textsuperscript{136} The Bordogni vocalises have piano accompaniment, which is available through several publishers. Ericson includes two versions of each of these pieces: the first is written in bass clef (using new notation), whilst on the facing page (or nearby) they are also printed an octave higher in the treble clef, to “facilitate learning the etudes in this low range.” John Ericson, \textit{Ultimate Low Horn}, preface. Example provided in Appendix 3.

The keys included in the book range from five sharps through to five flats. Hand stopping is also introduced and occasionally used in the very low register, which is a challenge, however the most difficult etude in the collection is certainly the final etude (see Figure 3.12). This etude is written to include transpositions into every key between A flat basso and A alto.\textsuperscript{138}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure3.12.png}
\caption{De Pré Ed. Leloir, 20 Études pour le Cor grave, Etude No.20 \textit{Moderato}, mm. 1-26.}
\end{figure}

The \textit{Études for Modern Valve Horn} Op.13 by the Belgian horn player Felix De Grave (1833-after 1894),\textsuperscript{139} as it currently exists, is actually a collection of seven smaller

\begin{footnotesize}
\textsuperscript{138} This includes the rarely seen transpositions of D flat and F\#, with the only key missing being that of A flat alto.
\textsuperscript{139} Felix De Grave, \textit{Études for Modern Valve Horn Op.13} (Bloomington, IN: Wind Music, 1967). De Grave studied with the famous horn player Jean-Désiré Artôt (1803-1887) in the early 1850’s before joining the \textit{Théâtre Royal de la Monnaie} in Brussels, where he remained from the 1860s until the 1880s. He was also a member of the \textit{Société des Concerts du Conservatoire de Bruxelles} until 1893. De Grave composed a number of pieces for the horn including both solo and ensemble works. His studies are certainly his most well-known...
\end{footnotesize}
works that are now published in a single volume. Originally the first book comprised of 6 *Etudes for Valve Horn* (see Figure 3.13), with the 24 *Grand Concert Etudes for Valve Horn* that follow making up the remaining six books. This rather extensive work was republished by Philip Farkas and Milan Yancich in an attempt to fill a void in the horn’s repertoire; namely musically rewarding studies from the Romantic period that were composed specifically for the valve instrument, unlike those of Jacques Francois Gallay (1795-1864) or Alexandre Clement Cugnot (1826-?). A vast array of characters and musical styles are included and a variety of keys used, ranging from five flats through to six sharps, and yet the range and technical challenges of the etudes remain quite accessible throughout. The *Etudes* of book one are all a page or two in length whilst the *Grand Concert Etudes* are all significantly longer, most spanning four pages in length, although there are also several that are longer, and therefore they can become quite taxing.

This is really the only flaw, as in general the De Grave etudes present a good workout throughout the middle and lower registers without demanding any of the lowest or highest notes available on the instrument. Due to the many arpeggios and wide intervals they require good agility and control of both articulations and dynamics across this range, whilst still remaining highly lyrical in nature. There are certainly some technically challenging moments and some moments that are lacking in inspiration, but the De Grave etudes also emphasise some of the best characteristics of the horn when the long melodic

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140 Felix De Grave, *Etudes for Modern Valve Horn Op.13*, preface. This edition is reasonably well edited to include the target areas for each etude, playing instructions and occasionally suggestions on breathing.

141 The range essentially extends three octaves from low G up to high a”, however the cor alto version of etude No.11 and also No.22 both include high B flat”. These etudes tend to sit in the middle register and are therefore predominantly written in the treble clef, however there is also a significant amount of old notation bass clef included. Besides the occasional use of hand stopping the only extended technique is the introduction of multiphonics in etude no.13.

142 One of the main factors in generating the length of these etudes is that material is often repeated directly, or in a number of closely related keys. This duplication of material, in addition to the chromatic scales and arpeggiated runs that are frequently used to connect sections does become a little tedious. There are also a number of etudes that rely quite heavily on echo effects, which are created through repeating phrases either dynamically softer, hand stopped, or played an octave lower.

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lines are suitably combined with a beautiful tone and musical phrasing. The unrestricted cadenza-like moments and Romantic nature of the music, especially evident in the more lyrical sections of each etude also offers a chance for experimentation and variety in the interpretation, making these etudes a rewarding course of study.\textsuperscript{143}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure313.jpg}
\caption{Felix De Grave, \textit{Etudes for Modern Valve Horn} Op.13, Etude No.5 \textit{Larghetto sostenuto}, mm. 1-36.\textsuperscript{144}}
\end{figure}

\textsuperscript{143} The final etude, which is an \textit{Introduction, Theme and 10 Variations with Finale} is particularly challenging. It is unfortunate that the accompanying piano parts are not available.

\textsuperscript{144} “Exercise on taste, feeling, and practical difficulties.” Felix De Grave, \textit{Etudes for Modern Valve Horn Op.13}.
Following these initial etude books were the 25 Spezialstudien für tiefes Horn by Heinz Liebert (1918-2000). Within the volume are etudes that include moments of striking dissonance and extensive chromaticism, and some that even border on atonal, however the majority are based on scales, arpeggios and relatively straightforward intervals that are repeated in sequences and harmonic arrangements (see Figure 3.14). The structures used in these page long etudes are also quite simple, with the keys ranging from three sharps through to five flats and including both major and minor tonalities. Liebert makes extensive use of the bass clef and old notation, extending the range down as low as pedal F as well as up to high a”’. He probably favours articulated patterns more than lyrical material, and provides a considerable challenge in doing so, however the 25 Spezialstudien für tiefes Horn also require good agility and control of dynamics across the entire range. Liebert also includes hand stopping in three of the etudes, and whilst quite accessible much of it does occur in the lower register. These are certainly not the most inspiring studies to play, but they are not without their challenges. They were quite an important component of low horn repertoire prior to the 1980s, when they effectively bridged the gap between the beginner etudes of Nauber and more difficult Neuling and Frehse etudes that utilise far more complex musical language.

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146 No. 3, No.21 and No.24 all include hand stopping, with the lowest not required being low c.
Figure 3.14: Heinz Liebert, 25 Spezialstudien für tiefes Horn, Etude No.7 Andante, mm. 1-16.

Marvin McCoy’s 46 Progressive Exercises for Low Horn (Intermediate)\(^{147}\) is certainly another useful resource. Although predominantly written in the bass clef using new notation, there are also five exercises written in old notation and three written exclusively in the treble clef. Opening with a single octave range that extends from f to f’ (see Figure 3.15), this is gradually expanded throughout the course of the book to two and a half octaves, extending from low B up to e’’. The relatively short exercises are melodically and structurally simple but do cover quite an array of characters from lyrical to well articulated, and a good selection of keys that range from four flats to four sharps. Unfortunately there are few markings included in this book for dynamics, articulations, phrasing or indicating the playing style; however each etude is given a specific metronome marking. The musical and technical requirements appear to be well thought out and organised, providing an effective course of study for the intermediate horn player.

\(^{147}\) Marvin McCoy, 46 Progressive Exercises for Low Horn (Intermediate) (Minneapolis, MN: McCoy’s Horn Library, 1986).
Martin Hackleman’s *34 Characteristic Etudes for Low Horn Playing* \(^{148}\) were adapted from the works of Russian composers Vladislav Blazhevich (1881-1942) \(^{149}\) and Sergei Vassiliev during the 1970s. \(^{150}\) Due to the lack of resources many horn players were resorting to the use of trombone and tuba repertoire, however these resources were not only somewhat intimidating but also occasionally applied incorrectly. Hackleman set about compiling some of his favourite materials into an accessible and graduated volume specifically for the horn, which “caught on very quickly and has sold continuously.” \(^{151}\) The etudes are of a moderate length, written entirely in bass clef using old notation and are well organised to progress from simple keys through to more complicated ones that range from five flats through to six sharps. The range of the etudes is also perfectly targeted towards low register development, spanning three octaves from an optional pedal C up to c#” (see

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\(^{149}\) Blazhevich was a well-known trombonist and composer, who composed a number of works that are still frequently used by lower brass instrumentalists.

\(^{150}\) A Russian tuba player who composed a popular set of twenty-four melodious etudes for the instrument.

\(^{151}\) Private correspondence with Martin Hacklemann, 12/08/2011.
Figure 3.16). It is a well-published volume, clearly printed and containing all the necessary markings including recommended metronome markings for each etude.

Predominantly focussed on developing a lyrical and music approach to playing in the lower register, the Hackleman etudes are certainly not without their challenges, with students frequently being confronted by expansive lines requiring good breath control and flexibility across the range of the instrument, runs that require dexterity and also moments of hand stopping. Hackleman has certainly achieved the goals cited in the publication’s foreword, in compiling a selection of lyrical etudes that have “musical merit as well as some technical challenge,” and so it is not surprising that these etudes have quickly become a standard part of the horn student’s syllabus.

Figure 3.16: Martin Hackleman, 34 Characteristic Etudes for Low Horn Playing, Etude No. 7 Lento, mm. 1-36.

152 Due to Hackleman’s choice of old notation in the bass clef the highest pitches encountered in these etudes are only written just above the stave, requiring a single ledger line. There are no extended techniques used, with only a few hand stopped pitches found throughout the book.

153 Martin Hackleman, 34 Characteristic Etudes for Low Horn Playing, preface.

154 Also highly recommended: Martin Hackleman, 21 Characteristic Etudes for High Horn Playing (Vuarmarens, Switzerland: Editions Bim, 1990). Based on the clarinet works of Cyrille Rose (1830-1902). “These works provide both a means of range development and an insight into the interpretive concepts of one of the world’s top professional hornists.” Randall Faust, “Music and Book Reviews,” The Horn Call 16/2 (April, 1986): 87-88.
Another important resource is Randy Gardner’s *Mastering the Horn’s Low Register*.\(^{155}\) This text is quite significant, and highly recommended, as it not only deals with some of the low horn’s most notoriously difficult orchestral excerpts in a logical and well thought out fashion, listing “Musical Keys” and “Technical Keys and Practice Tips,” but also includes numerous suggestions and exercises designed to aid in their performance.\(^{156}\) This follows a forty-two page introductory text of very informative content on the techniques and approaches to playing the horn. Note production is “comprehensively and systematically” explored,\(^{157}\) as well as many physical and musical concerns such as breathing, embouchure, articulation, tone, projection and a number of other miscellaneous topics, ensuring this work’s value for all horn players.

**Teaching Resources - Advanced**

Perhaps the most well-known low horn etudes available are the two books that make up the *30 Spezial-Etüden für tiefes Horn* by Hermann Neuling (1897-1967).\(^{158}\) These challenging etudes are all between one and two pages long, written using the treble clef and old notation bass clef, and requiring good flexibility across a range that extends well beyond three octaves from pedal F up to high b flat”.\(^{159}\) Flexibility, articulation and dynamics are the real challenges in these etudes, with flowing runs of scales and arpeggios contrasted by wide intervals and lyrical etudes by highly articulated ones that really challenge note production and clarity in the lower register (see Figure 3.17). This is in addition to loud playing in the lower register, rapid dynamic shifts and the frequent use of hand stopping throughout the entire range.

\(^{155}\) Randy Gardner, *Mastering the Horn’s Low Register* (Richmond, VA: International Opus, 2002).
\(^{156}\) Randy Gardner, *Mastering the Horn’s Low Register*, Part II.
\(^{157}\) Randy Gardner, *Mastering the Horn’s Low Register*, 1.
\(^{159}\) A large number of the frequent clef changes seem unnecessary.
Despite the etudes being written without a key signature they are quite complex musically and also constantly modulating, and this results in a continuous stream of accidentals that are not always clearly printed. Much like the famed *Bagatelle für tiefes Horn und Klavier* by Neuling, these etudes are both loved and despised by horn players due to their difficult and somewhat quirky nature.

![Moderato](image)

Figure 3.17: Hermann Neuling, *30 Spezial-Etüden für tiefes Horn*, Etude No.4 Moderato, mm. 1-44.

Less well-known are the *18 Studien für Horn mit besonderer Berücksichtigung der tiefen Lage* by Neuling. Although being shorter in duration and somewhat simpler technically, these eighteen studies share many similarities with the previously discussed work, including the frequent use of wide intervals, large dynamic contrasts and their

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160 In general the accidentals carry through the whole bar regardless of octave, however this is not always the case. Enharmonic shifts are also quite regular.
163 All of the studies are between half a page and a full page in length. Some of the material is awkward or atonal in nature, and therefore there are still some quite complex moments musically.
modern musical language. The player’s agility is certainly tested in both lyrical and articulated studies that cover a similarly wide range to the *30 Spezial-Etüden für tiefes Horn* (see Figure 3.18). They also frequently use of old notation bass clef and lack key signatures, however various transpositions are suggested in this work, which does not happen in the *30 Spezial-Etüden für tiefes Horn*.\(^{164}\)

![Figure 3.18: Hermann Neuling Ed. Pizka, 18 Studien für Horn mit besonderer Berücksichtigung der tiefen Lage, Study No.2 Andante, mm. 1-29.](image)

Hand stopping is not required to the same extent in this work as it is only included in a couple of studies, it is however still utilised in the lower register. The combination of these factors makes this volume of studies quite approachable and yet still reasonably challenging, and therefore they should prove beneficial in the development of the low horn

\(^{164}\) The range extends from written low F# up to high b flat”, although the actual pitches will be altered by transposition. Written high c”” is also included for horn in D, in studies No.16 and No.17.
skill set. They could certainly be used prior to Neuling’s 30 Spezial-Etüden für tiefes Horn, or to develop strength prior to attempting longer etudes.

Some valuable exercises can also be found in Neuling’s method, the Grosse F und B Hornschule: für den Elementar Unterricht mit besonderer Berücksichtigung der Schulung des Gehörs und der rhythmischen Empfindung, which also contains a relatively long introduction text that covers many aspects of playing the horn. Although the low register is clearly not the focus of this work, it is employed in some challenging ways, following the introduction of the bass clef in lesson eighteen (see Figure 3.19).

Figure 3.19: Hermann Neuling, Grosse F und B Hornschule, Exercise No.3 from Lesson 18.

Simple flexibility drills across the harmonic series of both the F and B flat sides of the horn are frequently included, as well as many exercises based on mixed intervals, scales and arpeggios, using different articulation patterns and rhythms. Octave leaps are often featured, and form the basis of more challenging exercises like the following example from lesson twenty-two (see Figure 3.20).

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166 Prior to this the range has been extended gradually from its starting point of g to c”. From Lesson 18 the range extends to a full three octaves, from low B flat up to high c””. The highest notes are often optional. Most of the exercises are quite short, with only one extending beyond a page in length.

167 The work also includes several duets, and concludes with a number of orchestral excerpts.
Figure 3.20: Hermann Neuling, *Grosse F und B Hornschule*, Exercise No.3 from Lesson 22.

The *34 Etüden für tiefes Horn* by Leipzig based horn player Albin Frehse (1878-1973)\(^{168}\) were intended to be more “musically challenging” than the simply conceived etudes books available that are technically based, and also written with a primary aim of targeting bass clef reading and hand stopping, which is notoriously difficult below the treble stave.\(^{169}\) There are certainly a number of challenges throughout the book, and indeed a lot of stopped notes and phrases, however these are generally well approached, usually echoing the previous note or phrase. Both the treble and bass clef are utilised, in addition to numerous time signatures and keys ranging from six flats through to five sharps in both major and minor tonalities (see Figure 3.21).\(^{170}\)


\(^{169}\) Albin Frehse, *34 Etüden für tiefes Horn*, preface.

\(^{170}\) Old notation when the bass clef is used. Major and minor scales are also included as an appendix at the end of the book.
Most of the etudes are about a page in length, and require a relatively wide range, good agility and control. They are also quite modern musically, and a significant number of them include modulations or more complex structures where contrasting ideas are explored, making them more challenging to approach and play. The Frehse etudes not only provide a companion work for the difficulties found in Neuling’s etudes, but also significant challenges for more advanced students.

Also mentioned in the foreword of this publication are the significantly easier thirty-six *Etüden für Waldhorn* that were composed by Albin Frehse to complement the studies of Georg Kopprasch and Bernhard Eduard Müller (1842-1920). Although

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171 Range extends three octaves, from optional low Gs up to a flat’’.
173 Little is known about Kopprasch. Born in Dessau, he was the son of bassoonist and composer Wilhelm Kopprasch (c.1750-after 1832). He played the horn in the band of the Prussian regiment before joining the Berlin Royal Theatre, and later returned home to play second horn in the court orchestra there. The famous Sixty *Etudes for Cor Basse* Op.6 “were first published in 1832 or 33 by Breitkopf and Härtel in Leipzig. While it is not known if any specific event inspired Kopprasch to write these etudes, it is possible that they were written for use at the Musical Institute in Dessau, which had been founded in 1829 by Friedrich Schneider (1786-1853), Kapellmeister to the Duke of Dessau. Notably, Schneider had written one of the first reviews of the valved horn earlier in his career from Leipzig.” John Ericson, “The Original Kopprasch Etudes.” Available at: [http://www.public.asu.edu/~jqerics/original_kopprasch.htm](http://www.public.asu.edu/~jqerics/original_kopprasch.htm)
See also: John Ericson, “Later Editions of the Kopprasch Etudes.” Available at: [http://www.public.asu.edu/~jqerics/later_ko.htm](http://www.public.asu.edu/~jqerics/later_ko.htm)
written for horn in F the composer also suggests a number of alternative transpositions for each etude with the aim of developing either strength, dexterity or occasionally to make the etude slightly less demanding for students of less ability. Twenty of the twenty-two etudes that make up the first book are fairly simple; all being less than two pages in length, in keys ranging from four sharps through to four flats, only covering a two and a half octave range that extends from low c up to high g”” and therefore only using treble clef. However, the seventeenth etude introduces hand stopping and also extends the range down a further fourth to the low G, and the twenty-first etude covers a range that extends from low B flat up to high a flat”” (see Figure 3.22).¹⁷⁵ This penultimate etude is based on themes from the operas *Das Rheingold* and *Götterdämmerung* by Richard Wagner (1813-1883).

![Albin Frehse, Etüden für Waldhorn, Etude No.21 Ruhig gehend, mm. 1-36.](image)

¹⁷⁴ Second horn player in the Gewandhaus Orchestra in Leipzig, and possibly also in Schwerin. Müller wrote several books of etudes as well as some chamber music. French-Horn.net website, accessed 18/07/2013. Available at: [http://www.french-horn.net](http://www.french-horn.net)


¹⁷⁵ Both of these etudes use old notation in the bass clef.
In the fourteen etudes that follow in book two, the keys are occasionally a little more complicated\textsuperscript{176} and the range is expanded further. This however, is predominantly achieved at the top of the range, which is extended to include high c'''. Several etudes extend to two pages in length\textsuperscript{177} and the treble clef is again used almost exclusively. Etude twenty-eight is of special interest as it is based on the famous ‘long call’ from Wagner’s opera \textit{Siegfried} (see Figure 3.23).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{etude.png}
\caption{Albin Frehse, \textit{Etüden für Waldhorn}, Etude No.28 \textit{Ziemlich schnell}, mm. 45-79.}
\end{figure}

The newest addition to the repertoire of low horn studies are the \textit{15 Low Horn Etudes} by Portuguese horn player and composer Ricardo Matosinhos,\textsuperscript{178} which he dedicated to Sarah Willis “for all her work as a low horn player and for being such a big inspiration for all hornists.”\textsuperscript{179} Composed in a heavily jazz inspired and rhythmically vibrant style that aims to be appealing to students, these etudes are of varying difficulty but

\begin{itemize}
\item\textsuperscript{176} Keys ranging from five sharps through to six flats.
\item\textsuperscript{177} The last two etudes, which are cycles of scales and arpeggios are significantly longer.
\item\textsuperscript{179} Ricardo Matosinhos, \textit{15 Low Horn Etudes}, preface.
\end{itemize}
all certainly target the lower register. They are essentially a series of character pieces in contrasting styles, and therefore the fact that the publication foreword includes a brief synopsis of each etude identifying the compositional elements used, inspiration behind the music and sometimes suggesting an approach to playing the material is advantageous (see Figure 3.24).

![Figure 3.24: Ricardo Matosinhos, *15 Low Horn Etudes*, Etude No.1 *Etude for Pedro*, mm. 1-24.](image)

One of the major difficulties encountered within a number of these etudes stems from the musical content being based on pentatonic and blues scales or modes, which are far less familiar to the classical musician. The technical requirements are also quite challenging in some etudes, requiring good flexibility and articulation throughout the range of the instrument whilst at the same time negotiating the complex rhythms and extended techniques that are frequently used. Given the heavily jazz influenced and complex

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180 The overall range is expansive but remains accessible throughout, extending just over three octaves from pedal D to high F”.
181 These include different glissandi effects, pitch bends, flutter tonguing, half valving and quite a lot of multiphonics.
nature of many recent compositions for the horn, I am sure that these etudes will soon become standard repertoire for advanced students.\(^{182}\)

Since the development of the valve in the early nineteenth century there has been a need for pedagogical resources specifically targeted towards the lower register of the horn. Whilst earlier works composed for the natural instrument, such as Gallay’s *12 Studies for Second Horn* Op.57, have both their challenges and rewards and certainly deserve a place in the syllabus there was seemingly a gulf between those and the well-known etudes of Hermann Neuling and Albin Frehse composed for the valve horn in the mid twentieth century. The lack of recognised resources that were targeted towards the development of the horn’s lower register was particularly limiting for less advanced students. Teachers have been forced to use more standard etudes transposed into lower keys or played down an octave, or resorted to borrowing material from other instruments to fill the void, however this need has been realised, and there are now a number of new practical resources that are readily available and which cater to students of all levels. Whilst these are not as well-known or as widely utilised as the more standard method and etude books, especially amongst institutional band and music programs, it is hoped that their use and familiarity will increase in the future and low horn technique will no longer be such a common fault. Unfortunately informative texts are still somewhat lacking, with most etude and method books containing little information to guide teachers and students through their endeavours, and journal articles appearing rarely. The exceptions to this statement are Douglass Hill’s *Low Range for the Horn Player* and Randy Gardner’s *Mastering the Horn’s Low Register*, both of which are very highly recommended.

\(^{182}\) Other publications of interest, which were unavailable for this study, include the unpublished *Low-Horn studie Johannes Brahms: variationen über ein thema von Joseph Haydn* composed in 2000 by Danish horn player Thomas Ekman (b.1956), the *20 Estudios para trompa bajo* by Spanish horn player Vincente Zarzo Pitarch (b.1938), (Valencia: Piles Music, 2002) and the *Twenty Difficult Etudes for the Horn’s Middle Register* by current Professor of Horn at the University of Wisconsin-Madison School of Music Daniel Grabois (b.1964), (Self Published, 2009). All three of these publications are recommended as being of medium difficulty by Ricardo Matosinhos on his Horn Etudes website. Available at: [http://www.hornetudes.com/](http://www.hornetudes.com/)
Chapter 4 - Contemporary Compositions for Low Horn

When setting out this research project, one of the intended outcomes was acknowledged as being the identification and evaluation of additional solo pieces that feature the horn’s lower register. It was crucial that these works demonstrated pedagogical value, in addition to showcasing the level of technical mastery and musicality that is possible in the lower register of the horn, therefore providing legitimate repertoire options for solo performances and examinations. This was especially necessary now that there is a resurgence in somewhat ‘specialised’ low horn players, encouraged largely by the members of horn quartets and ensembles and the excellent compositions and arrangements that have been performed and recorded by them.\(^1\) Amongst the recommendations that were received from teachers and performers throughout my candidature, many works were mentioned as being potentially suitable for my research into solo works. Unfortunately a significant number of these fell into alternate classifications; many works were encountered that “don’t go too high” or have a “significant moment in the lower register,” but very few that could really be labelled as truly featuring the lower register.\(^2\) This was also the case when reading recording and sheet music reviews; many promising leads ended in disappointment. A significant number of the following works have not been reviewed in *The Horn Call*, and many of them are yet to be recorded and made commercially available.

\(^1\) These include Charles Putnam of the American Horn Quartet and Sarah Willis of the Berlin Philharmonic Horn Quartet, as well as larger horn ensembles including the L.A. Horn Club and more recently The London Horn Sound, Vienna Horns and Ensemble Capricorno that have played arrangements and original compositions featuring the low players on both horn and Wagner tuba.

\(^2\) These include Alexander Glazunov’s *Rêverie* for Horn and Piano Op.24, Camille Saint-Saëns’ *Morceau de Concert* for Horn and Orchestra (or Piano reduction) Op.94 and Robert Schumann’s *Adagio and Allegro* for Horn and Piano Op.70 to name a few.
The very small number of standard low horn pieces written since the development of valves, were therefore frequently suggested by my sources as being basically the extent of what was available. The *Bagatelle für tiefes Horn und Klavier* by Hermann Neuling (1897-1967) is without a doubt the most famous of these low horn works. Originally published in East Germany, it remained unavailable and unknown in the west until Manfred Klier suggested its use as the required solo for a low horn audition being held by the Berlin Philharmonic in November 1984. By this point the music was also out of print, so a photocopy of Klier’s original horn part was prepared and sent to the candidates, resulting in a single week of preparation without a piano score or any idea of how the work might actually sound. Nonetheless, the resulting performances were relatively well received by the orchestra, though not without the occasional outburst of laughter. The Neuling *Bagatelle* has gone on to become the standard low horn solo in both audition and recital settings and today it is both well-known and frequently performed throughout the world. Although a famous low horn player in Germany during his life, Hermann Neuling is not particularly famous outside of horn circles and surprisingly little is documented about his life considering the importance of his contributions. In addition to the *Bagatelle*, he also wrote a concerto, a method, and composed several books of etudes for the horn.

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5 Private correspondence with Fergus McWilliam, who won the audition, 23/01/2014.

6 Hermann Neuling played and taught in Berlin, and later Cologne. He also played in the Bayreuth Wagner Festival Orchestra for twenty-one seasons, between 1933 and 1963. This is testament to Neuling’s importance as a performer and teacher as each year after 1953 he required special permission to cross over into West Germany. Private correspondence with William Melton, 06/02/2014. Neuling also taught at the State Conservatory in Izmir, Turkey between 1962 and 1966. Poor health made it necessary for him to return to Germany, and unfortunately he died nine months later. Private correspondence with Mahir Çakar, 12/02/2014.

7 The *Konzert für tiefes Horn* was completed prior to 1949 but rejected by the publisher that Neuling approached, who instead suggested a smaller piece. The first movement later formed the foundation of the *Bagatelle*. Private correspondence with Peter Damm, 29/04/2014.
The Bagatelle is both loved and despised amongst horn players, and audiences, for the difficulties that it showcases within its somewhat quirky and humorous nature, and yet none can argue its necessity or high profile for all other low horn pieces are inevitably judged in comparison to it. It is essentially a five-minute showpiece of low horn techniques juxtaposed with Romantic inspired lyrical melodies that are constantly being restricted and interrupted by more challenging technical ideas, such as wide intervals as well as rapid arpeggios and scale runs. The opening fanfare-like phrase, which covers a little over two octaves, is almost immediately contrasted by a more lyrical theme that also covers a reasonably wide range and includes several octave jumps (see Figure 4.1).

A brief cadenza of cascading arpeggios that eventually descends to a low A leads into the second, more Romantic section of the piece, although this again is short lived, with a return to more technical difficulties. The highlight of the Bagatelle for me is the eleven bars that begin with the slow frei im Vortrag melody at figure 6 and dramatically build in momentum towards the recapitulation at figure 7 (see Figure 4.2). Beginning on g below the stave, the horn melody extends down an octave to the low G as well as up into the stave, before a rapid descent down to low c and a two octave jump back up to c’’. This flows into a dramatic series of arpeggios that lead into the piano’s reintroduction of the opening fanfare.\footnote{Most importantly: Hermann Neuling, \textit{30 Special Etudes for Low Horn}, 2 vols. (Leipzig: Edition Pro Musica, 1951). These were discussed in Chapter 3.} \footnote{Rather than playing the four bars before figure seven at \textit{Tempo I}, I like to play this brief section slightly faster as this allows for a small \textit{ritardando} into the recapitulation.}
The virtuosic conclusion to the piece again sees the opening’s fanfare-like motif played alongside chromatic lines, octave leaps and finally ascending scalic runs. Although written in modern harmonic language, the rapid leaps around the register and arpeggio runs are certainly reminiscent of the traditional cor basse writing for natural horn where the reliance on the harmonic series necessitated that style of writing.
One of the great musical challenges with this work is in the interpretation. For audition purposes a strictness of tempo and evenness of notes in terms of their dynamics, tone and articulation seems crucial, essentially creating the feeling of a fairly disciplined march. Musically however, the character of the piece seems to demand a little more freedom and exuberance. It is through this contradiction, and the somewhat comical forays into the low register that humour is created; as the piece “wants to be played with romantic rubato but cannot ultimately shake its military rigidity and lack of soul.”

Imagine the German actor Gert Froebe playing the overweight Prussian officer in the 1965 film "Those Magnificent Men in their Flying Machines". Imagine him stuffed into his tight-fitting uniform and helmet, attempting to compose or perform a romantic work for horn. How might it work out? A little stiff to say the least.

In a similar way to the Neuling, the *Canto Serioso* for horn (or cello) and piano by Danish composer Carl Nielsen (1865-1931) has also become a standard low horn piece. Although most famous for his six symphonies and large output of songs, Nielsen was also active as a scholar and conductor, conducting the Royal Orchestra at the theatre from 1905 until 1914. The *Canto Serioso* is the earliest of the works contained in this chapter, composed during the month of April in 1913 following the announcement of a competition being held by the Royal Orchestra on April 24 of that year. The aim of the competition was to replace one of the less capable members of the horn section, Emil Tornfeldt who

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10 Private correspondence with Fergus McWilliam, 23/01/2014.
11 Private correspondence with Fergus McWilliam, 23/01/2014.

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had joined the orchestra the previous year, with a more competent player on 4th horn. The piece was therefore written specifically to exploit the lower register of the instrument and test the applicants.

The short song is in ternary form, with a lyrical opening Andante sostenuto that demands good tone and sustaining ability (see Figure 4.3), being contrasted with a middle section which although slower and marked Adagio molto is much more assertive in nature due to the triplet arpeggios and repeated notes featured in the horn line. Although these sit in a comfortable range, the articulation still needs to be precise and uniform throughout, with the exception of the notes that are accented or marked staccato. The work reaches its climax on a sustained f’ at the top of the stave in bar 26, which is the highest note in the piece, before winding down and returning to the opening material. There is also a brief coda, starting in bar 37, where the tempo alternates between the Andante and Allegro, and the range gradually descends down to the final note; a sustained low c.

![Figure 4.3: Carl Nielsen, Canto Serioso for Horn and Piano, mm. 1-14.](image)

The Royal Orchestra competition was won somewhat unexpectedly by twenty-three year old Martin Sørensen, who joined the orchestra on July 1, 1913. It has also been suggested that prior to the work’s publication in 1944 it was used as an exam piece at the

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16 Overall the range extends from low G up to f’.
Royal Academy of Music, which reinforces its value as a solo piece for all horn students. The work contains both loud and soft dynamics, legato phrases and various articulations over three octaves in the important lower and middle registers, and also requires a musical approach to make for a compelling performance.

Beyond these two well-known pieces there are very few other recognised low horn solos from the last hundred years. Similar small-scale ‘character pieces’ are probably going to provide a more accessible option in the programming of recitals than the longer works discussed later on. One such work is the Lullaby for Second Horn with Piano accompaniment by the American Philip W. L. Cox Jr. (1910-2000). This short lyrical piece is quite straightforward, in binary form and covering a relatively small and comfortable range of just over two octaves, from low e flat to g’’ at the top of the stave (see Figure 4.4).

Figure 4.4: Philip W. L. Cox Jr., Lullaby for Second Horn with Piano accompaniment, mm. 1-13.
Considering the title includes the designation “for second horn” it is perhaps a little disappointing that further exploration of the lower register was not undertaken, as this is not a challenging work. However, it could be used with less advanced students to encourage good tone and support in the middle and lower registers, as well as to develop a cantabile style that utilises rubato.

Another relatively short and simple low horn piece is the *Scherzo* for Horn (or Bassoon or Cello) and Piano, composed in 1970 and 1971 by the English Composer Michael Head (1900-1976). Head is well known in the United Kingdom and Canada due to his large output of vocal compositions. Although melodically simple and harmonically conservative, the Scherzo is an attractive option for low horn players due to the neatness and precision that it requires. The clarity of articulation and sudden dynamic contrasts required below the stave are the main challenges in this brief but enjoyable character piece that is entertaining, witty and quite energetic (see Figure 4.5).

![Figure 4.5: Michael Head, Scherzo for Horn and Piano, mm. 34-51.](image)

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23 Head also composed a significant amount of chamber music for the oboe following performances with oboist Evelyn Rothwell (1911-2008). Evelyn Rothwell was also known as Lady Barbirolli following the death of her husband, the world-renowned conductor Sir John Barbirolli (1899-1970). Nancy Bush, *Michael Head: Composer Singer Pianist* (London: Kahn & Averill, 1982).

24 The range extends from pedal F up to g”.

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The Scherzo was dedicated to the horn player Ian Smith, who studied piano with Michael Head at Royal Academy of Music in his first year there before leaving early in 1971 to take the post of co-principal horn with the Scottish National Orchestra, a post that he held for twenty-two years.\textsuperscript{25}

Relatively unknown is the 1977 composition Segnali per corno e pianoforte\textsuperscript{26} by Italian horn player and composer Carlo Prosperi (1921-1990), who was an important figure in Italian atonal music.\textsuperscript{27} The work is dedicated to the famous Italian horn player Domenico Ceccarossi (1910-1977), who made several LP recordings and composed a number of important works himself\textsuperscript{28} in which he intended to display technical virtuosity and show “the horn on the same level as the Caprices of Paganini.”\textsuperscript{29}

The four movements of Segnali are closely linked, and heavily reliant on a ‘call and response’ style of composition where each instrument presents its own signal call motif, which is then developed. The first movement is the most significant in terms of lower register work; written in alternating time signatures it is characterised by wide intervals and frequently descends to low c and often to the pedal F, although these are optional. Beneath the solo horn’s opening call the piano plays only a pedal F (concert pitch) for the first 15 bars, before then adding a tone cluster and responding with a repeated triplet call of c-c#-e in bar 18 (see Figure 4.6).

\textsuperscript{25} Private correspondence with Ian Smith, 10/03/2012.
\textsuperscript{26} Carlo Prosperi, Segnali per corno e pianoforte (Milan: Edizioni Suvini Zerboni, 1980).
\textsuperscript{28} Most notably the Dix Caprices pour Cor. These are obviously quite technically demanding and require good flexibility, stamina and musicality. They cover a wide range from pedal F up to high c’’, and are characterised by wide intervals, extended arpeggiated figures, rapid articulated passages including double tonguing, some hand stopping and occasionally rather expansive lyrical lines. Domenico Ceccarossi, Dix Caprices pour Cor (Paris: Alphonse Leduc, 1955).
\textsuperscript{29} Most of the recordings made by Domenico Ceccarossi are either live or unedited. The International Horn Society webpage, accessed 02/02/2013. Available at: http://www.hornsociety.org/ihs-people/honoraries/26-people/honorary/45-domenico-ceccarossi-1910-1997
Figure 4.6: Carlo Prosperi, *Segnali per corno e pianoforte*, Movement I., mm. 1-19.

Figure 4.7: Carlo Prosperi, *Segnali per corno e pianoforte*, Movement III., mm. 27-32.
The second movement is far more energetic, utilising dotted rhythms in 3/8, 6/8 and 9/8 bars that alternate quite freely. The *forte* horn calls die away in dynamic so that the answering piano line of quavers are clearly heard. This creates a huge contrast with the following movement, where the tempo is significantly slower, the horn is muted and the piano takes the lead for the first section. The horn replies in the second section, triplet patterns soaring over tremolo chords and a slow moving bass line in the piano. A repeated pattern of twelve notes is then introduced in the piano accompaniment, which repeats for most of the remainder of the movement (see Figure 4.7).

The finale is rapid and chromatic, with the piano playing awkward semiquaver patterns in what are essentially 1/4 bars in between the more sustained and flexible horn calls. The first horn call in measure 15, repeats the piano’s first call of the first movement; the repeated triplet call of c-c#-e (see Figure 4.8).\textsuperscript{30} Echo hand stopping effects are used extensively in the horn part, further suggesting a return to previously heard material.

\textsuperscript{30} In concert pitch.
The horns signal calls get increasingly complex until, in bar 57, the direction flessibile disappears and a more constant momentum soon takes over with semiquaver patterns alternating between the two voices. A brief but aggressive, accented and fortissimo interlude suspends the movement briefly, which is somewhat reminiscent of the third movement with its tremolo accompaniment and angular triplet melody in the horn. Finally though, the opening horn call again rings out and the piece concludes in much the same way as it began.

There are certainly a number of challenges found in this work, not only in the wide range but also in the somewhat awkward intervals, rhythms and technical sections. Due to this and the contemporary and complex musical language that Prosperi uses, this would

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31 The range extends from pedal F up to high b''.
be an effective recital piece, with enough flair and variation built in to maintain the audience throughout the duration of the work.

Better known are the works of Dutch composer Jan Koetsier (1911-2006), who initially studied piano and conducting at the Berlin Hochschule für Musik.\textsuperscript{32} Today he is almost certainly best known for his Brass Symphony Op.80, composed in 1979, however Koetsier composed over 170 works including symphonies, piano and organ music, songs, choral works and an opera, with brass instruments being well represented in many of these. Initially influenced by Paul Hindemith (1895-1963), Koetsier increasingly incorporated Neo-Classical ideas into his music, combining lyrical melodies with strong rhythms, and often including hints of jazz. Before retiring in 2002 he took commissions and worked with some of the world’s leading brass ensembles, including the Philip Jones Brass Ensemble, Trio Armin Rosin, Brass Philharmonie, Slokar Quartet, Rennquintett, Leipziger Hornquartett and the Münchner Blechblasersolisten. The following three pieces represent only a small selection of Koetsier’s compositions for the horn as a solo instrument.\textsuperscript{33}

Although titled Romanza,\textsuperscript{34} the predominant character of this simple ternary piece for Horn and Piano that is catalogued as opus 59/2 is more like that of a lyric pastorale due to the relaxed 12/8 metre and Larghetto tempo (see Figure 4.9), however the contrasting B section has much more momentum. The middle section is played muted, and the performer may be required to double tongue the repeated notes if the direction of piu mosso is taken

\textsuperscript{32} As a conductor, one of Jan Koetsier’s most notable positions was as second conductor of the Concertgebouw Orchestra in Amsterdam under Willem Mengelberg, a post he held from 1942 until 1948. He was widely criticised during this time due to the German occupation of Holland, and indeed had some difficulties with the German regime during the war, but in 1950 he resettled in the Federal Republic of Germany and became the conductor of the newly established Bavarian Radio Symphony Orchestra. He was also the professor of conducting at the Munich Hochschule für Musik from 1966 until 1976. Emile Wennekes. “Koetsier, Jan.” Grove Music Online. Oxford Music Online. Oxford University Press, accessed 02/10/2013. http://www.oxfordmusiconline.com/subscriber/article/grove/music/15257

\textsuperscript{33} Refer to CD: Jan Koetsier: Music for Horn - Alone and with Piano and Harp, James Boldin with various artists, MSR Classics MS1393, 2013. This recording contains all three of the works discussed here.

to heart. It is a short, but beautiful and easily accessible work that requires some flexibility and displays both evenness and beauty of tone as well as phrasing and musicality. Composed in 1972, it was not performed until 1985.

Figure 4.9: Jan Koetsier, *Romanza* for Horn and Piano Op.59/2, mm. 1-12.

The work that follows in the catalogue, *Variationen* for Low Horn and Piano Op.59/3, was composed in 1986 and performed later that year in Detmold. Although the theme that this six-minute showpiece is constructed upon is not particularly imaginative, the treatment is quite entertaining, and it does provide a piece that demonstrates how far the technique of the horn has come since the development and implementation of valves. Following the theme, the first variation is quite virtuosic, featuring rapid octave leaps, arpeggios and mixed intervals (see Figure 4.10), whilst in contrast the second is a very sedate series of chromatic scales, albeit with some octave Es in the middle.

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35 Range extends from low A flat up three octaves to a flat”.
36 Although it was described by William Scharnberg in his review for *The Horn Call* 11/2 (April 1981): 77-79, as “a lyrical, neo-Romantic ABA work with a couple of forays into the low range, three workable ritardandi [sic.], and a muted, dance-like middle section.”
In the third variation Koetsier returns to virtuosity, this time with lower neighbour notes creating a triplet pattern that requires fast finger technique if the illusion of a constant tempo is to be maintained throughout the entire piece. This is in addition to a number of fast arpeggio patterns that require clear articulation and good agility. The fourth variation is written in multimetre and has an air of assertiveness due to the marcato direction (see Figure 4.11). In addition to the wide intervals that are so prominent in this piece, this final variation also utilises hand stopping and flutter tonguing before winding down and returning to the opening theme and one final flourish of descending arpeggios to mark the culmination of the work.
These two works by Koetsier are easily combined with the encore-style *Scherzo Brilliante* for Horn and Piano Op.96 to create a three movement sonata-like work.\(^\text{38}\) Composed in 1983 for Marie-Luise Neunecker it was premiered the following year, however this work is not a low horn piece. Although it is only about three minutes long, the scherzo can be quite tiring as it predominantly sits in the upper part of the stave and only occasionally ventures below it, and even then only as low as an f (see Figure 4.12). There are very few rests, and it also ascends to a high c’’’ at the end of the scherzo/A section. Again this piece is written in ternary form, and it is generally full of energy and drama, but with a sharp contrast created through the application of a noticeably different middle trio section. In this section, the momentum and drama fade and longer, softer notes and hand stopping briefly take over before the return to the scherzo proper.\(^\text{39}\)


\(^{39}\) This is with the exception of the triple tongued chromatic scale in bars 94-97.
Written in 1985 for his wife Linda, the Romance for Horn and Piano of Joseph Pehrson (b.1950)\textsuperscript{40} is just one of a number of works written for the instrument by this American pianist who is known for experimenting with unusual tunings and instrument combinations, and frequently including electronic and amplified instruments in his works.\textsuperscript{41} His catalogue of works includes several horn ensemble pieces, a number of chamber music works featuring the horn in a variety of both traditional and mixed ensembles, and a Concertino for Horn and Eight Instruments. Several of the pieces written by Pehrson between the years 1987 and 1991 were commissioned and premiered by the Belgian horn player Francis Orval.\textsuperscript{42}


\textsuperscript{41} Composer’s webpage, accessed 02/11/2013. Available at: http://users.rcn.com/jpehrson/JosephPehrson.html

\textsuperscript{42} Born in Liège Belgium, Orval is renowned as a horn teacher, soloist, chamber musician, and recording artist on both the modern and natural horn. He has written a method and also composed and arranged a large number of works for the horn in recent years, including works by Bach, Mozart, Rosetti and Vivaldi. Publisher’s website, accessed 02/11/2013. Available at: http://reiif.ch/composer/Orval-Francis-%28Horn-Composer%29/15
The Romance consists of three short movements, each highly melodic with contrasting sections, but also characterised by the almost constant use of multimetre. The first movement is the most substantial. It opens with a fanfare-like motif over somewhat infrequent chords in the piano, which then move through several time signatures as the material is gradually altered. Suddenly the accompaniment takes on a rhythmic drive in bar 18 and the momentum and tempo begin to build towards the middle section, which returns to the slower opening tempo (see Figure 4.13) and is characterised by triplet movement in the horn above a somewhat repetitive, almost minimalistic accompaniment of broken chords that magnifies the use of polyrhythms by alternating freely between semiquaver quadruplets, quintuplets and sextuplets.

The expansive legato melodies throughout this middle section are always juxtaposed by rapid chordal figures in the accompaniment, of either flowing arpeggios or block chords, which makes for an interesting texture throughout. As the drama begins to build with the horn’s entry in bar 68, again there is a surprising shift in character and a

Figure 4.13: Joseph Pehrson, Romance for Horn and Piano, Movement I. Moderately, mm. 42-54.
brief lyrical moment of three bars before the return of the opening fanfare. The second movement is quite straightforward, ternary in form with the middle section sustaining slightly more momentum than the peaceful and quite lovely opening and closing sections. The brief finale should maintain an air of excitement and energy throughout, eventually building from the lower register into the middle register and through semiquaver runs towards the dramatic rallentando in bars 55 and 56, before the final fortissimo outburst. This piece should certainly be considered as a realistic option for those looking for a short but reasonably accessible contemporary work that has some challenges in range and articulation in the lower register, whilst remaining tonal throughout. The main difficulty certainly lies in the rhythmic accuracy that is required.

The Tre Poemi for Horn and Piano by German composer David Volker Kirchner (b.1942) is a dramatic set of pieces composed in the late 1980s for famous horn player and teacher Marie-Luise Neunecker. The work was completed following Neunecker’s first prize in the International New York Concert Artist Guild Competition of 1986. This is a fantastic recital piece, and just one of a number of works for horn by the composer. Other works of interest by Kirchner include a Concerto for Horn and Orchestra that was also composed for Neunecker and a number of chamber music pieces featuring the instrument.

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43 Extending from pedal F to high a flat’’.

45 Derived from a thirty minute song cycle for Baritone voice, Horn and Piano by Kirchner titled Orfeo, after the text “Die Sonette an Orpheus” by Rainer Maria Rilkes. In the nine movement cycle, movement IV is the Lament d’Orfeo and movement VII the Danza d’Orfeo, however La Gondola funebre is not included. Orfeo was premiered on May 6, 1988 in Karlsruhe by Neunecker, with Baritone Hermann Becht and Pianist Nina Tichman. David Volker Kirchner, Orfeo for Baritone voice, Horn and Piano (Mainz: Schott Musik International, 1989). Schott, Volker David Kirchner: Catalogue of Published Works, accessed 05/02/2013. Available at: http://www.schott-music.com/shop/resources/643364.pdf
46 David Volker Kirchner, Konzert für Horn und Orchester (Mainz: Schott Musik International, 1996).
The first movement titled *Lamento*[^47] is quite dramatic and expansive in nature. The interval of a tritone is almost constantly present, and provides the harmonic material for much of the work. The first twelve bars of the movement are for the horn alone and centred around the pitches a flat and d, but they are played with the bell of the horn directed into the piano with the sustain pedal held so that the strings vibrate freely, which aids in creating a vibrant atmosphere (see Figure 4.14). The horn part frequently utilises glissandi across the harmonic series as well as echo effects and dramatic colour changes through hand stopping, whilst other tonal possibilities such as plucking the strings of the piano are used in the accompaniment.

Figure 4.14: David Volker Kirchner, *Tre Poemi* for Horn and Piano, Movement I. *Lamento*, mm. 1-7.

The echo effects play an important role not only in the resonance of the piano, but also in the frequent canonical transformation of the motifs, which are easily conceived and followed in their variations.48

The rather sudden outbursts of anger that interrupt in the middle of this rather sombre movement are quite disconcerting, characterised by rapid repeated notes and glissandi. On the second occurrence, the tritone interval between low c# and low G is repeated several times.49

The second movement is titled Danza and has much greater drive and energy but is certainly not lacking in drama. It is in a fast 3/8 and built around short motifs that feature rather wide intervals and are repeated numerous times (see Figure 4.15). Through the addition of double tonguing and rapid alternations between hand stopped and open fragments these motifs become quite complex. This movement is where solid low horn technique is particularly noticeable in producing good, clear articulation and projecting the rapid notes with good clarity.

49 Overall the range extends from low G to high a’’. 
The third movement, *La Gondola funebre*, is again in complete contrast to the earlier two movements. This slow *Misterioso, molto sostenuto* movement is quite dark and heavy, but still provides a lot of opportunities for the horn player to demonstrate tone and technique. Glissandi effects from open to stopped horn, half stopped phrases and a lot of *sforzando* accents are utilised throughout the movement, but especially in the more agitated middle section.

The piano’s pedal provides the sound surface, which changes continually but imperceptibly. In great waves, the cantabile melody of the horn slides over this surface of sound. Strident and cutting, the high strings of the piano are put into play, along with *sforzatissimo* accents from the horn and a pulsing rhythm in the lowest register, all of which act to rupture this unreal silence.50

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The renowned American trumpet player and conductor Anthony Plog (b.1947) is also well known today for his compositional output, which often features brass and wind instruments. For the horn there are a large number of solo pieces, chamber works, and two concerti by Plog, as well as the *Triple Concerto* for Trumpet, Horn, Trombone and Orchestra.

Plog’s *Nocturne* for Horn and Strings\(^{51}\) was written for Gail Williams, completed in 1988 and premiered by her the following year on November 4 in St. Charles, Illinois with the Illinois Chamber Orchestra and director Stephen E. Squires.\(^{52}\) Williams’ wonderful playing and concept of line, experienced during the many years that the two played together in the Summit Brass, inspired Plog in the lyrical and expressive nature of the Nocturne.\(^{53}\) The work opens with an expansive solo horn line, creating a contemplative feeling before the sustained string chords enter in bar 8 over a pizzicato bass line (see Figure 4.16).

![Figure 4.16: Anthony Plog, Nocturne for Horn and Strings, mm. 1-18.](image)


\(^{52}\) Anthony Plog, *Nocturne for Horn and Strings* (Piano reduction), preface.

\(^{53}\) Private correspondence with Anthony Plog, 21/01/2014.
After a brief muted section of arpeggiated figures, the work develops into a much more “vigorous and brilliant” Allegro at bar 50 in which elements of the primary theme reappear over a highly rhythmic and almost minimalist accompaniment. In this faster middle section, clear articulation and good agility are required as the horn part is largely composed of syncopated rhythms and flowing arpeggio figures that extend throughout the lower and middle registers (see Figure 4.17). The more animated accompaniment continues despite the reintroduction of the lyrical material from the opening of the piece in the horn. As the momentum slowly subsides the horn emerges into a brief cadenza that leads to the conclusion of the work.

Figure 4.17: Anthony Plog, Nocturne for Horn and Strings, mm. 59-85.

The expressive nature so evident in this work, and indeed throughout the series of nocturnes that Plog has written for brass instruments, does not exclude it from technical challenges. The beautifully lyrical melodies require good agility and control over tone, dynamics and phrasing, while the more technical middle section also necessitates clear

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54 Anthony Plog, Nocturne for Horn and Strings (Piano reduction), preface.
55 Whilst the nocturnes are designed to exhibit the lyrical nature of each instrument, they are just one portion of a larger project of works for each brass instrument, which consists of: Postcards (solo), 3 Miniatures (with piano), Nocturne (with strings) and Concerto (with full orchestra).
articulation and precise left hand technique. The eight minute work demonstrates so much so well that it really should be more widely known and performed far more often.\textsuperscript{56}

The Austrian composer and teacher Gottfried von Einem (1918-1996) travelled to Berlin in 1937 intending to study composition with Paul Hindemith (1895-1963), however due to rising political tensions Hindemith had already resigned from his position at the Berlin Hochschule für Music in March of that year.\textsuperscript{57} Von Einem remained in Berlin as assistant to the conductor of the Berlin Staatsoper, Heinz Tietjen (1881-1967) and studied instead with Boris Blacher (1903-1975), who later wrote the libretti for several of von Einem’s major operas.\textsuperscript{58} Although best known for his stage works, von Einem also composed a significant amount of chamber music in his later years. His \textit{Jeux d’amour: Drei Capricen für Horn und Klavier Op.99}\textsuperscript{59} was written in 1993, and dedicated to Helmuth Pany upon his fiftieth birthday.\textsuperscript{60} It was premiered at the Carinthian Summer Festival on August 3 the following year by Angela Odin and Robert Lehrbaumer.\textsuperscript{61}

The opening two movements of the work are fairly straightforward; the first begins as a lyrical melody in D Minor that is repeatedly interrupted by scale runs and strong chords in the piano accompaniment until eventually the horn joins in, whilst the second is a quaint little \textit{Allegretto} in 3/4 that is played muted throughout by the horn. The final movement, another \textit{Allegretto} in 6/8 this time, has an almost identical quaver tempo to the previous movement but a lot more quaver movement and a more complex accompaniment utilising cross-rhythms, which makes it quite a bit more difficult than the preceding

\textsuperscript{56} Overall the range extends from low A up to high b flat”.
\textsuperscript{60} Helmuth Pany was the managing director of the music publisher Doblinger from 1980 until 2008 when he handed over control to his son, Peter Pany. Helmuth is the great-grandson of the company’s founder Bernhard Herzmansky Sr. Doblinger \textit{sound:files} news (No.27, Autumn 2008): 11. Doblinger website, accessed 05/08/2013. Available at: \url{http://www.doblinger-musikverlag.at/index_en.php}
movements. The horn part also includes several semiquaver runs and arpeggios (see Figure 4.18).


Figure 4.19: Gottfried von Einem, *Jeux d’amour: Drei Capricen für Horn und Klavier* Op.99, Movement II. *Allegretto*, mm. 35-49.
Although the range of von Einem’s work is quite approachable, there are some awkward leaps between registers in each movement, ruling out performance by inexperienced players. Other difficulties found in the work include two octave leaps within phrases that are both articulated and slurred, and the numerous phrases that begin significantly higher or lower than the preceding note (see Figure 4.19).

_Night Song_ by Andrew Boysen Jr. (b.1968) was composed in 1994 through a commission from Virginia Thompson, and later won first prize in the 1999 International Horn Society Composition Contest. Boysen is well known in both the United States and United Kingdom as a conductor and a prolific composer of wind ensemble music. He explains the context of this composition in the following way:

Virginia was my high school horn teacher and an enormous influence on me as a player and as a developing musician. When she asked me to write the piece, it was a wonderful honor and a chance to write something for a person and player that I admired more than anything. I remember that she wanted something that was lyrical and dramatic….My concept for the piece was to move from the very bottom of the instrument to the very top over the course of the piece. Virginia was more of a high horn player so she definitely had the chops for the climactic moments. But she was also one of those rare players who also had a really strong low register. I was always much more of a low horn player, so it was easy for me to imagine that opening...and, in fact, play that opening as I was working on the piece.

_Night Song_ for Horn and Piano was envisioned to fill the slower and more lyrical spot within recital programs, but also as a medium to introduce more dissonant pitch

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62 Overall the range extends a little beyond three octaves, from low G up to b flat’.
64 This commission was with the assistance of West Virginia University, where Virginia Thompson has been the Professor of horn since 1990. Recording: Andrew Boysen Jr., _Night Song for Horn and Piano_, Virginia Thompson with James Miltenberger, _Colors: Music for Horn_, Mark Masters 7654, 2008.
65 Private correspondence with Andrew Boysen Jr., 22/01/2014.
material. It begins with a free, flowing section with the horn playing a motif that begins as a series of five notes and gradually becomes longer and more complex whilst the piano repeats its own motif of notes moving in contrary motion (see Figure 4.20).

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Figure 4.20: Andrew Boysen, *Night Song* for Horn and Piano, mm. 1-19.

There is a dramatic outburst at figure A before an ostinato (pedal point) consisting of a repeated chord cluster is set in motion at figure B. The music gradually builds in momentum, intensity and tempo through recurring as well as new motifs, different time signatures and characters towards the five climactic glissandi, which extend from f’ in the stave up to high c’’’ (see Figure 4.21), and a cadenza-like section at figure K.

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66 Private correspondence with Andrew Boysen Jr., 22/01/2014.
67 Initially this motif only covers two octaves, having begun on a low G, but the horn part soon extends to the top of the treble stave providing a good test of agility. This is also true of the many wide intervals found in the piece, which are predominantly sevenths or ninths.
Finally there is a return to the ostinato and later, the opening horn and piano motifs, which mark the conclusion of the work.

It is a dissonant work, with lots of clusters, seconds, and sevenths. Both horn and piano are subjected to a full range of technical and musical demands, particularly in rhythm and large, angular intervals.68

Although the work is not programmatic, it certainly is a dramatic, expressive and effective piece of contemporary music with plenty of technical challenges for the horn player. With the exception of a single hand stopped note, there are no extended techniques, although it does cover a wide range from low G up to high c’’’ and requires excellent technique and flexibility throughout this range, with many rapid and wide-ranging figures included, that are played both slurred and articulated.

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Composed in 1996, *The Trump of Swing I für tiefes Horn und Klavier* by the German composer Ernst-Thilo Kalke (b.1924)\(^69\) is a four movement work that draws its inspiration from a number of different sources. The opening movement is a *Fanfare* written in the style of a swing march, whilst the second *Evening Star* is a rendering of the well-known song *Lied an den Abendstern* (Song to the Evening Star) from the opera *Tannhäuser* by Richard Wagner (1813-1883).\(^70\) The third movement *Blue Waltz* is another homage, this time directed towards Johann Sebastian Bach (1685-1750) before a high-energy movement titled *Ultimo* concludes the work. The inclusion of “für tiefes Horn” in the title is somewhat misleading as the lower register is really only visited through a couple of brief forays below low g (see Figure 4.22).

![Figure 4.22: Ernst-Thilo Kalke, The Trump of Swing I für tiefes Horn und Klavier, Movement I. March, mm. 14-23.](image-url)

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\(^70\) Ernst-Thilo Kalke, *The Trump of Swing I für tiefes Horn und Klavier*, preface.
Overall the range only extends two octaves, from low d# up to e’, so although there are some wide intervals and arpeggiated figures that require reasonable technique the work remains very approachable for less advanced students and provides a fun, jazz inspired option to begin working on the lower register.

The American composer and pianist Jim Rhinehart (b.1967) composed his *Passacaglia* for Low Horn and Piano\(^{71}\) in 2009 at the beginning of his doctoral studies, with the support and guidance of long time friend and low horn specialist Tamara Kosinski, to whom the work is dedicated.\(^{72}\)

Jim and Tammy share a birthday one year apart, and were horn players together in junior high and high school where Tammy was always first chair and Jim was always second and rightfully so. Jim considers this piece a down payment on all the “I’ll write you a piece” promises he made throughout the years.\(^{73}\)

The Passacaglia is an accessible work for both players and audience members alike. Although it opens with an atonal sequence of crotchets where the interval of a second is constantly repeated, the recurring adaptations and variations of this material give the work a sense of continuity and familiarity (see Figure 4.23).

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\(^{71}\) Jim Rhinehart, *Passacaglia for Low Horn and Piano* (Bloomfield Hills, MI: Cornopub, 2011).

\(^{72}\) Tamara Kosinski is a graduate of the University of Michigan, the dedication actually reads: For Tammy Kosinski, Friend and “Little Sister.” The work was premiered in 2010 by one of Tammy’s high school horn students, Aidan Mase-Kemnitz. Private correspondence with Jim Rhinehart, 14/11/2013.

\(^{73}\) Jim Rhinehart, *Passacaglia for Low Horn and Piano*, preface.
Figure 4.23: Jim Rhinehart, *Passacaglia* for Low Horn and Piano, mm. 1-16.

When asked about the composition Rhinehart informed me:

> I've always loved Bach, and that's one inspiration. But more importantly, I liked the structure it imposed. Everything in the piece grows from those first 15 notes. The first and second bars are based on minor seconds, and the third and fourth bars are based on major seconds. Chords are built from those same intervals and pitches.  

From this somewhat uneasy opening the tension and momentum gradually increase through smaller note values and a steadily increasing tempo towards figure C, where there is a brief but dramatic outburst marked *con forza*. Soft sustained chords in the piano and hand stopped notes in the horn immediately create a contrast in mood, generating a rather sparse section with moments of silence, before the music begins to build again from figure E towards another outburst at figure F. This time the drama and excitement is maintained with semiquaver runs and dotted figures, which continue through to the conclusion of the work (see Figure 4.24).

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74 Private correspondence with Jim Rhinehart, 14/11/2013.
Figure 4.24: Jim Rhinehart, *Passacaglia* for Low Horn and Piano, mm. 113-125.

The passacaglia’s main difficulties lie in the articulation issues that are often present across the break and into the lower register; namely accuracy, clarity and projection. The range covered in the piece makes it an ideal showpiece for aspiring low horn players to show their technique in a contemporary but short and accessible work, or as a break amongst higher sitting repertoire in a longer recital.\(^75\)

Larger scale works are more difficult to find, and program, but several options exist for the low horn player. Perhaps the earliest of note is by the French composer, teacher and musicologist Charles Koechlin (1867-1950), who was heavily influenced by Jules Massenet (1842-1912) and Gabriel Fauré (1845-1924), with whom he studied at the Paris Conservatoire alongside Maurice Ravel (1875-1937) and Florent Schmitt (1870-1958).\(^76\) Koechlin should be reasonably well known amongst horn players, however this reputation is largely based on a single work; the *Quatre Petites Pieces* Op.32a, which due to its

\(^75\) The range extends down to pedal D but only up to high f’.

instrumentation of horn, violin and piano is often used to complement the *Trio* for Horn, Violin and Piano in E flat Major Op.40 of Johannes Brahms (1833-1897). Koechlin played the horn himself,\(^{77}\) so it is not surprising to find a significant number of other works featuring the horn amongst his catalogue of works, including solo and chamber music pieces, the most notable being the Sonata for Horn and Piano Op.70. In addition to these, Koechlin also wrote a large number of compositions for hunting horns.\(^{78}\)

The composer also transcribed his Sonata for Bassoon and Piano Op.71,\(^{79}\) which was originally composed in the years 1918 and 1919 and premiered in 1938, for the Belgian horn player Georges Caraël in the January of 1942.\(^{80}\) The three-movement work is quite short, yet still contains several challenges for the horn player, predominantly in its complex rhythmic and technical lines. It therefore provides an interesting performance option for horn players in terms of a late Romantic or early twentieth-century multi-movement work.

The first movement opens with a beautiful Impressionistic section where the lyrical solo line is enriched by flowing broken chords in the piano accompaniment. This material returns again to conclude the movement following a more energetic *Allegretto scherzando* middle section, which begins at bar 12 (see Figure 4.25). The peaceful second movement is both rhythmically and harmonically interesting despite the fact that it is constructed on a simple bar long ostinato that runs continuously throughout the movement (see Figure 4.26).\(^{81}\)

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\(^{78}\) Including two sets of *Twenty Sonneries* for Hunting Horns Op.123 and Op.142, both written during the 1930’s.


\(^{80}\) Although this transcription didn’t require a new score to be produced, the hand written manuscript is held by the Bibliothèque Nationale of Paris (M.S.16093) in addition to the original version (M.S.16096). Charles Koechlin, *Sonata for Bassoon and Piano Op.71*, preface.

\(^{81}\) The horn only plays the figure for six bars, occurring between figures 2 and 4.
Figure 4.25: Charles Koechlin, Sonata for Bassoon and Piano Op.71 transcription, Movement I. *Andante con moto*, mm. 14-31.

Figure 4.26: Charles Koechlin, Sonata for Bassoon and Piano Op.71 transcription, Movement II. *Nocturne: Andante quasi adagio*, mm. 1-4.
The third movement is somewhat reminiscent of the traditional 6/8 rondo finale for horn players, although in this case it employs many time signature changes (see Figure 4.27). The animated third movement is more difficult than the preceding two movements, jumping around a wider range and including some awkward lines, however it also provides a chance for the horn player to open up in the lower register and demonstrate good flexibility, articulation and control of dynamics.

![Figure 4.27: Charles Koechlin, Sonata for Bassoon and Piano Op.71 transcription, Movement III. Final: Allegro, mm. 1-17.](image)

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82 Initially 15/8, 9/8, 12/8 and 6/8, but later 3/4, 4/4, 5/4, 6/4 and 3/2.
83 Range extends from low B flat up to high c‴‴, although there are options to reduce the upper limit of this range to a high a♯‴ or g♯‴.
The solo horn part is slightly modified from the original bassoon part in several places, with some lines or fragments being altered through octave displacements. Although this is the principal change, the horn part also carries several additional playing instructions, predominantly reflecting the desired tone and character. The horn version also uses a mute in the middle section of the first movement, as well as hand stopping in the middle section of the finale, which adds further contrast.

A work that is deserving of greater recognition is the Sonata in E flat for Horn and Piano, Op.101 by “the English Rachmaninov” York Bowen (1884-1961). Following a period of service in the regimental band of the Scots Guards as a horn and viola player during the First World War, Bowen returned to the Royal Academy of Music to teach piano. He was friends with the famous horn soloist Dennis Brain (1921-1957) and his father Aubrey Brain (1893-1955).

The Sonata in E flat was composed in 1937 for Aubrey Brain and premiered by him in 1943. Dennis Brain also famously performed the work in a concert that took place at Wigmore Hall on April 30, 1956 with the composer at the piano. Although this particular concert had been scheduled to celebrate the tenth anniversary of the Dennis Brain Wind Quintet it was also used as a chance to honour Aubrey Brain (who had died the previous September) and his accomplishments, with all the proceeds going to create an Aubrey Brain Memorial Trust designed to promote a wind scholarship. Even with the reduced

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84 As seen in the previous example.
86 York Bowen Society website, accessed 05/09/2011. Available at: [http://www.yorkbowen.co.uk/index.htm](http://www.yorkbowen.co.uk/index.htm)
87 Having previously studied piano and composition there. The wonderfully rich orchestration that Bowen was able to accomplish in his compositions was no doubt aided by the knowledge he had gained in playing several orchestral instruments. Monica Watson. "Bowen, York." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed 05/09/2011. [http://www.oxfordmusiconline.com/subscriber/article/grove/music/03757](http://www.oxfordmusiconline.com/subscriber/article/grove/music/03757)
88 Aubrey Brain taught horn at the RAM and also played principal horn at Covent Garden as well as with the London Symphony Orchestra and BBC Symphony Orchestra for many years.
tonal capabilities of just horn and piano, the Sonata features many of the Romantic traits for which Bowen’s music is renowned including beautiful melodies, harmonies and powerful transformations in mood.

As expected, the work also shows a very good understanding of the horn in its melodic construction and use of dynamics, articulations and colour changes created through the use of hand stopping. However it is when Bowen extends the solo line beyond the middle register that his knowledge of the instrument is especially evident. The highest notes in this piece are always approached through an upwards-moving flourish or with a relatively favourable note preceding them and this is usually complemented with a crescendo.\textsuperscript{90} The low notes fit into the phrases in a similar fashion, and there are also regular periods of rest for the soloist.

The first movement of the Sonata opens with a lyrical melodic line that seamlessly transforms in its mood and direction as the tension builds and subsides (see Figure 4.28). The contrasting middle section is quite dramatic and provides an opportunity for the horn player to really open up throughout the middle and lower registers through repeated arpeggio runs, octave jumps and some more sustained notes as the momentum relaxes and opening melody returns. The opening to the second movement, marked \textit{Poco Lento Maestoso}, is also quite dramatic with accented notes in the horn and sustained chords marked \textit{pesante} in the accompanying piano part. Although there are more peaceful moments in this movement, a degree of restlessness and apprehension is maintained. The finale is marked \textit{Allegro con spirito} and is full of a seemingly carefree and also somewhat pompous character (see Figure 4.29). This is twice contrasted by brief \textit{sostenuto} passages before a virtuosic coda full of double tonguing and chromatic semiquaver runs.

\textsuperscript{90} A good example of this is the ascending line of bars 41-44 in the second movement, which covers the entire three and a half octave range of the piece from low G to high c’’’.

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Figure 4.28: York Bowen, Sonata in E flat for Horn and Piano Op.101, Movement I.

*Moderato espressivo*, mm. 1-15.

Figure 4.29: York Bowen, Sonata in E flat for Horn and Piano Op.101, Movement III.

*Allegro con spirito*, mm. 1-10.
Halsey Stevens (1908-1989) is perhaps best known for his scholarly work on the life and music of Béla Bartók (1881-1945), however he also composed music for a wide variety of instrumental and vocal combinations.\(^{91}\) The most famous work amongst his compositional output is certainly the Sonata for Trumpet and Piano written in 1956, however he also composed a Sonata for Horn and Piano.\(^{92}\) Written between September 15 1952 and January 30 1953, and dedicated to George Hyde,\(^ {93}\) the Sonata was premiered in Los Angeles by Hyde and Stevens on March 16, 1953.\(^ {94}\) In 1954 the work won a publication award from the National Association of College Wind and Percussion Instructors, and in the years that followed, it was performed by a number of leading horn players in America.\(^ {95}\)

Fragments of the opening motif form the basis for all three movements of this Sonata, which combines attractive melodic ideas with rhythmic vigour and technical challenges in a contemporary but tonal framework. The first movement, *Allegro moderato*, has a light and carefree character, yet requires good flexibility in negotiating the lyrical but wide ranging melodic lines (see Figure 4.30). Wide intervals are frequently encountered throughout the work, however the intervals of fourths and fifths are almost constantly present.


\(^{93}\) Stevens worked at the University of Southern California from 1946 to 1976, so presumably this is the Hollywood based horn player and composer George W Hyde. Hyde was a recognized member of the Los Angeles Horn Club, and music written by him can be found amongst their publications.

The L.A. Horn club was formed in 1951 when James Decker and Wendell Hoss organized thirty-six professional horn players to play a horn choir concert. Due to contractual agreements these talented musicians were unable to perform in alternate studios, so The L.A. Horn Club was formed as a legal way for them to perform outside of their usual jobs. In addition to publishing many of the works that were composed for the ensemble, the club also released two albums; one in 1960 and the other in 1970. Anthony Schons. “A History of Horn Choirs in the United States.” *International Horn Society Webpage*, accessed 05/09/2012. Available at: [http://www.hornsociety.org/publications/horn-call/online-articles/27-the-horn-call/online-articles/409-horn-choir-history](http://www.hornsociety.org/publications/horn-call/online-articles/27-the-horn-call/online-articles/409-horn-choir-history)

\(^{94}\) Private correspondence with Halsey Stevens’ daughter Ann Stevens Naftel, 31/01/2014.

\(^{95}\) Private correspondence with Halsey Stevens’ daughter Ann Stevens Naftel, 31/01/2014.
The second movement is a far more sombre poco adagio, which although lyrical maintains a somewhat uneasy feel throughout. This is contrasted by the high energy and rather technical final movement, where strong and clear articulations are necessary across the entire range (see Figure 4.31).

The Stevens Sonata is an appealing recital piece, as it not only demonstrates solid technique but also twentieth century musical ideas in an accessible and audience-friendly form. It is well written for horn players, including rests at fairly regular intervals, and although the range probably favours the middle and upper registers somewhat, it is also quite expansive and includes many lines requiring solid low horn technique.96

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96 Overall range extends from low A up to a high c''' in the fourth last bar.
The works of Swiss composer Daniel Schnyder (b.1961) are quickly gaining in popularity, perhaps because of their accessibility as they bridge the gap between classical music and other styles such as jazz and popular music, and also frequently incorporate non-Western influences. Many of his works have been adapted for alternate instruments from the original compositions, an idea that the composer not only supports but also encourages, as in most cases it is the performers who hear the music and want to play the work.

If the music can be adapted I am fine with that. I love the idea of music being wide open…that you can actually play it on different instruments. Even the special effects can be adapted and in a lot of ways you can detect your instrument in a new way thru the voice of another instrument. Like

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97 Schnyder is also a very prominent and well-respected saxophonist, as a recording artist and chamber musician who has toured extensively.

98 Private correspondence with Daniel Schnyder, 02/02/2014.
different actors saying the same thing. These days we are way too academic about that.\textsuperscript{99}

The Sonata for Horn and Piano\textsuperscript{100} was composed in 1995 and won first prize at the 1996 International Trumpet Guild's composition contest in its original form, composed for bass trombone or tuba.\textsuperscript{101} It was later arranged by the composer for horn player David Jolley and recently recorded by Adam Unsworth along with several other works composed by Schnyder on the CD \textit{Just Follow Instructions}.\textsuperscript{102} Unsworth describes the composer as:

A saxophonist, improviser, and perhaps the most extraordinary composer writing brass music today unfamiliar to most horn players. His music is highly technical, challenging, edgy, and as rewarding as it is difficult. He combines a variety of musical styles: contemporary, classical, jazz, latin, renaissance, and parlor music elements are all infused into Daniel’s unique musical palette. The result, however, is always vintage ‘Schnyder’ – music of incredible depth and complexity that has tremendous audience appeal, but is very difficult to categorize.\textsuperscript{103}

The Sonata is quite a challenging piece in terms of style, with its heavy jazz influences, and also due to the technical requirements of playing complex rhythms and intervals in the lower register (see Figure 4.32). The first and third movements of the Sonata are very virtuosic, requiring not only power, stamina, and accomplished technique

\textsuperscript{99} Private correspondence with Daniel Schnyder, 02/02/2014.
\textsuperscript{100} Daniel Schnyder, \textit{Sonata for Horn and Piano} (Crans-Montana, Switzerland: Editions Marc Reift, 1997).
\textsuperscript{101} The piece was originally written for bass trombonist David Taylor, who has worked extensively with Schnyder, and later adapted for horn player David Jolley.
\textsuperscript{103} Adam Unsworth, “Daniel Schnyder: Just Follow Instructions,” \textit{The Horn Call} 40/3 (May, 2010): 92. This article contains biographical information about the author as well as details regarding his other compositions for the horn, including the Trio for Horn, Violin and Piano, Trio for Trumpet, Horn and Trombone and \textit{Le Monde Miniscule} for solo horn.
across the entire range of the instrument, but also numerous extended techniques such as glissandi, bends and hand stopping to achieve different sounds.

This is another key aspect of Schnyder’s compositions; the virtuosic disposition that they show, which challenges the performers both musically and technically. What starts as a virtuosic composition for a leading performer on one instrument can inspire colleagues and students across all instruments and around the world. “It is a beautiful and meaningful process of growth, heritage and evolution.”

The cadenza in the first movement, which is titled *Blues*, has some particularly challenging intervallic sections, and extends from pedal F all the way up to high b flat” (see Figure 4.33). The ‘plunger effect’ in bar 118 further complicates matters by introducing some hand stopping, initially extending down to low f but then a few bars later as the cadenza concludes there is a hand stopped low B.

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104 Private correspondence with Daniel Schnyder, 02/02/2014.
When the theme returns to conclude the movement (bar 195) it is slightly altered, with about two bars being written down an octave. It is also then extended in both duration and range, finishing on a high b flat”, which must be held for a couple of bars at a loud dynamic and with the introduction of flutter tonguing midway through.

105 The ‘plunger effect’ is produced by opening and closing the hand within the bell of the horn to create variations in tone, in an attempt to recreate the effect created through the use of a rubber plunger that is often used by brass players in jazz.
The second movement is also very virtuosic but in the form of a soulful ballad that is played muted throughout. There are a couple of particularly long lines that require good breath control, some phrases that include slightly challenging intervals and although marked *rubato*, some level of rhythmic accuracy must be maintained (see Figure 4.34).

Figure 4.34: Daniel Schnyder, Sonata for Horn and Piano, Movement II. *An American Ballad*, mm. 1-8.

The third movement, titled *Below Surface* is fast and both technically and rhythmically challenging with its extensive use of multimetre and further complications being caused by the large amount of material that is doubled in the piano part. There are some rapid register shifts and dynamic shifts but overall this is a brilliant finale to a sonata that combines beautiful, technical and catchy melodies of an improvisatory nature with complex rhythms and interplay between horn and piano (see Figure 4.35).

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106 Care must be taken as this has the potential to create balance issues with the piano.
Recently Schnyder also transcribed the Concertino for Tenor Trombone and String Orchestra (or Quartet)\textsuperscript{107} across to Horn, Percussion and String Orchestra for Hubert Renner.\textsuperscript{108} This arrangement was premiered on October 25, 2013 in the Tonhalle theatre of St. Gallen by Renner and the St. Gallen Symphonie Orchester.\textsuperscript{109} Only minor changes were made from the original trombone version, essentially altering mute changes, removing slides and a couple of notes due to the rather expansive range, which still extends from pedal E up to high c’’’. The complex rhythmic ideas and extensive use of multimetre make this an exceptionally difficult ensemble piece.\textsuperscript{110} The work is full of technical difficulties for the horn player including large and awkward intervals that need to be negotiated very rapidly, hand stopping effects, glissandi, flutter tonguing and a large number of rapid semiquaver runs. Almost all of these techniques are included in the exciting opening section of the work. The many technically challenging moments and complex ideas do not detract from flowing lyrical melodies, with recurring motifs and longer melodic lines uniting the larger structure (see Figure 4.36).

\textsuperscript{107} Originally commissioned by German trombonist Henning Wiegraebe, professor at Stuttgart University, who premiered the work with the Mandelring Quartet. Private correspondence with Daniel Schnyder, 02/02/2014.
\textsuperscript{108} Daniel Schnyder, \textit{Concertino for Horn, Percussion and String Orchestra} (Self Published, 2013). Also available for soloist with string quartet, string quintet or string quintet with percussion. Private correspondence with Daniel Schnyder, 02/03/2013.
\textsuperscript{109} Private correspondence with Daniel Schnyder, 23/04/2013.
\textsuperscript{110} Private correspondence with Hubert Renner, 17/07/2013.
Following the dramatic ending to the first movement of the work, a brief violin solo and high tempo section leads into the slower middle movement of the work. Over constant quaver movement, *espressivo* melodies are featured in both the horn and cello parts before a brief horn cadenza and the final movement. The finale is certainly the most virtuosic, with the soloist carrying most of the melodic material and a return to energetic, jazz inspired material (see Figure 4.37). The percussive instruments add a huge variety of sounds into the texture, whilst the strings also make use of numerous playing techniques to add further tonal variations to the work. This is a fantastic work, although clearly very complex and difficult.

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111 The three movements of the work are played without break.
112 Percussive instruments used include various cymbals, drums and wood blocks, as well as chimes, a small metal plate, tambourine, cow bell, slide whistle and flexatone.
113 These include *pizzicato*, *glissandi*, *harmonics*, *tremolo*, and the use of *sul ponticello*, *col legno* and *flautando*
As a composer, the American horn player Kerry Turner (b.1960) is undoubtedly best known for his large output of chamber music, which often features wind and brass instruments. Despite his busy schedule playing principal horn in the Luxembourg Radio Symphony Orchestra he continues to perform regularly in chamber music settings, including with the internationally acclaimed American Horn Quartet and Virtuoso Horn Duo. The music that he has composed for horn combines virtuosic technique with experimentation in facets such as ensemble construction, form, texture and style, but always in a melodious and accessible fashion. The Concerto for Low Horn and Chamber Orchestra was composed in 1995\textsuperscript{114} and exploits not only the lower register of the instrument and the traditional skills of the 'cor basse' player,\textsuperscript{115} but also makes use of the horn’s ability to change tone and character, to play with different instruments of the orchestra and perhaps most importantly to ‘sing’ beautiful vocal-style melodies. Charles

\textsuperscript{114}Kerry Turner, \textit{Concerto for Low Horn and Chamber Orchestra} (Piano Reduction), (Vuarmarens, Switzerland: Editions BIM, 1996). There are a number of corrections that need to be made in both the horn and piano parts of this edition. Private correspondence with Kerry Turner, 29/09/2011.

\textsuperscript{115}Traditional skills such as wide leaps and rapid arpeggiated passages. The composition was originally begun on commission from Edward Deskur of the Tonhalle Orchestra in Zürich. Private correspondence with Kerry Turner, 29/09/2011.
Putnam recorded the Concerto for an Albany Records release that features a number of Kerry Turner’s works.¹¹⁶

Throughout the Concerto the horn is required to express a vast array of emotional characters, beginning from the very outset with the first movement's dramatic opening glissandi. The Concerto covers a range of just over three octaves but sits predominantly in the middle to lower register, only extending upwards to a single g#’’ in the second movement and including optional pedal Fs in the fourth movement. Otherwise the typical range is perhaps best summed up by this opening motif, the glissandi sweeping up from low B to g’ at the top of the stave (see Figure 4.38). There are some challenging moments in this opening movement with wide intervals, rapid tonguing and fast fingering all being required frequently.

Figure 4.38: Kerry Turner, Concerto for Low Horn and Chamber Orchestra, Movement I. Allegro, mm. 1-9.

The lyrical second movement marked *Andante* has a somewhat melancholic feel, yet it highlights the horn’s wonderfully expressive tone quite beautifully (see Figure 4.39).\(^{117}\)

![Figure 4.39: Kerry Turner, Concerto for Low Horn and Chamber Orchestra, Movement II. *Andante*, mm. 1-22.](image)

The accompaniment here is provided by strings and harpsichord and is in complete contrast with the playful third movement *Allegro scherzando*, which is written as a wind quintet and features energetic dance-like melodies.\(^{118}\) The horn player is required to hand stop multiple pitches, often requiring quick changes from open to closed and back again, and also needs to negotiate a number of short but rapid technical passages. The final movement is the most virtuosic, featuring several long stretches of double tonguing that certainly require proficiency at this playing technique and also a couple of challenging runs beginning in the lower register (see Figure 4.40).

\(^{117}\) The range here extends from low B up to the g#’’ previously mentioned.

\(^{118}\) This smaller ensemble was requested in the commission. Private correspondence with Kerry Turner, 29/09/2011.
Figure 4.40: Kerry Turner, Concerto for Low Horn and Chamber Orchestra, Movement IV. 
*Allegro*, mm. 25-35.

Although there are a couple of other little challenging moments in this movement, perhaps the most difficult section is the ‘cor basse’ style rapid arpeggios in bars 64 to 66 (see Figure 4.41). These move chromatically from the E flat horn through to the B flat horn. These move chromatically from the E flat horn through to the B flat horn. In addition to the fast tempo, the changing length and response of the horn commands good agility paired with articulation that is both clear and accurate.

Figure 4.41: Kerry Turner, Concerto for Low Horn and Chamber Orchestra, Movement IV. 
*Allegro*, mm. 60-76.

119 The harmonics are played starting on the F side with the first valve, then ascending through second valve, open and across to the B flat side using second and third, first and second, and so on. The final arpeggio should be played using the open B flat horn rather than the open F side as printed.
A slight variation of the opening fanfare motif from the first movement marks the beginning of the coda that concludes this final movement, which culminates with a chromatic scale spanning two octaves. Compared to the original orchestral version the piano reduction is less dramatic and obviously creates less room for tonal contrasts, which I think is one of the best features of the original composition. However, it is still a very satisfying work to perform that truly shows off low register capabilities.

The British composer Andrew Downes (b.1950) is the son of former Birmingham Symphony Orchestra horn player Frank Downes (1921-2005) and also played the instrument himself for a short while, so it is not surprising to find numerous compositions for the horn and the Wagner tuba in his catalogue of works. Armed with a sound knowledge of the horn, its capabilities, and what both works and sounds best, he crafts beautiful yet technically demanding works that are full of flowing melodies, contrasting thematic ideas and complex rhythms. In recent years he has formed a close friendship with several Czech musicians, and this has resulted in a Concerto for Horn and Symphony Orchestra Op.101 for Ondrej Vrabec who is currently the Principal and Solo Horn of the Czech Philharmonic Orchestra, as well as a Concerto for Four Horns and Symphony Orchestra Op.77, which was premiered with soloists Radek Baborák, Stanislav Suchanek, Ondrej Vrabec, and Zdenek Divoky. Other works written by Downes include a Sonata for Violin, Horn and Piano Op.93, Sonata for Four Horns Op.22, Sonata for Eight

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120 After studying singing and composition at St. John's College in Cambridge and the Royal College of Music, Andrew Downes went on to teach composition and later became the head of Birmingham Conservatoire's School of Composition and Creative Studies, a post which he held until 2005. He now works as a freelance composer. Composer’s website, accessed 05/08/2011. Available at: http://www.andrewdownes.com/

121 Premiered by Vrabec with the Central England Ensemble and Music Director Anthony Bradbury in Birmingham Town Hall on October 21, 2012 in a concert to celebrate the 10th anniversary of CEE. Composer’s website, accessed 05/08/2011. Available at: http://www.andrewdownes.com/

122 Composed for the Czech Philharmonic Orchestra, who were conducted by Vladimir Valek in the premiere at Dvorak Hall in Prague on February 28, 2002. Composer’s website, accessed 05/08/2011. Available at: http://www.andrewdownes.com/
Horns Op.53, *Five Dramatic Pieces* for Eight Wagner Tubas Op.80, and a Suite for Six Horns or Horn Choir Op.69, as well as works for brass ensembles of various sizes.

The Sonata for Horn and Piano Op.68 was commissioned by Roland Horvath of the Vienna Philharmonic Orchestra, composed in 1998, and premiered shortly thereafter.\(^{123}\) Although the work was not specifically composed as a low horn sonata it was composed for a low horn player,\(^{124}\) so there are some challenging lower register moments. It covers a difficult range that extends from low A flat up to high b’’, and requires precise technique throughout the entirety of this range. The first two movements of the Sonata are also a real test of stamina as there are very few rests amongst the beautiful but expansive lines. Some of these extended phrases require excellent breath control, and there are often rapid leaps from the upper register to lower register that are quite challenging (see Figure 4.42).

The start of the second movement requires double tonguing at a loud dynamic level below the stave, which requires practise if acceptable clarity is to be achieved. The third movement is definitely less taxing but also contains a couple of little technical moments such as in bar 24 (see Figure 4.43).

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\(^{124}\) Private correspondence with Andrew Downes, 01/09/2011.
Figure 4.42: Andrew Downes, Sonata for Horn and Piano Op.68, Movement I. *Andante molto e espressivo*, mm. 11-33.

Figure 4.43: Andrew Downes, Sonata for Horn and Piano Op.68, Movement III. *Andante leggero*, mm. 22-28.
The most difficult aspect of the work is the rapid shifts into contrasting styles and dynamics that the performers must make, as these occur frequently throughout each movement. The endings to all three movements are also challenging, the first two end with repeated notes above the stave at a soft dynamic, whilst the third ends with the horn playing alone, reminiscent of the opening to the work.\footnote{This work has been transcribed by Cynthia Downes for Viola and Piano. Composer’s website, accessed 05/08/2011. Available at: http://www.andrewdownes.com/}

Solo works are another viable option for performance, and there are many that showcase low horn technique, even if only briefly.\footnote{The Four Improvisations from Travelling Impressions by Vitaly Buyanovsky (1928-1993) and Horn-Lokk by Sigurd Berge (1929-2002) are further options, in addition to the works discussed here.} Grandfather Benno’s Night Music for Solo Horn is one such work,\footnote{Usko Meriläinen, Grandfather Benno’s Night Music for Solo Horn (Helsinki: Edition Fazer, 1976). Recording: Usko Meriläinen, Grandfather Benno’s Night Music for Solo Horn, Jeffrey Lang, One World Horn: A Solo Horn Journey, Self Published, 2012.} written by the Finnish composer, conductor and teacher Usko Meriläinen (1930-2004) in 1976 for the National Brass Competition in Helsinki.\footnote{Usko Meriläinen, Grandfather Benno’s Night Music for Solo Horn, preface.} Known mainly for composing instrumental music, he combined highly rhythmical material with “instrumental brilliance” using a variety of tools including traditional and Neo-Classical devices, as well as dodecaphony and post serial language.\footnote{Kimmo Korhonen, Usko Meriläinen in Profile trans. Susan Sinisalo (1998, updated 2004). Accessed through Music Finland website on 17/02/2014. Available at: http://composers.musicfinland.fi/musicfinland/fimic.nsf/0/DD1FD7B559D14AC7C225753500524CEF?open document} Meriläinen was heavily influenced by Igor Stravinsky (1882-1971), and especially his famous ballet the \textit{Rite of Spring}.\footnote{Kimmo Korhonen, Usko Meriläinen in Profile trans. Susan Sinisalo (1998, updated 2004). Accessed through Music Finland website on 17/02/2014. Available at: http://composers.musicfinland.fi/musicfinland/fimic.nsf/0/DD1FD7B559D14AC7C225753500524CEF?open document} This influence can be heard throughout his Partita for Brass, which won second place in the Thor Johnson composition competition in Cincinnati Ohio in 1954,\footnote{Einojuhani Rautavaara (b.1928) won first prize at the competition with his \textit{A Requiem in Our Time}, which is also for brass ensemble and was premiered by the same ensemble on the same date as Meriläinen’s composition.} where the work was premiered by the Cincinnati Conservatory Brass Choir conducted by
Ernst N. Glover on May 10.\textsuperscript{132}

*Grandfather Benno’s Night Music* for Solo Horn was inspired by the humorous novel *Kun isoisä Suomeen Hiihti* (When Grandpa Skied to Finland) by award winning Finnish-Jewish author Daniel Katz (b.1938).\textsuperscript{133} Written in 1969, the novel is an autobiographical chronicle that follows Grandfather Benno’s military adventures through the Russo-Japanese War\textsuperscript{134} where as a young man and part of the Imperial Russian Army he “blasted out fanfares on his cornet at all the wrong moments and puffed away on strong cigars,” to battles during the First World War and finally the injury that he incurred during the Second World War.\textsuperscript{135}

This hysterically funny history of a Jewish family making its way across Finland and Russia rides roughshod over history, relating one crazy incident after another.\textsuperscript{136}

Meriläinen’s composition is a relatively short piece of music that “depicts imaginative forest sounds and music as heard by Father Benno on his nightly watch.”\textsuperscript{137} Its nature is predominantly expansive, but it is not without the occasional outburst of energy (see Figure 4.44). The atmosphere of solitude in the wilderness is enhanced through the free tempo and unconventional rhythm, which is created through the lack of a time signature and irregular length of bars. There are not a lot of directions on the page, which

\textsuperscript{132} Music Finland website, accessed 17/02/2014. Available at: [http://composers.musicfinland.fi/musicfinland/fimic.nsf/COMMAA/0AA78E9B9C6F891DC22574810036D0B7?opendocument](http://composers.musicfinland.fi/musicfinland/fimic.nsf/COMMAA/0AA78E9B9C6F891DC22574810036D0B7?opendocument)

\textsuperscript{133} Private conversation with Julian Leslie, 14/03/2014.

\textsuperscript{134} A conflict between Russia and Japan that was centered on ports and shipping around Korea and Manchuria, fought between February 1904 and September 1905.

\textsuperscript{135} Whilst taking shelter in a bomb shelter “the rabbi’s knife slipped during his grandson’s circumcision.” WSOY Website, accessed 17/02/2014. Available at: [http://foreignrights.wsoy.fi/products/fiction/-/68/show/27210](http://foreignrights.wsoy.fi/products/fiction/-/68/show/27210)

\textsuperscript{136} WSOY Website, accessed 17/02/2014. Available at: [http://foreignrights.wsoy.fi/products/fiction/-/68/show/27210](http://foreignrights.wsoy.fi/products/fiction/-/68/show/27210)

\textsuperscript{137} Jeffrey Lang, *One World Horn: A Solo Horn Journey*, liner notes.
leaves lots of room for space and personal interpretation. Frequently utilising the interval of a second, the work is characterised by dynamic contrasts and the additional tonal variations created through the use of hand stopping. Overall the range of the piece extends from pedal F up to high a flat.

Figure 4.44: Usko Meriläinen, *Grandfather Benno’s Night Music* for Solo Horn, mm. 20-24.

The *Topanga Variations* for Solo Horn were composed in the years 1981 and 1982 by American trumpeter and composer Stanley Friedman (b.1951) for Norwegian horn player Frøydis Ree Wekre.\(^1\) Friedman is quite well known amongst brass players for his large output of brass compositions, including works for brass quintet, brass ensemble and winds. In addition to the *Topanga Variations*, Friedman also composed *Jerusalem Fugue*

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for horn and strings in 1996\textsuperscript{139} and a horn quartet titled *Alpine Lakes*, which was commissioned by the American Horn Quartet in 1997.\textsuperscript{140} The *Topanga Variations* were premiered by Frøydis in 1982 at the California Institute of the Arts, the title referring to the area north of Los Angeles where she was living at that time.\textsuperscript{141}

In the early 1980s Frøydis and I both were living in the Los Angeles area and became acquainted at salon concerts she and tubist Roger Bobo produced in a mountainous suburb called Topanga Canyon. These were fairly informal events, at which she and Roger played alphorns and young musicians performed in order to get exposure, solo experience and expert critical evaluations from Frøydis and Roger. After hearing me play my solo trumpet piece Solus, Frøydis asked me to compose a horn solo for an upcoming recital. Twice during the creative process, Frøydis met with me to try out bits of the music; I was not sure the fourth movement was even playable, but she made it work and even sound easy. During these sessions I was eager for Frøydis to suggest improvements for *Topanga Variations*, in terms of notation, playability and musical structure…and her insights led to the creation of a much better composition. These sessions with Frøydis greatly helped shape the evolution of my musical philosophy over the past 30 years.\textsuperscript{142}

All four variations are based on the opening motif of three notes; a flat, e flat and f. The piece is energetic and highly rhythmical in two movements, and yet ametric and quite expansive in the remaining two. It also contrasts lyrical melodies with angular lines full of wide intervals, and is quite demanding technically for the horn player, but also rewarding.

\begin{itemize}
\item \textsuperscript{139} Commissioned by the International Horn Society and Israel Philharmonic principal horn James Cox in memory of Meir Rimon (1946-1991), who was the former principal horn of that orchestra and affiliated with the IHS for many years. The IHS commissioning fund for new compositions was renamed in Rimon’s honour in 1992. International Horn Society webpage, accessed 01/02/2014. Available at: \url{http://www.hornsociety.org/}; Composer’s webpage, accessed 01/02/2014. Available at: \url{http://stanleyfriedman.com/composer/mf2.htm}
\item \textsuperscript{140} Composer’s webpage, accessed 01/02/2014. Available at: \url{http://stanleyfriedman.com/composer/mf2.htm}
\item \textsuperscript{141} Frøydis Ree Wekre, *Songs of the Wolf*, liner notes.
\item \textsuperscript{142} Private correspondence with Stanley Friedman, 06/02/2014.
\end{itemize}
The work both captures and demands the listener’s attention to follow the unexpected evolution of the opening motif, which is always present, and through the occasional use of hand stopped notes and muting. These tonal contrasts are particularly evident in the opening variation (see Figure 4.45), which requires good hand stopping technique, agility and articulation as well as rhythmic accuracy.

Figure 4.45: Stanley Friedman, *Topanga Variations* for Solo Horn, Variation I., mm. 1-13.

Figure 4.46: Stanley Friedman, *Topanga Variations* for Solo Horn, Variation II., mm. 65-68.
The second variation, which is ametric, sits much lower in the instrument’s range and although it is more sustained in nature, is not without its challenges, especially regarding articulation in the lower register and agility (see Figure 4.46). The third variation is jazz inspired, with a medium rhythmic swing throughout and catchy melody, whilst the fourth is quite minimalistic and dramatically contrasts soft and loud dynamics as well as unmeasured and free-flowing sections with sudden outbursts of energy. This is a highly effective work that showcases many aspects of the horn player’s technique across all registers of the instrument.

Another of the more challenging solo options is the Jazz Set for Solo Horn; a highly virtuosic piece in jazz style that was composed by Douglas Hill (b.1946) between the years 1982 and 1984. The completed set of four short movements was first performed at the Nineteenth International Horn Workshop in Provo, Utah by the composer. Hill also recorded the work for a Gunmar Recordings release titled A Solo Voice, where it appears alongside works by Verne Reynolds (1926-2011), Gunther Schuller (b.1925), Avram David (b.1930) and Hans Erich Apostel (1901-1972). More recently the work was recorded on a MSR release of Douglas Hill’s compositions titled Thoughtful Wanderings..., performed by Adam Unsworth.

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143 Overall the range extends from low F# in this movement up to high c’’’ in variation three.
144 This final movement is again ametric with tempos generally being designated in time (such as “10 sec. ± per line” at bar 111), although six bars near the beginning (mm. 104-109) are notated in 12/8 and supplied with a metronome marking of dotted crotchet equaling 72.
146 Douglas Hill, Jazz Set for Solo Horn, preface by Randall Faust.
Each of the four movements in the set carries a colourful title: *Lost and Found, Cute ‘n Sassy, Lullaby Waltz* and *Fussin’ for Emily*. The composer suggested that the set:

could simply be thought of as a parent’s feelings and responses to his or her child: from the admiration of a child’s innate and contagious silliness to the burdensome feelings of sadness, from the child’s peaceful moments of rest to those of teasing and outrageous energies for play.¹⁴⁹

However, the above quote takes on a more poignant sentiment when paired with the knowledge that the first two pieces were written following the death of Hill’s first child at just one and a half years old:

“Cute and Sassy” came to me as a remembrance of his “contagious silliness.” “Lost and Found” contains the “burdensome feelings of sadness,” as well as some obvious anger and outrage. Two years later our new daughter inspired two more joyous pieces including the programmatic “Lullaby Waltz” depicting the unsuccessful attempt to put her to sleep, ending in some light-hearted teasing, and “Fussin' for Emily” which lets loose our mutual “outrageous energies for play”…The use of the word “Fussin” was meant as a pun for the “Fusion” of many Jazz elements with Classical and Rock music that can be found in the work.¹⁵⁰

The publication begins with a three-page glossary of the notation that has been used and describes the extended techniques that they represent. “One hesitates to list all of these ‘techniques’ because they are not as individually important as they are collective vehicles for the personal creative expression of the artist,”¹⁵¹ however I agree with William Scharnberg who stated in his review of the work that “the hornist will need some jazz

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¹⁴⁹ Douglas Hill, *Jazz Set for Solo Horn*, preface by Randall Faust.
¹⁵⁰ Private correspondence with Douglas Hill, 01/10/2013.
¹⁵¹ Douglas Hill, *Jazz Set for Solo Horn*, preface by Randall Faust.
background, together with an excellent range and technique, to approach the works in the intended style.”¹⁵² In Hill’s own words: “These pieces are meant to sound as if improvised and to be fully enjoyed.”¹⁵³

The opening movement, _Lost and Found_ is bluesy, though gradually becoming faster and more restless as the speed of the beat is doubled and then doubled again. A small section played “like a string bass” interrupts this frenetic music before a brief cadenza leads into a return to the opening material (see Figure 4.47).

![Figure 4.47: Douglas Hill, Jazz Set for Solo Horn, Movement I. Lost and Found, mm. 61-77.](image)

_Cute ‘n Sassy_ is a highly energetic piece full of mixed intervals and glissandi that is played in a bebop style. Besides covering an entire four octave range from pedal C to high c””, this movement also makes use of a large number of extended techniques to achieve greater tonal variations. Having read the brief description given by Hill, the _Lullaby Waltz_ certainly comes across as a programmatic movement. The lyrical lullaby melody gradually

¹⁵³ Douglas Hill, _Jazz Set for Solo Horn_, preface by Randall Faust.
becomes more improvisatory and elaborate as the tempo increases until somewhat unexpectedly it seems that success has been achieved. The opening melody returns, and slows as the horn repeats it hand stopped and pianissimo, however the peace is fleeting and a dramatic outburst concludes the movement. The final movement, Fussin' for Emily, is another high-energy movement that is funk inspired. The opening riff forms the basis of the movement (see Figure 4.48) and receives an interesting treatment through the middle section of the movement where multiphonics are utilised whilst playing hand stopped. “Quasi pizz.” bass lines and expansive countermelodies also make appearances in what is a highly technical but equally exciting finale.

Figure 4.48: Douglas Hill, Jazz Set for Solo Horn, Movement IV. Fussin’ for Emily, mm. 1-23.154

154 Fingering suggestions for the lip trills are included by the composer in brackets above the notes.
The renowned American composer and conductor Samuel Adler (b.1928) has composed twenty-one works in his series of Cantos, which span from 1970 through until 2010. Predominantly written for a single solo instrument, Adler has composed a canto for most of the standard instruments of the orchestra as well as several others, such as Canto XVIII for Accordion and Canto XX for Guitar. The project was inspired by one of Adler’s composition teachers, Paul Hindemith (1895-1963), who himself famously wrote a series of sonatas for every instrument of the orchestra between 1935 and 1955.

I decided to write a series of solo works for as many instruments of the orchestra as I could…I did not want to write Sonatas but rather solo works in the form of concert etudes, which would give the performer an opportunity to demonstrate his/her virtuosity and also to demonstrate great possibilities for each instrument, but not like Berio, to use too many extended techniques…The one for horn was inspired by the many wonderful works for that instrument and of course the famous excerpt from Till. I have known a great many hornists and they have been a model for this work.

Adler’s Canto XI for Horn Solo was composed in 1984 and premiered the following year in December at the Eastman School of Music in Rochester, NY by the

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157 Private correspondence with Samuel Adler, 05/04/2014.
celebrated horn player, teacher and composer Verne Reynolds (1926-2011). The structure of the work allows the performer to demonstrate many of the best qualities of the horn. The recitative-like opening section contrasts a fanfare-like motif with more lyrical melodies (see Figure 4.49), covering a wide range of the instrument and varying dynamic levels.

![Figure 4.49: Samuel Adler, Canto XI for Horn Solo, system 1-4.](image)

This leads into a faster, more energetic and rhythmically vibrant second section that is predominantly written in 6/8 but also features the use of asymmetrical rhythms and metres (see Figure 4.50). This creates irregular and unexpected note groupings within the flowing quaver melodies, which are then also interrupted by angular intervallic lines made up of *staccato* quavers.

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159 Samuel Adler joined the faculty of the Eastman School of Music in 1966, serving as chair of the composition department from 1974 until 1995. Since 1997 he has been a member of the composition faculty at the Juilliard School of Music in New York City, NY. Composer’s website, accessed 20/03/2014. Available at: [http://www.samuelhadler.com/](http://www.samuelhadler.com/)

Verne Reynolds served as Professor of Horn at the Eastman School of Music from 1959 until he retired in 1995. He was one of the founding members of the Eastman Brass Quintet, formed in 1964 with “a mission to raise the artistic level of the brass quintet.” International Horn Society website, accessed 20/03/2014. Available at: [http://www.hornsociety.org/home/ihbs-news/26-people/honorary/87-verne-reynolds](http://www.hornsociety.org/home/ihbs-news/26-people/honorary/87-verne-reynolds)

160 In this opening section of the work, the range extends three octaves from low B flat up to high b flat”. In the second section the range is extended by a couple of notes; from low A flat up to high c‴. 
The work carries a “slight apology to Richard Strauss,”\textsuperscript{161} and indeed there are several moments that are highly reminiscent of Strauss’ horn writing but drawing in particular upon the tone poem \textit{Till Eulenspiegels lustige Streiche} Op.28. There are certainly some challenges as far as agility, phrasing and technique in this work, but despite all the drama and contrast it achieves a very pleasing and musical result. Adler has also composed a Sonata for Horn and Piano\textsuperscript{162} and a Concerto for Horn and Orchestra\textsuperscript{163} in addition to a large amount of chamber music featuring the instrument, including the horn octet \textit{Brahmsiana}.	extsuperscript{164}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure4.50.png}
\caption{Samuel Adler, \textit{Canto XI} for Horn Solo, mm. 43-65.}
\end{figure}

\textsuperscript{161} Samuel Adler, \textit{Canto XI} for Horn Solo.
\textsuperscript{162} Samuel Adler, \textit{Sonata for Horn and Piano} (North Easton, MA: Robert King Music, 1951). Composed in 1946 whilst Adler was an undergraduate student at Boston University. Private correspondence with Samuel Adler 05/04/2014.
\textsuperscript{164} Samuel Adler, \textit{Brahmsiana} for Eight Horns (Bryn Mawr, PA: Theodore Presser, 1998). Composed in 1997 following a commission from the International Horn Society for the 20\textsuperscript{th} Annual Convention. Composer’s website, accessed 20/03/2014. Available at: \url{http://www.samuelhadler.com/}
Randall Faust (b.1947) has been a prolific composer of music for the horn for many years now. One of his compositions that truly features the lower register of the instrument is the solo work titled *Mazasha*,\(^\text{165}\) which was written in 1985 and premiered by the composer in a recital at Auburn University, Alabama in May of that year.\(^\text{166}\) The work takes its title from the Sioux Indian word for “Red Earth” and was inspired by Faust’s association with the “Order of the Arrow,” an honour society of the Boy Scouts of America during his childhood in Western Minnesota.\(^\text{167}\) The order integrated American Indian traditions and dances into their ceremonies, and Faust has indirectly recreated several elements within the two contrasting sections of the work, essentially creating a prelude and ritual dance.

The atmospheric opening section is inspired by a “Dance of the Four Winds,” that was performed at the beginning of ceremonies.\(^\text{168}\) It is played muted and although somewhat sparse features three distinct ideas\(^\text{169}\) in addition to introducing the thematic material for the second, faster section. The second section is more celebratory, written using extensive multimetre and characterized by strongly accented but uneven rhythms, which represent the “Buffalo Paw” dance (see Figure 4.51).\(^\text{170}\) The variations in note lengths and articulations are coupled with wide leaps and extreme dynamic contrasts, with the melody beginning softly in bar 15 and continuing until a sudden *fortissimo* outburst in bar 36, after which a three note motif and hand stopped notes are introduced to add further variation. There is a prolonged hand stopped passage from bar 67 to 75 and then a number of gradual crescendos hinting at the piece’s conclusion, however this does not occur until


\(^{166}\) Private correspondence with Randall Faust, 16/11/2013.

\(^{167}\) Private correspondence with Randall Faust, 16/11/2013.

\(^{168}\) Private correspondence with Randall Faust, 16/11/2013.

\(^{169}\) The three ideas are ascending glissandi, which mark each section of the dance, rhythmic tapping on the bell of the horn with a ring to represent bells worn on the ankles whilst dancing, and chant-like melodies that are sung over a played pedal (multiphonics). Private correspondence with Randall Faust, 16/11/2013.

\(^{170}\) Private correspondence with Randall Faust, 16/11/2013.
after one final glissando in bar 113, which is strongly reminiscent of the opening motif albeit flutter tongued.\textsuperscript{171}

![Mazasha for Solo Horn, mm. 15-30.

The work is quite clearly “inspired by the composer’s study of the chants and dance rhythms of Native Americans,”\textsuperscript{172} and although the authenticity of these handed down traditions could be questioned, Faust has nonetheless produced a rather unique and audience friendly solo piece for the horn. The Mazasha provides an entertaining gateway to solo works that feature extended techniques, whilst also displaying good articulation, agility and rhythmic precision. The wide leaps so prominent in the work are also reminiscent of traditional cor basse writing, albeit in a completely different tonal context.

Robert G. Patterson (b.1957) is a horn player and composer based in Memphis, Tennessee who has written for a wide variety of mediums from solo instruments through to full orchestra, but is probably best known for his wind chamber music. The set of Four

\textsuperscript{171} This motif represents a drum roll, which signaled the end of the dance. Private correspondence with Randall Faust, 16/11/2013.

Pie\(\text{c}\)es for Natural Horn\textsuperscript{173} was composed in 1985 as “practice exercises while he was touring England and Scotland with Tony Lee Garner and the Rhodes College Singers.”\textsuperscript{174} Although performed several times in the following years, the most significant performance of the Four Pieces for Natural Horn took place at Tennessee Tech University on March 22, 1991 as part of the Southeast Horn Workshop, where it was performed by the composer.\textsuperscript{175}

The melodic material in three out of the four movements of the work is as expected, relying on the harmonic series and hand stopping as is necessary when composing for the natural instrument. These movements generally require good agility and pitching to skip across the notes of the harmonic series, and also clear articulation throughout the entire register (see Figure 4.52).\textsuperscript{176}

The third movement of the set, Deliberately, is quite unusual in comparison as it is heavily reliant on the factitious tones playable below the second harmonic (written c), and also requires the third harmonic (written g) to be bent down on several occasions (see Figure 4.53). This unique movement is essentially based on the opening motif of five notes (B flat-A flat-B-G-F#), which are constantly being displaced within the bar and grouped differently. Achieving these pitches accurately is the most difficult aspect of the movement, and requires good aural training and control of the embouchure. The range of this movement extends almost three octaves from low F# up to e’’.

\textsuperscript{173} Robert G. Patterson, Four Pieces for Natural Horn (Memphis, TN: Great River Music, 1992). Recording also available online at: http://www.greatrivermusic.com/index.html
\textsuperscript{174} Robert G. Patterson, Four Pieces for Natural Horn, preface. The group were performing: Robert G. Patterson, Psalm of Faith in the Wilderness for SATB choir and Natural Horn (Memphis, TN: Great River Music, 1992). Written in 1982, it is based on text from Psalm 63. The horn part of this piece also calls for some low register work at the conclusion, overall the range extends from written low F# up to d flat’’” (horn in D). Private correspondence with Robert G. Patterson, 22/01/2014.
\textsuperscript{175} Private correspondence with Robert G. Patterson, 29/01/2014.
\textsuperscript{176} In these three movements the range extends from a written low A flat up to high d’’”, however this is without taking the horns key (suggested horn in E flat and D) into account which will lower this upper extreme. The first movement Dolefully is centered around the note b flat’, and features several motifs reminiscent of horn calls. The second movement (Briskly) and finale (With motion) are both high-energy movements that feature double tonguing and flutter tonguing within a heavily rhythmical setting that includes many time changes. There is also a brief lyrical interlude in the finale where factitious tones in the low register are utilized (low B flat, A and A flat), and the movement also finishes on a low B flat.
Figure 4.52: Robert G. Patterson, *Four Pieces for Natural Horn*, Movement I. *Dolefully*, mm. 1-18.

Figure 4.53: Robert G. Patterson, *Four Pieces for Natural Horn*, Movement III. *Deliberately*, mm. 1-16.
Patterson has also composed a trio for horn, violin and piano titled *Scenes from Beyond Memory,*\(^{177}\) which is a set movements based on poems selected from a Japanese collection called “Ogura Hyakunin Isshu.” The collection, dating from around the year 1200, is a standard work of Japanese literature and consists of one poem each by one hundred poets.\(^{178}\) The seven poems set to music by Patterson are:

1. The Solitary Stag
2. Departing Seabirds
3. The Counterfeit Cockcrow
4. The Pining Grove
5. Cuckoo at Dawn
6. The Lone Cricket
7. Arc O’er the River of Heaven

The range of the horn part favours the lower and middle registers throughout the opening movements, extending three octaves from low G up to high g’’, especially in representing the voice of the Stag in the opening movement (see Figure 4.54).\(^{179}\) Following the beautifully lyrical fourth movement, Patterson includes a movement for solo horn, which is largely composed of natural horn technique and hand stopping, and here the range is extended up to high c’’’.


\(^{178}\) Private correspondence with Robert G. Patterson, 27/01/2014.

\(^{179}\) Private correspondence with Robert G. Patterson, 27/01/2014.

\textit{Cor Leonis} is the name given to the most scintillating star of the constellation Leo, also known as Regulus. Although the music is not programmatic, a romantic spirit is concealed beneath the title’s pun. \textit{Cor Leonis} proposes a solution to an old enigma: How did Leo lose its Horn? The answer is: It got lost when Leo gained its Heart.\footnote{J. Bernardo Silva trans. Filipe Costa, \textit{Solo}, liner notes.}

\textit{Cor Leonis} is a short piece that contrasts lyrical phrases with more agitated and technical ideas, which frequently require good articulation across rather wide intervals. The range is not too large, only extending two and a half octaves from g’ at the top of the stave down to low d (see Figure 4.55). Extended techniques are not
used beyond hand stopping, which is utilised very effectively on several occasions to create further tonal contrasts.

Figure 4.55: Stephen Dodgson, *Cor Leonis* for Solo Horn, mm. 17-25.

*Why?!* was composed by American horn player and professor Randy Gardner (b.1952) in the year 2000 and opens with a note from the composer that states:

Struggling to discover answers to unanswerable questions is a universal human experience. *Why?!* gives musical voice to the process of grappling with these questions. Quotations from the music of J. S. Bach represent all that is beautiful, peaceful, pure, and rational. Contrasting sections contend with the opposite. Throughout this composition, questioning moves towards inner reconciliation and resolution – beginning with a loud exclamation and closing with only a soft question remaining.

The piece certainly “takes the hornist through a vast gamut of expression” as well as pushing the boundaries of musicality, range and technique (see Figure 4.56). It utilises numerous special effects including hand stopped effects, flutter tonguing, wind sounds

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187 With the exception of the last note, the overall range extends from low G to high b flat.”
played with the mouthpiece reversed, and notes played using half valve technique. The work is constructed using
two very contrasting themes. The first, from the *Sinfonia* to Cantata 156 (“I Stand with a Foot in the Grave”) by J. S. Bach, begins in the third line and continues in fragments periodically throughout the piece. The other motive is simply four notes (g′-b flat′-a flat′-g′)...The contrast between the serene Bach melody and both the violent opening motive and second recurring motive makes for a dramatic composition...The solo begins with loud, angry, *secco* c#′s which work into a tritone scream upward.188

Figure 4.56: Randy Gardner, *Why?!* for Solo Horn, mm. 1-12.

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Paul Basler (b.1963) is well known amongst horn players as a prominent performer, teacher, and having also composed numerous works for the instrument in both solo and chamber settings. *Triathlon* for solo horn\(^{189}\) was commissioned by and written for the 2001 American Horn Competition, where it was used as the required work in the second round of the professional division:

They wanted the work to challenge the hornist both technically and musically. I decided to incorporate various horn effects such as glisses, rips, stopped horn effects etc. Also it was vital to use the entire register - the lowest note is E and the highest, c3. The second movement uses the low register in a lyrical manner. Too often this register is underused by composers who do not understand the instrument. It is one of our finest registers.\(^{190}\)

The work carries a dedication to Charles Snead, who is currently the Director of the Music School and Professor of Horn at The University of Alabama in Tuscaloosa. The two have often performed together and Basler has dedicated a number of works to Snead, who he considers to be one of his “dearest friends” and “one of the most important performers and instructors on the horn in the United States.”\(^{191}\)

As the work was not performed prior to the competition, each of the three movements carries a descriptive title aimed at assisting the player in their interpretation.\(^{192}\) The piece opens with a fast and exciting dance-like movement entitled *Aggressive*, where forceful accented lines and numerous rips are contrasted by sustained and lyrical moments, before a rather unexpected soft ending. The second movement is a complete contrast,

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\(^{190}\) Private correspondence with Paul Basler, 01/10/2013.


\(^{192}\) The three movement structure is utilized as there are three portions to a triathlon. Private correspondence with Paul Basler, 01/10/2013.
suitably titled *Apprehensive* (see Figure 4.57). It features the lower register of the instrument, requiring good flexibility and control across the three octave range, as well as hand stopping in an absorbing, yet introspective ballad.

![Image of musical notation]

Figure 4.57: Paul Basler, *Triathlon* for Solo Horn, Movement II. *Apprehensive*, system 1-2.

The final movement *Acrobatic* is another fast and energetic “Middle Eastern-inspired”

dance reflecting Basler’s Turkish heritage, this time characterized by multimetre and glissandi. Minor seconds and thirds are very prominent throughout the entire work. The *Triathlon* of Paul Basler is very well written; dramatic and appealing, from start to finish and also providing a real chance for horn players to demonstrate a lot of technical and musical skills in just five minutes of music.

The award-winning composer Daniel Baldwin (b.1978) composed *Rashomon* for Solo Horn in 2006 following a commission from friend Mike Keegan, who is a freelance horn player and composer in Milwaukee and who later premiered the work.

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195 Private correspondence with Daniel Baldwin, 12/03/2014.
Baldwin’s first unaccompanied solo work *Kitsune* for solo Bass\(^{196}\), *Rashomon* is inspired by Asian mythology, art and culture.

*Rashomon* literally means “castle gate” and was the gate to the city of Heian-Kyo (Kyoto) in Japan. It was built in 784 AD to be a frontage for Emperor Kammu’s new capital and was hailed as one of the most spectacular gates to the city because of its size and brilliantly painted and tiled décor. There have also been several fascinating stories about the gate such as the story of Shudendoji, the ”demon of Rasho gate” who was known as the monster who carried off all the most beautiful maidens in the city.\(^{197}\)

As *Rashomon* was to be premiered in a large church, Baldwin composed the work in a style that would allow the harmonies to ring out\(^{198}\) and therefore the element of space is crucial in performing the work. The piece opens with two sustained low As and a brief section that is composed of fanfares,\(^{199}\) marked *Andante Dramatico*, which are repeated hand stopped and muted. The *Piu Mosso* that follows is highly melodic, with the Asian influences clearly audible. Eight bars of flowing arpeggios lead to a *ritardando* and back into the opening tempo (see Figure 4.58) as long legato melodies build towards the climax of the work, before gradually fading away again to the *pianissimo* conclusion. The technical requirements of this brief work are not too challenging, however it does require reasonable agility and breath control as well as the ability to place the lower notes accurately.

\(^{196}\) Daniel Baldwin, *Kitsune: (Fox Tales) for String Bass and Piano* (Medina, NY: Imagine Music, 2014). Originally composed in 2005, the three movement work is based on short stories and was revised by the composer in 2008 and 2009 at the request of bass professor H. Eric Hansen so that it is now available with optional piano accompaniment. Imagine Music website, accessed 14/03/2014. Available at: http://stores.imaginemusicpublishing.com/kitsune-fox-tales/

\(^{197}\) Daniel Baldwin, *Rashomon for Solo Horn*, preface.

\(^{198}\) Private correspondence with Daniel Baldwin, 12/03/2014.

\(^{199}\) Overall the range extends three octaves from low A up to g’.”
Baldwin has written numerous pieces for wind instruments and is often inspired by nature and visual art. Among his other works for the horn, *Appalachian Suite* for Horn and Piano\(^{200}\) was inspired by Richard Strauss’ epic tone poem *Eine Alpensinfonie* Op.64, *Landscapes* for Clarinet, Bassoon, Horn and Piano\(^{201}\) by the artworks of his favourite artist, the American landscape painter Frederic Edwin Church (1826-1900)\(^{202}\) and the wind quintet *Las Nubes*\(^{203}\) by the cloud formations seen during a flight. He is also currently writing an extended, multi-movement wind quintet titled *Dreams of the White Tiger* and a single movement work for eight-part horn choir titled *Big Sky Country*.\(^{204}\)

Unfortunately there are also some promising works for solo horn that have proven to be almost completely unavailable during my candidature. One of these in particular, *The Magic Horn* by Ladislav Kubík (b.1964), shows great potential as a solo work featuring

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\(^{204}\) Private correspondence with Daniel Baldwin (28/03/2014).
the lower register. Kubík was born in Prague and studied composition and music theory at the Prague Academy of Music, before accepting a position as Professor of Composition at Florida State University in Tallahassee, FL in 1991.\textsuperscript{205} \textit{The Magic Horn} was composed for fellow FSU faculty member Michelle Stebleton, who premiered the work on May 25, 1993 at the International Horn Symposium that FSU were hosting.\textsuperscript{206} Despite being listed as published by Triga/Schott on the composer’s website the sheet music for the work unfortunately remains unavailable, perhaps because the composer has since modified the work. The version included on Michelle Stebleton’s recent solo recording \textit{Marathon} is somewhat different from the original.\textsuperscript{207}

Although largely unknown, Hermann Neuling is also responsible for a further solo option in his \textit{Konzert-Cadenz} for Horn and Piano,\textsuperscript{208} which is based freely after Henri Kling’s \textit{Characteristic Etude No.31} (See Figures 4.59 and 4.60).\textsuperscript{209} The Neuling version is even more dramatic than the original etude, containing quite different playing instructions, dynamic markings and articulations for some of the material that would otherwise be the same, and also includes a complete piano part. The accompaniment is quite sustained in nature around the technically challenging flourishes of the solo horn part, including some accented and \textit{tremolo} chords, and creating a recitative-like quality. Neuling also adds a four bar piano interlude at bar twelve, in addition to some rapid accompanying lines and a slightly humorous final chord that is rather high in the piano’s range and certainly far above the final sustained pedal F played by the horn.\textsuperscript{210}

\begin{itemize}
\item[\textsuperscript{205}] Composer’s website, accessed 24/03/2013. Available at: http://ladislavkubik.com/index.html
\item[\textsuperscript{206}] Composer’s website, accessed 24/03/2013. Available at: http://ladislavkubik.com/index.html
\item[\textsuperscript{210}] The range extends from pedal F up to high a”.
\end{itemize}
Figure 4.59: Hermann Neuling, Konzert-Cadenz for Horn and Piano, mm.1-12.
Similarly the *Six Unaccompanied Lower Register Pieces for Solo Horn* by Glen Morgan are largely unknown and difficult to acquire. The suite is a collection of relatively short character pieces that were composed between 1995 and 1997 with the aim of providing fun way for musicians to develop their musicality in the lower register whilst also working on their technique. Each movement is distinctly different in character, and carries a brief but descriptive title. The first, *Soliloquy*, allows for a lot of rubato and contrast in dynamics whilst also including some awkward leaps (see Figure 4.61).

The second movement, a *March*, is at the rather quick tempo of a minim equals ninety-two, making articulation crucial. The opening material in this movement is characterised by sweeping scale runs and wide interval jumps (see Figure 4.62), before a

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211 Glen Morgan, *Six Unaccompanied Lower Register Pieces for Solo Horn* (West Sussex: Soundscapes, n.d.).

212 Dr. Glen Morgan (b.1930) is an American horn player and composer, who studied the instrument with Ward Fearn, Verne Reynolds and Philip Farkas as well as composition with Bernard Heiden. In 1978 he moved to England, accepting a position teaching composition at the Trinity College of Music shortly thereafter. He remained in the role until retiring in 1996 to focus on his own compositions, and in 2007 returned to Pennsylvania. Notable amongst his output of horn music are the *Songs of Ariel* for Horn and Soprano and the Concertino for Horn and Chamber Orchestra, originally titled *Concerto for a Libran*, which was premiered by Michael Thompson in London in 1997.
more lyrical *Trio* section and brief return to the march, albeit with a curious repeat included but not a *da capo*.

Figure 4.61: Glen Morgan, Six Unaccompanied Lower Register Pieces for Solo Horn, Movement I. *Soliloquy*, mm. 1-12.

Figure 4.62: Glen Morgan, Six Unaccompanied Lower Register Pieces for Solo Horn, Movement II. *March*, mm. 1-7.

The following *Waltz*, *Tango*, *Nocturne* and *Fantasia* are all rather straightforward but still full of wide intervals, sudden dynamic contrasts and include some minor technical challenges such as hand stopping and muted tones, which appear in the final movements of this set. These pieces could certainly provide an introduction to solo horn works for a
younger student with a solid low register, with the possibility of leaving out one or two of the more challenging movements due to any technical issues or because of the reasonably large range that is required.\textsuperscript{213} The range of the \textit{Tango} is the largest and most challenging in the set; frequently requiring low A flat’s that are well articulated and centred, and continuously jumping around in the two octaves between it and g’, as well as briefly ascending to g”.

Another work of note for the low horn player is the \textit{Gummi-Polka} for Horn Solo, written by an anonymous composer in Luxembourg during December 1994.\textsuperscript{214} Although unpublished, the work has been performed and distributed by both Frøydis Ree Wekre and The Philadelphia Orchestra’s fourth horn, Denise Tryon, who introduced me to it in 2012.\textsuperscript{215} The \textit{Gummi-Polka} consists of two sections; the opening written in B flat Major (see Figure 4.63)\textsuperscript{216} and the second, slightly longer section in E flat Major. Being characterised largely by the rapid shifts from accompanying notes in the lower register up into the stave where the melody is written, the work remains light-hearted, and approaching comical throughout.\textsuperscript{217}

![Figure 4.63: Anonymous, Gummi-Polka for Horn Solo, mm. 1-9.](image)

\textsuperscript{213} The range extends from low G to g’’ at the top of the stave.
\textsuperscript{214} The page carries these details as well as the initials MB.
\textsuperscript{215} Anonymous, \textit{Gummi-Polka} (Unpublished, n.d.).
\textsuperscript{216} There is a da capo repeat included.
\textsuperscript{217} Prior to the final bar, where there is a high b flat’’, the range of the work extends from low B flat up to f’’.
Thankfully there are always new works being composed, and some of the most recent compositions for low horn have come about through the work of Denise Tryon. The first to be published are the *Hunting Songs* for Low Horn by Brett Miller (b.1976), which was published in 2013 by Brass Arts Unlimited as part of their *Introit New Music Series*. Miller began playing the horn at age eleven and has been actively composing since he was fifteen, so it is no surprise to find that he writes both well and frequently for brass instruments in both solo and chamber music settings. Whilst gaining some popularity through his composing, he is also clearly a talented horn player, evident through his recent recording and current position as a member of the Ceremonial Brass in the United States Air Force Band, Washington, D.C.

*Hunting Songs* is in three parts, and although the publication states that the work is not directly programmatic, in reality it is, with Miller combining the horn’s hunting origins with inspiration from nature.

I had been wanting to write a work with "natural" inspiration for some time and I love sitting on my deck watching the birds soar overhead and thought I might be able to do something with that...I thought it would be interesting to do a piece that had a "hunting horn" aspect to it, but to turn it on its head and use the horn to tell the story of the hunter, rather than portray the servant on horseback.

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221 “While not programmatic, each part paints an image of three different hunters: the crow, the owl, and the falcon.” Brett Miller, *Hunting Songs for Low Horn*, publication back cover.
222 Private correspondence with Brett Miller, 18/10/2013.
Musically Tryon and Miller agreed on a lyrical work, taking its inspiration from the lieder of Franz Schubert (1797-1828) and Hugo Wolf (1860-1903).\(^{223}\) In *The Crow*, the lyrical but slightly sinister and menacing horn solo is supported by a constantly moving accompaniment (see Figure 4.64), whilst *The Owl* is much more sustained, quiet and reflective in nature. It shows “how quietly the owl hunts, perched, watching, then suddenly (as the piece crescendos down to the low C in measure 59) swoops down, captures its quarry, then silently retreats back to its perch.”\(^{224}\)

![Figure 4.64: Brett Miller, *Hunting Songs* for Low Horn, Movement I. *The Crow*, mm. 1-20.](image)

*The Falcon* suggests the typical horn rondo finale with its 6/8 time signature and *Allegretto* tempo marking. It depicts the “swirling and soaring of a falcon as it hunts, high above the world, seeing all and evoking power and precision and of course it gets its quarry right at the triplets and the tonal high point of the piece and quickly disappears.”\(^{225}\)

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\(^{223}\) Private correspondence with Brett Miller, 18/10/2013.

\(^{224}\) Private correspondence with Brett Miller, 18/10/2013.

\(^{225}\) Private correspondence with Brett Miller, 18/10/2013.
this work, the usual technical boundaries one might expect are not really confronted, making it an ideal piece for students working in the lower register. However, in projecting and sustaining a beautiful tone with singing quality at volume there certainly are challenges to be found. The piece certainly asks for the performer “to really sing and use great musical expression in that range, something that Denise is fantastic at.”

Tryon premiered the work on July 20, 2013 at the Peabody Conservatory in Baltimore.

Soon to be released works from Tryon’s project include commissions from horn player Nathan Pawelek (b.1968), pianist Andrea Clearfield (b.1960) and bassist Peter Askim (b.1971). The work by Pawelek, titled *Irremediable Breakdown*, is approximately thirteen minutes long and follows the “evolution of a love affair with an unhappy ending.” It is composed in four sections that are played through without interruption and is “probably a pessimistic commentary on marriage in the US these days, where more than 50% end in divorce due to irreconcilable differences with the four movements cataloguing a somewhat familiar timeline.” The “loneliness and depression” evident in the first movement, *Wakening*, results in a sorrowful *Lament* before a moment of unexpected romance brings joy and a love song, titled *Romance*. Unfortunately there is no happy ending as *Irreconcilable Differences* lead to “bickering and resentment, and while there are attempts at reconciliation, the end is irremediable.”

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226 Private correspondence with Brett Miller, 18/10/2013.
227 Private correspondence with Nathan Pawelek and Denise Tryon, 21/01/2014.
228 Private correspondence with Nathan Pawelek and Denise Tryon, 21/01/2014.
229 The final section is written in 7/8, representing the difficulties encountered in negotiating and arguing. Private correspondence with Nathan Pawelek and Denise Tryon, 21/01/2014.
Andrea Clearfield has written several solo works for horn owing to a close friendship with Frøydis Ree Wekre. The new work commissioned by Tryon, titled River Melos, is a single movement work in a “loose rondo/variation form” that covers an expansive range, extending from pedal F up to high b flat.

River Melos is a melodic unfolding in perpetual motion, from quietly flowing into waves of great intensity and movement and back, opening into a larger space at the end.

Portuguese horn player and composer Ricardo Matosinhos (b.1982) has also recently completed a Suite for Low Horn and Piano, which is also available in editions for both trombone and euphonium. The three movements that make up the suite each carry creative titles. The first movement, titled Let’s Play, and final movement Rag are both light-hearted and rhythmical, with the later requiring swung rhythms. The middle movement is the beautifully lyrical Water Ripples. The range of this seven minute piece extends from low c up to a’, making it a good repertoire option for younger students.

Along with the need for pedagogical resources that were specifically targeted towards the development of the horn’s lower register, there has also been a similar need for solo repertoire options, as recognised works that truly allow aspiring horn players to demonstrate their skills in the lower register have been rare. Although both traditional cor basse repertoire and music composed during the transitional period when valves were becoming accepted have much more to offer than widely accepted, additional modern

231 Approximately nine minutes in length, it is due to be published shortly by either Anglefire Press or Jomar Press. Private correspondence with Andrea Clearfield and Denise Tryon, 03/05/2014.
232 Private correspondence with Andrea Clearfield and Denise Tryon, 03/05/2014.
compositions were certainly required to endure alongside these and the more celebrated recent additions of Hermann Neuling’s famous *Bagatelle* and Carl Nielsen’s *Canto Serioso*. There actually are a number of interesting and attractive pieces available to the low horn player that are both musically rewarding and offer beneficial challenges to the student, or indeed the professional musician. These compositions cross many different styles and genres, and allow for increasing levels of virtuosity to now be demonstrated throughout a player's development. It is hoped they will become more widely recognised, more frequently performed and also more highly valued amongst horn players in the coming years.
Chapter 5 - Borrowing and Transcribing

Teaching Materials

The approach to playing the horn in recent decades has increasingly been shaped by the research and teachings of several leading figures when it comes to breathing and physiological aspects as well as in the mental approach, musicality, style and the movement towards more historically accurate performance practices.¹ Teachers of the horn have in previous years been required to search for studies and exercises focussed more specifically on articulation and flexibility for less advanced students, and have often chosen to borrow from the pedagogical materials originally designed for other instruments where these traits are more effectively developed, such as the Method for Cornet by Jean-Baptiste Arban (1825-1889)² and Robert W. Getchell’s Practical Studies for Cornet and Trumpet.³ This has also on occasion been the approach to lower register work, where there has been a severe lack of resources available. The most commonly used option amongst teachers has been the use of standard horn etudes such as those of Georg Kopprasch⁴ played down an octave or transposed into a lower key, however this approach has a major drawback as it fails to teach the reading of bass clef adequately. For actual low studies, the horn’s repertoire has rested almost solely on a small number of etudes hidden amongst

¹ This is also the case with other woodwind and brass instruments.
⁴ The Sixty Etudes for Cor Basse Op.6. are available in many publications such as: Sixty Selected Studies for French Horn Ed. Friedrich Gumert and Albin Frehse (New York, NY: Carl Fischer, 1939). Also now available transposed into lower keys and using both old and new notation bass clef in the publication: Kopprasch Down Under Ed. Corbin Wagner (Bloomfield Hills, MI: CornoPub, 2013).
larger works, and the relatively difficult *30 Special Etudes for Low Horn* by Hermann Neuling.

Since 1990, attempts have been made to fill this void and make the teaching of the lower register and bass clef more accessible to less advanced players. These newer method books all contain useful material for the development of a good low range, with several containing transcriptions of the lyrical etudes and vocalises that had previously been utilised by the lower brass instruments. These studies provide plenty of difficulties and certainly challenge the student to develop their breath control, sustaining power and phrasing, but rarely do they approach the more technical requirements and lower register facility that is required to play the Neuling etudes. However, they perhaps show the way forward for students, teachers and performers who are looking to develop this aspect of their playing.

The horn player’s main aim in the lower register should always be the production of a beautiful, full, rich tone and to play as musically as possible, as is the case in the middle and upper registers. Regardless of this fact, technical work cannot be avoided and in reality, due to the difficult nature of the instrument, will occasionally need to be focussed upon to make the realisation of the above aims achievable on a more consistent basis. Challenging patterns that can be applied to the horn are not difficult to find. An exercise that woodwind players can often be heard practising is the major scale played with the addition of extra intervals, most often thirds or fourths. This exact same exercise can be found in several of the treatises produced at the Paris Conservatoire in the

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7 See Chapter 3 regarding technique and teaching materials for more details regarding these resources.
nineteenth century where it is also extended to include all intervals up to two octaves (see Figure 5.1).  

Figure 5.1: Jacques-Francois Gallay, *Methode Pour le Cor Op.54*, Exercises No.40, No.66 and No.68.

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8 Including Jacques-Francois Gallay, *Methode Pour le Cor Op.54* (3rds, 4ths and 5ths), Louis-Francois Dauprat, *Methode de Cor Alto et Cor Bass* (one octave) and Heinrich Domnich, *Methode de Premiere et de Second Cor* (two octaves). These publications are discussed in Chapter 1.

For the low horn player, where one of the main technical challenges has often been the rapid leaps in register and the wide range that must be covered, the advantages of practising a simple exercise such as this and gradually increasing the level of difficulty are obvious. However, for all horn players there are benefits in the consistent execution of intervals when combined with uniform articulation and good tone production across the whole range of the instrument. An exercise of this sort also develops the player’s intonation and aural skills if careful attention is paid to the relationship between the notes, as well as beginning to develop greater flexibility in the embouchure.

Other scale patterns can also be copied from other instrumentalists to develop technique. The advances made to the horn since the application of the valve to the instrument in the early nineteenth century, and the musical and technical requirements now expected of all players, means that good left hand technique cannot be stressed enough. Simple patterns such as those of James Stamp (see Figure 5.2), Emory Remington, Max Schlossberg\textsuperscript{10} or chromatic scales are useful in building dexterity, as well as improving the student’s familiarity with their scales. They can also be extended quite easily and used as exercises to increase both range and agility.

Simple flexibility exercises based on the harmonic series are a crucial element in the majority of warm up routines. Most horn teachers will indeed have multiple patterns and variations of this type of exercise with increasing complexity, that have no doubt been passed down from teacher to student for generations. Good flexibility and control over the harmonic series has always been a key component in the low horn player’s skill set and is still of upmost importance when it comes to modern day performances of repertoire from the Baroque and Classical periods. During these periods the cor basse player reigned supreme and was often required to move through the notes of the harmonic series in a very rapid and virtuosic fashion. The patterns used above middle c’ are easily altered to include lower notes, or can often be played an octave or more lower, and no publication is really necessary for this although they do exist. However, if new patterns are required ideas may also be taken from the trumpet’s repertoire as these exercises are also easily applied to the lower octaves of the horn by simply transposing down an octave to where the harmonic series corresponds (see Figure 5.3).

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11 James Stamp, *Warm-Ups + Studies: Trumpet or Cornet/Flugelhorn*, 11-12.
12 Arpeggios are an equally important fundamental of horn technique, and obviously feature prominently in the harmonic series. Developing flexibility was discussed in Chapter 3.
13 Such as: Dr. David Ware, *Low Horn Flexibility Studies* (Salem, CT: Cimarron Press, 2006). Also discussed in Chapter 3.
The lyrical phrasing, cantabile style, agility and agility required to play the *Vocalises* of Marco Bordogni (1788-1856)\(^\text{16}\) that lower brass players have been using for decades means that these studies are now found as equally at home in the horn studio. Although there are several publications available where this material has been transcribed specifically for the horn,\(^\text{17}\) this has generally resulted in them also being brought up in pitch to the more standard ‘lyrical study range’ of the instrument. So then, there is great value in reading a publication that is instead marketed towards one of the lower brass instruments. The lyrical nature and inherent challenges found in the studies are maintained and somewhat amplified through this approach, which also provides the student with a

\(^{15}\) Bai Lin, *Lip Flexibilities: for all brass instruments*, 6, 12 + 21.

\(^{16}\) Marco Bordogni was a famous Italian tenor and teacher at the Paris Conservatoire from 1820 until his death.

much needed source of lyrical music where the bass clef alone is utilised. Publications can be found and read as either old or new notation\textsuperscript{18} depending on the instrument that the publication was originally intended for and the editing process. For example, the popular Carl Fischer publication for trombone edited by Johannes Rochut (see Figure 5.4)\textsuperscript{19} is read as new notation whilst the publications edited by Allen Ostrander and Chester Roberts (see Figure 5.5) for bass trombone or tuba require the music to be read as old notation.\textsuperscript{20}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure5_4.png}
\caption{Marko Bordogni Ed. Rochut, \textit{Melodious Etudes for Trombone}, Vocalise No.3 \textit{Allegretto}, mm. 1-24.}
\end{figure}

\textsuperscript{18} Old notation is written an octave lower in the bass clef than modern ‘new’ notation. Therefore the horn in F sounds a fourth above the written pitches, rather than a fifth below.


Figure 5.5: Marko Bordogni Ed. Roberts, *43 Bel Canto Studies for Tuba (or Bass Trombone)*, Vocalise No.2 Allegretto, mm. 1-24.

Figure 5.6: Marko Bordogni Ed. Schwartz, *Bordogni for Bass Trombone: 27 Selected Vocalises*, Vocalise No.4 Allegretto, mm. 1-24.
There are many different publications available of these studies written in bass clef, however one further edition, a transcription for bass trombone by David Schwartz, also deserves mention.\(^{21}\) In this publication the études are transcribed into different keys to the previously mentioned editions, providing a further option for study (see Figure 5.6).\(^{22}\)

The Bordogni vocalises provide lyrical études in many different keys and varied characters that will help develop articulation, breathing, a full tone at all dynamic levels and the ability to sustain and control pitches in the lower register. The melodic lines also frequently include different ornaments, and will develop the musicality and phrasing of moderately advanced students. They have also on occasions been used as solo works on tutti horn audition lists.

Similarly, the vocal studies of Giuseppe Concone (1801-1861)\(^{23}\) are used by many instrumentalists as lyrical studies. There is a transcription by John Sawyer for trumpet and horn that is widely available and used, published by The Brass Press as *Lyrical Studies for Trumpet or Horn*.\(^{24}\) Reginald Fink also relies heavily on them in his *Studies in Legato for Trombone*\(^{25}\) where they are reproduced an octave lower and in bass clef, which is read as new notation by the horn player. The same book is also available published for bass trombone and tuba, again providing an old notation option of the same material. These resources can be used with less advanced students to begin developing the ideals that were discussed with the Bordogni, as they are not only shorter but also less difficult technically.


\(^{22}\) David Schwartz has now published seven volumes for trombone, as well as piano and CD accompaniments. Schwartz also offers slightly more realistic metronome markings for the brass player to aim at in his numerous publications based on the original Bordogni markings, conversations with Boston Symphony Orchestra Bass Trombonist Douglas Yeo and his own experience. These tempo suggestions are available online at: http://www.nyx.net/~dschwart/

\(^{23}\) Giuseppe Concone was also an influential Italian singing teacher.


In short, there are many options available for unusual but challenging etudes in the repertoire of other instruments if these resources are explored. Lyrical and technical aspects of instruments such as the trombone, bass trombone, tuba and bassoon that utilise the bass clef whilst still making an allowance for breathing are obvious choices, but the imaginative teacher or student could surely find many other options for study that fulfil their own personal needs. The value of trumpet repertoire played an octave lower so the harmonics correspond should also be explored for flexibility and technical exercises.

**Solo Repertoire**

Even though the lower register used to be favoured for solo works, there are unfortunately relatively few recognised solos that have been composed since the development of valves that can be performed to demonstrate a student’s skills in the lower register as they are developed, or indeed for an accomplished performer to play in an attempt to display their talents. Despite the very real need for these works, those that are available have failed to break into the standard performance repertoire of the horn and remain somewhat unknown, as they are predominantly composed by lesser-known composers and in a less iconic style.\(^{26}\) Therefore transcriptions and other options must be considered as an underutilised but nevertheless very legitimate performance option.

Today there seems to be an ever-increasing number of works, being sourced predominantly from other ‘tenor voice’ instruments such as the cello, bassoon and trombone, that are being edited, transcribed, published and becoming readily available and performed as solo horn options. As is the case with any transcription, the performer needs to find a balance between the original intent and vision of the composer and what is possible or practical when the music is applied to the new instrument. In many cases the

\(^{26}\) The obvious exceptions being the *Bagatelle für Tiefes Horn* of Hermann Neuling and Carl Nielsen’s *Canto Serioso* for Horn and Piano, which are both well known. Other solo options were discussed in the previous chapter.
outcome is a completely new entity, a combination of sounds that the composer would never have dreamt of at the time of composition, and this raises several difficult questions. Of primary concern are the musical approach and the level of commitment to honouring the original concept of the work in terms of historical accuracy, style and characteristic features. A favoured transcription amongst horn players for many years now, as well as with the lower brass and other instrumentalists, are the 6 Suiten für violoncello by Johann Sebastian Bach (1685-1750). Although many performers choose to use the original cello parts27 there are several versions available that have been arranged specifically for horn,28 the first of which was a transcription by Wendell Hoss that was published by Southern Music Company in 1950 (see Figure 5.7).29 Several artists including Daniel Katzen, Francis Orval, Radek Baborák and J. Bernardo Silva, have also recorded the suites on the horn.30

27 “Some hornists play from a cello edition because the want to work on their low register (for control, stability, and flexibility), others to be authentic, and still others because of the more relaxed feeling possible in that range...A bonus is facility in reading C bass clef and tenor clef.” Marilyn Bone Kloss, “The Bach Cello Suites on Horn,” The Horn Call 25/1 (November, 1994), 38.


Before using the *Six Cello Suites* of J. S. Bach, the teacher must decide the purpose for studying them: Will it be to develop flexibility, bass clef reading, or a better understanding of Baroque form and Style? A decision on these matters should precede the choice of a given edition.  

A transcription of the *Unaccompanied Cello Suites* for horn (or any wind instrument for that matter) presents three interesting questions – where to breathe, how to handle multiple stops, and the problem of *tessitura*.

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Figure 5.7: Johann Sebastian Bach Ed. Hoss, Suite for Violoncello No.1, *Prelude*, mm. 1-22.

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Due to the additional notes that are unplayable on the horn, the arrangers have reduced the chordal and polyphonic writing into carefully selected grace notes that are playable on the horn, in an attempt to maintain the different strands of the original texture and harmonies. Then phrasing and breathing suggestions have been added, however ultimately these must be decided upon by the performer in addition to the approach and style that is employed.

Arrangers have generally sought to bring the suites into a more favourable range for horn players through their choice of keys, and have also removed some of the confusion caused by the original clefs by predominantly using the treble clef. In the Hoss edition, as well as several others, this is achieved through simply transposing the original cello part up an octave, which results in the written key of each suite remaining the same for the horn player but it sounding a fourth higher than the original (see Figure 5.8). Although “some hornists prefer this range because it is lighter and brighter than the cello range and more playable on the horn,” it has also led to the loss of an important feature of playing the suites on horn: “the opportunity to work in depth on our low register flexibility and response.” The editions by Wagner and Katzen take the alternate approach, maintaining the sounding pitch by transposing the horn part up a fifth from the original (see Figure 5.9).

33 Randy Gardner, Mastering the Horn’s Low Register (Richmond VA: International Opus, 2002), 98. However Wagner predominantly uses bass clef and old notation prior to Suite No.6.
34 Suite No.1 is written in G Major so sounding C Major when played by a Horn in F, Suite No.2 is written in D Minor so sounding G Minor, etc. The Baborák, Bourgue, Orval and Sauer editions are all in the same keys as the Hoss, with the exception of Suite No.6, whilst the Yancich is written another fourth higher, so Suite No.1 is written in C Major and sounding F Major, Suite No.2 is written in G Minor so sounding C Minor etc.
36 Daniel Katzen, “Bach’s Cello Suites on the Horn,” The Horn Call 43/1 (October 2012), 76.
These suites contain such a wonderful variety of musical material that some hornists alternatively choose to perform them from the cello edition. When transposed from the cello part, the tessitura encompasses the bottom of the bass clef to the middle of the treble clef...So now we have four challenging keys in which a hornist might perform these suites: untransposed bass clef, bass clef transposed up a fifth (sounding the concert pitch), an octave higher than the cello in Hoss’ edition, and another fourth above that in Yancich’s edition.37

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37 William Scharnberg, “Music and Book Reviews,” *The Horn Call* 30/3 (May, 2000), 91-92. (See Figure 5.10)
Marilyn Bone Kloss takes another slightly different approach in her self-published transcription of selected movements from the suites, 38 *Suites for Cello Solo: Selected Movements Transcribed for Horn*, although once again the cello part is transposed up a fifth so that it sounds the correct pitch when played on the horn in F. However, unlike all the other versions, Marilyn Bone Kloss utilises both the treble and bass clefs simultaneously on separate staves with the musical line moving freely between them (see Figure 5.11).

38 The opening movement of the volume is the Sarabande from Suite No.5 in C Minor BWV 1011, which is followed by the pair of Menuets from the first suite, Bourrées from the third suite, Gavottes from the sixth suite and finally the Gigue from the first suite. The preface recommends both the Hoss and Bourgue transcriptions for horn, as well as a number of editions for cello. The publication also includes some notes regarding the editing process, including questionable notes, the implementation of grace notes, articulation choices and slurs, which follow the Anna Magdalena Bach manuscript as closely as possible with the dotted slurs being added by the author as suggestions for the horn.
Complications arise in the final suite. Written for a slightly different instrument with five strings and in the key of D Major, it covers a far wider range and also requires some particularly difficult decisions be made by the arranger. As a result of these difficulties this suite has been approached in a number of different ways, and is far less regularly performed by horn players. In the sixth suite, Katzen chooses to retain the key of D Major (see Figure 5.12), whilst other editions have chosen either A Major or G Major.\footnote{Sauer and Wagner in A Major whilst Bourgue, Orval and Yancich are in G Major.}
Figure 5.12: Johann Sebastian Bach Ed. Katzen, Suite for Violoncello No.6, *Courante*, mm. 1-28.

Francis Orval writes the *Sarabande* and second *Gavotte* of this suite for horn duet, to give the impression of maintaining the original double stops (see Figure 5.13). Hoss took a similar, although slightly different approach in his transcription of the sixth suite, writing in the key of B flat Major for Horn in E in the *Prelude, Allemande, Courante* and
*Gigue* movements, followed by A Major for two horns in F in both of the *Gavottes* and three horns in F for the *Sarabande*.\(^{40}\)

Figure 5.13: Johann Sebastian Bach Ed. Orval, Suite for Violoncello No.6, *Gavotte II*, mm. 1-24.

\(^{40}\) Katzen includes an additional version of the *Sarabande* for horn quartet in his publication.
Single movements of the suites have also, on occasion, been required for orchestral auditions as a set work.\textsuperscript{41} Although these cello suites remain a constant performance favourite amongst horn players, sometimes questions are asked if these performances actually do justice to the music due to the concessions that have necessarily been made. Regardless of this, they certainly do provide a great tool for the development and practice of the horns lower register, requiring flexibility, stamina, clear articulation and left hand technique. Beyond this, they offer a challenging performance option and a great medium to better musical understanding for all musicians, making them constantly rewarding to play.

I wish for all who accept the challenge of the Bach Suites on the horn, musical enlightenment instead of bravado, beauty instead of strength, and joy instead of arduousness.\textsuperscript{42}

There are obviously other options for solo Baroque works that do take breathing and the capacity to play a single note into consideration, such as amongst the vast repertoire of flute and bassoon pieces. Due to the lack of pre-twentieth century solo repertoire written for the lower brass instruments, performers have already ventured into an exploration of these resources and have chosen to transcribe many solo compositions from the Baroque and Classical periods. Amongst Bach’s output are several other interesting options for the horn player that have already been adapted by other performers, including movements from various cantatas and the Orchestral Suites BWV 1066-1069, as well as both sonatas and partitas for solo flute and solo violin. Other Baroque compositions that have been experimented with include the music of Arcangelo Corelli (1653-1713), George Frideric Handel (1685-1759), Henry Purcell (1659-1695) and Antonio Vivaldi (1678-

\textsuperscript{41} Randy Gardner, \textit{Mastering the Horn’s Low Register}, 98; Marilyn Bone Kloss, “The Bach Cello Suites on Horn,” 39.

\textsuperscript{42} Daniel Katzen, “Bach’s Cello Suites on the Horn,” 77.
1741). Indeed the horn player needs only to listen and explore the music available to find challenging repertoire options that are either available already transcribed for horn, or may be adapted for performance quite easily.43

Indiana University Professor of Horn Rick Seraphinoff, is currently transcribing the *Twelve Fantasias for Unaccompanied Flute* by Georg Philipp Telemann (1681-1767) as a set of unaccompanied solo works for the horn in its lower register. These pieces seem ideal for a horn transcription as they were originally conceived for a wind instrument playing a single pitch whilst creating implied harmonies, and having been written down an octave from the original they enter into proper low horn territory. The beautifully lyrical melodies and technically challenging faster movements contain many challenges for the horn player, and certainly provide an attractive solo option.

Another void in the horn’s solo repertoire occurred at the beginning of the nineteenth century, where the development of the valved instrument failed to result in the larger scale Romantic compositions that were composed for many other instruments.44 With the desire to contribute “something truly substantial to the repertoire for horn and piano, both in quality and dimension”45 Metropolitan Opera Orchestra horn player Scott Brubaker decided to transcribe and record two sonatas by Johannes Brahms (1833-1897). The first was the Sonata for Cello and Piano in E Minor Op. 38,46 which was originally

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43 There are a number of such pieces by less well known composers of the Baroque period that have already been transcribed for horn. Although there are technical difficulties most of these do not feature the lower register, including: Benedetto Marcello, *Six Sonatas for Horn and Piano (Organ)* Ed. John Glenesk Mortimer (Crans-Montana, Switzerland: Editions Marc Reift, 1997); Johann Ernst Galliard, *Six Sonatas for Horn and Piano (Organ)* Ed. John Glenesk Mortimer (Crans-Montana, Switzerland: Editions Marc Reift, 1999); Henry Eccles, *Sonata in G Minor* Ed. Joseph Eger (New York, NY: International Music Company, 1963). The number of quality solo compositions for the horn in the Classical period leaves little need for transcriptions, however lower brass players have also utilized the works of Wolfgang Amadeus Mozart (1756-1791) and Gioachino Rossini (1792-1868), amongst others, so again there are further options which may be explored and considered for performance if one is inclined to do so.

44 As discussed in Chapter 2.


published in 1866, the same year as the famous Trio for Horn, Violin and Piano in E flat Op. 40. Brahms dedicated the Sonata to the Viennese vocal teacher and amateur cellist Joseph Gänsbacher (1829-1911), the pair premiering the work for a private audience in Leipzig on January 14, 1871. The first of the three movements, an elegiac Allegro non troppo, showcases the cello’s lyrical qualities (see Figure 5.14) whilst the second movement, Allegretto quasi minuetto, combines the folk and dance influences for which Brahms became renowned with sweeping Romantic melodies. Brahms’ love of Johann Sebastian Bach is demonstrated in the final movement where he integrates contrapuntal techniques within the sonata form, using a melody reminiscent of those found in Bach’s Die Kunst der Fuge BWV 1080. Whilst the characteristic cello writing cannot be denied, the substitution of horn provides many interesting features. It allows for greater dynamic equality in the louder, more agitated sections of the first and third movements where the piano often utilises the lower register and thickens the texture, whilst also preserving the gentler, albeit slightly troubled characters that Brahms also employs. The exploration of the horn’s middle and lower registers preserves the ideal warm, dark, passionate and expressive tone initially used by Brahms and yet also provides the performer with a wonderfully challenging and rewarding work “that will especially test one’s endurance, low register, and flexibility, not to mention musicianship!”

The endurance and agility required to perform this work provides a really significant challenge, although the range extends just over three octaves from low G up to high b”’, as there are very few bars rest in the almost thirty minute long piece.

The second of the Brahms sonatas transcribed by Brubaker was the Sonata for Clarinet and Piano in E flat Major Op. 120 No.2. As was the case with the cello Sonata, Brubaker considered this work ideal due to the deeply lyrical and romantic characters as well as its tonal attributes, with Brahms favouring “warmth of tone, rather than brilliance.” Again the work spans over twenty minutes in length and covers a range extending just beyond three octaves, although in this case it is from low B up to high c’’’ and the lower notes are only visited rarely and are then generally sustained pitches. Due to the register of the original clarinet part many phrases have been displaced by an octave, and although this is not so noticeable when played in context, it does contribute to the work being unsuitable for a low horn player. The work would however be as impressive for a high horn player as the cello Sonata is for low horns, requiring endurance and showcasing the player’s agility and technique (see Figure 5.15).

Figure 5.14: Johannes Brahms Ed. Brubaker, Sonata in E Minor Op.38 for Horn and Piano, Movement I. Allegro non troppo, mm. 1-35.

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51 This is also due to the many high entries at soft dynamic levels in what is a fairly light texture.
Another cello sonata that has been transcribed for horn is the *Grand Sonata* in A Major for Cello and Piano Op. 104\(^{52}\) by Johann Nepomuk Hummel (1778-1837), who is famous amongst brass players due to his Concerto in E flat for keyed trumpet S.49/woO.1, which was composed in 1803. The *Grand Sonata* was written many years later in 1824, and published shortly after in London in 1826.\(^{53}\) It is in three movements that are all typically Classical in structure, and was transcribed for both euphonium and horn by pianist and composer Dr. Fred Broer (b.1942).\(^{54}\)

The publication includes an extensive preface by Broer discussing the editing approach, sources consulted and stylistic elements that should be considered when

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\(^{52}\) The Cello Sonata was composed in 1824 and first published in 1826 by Boosey in London, and a year later by Peters in Leipzig.


performing the piece. Although he states that “only minimal changes were required for the adaption since the cello part is very lyrical and lies in a comfortable range for the horn”\textsuperscript{55} Broer has proceeded to add “some passages for the euphonium” to make the part “more demanding,” and also in an attempt to create a more equal balance between the two voices. Some of these musical additions that were discreetly added in “Hummel’s personal style in order to preserve the original intent of the music”\textsuperscript{56} work nicely and add to the piece, whilst others seem unnecessary (see Figures 5.16 and 5.17).

![Figure 5.16: Johann Nepomuk Hummel Ed. Broer, Sonata for Horn and Piano Op.104, Movement I. Allegro amabile e grazioso, mm. 1-17.](chart1.png)

![Figure 5.17: Johann Nepomuk Hummel Ed. Grützmacher, Grande Sonata for Cello and Piano Op.104, Movement I. Allegro amabile e grazioso, mm. 1-17.](chart2.png)


Obviously there are some notes of harmonic function that needed to be removed from the original solo cello part, such as chords requiring double stopping, however some entire passages have also been removed, which seems unwarranted. In the first two movements this basically amounts to pizzicato notes and the occasional chord. However the heavy handed editing is especially evident in the final movement, where most of the solo line in the minore tonality has been completely altered (see Figures 5.18 and 5.19),\textsuperscript{58} whilst the middle maggiore section remains quite faithful to the original. This editing should not be automatically thought of as a negative, but it certainly does seem a little unnecessary, especially given Broer himself comments on the “excellent craftsmanship and exquisite beauty of the Sonata Op.104,” which is “one of his finest and most mature works in the sonata genre.”\textsuperscript{59}

\textsuperscript{58} In these two examples the author of this paper has added rehearsal marks A and B to the Broer arrangement so that they correspond to the Grützmacher, which has had bar numbers added into the left margin. Notes that correspond (without considering octave displacement or rhythmic variation) have been highlighted.

\textsuperscript{59} Johann Nepomuk Hummel Ed. Dr. Fred Broer, 	extit{Sonata for Horn and Piano Op. 104}, preface.
Figure 5.18: Johann Nepomuk Hummel Ed. Broer, Sonata for Horn and Piano Op.104, Movement III. Rondo: Allegro vivace un poco, mm. 1-79.
Figure 5.19: Johann Nepomuk Hummel Ed. Grützmacher, *Grande Sonata* for Cello and Piano Op.104, Movement III. *Finale: Allegro non troppo*, mm. 1-79.

Due to the extent of changes made, it is not surprising to find that it has also resulted in a rather inaccurate claim in the preface that “the piano part itself remains authentic and unchanged from the original,”\(^6\) as this is certainly not the case. In addition to these somewhat surprising editorial decisions, Broer has also simplified many of the arpeggiated passages and displaced numerous notes and passages by an octave, effectively reducing the required range in the first two movements from three and a half octaves to just two and a half octaves, ranging from low d up to g”. In the third movement this range is stretched out to a full three octaves from low B to high b”, however the range should

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really be extended to include low Gs throughout if a rendition slightly more truthful to the original is desired.

Regardless of these considerations the work does show potential as a horn piece.\textsuperscript{61} There are some beautiful, long lines for the soloist to play and also some equally challenging technical sections. It also provides an interesting option in its comparison to those first sonatas for horn and piano that were composed at the beginning of the nineteenth century in the early Romantic style and have remained standard horn recital repertoire.\textsuperscript{62} Several of these works are actually of a similar length, spanning around twenty minutes, yet due to the limitations of the natural instrument contain far different challenges.

Another transcription of the Hummel Sonata is available on Kazimierz Machala’s recording \emph{The Virtuoso Horn: Premiere Recording of Transcriptions for Horn and Piano}, however the sheet music has not been published.\textsuperscript{63} Machala remains far closer to the original version, with only a couple of small alterations noticeable throughout the entire three movements, prior to the conclusion of the work where in the final \textit{piu moto} the broken chords are simplified.\textsuperscript{64}

\begin{flushright}
\footnotesize
\textsuperscript{61} Jeffrey Snedeker, “Music and Book Reviews,” \textit{The Horn Call} 38/2 (February, 2008), 78.
\textsuperscript{62} Such as the Ludwig van Beethoven Sonata for Horn and Piano in F Major Op.17 (1801), Franz Danzi Sonata for Horn and Piano in E flat Major Op.28 (1805) and Sonata for Horn and Piano in E Minor (1813), Nikolas von Krufft Sonata for Horn and Piano in E Major (1812), Ferdinand Ries \textit{Grande Sonata} Op.34 (1811), etc. that are discussed in Chapter 1.
\textsuperscript{64} Essentially just the occasional note is missing or altered through octave displacement in Machala’s version. The broken chords at the conclusion are also simplified in the Broer edition.
\end{flushright}
Machala has been responsible for several other transcriptions, most notable amongst these being selected lieder by Franz Schubert (1797-1828), the *Introduction and Polonaise Brillante* for Cello and Piano in C Major Op.3 by Frédéric Chopin (1810-1849), and the Twelve Variations in G Major on ‘See the conqu’ring hero comes’ from Handel’s *Judas Maccabaeus* WoO.45 by Ludwig van Beethoven (1770-1827), which was also originally for cello and piano. Beethoven’s composition was dedicated to Princess Christiane von Lichnowsky, composed in 1796 and published the following year in Vienna. The opening theme and eight of the twelve variations that make up this work contain few if any challenges for the horn player (see Figure 5.20), despite alternating between lyrical, technical, solo and accompanying material, however there are some more difficult moments in the second half of the piece. *Variation VII* consists of wide ranging triplet runs in the solo part, extending from low B up to d‴ (see Figure 5.21). The melody in *Variation XI*, marked *Adagio*, is highly ornamented and provides a beautiful contrast leading into the energetic finale provided in *Variation XII*, complete with rapid intervallic passages.


http://www.oxfordmusiconline.com/subscriber/article/grove/music/40026

67 *Variation VIII* also includes one brief but slightly challenging semiquaver run, which is a two octave ascending scale, beginning on low A.
Figure 5.20: Ludwig van Beethoven Ed. Machala, Twelve Variations in G Major on ‘See the conqu’ring hero comes’ from Handel’s *Judas Maccabaeus* WoO.45, mm. 1-48.

Figure 5.21: Ludwig van Beethoven Ed. Machala, Twelve Variations in G Major on ‘See the conqu’ring hero comes’ from Handel’s *Judas Maccabaeus* WoO.45, mm. 169-176.

Again Machala remains very accurate to the original, however it may be difficult to program the Beethoven into a horn recital due to its length of over twelve minutes and the fact that much of the virtuosic solo material is found in the piano part. The work should instead, perhaps be considered by reasonably advanced players as either an entranceway into the more challenging cello transcriptions or for a moment of respite in longer recitals, where the familiarity of the melody recurring in variation form would perhaps be appreciated by the audience.
The transcription of Chopin’s *Introduction and Polonaise Brillante* for Cello and Piano in C Major Op.3 by Machala also shows some promise as a low horn transcription, but is far less authentic when compared to the original. At the conclusion of the introduction the horn takes the ascending line of the piano cadenza, ascending from a low d up to high a”. Several brief pizzicato sections and a couple of passages where the solo line is reduced to playing an accompaniment role in the *Alla Polacca* that follows have been removed, and although this provides the horn player with a much needed break they are also the passages that sit lower in the instruments register.\(^{68}\) There are some small changes through octave displacements and such, but the conclusion to the piece has also been heavily edited (see Figures 5.22 and 5.23).

![Figure 5.22: Frédéric Chopin Ed. Machala, *Polonaise Brillante* Op.3 for Horn and Piano, mm. 204-230.](image)

\(^{68}\) Overall the range extends from low B flat up to high b”.
Chopin composed the Introduction and Polonaise Brillante in 1829 and 1830 at the age of just 19, dedicating the work to the renowned Austrian cellist Joseph Merk. In later years, Chopin was considered one of the leading composers and pianists of his generation.

Machala’s transcriptions of Schubert lieder were recorded by Richard King and offer a very accessible and rewarding performance option to less advanced horn players as they are not particularly difficult in terms of technique or range, but certainly are challenging musically. For this publication Machala selected songs from several cycles including *Die schöne Müllerin* D.795 op.25, *Schwanengesang* D.957 and *Die Winterreise*.

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D.911 op.89, as well as several famous lieder such as *Gretchen am Spinnrade* D.118 op.2 (see Figure 5.24) and *Die Forelle (The Trout)* D.550 op.32. “Each of these songs was carefully chosen by Mr. Machala to ensure that their style would not be compromised in the transcription process.”

Figure 5.24: Franz Schubert Ed. Machala, *Gretchen am Spinnrade*, mm. 1-29.

These shorter pieces are probably more appealing than the larger scale works previously discussed. The inclusion of a transcription lasting over twenty minutes into the program of a horn recital would possibly be accepted less favourably than the inclusion of what would be considered more ‘standard’ horn repertoire. There are many options for these shorter pieces, one of which is the beautiful *Elegie* in D flat Major for Cello and Piano Op. 17 by Aleksandr Konstantinovich Glazunov (1865-1936), which lasts approximately eight minutes. Whilst working on his Symphony No.2 in F# Minor Op. 16 in 1886, Glazunov was plunged into mourning following the death of Franz Liszt (1811-1886) whom he had met and spoken with during a trip to Vienna two years earlier. Glazunov dedicated the work to Liszt and then composed the elegy, which he also

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dedicated ‘To the memory of F. Liszt.’ The work was arranged for horn and piano by the Russian horn professor Mikhail Buyanovsky (1891-1966) and later orchestrated by his son Vitaly Buyanovsky (1928-1993). Although not significantly altered from the original the work contains all the makings of a great horn piece including deeply romantic harmonies, a lyrical and expressive melody (see Figure 5.25), chances to alter the tone of the instrument and, during the more uncompromising middle section, an opportunity to open up in both the upper and lower registers.

![Figure 5.25: Aleksandr Konstantinovich Glazunov Ed. Buyanovsky, Elegie for French Horn and Piano, mm. 1-30.](image)

In the resources section of *Mastering the Horn’s Low Register*, Randy Gardner not only recommends the Bach cello suite transcriptions of Wendell Hoss, but also David Thompson’s transcription of Arthur Pryor’s famous trombone showpiece *Blue Bells of

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74 Pizzicato accompaniment is altered, a couple of octave displacements, slurring is also slightly different.
75 Randy Gardner, *Mastering the Horn’s Low Register*, 98.
76 Arthur Pryor (1870-1942) was a virtuoso trombone player, well known as a soloist and composer due to the twelve years that he spent playing in the band of John Philip Sousa and later forming his own ensemble.
Scotland. This work can be considered the trombone equivalent to Jean-Baptiste Arban’s *Carnival of Venice*, almost as a ‘rite of passage’ for players. Originally composed in 1899, the Thompson transcription provides horn players with a “proven audience pleaser” and a “real period showpiece from the days when concert band soloists were all the rage.” The six minute work covers the full range of the instrument, from high c’’’ all the way down to pedal D (see Figure 5.26), and includes “many virtuosic low register passages.”

The cantabile theme that forms the basis of the work is presented following a virtuosic twenty-four bar introduction where wide leaps and wide ranging arpeggios contrast the lyrical material. In the variations that follow the technical boundaries are pushed, initially through triplet quaver movement, then syncopated semiquaver patterns, and following a brief cadenza and increase in tempo, further semiquaver runs that are even more virtuosic and lead to an exciting conclusion.

Besides the difficult four octave range there are several other challenging aspects to the work, most notably the flexibility that is required to execute the rapid shifts between low and high notes, as well as to perform the sweeping arpeggios and fast octave jumps. It is well suited to the horn but does require sharp technique throughout, albeit in the favourable key of C Major, “making it one of those rare pieces which sounds more difficult than it is.”

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79 Randy Gardner, *Mastering the Horn’s Low Register*, 98.
80 Randy Gardner, *Mastering the Horn’s Low Register*, 98.
81 Extending from pedal D up to high c’’’, although this upper limit can be reduced to g’’ if the final measures are played an octave lower.
Further options can be found in the extensive catalogue of works transcribed, edited and recorded by Eric Ruske, whose focus is to continue “the development of the horn as a solo instrument and the expansion of its oeuvre.”\textsuperscript{83} These transcriptions, which draw on the music of many different periods and genres, certainly fulfil Ruske’s aim of supplementing “the options horn players have for interesting recital programs and solo competitions, as well as broadening and deepening their musical vocabulary.”\textsuperscript{84} One transcription that works for low horn players is Ruske’s edition of Felix Mendelssohn’s (1809-1847) \textit{Lied ohne Worte} Op. 109,\textsuperscript{85} which is also available on his recording \textit{The Classic Horn: World...}
The piece is in ternary form, with the lyrical *Andante con moto* that opens and concludes the work being contrasted by a fiery *agitato* section (see Figure 5.27). Ruske’s edition remains very faithful to the original cello version, covering a range from low G up to high b”. This five minute piece requires good stamina as there are almost no rests in the entire work for the horn player, and also good flexibility as there are a couple of large leaps from the top of the stave down towards the pedal register and an arpeggio passage at the end of the work that spans three octaves. The highly ornamented melody, which features multiple turns and grace notes, must also retain an air of delicacy and control regardless of the dynamic. For these reasons the piece is probably ill-suited to a full-length recital program where fatigue would possibly become an issue.

Again the players of lower brass instruments have explored the music of the Romantic period, as well as more modern compositions, and discovered a number of other options for solo repertoire; amongst them works by Johannes Brahms (1833-1897), Claude Debussy (1862-1918), Gabriel Fauré (1845-1924), Edvard Grieg (1843-1907), Gustav Mahler (1860-1911), Sergey Prokofiev (1891-1953), Serge Rachmaninov (1873-1943), Franz Schubert (1797-1828), Robert Schumann (1810-1856), Jean Sibelius (1865-1957), Ralph Vaughan Williams (1872-1958) and Richard Wagner (1813-1883).

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86 Also available: Felix Mendelssohn, *Lied ohne Worte Op. 109 for Horn and Piano* Ed. Oscar Franz (Dresden: Stich und Druck von J. G. Seeling, c.1890). This version is slightly different in the second section where a number of the higher and lower notes have been removed as well as including a completely different cadenza and slightly different ending. The range remains basically the same as the Ruske version of the work, extending from low G up to high a”. Franz also includes the use of some echo or muted effects.


87 With the exception of the last two bars of the *agitato* where the arpeggios have been changed to avoid a high e”, resulting in one of the high b”s. If required, the earlier high b” (two bars before letter C) can be avoided by removing the octave jump and playing this phrase at the same pitch as the preceding one, which is a given option in the cello edition (and Franz arrangement) and so remains a legitimate option. The only minor problem with the Ruske edition is the missing #s in the sixth, seventh and eight bars after letter B.
When considering the study and performance of music that has already been published for one of the lower brass instruments, whether it is an original composition or a transcription, the horn player has several crucial decisions to make. The first of these is to decide if the piece will work on the horn whilst still retaining a significant amount of its original or adopted character, and then on a more practical note, if a transcription of the music is actually necessary. With careful consideration of dynamic markings, phrasing and the texture it is possible to read directly from the published part in bass clef, transpose, and achieve a good balance with the accompaniment and pleasing final result. This is only achievable if the piece has been selected carefully.
The *Sonata ‘Vox Gabrieli’* for Trombone and Piano\(^{88}\) by the Croatian composer, conductor and violinist Stjepan Šulek (1914-1986)\(^{89}\) is one such piece that becomes a valid performance option on the horn when all of these factors have been taken into account (see Figure 5.28).\(^{90}\) The Sonata was commissioned by the International Trombone Association in 1974 and dedicated to the renowned trombone teacher and founding member of the ITA, William F. Cramer. Throughout the piece powerful dramatic and often highly technical passages are balanced against expansive lyrical melodies.

![Figure 5.28: Stjepan Šulek, Sonata ‘Vox Gabrieli’ for Trombone and Piano, mm. 21-45.](image)

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\(^{89}\) Šulek was renowned for his expressive Romantic style of writing and the use of relatively simple Classical or Baroque forms and structures. Only two years before the composition of this Sonata, Šulek composed a Concerto for horn and orchestra, which unfortunately has failed to break into the horn’s standard repertoire. The Concerto was dedicated to the horn player Prerad Detiček, who premiered it on February 16, 1973 in Zagreb and later recorded it. Detiček inspired many works by Croatian composers during his distinguished playing and teaching career, as well as through his work with the Croatian Society of Music Artists, where he later became president. One of his more famous students is Radovan Vlatkovic.

\(^{90}\) Performed in a recital on Friday May 11, 2012 by the author of this paper on horn.
It is difficult for a horn’s reflected sound to match the power and directness of a trombone. However, by reducing the dynamic levels slightly the beautiful expansive melodies can be performed by the horn in a far superior fashion as the need to constantly break the phrase is greatly reduced and it can in fact be played completely legato if desired. In the technical sections the use of valves allows for equally rapid and secure execution. The range of this piece extends three octaves from pedal F up to f’, making it characteristic low horn range.

As a further example, Gustav Mahler’s *Lieder eines fahrenden Gesellen* and similarly the *Vier ernste Gesänge für eine Baßstimme mit Begleitung des Pianoforte* Op.121 of Johannes Brahms have both been transcribed and arranged numerous times. Although these works have become available in publications specifically for brass instruments,\(^9\) perhaps the better option is found in performing from the original vocal score. By returning to the original source, the outside influence from editing is removed from the process, and this approach also has the additional benefit of involving the text and allowing the performer to make the majority of decisions regarding appropriate articulation and phrasing.

There really are a wealth of resources available to the creative and inquisitive horn player now, not only in terms of sheet music but also recordings and reviews where further repertoire ideas can be found for original and dynamic performances. The accessibility and ability to search through these resources through the internet, in combination with new music editing software, makes finding and creating new arrangements and transcriptions far less complex or demanding. Personalised editions for different instruments or performance settings are also easily achievable. Although this has led to a rather rapid growth in the number of music publishers and publications being marketed, and the quality can obviously vary, there are certainly a number of recent publications displaying some new, exciting and virtuosic options for performers of the horn.
Conclusion

This project set out to explore the developments that have been made in writing for the horn’s lower register through an examination of the musical and technical challenges encountered by performers. This resulted in a series of public recitals, a folio of recordings and an exegesis that contextualises the works performed within the developments made to the instrument.

The horn has certainly undergone some significant changes in its design and manufacture since its emergence as an orchestral instrument, and these developments have altered not only its musical capabilities, but also the way in which composers write for the instrument and its role within both ensembles and as a solo instrument. There are a large number of historically significant works that today are rarely played, and these certainly show low horn technique as it existed on the natural horn. The development of valves and their implementation may have resulted in a small void of solo works from the beginning of the nineteenth century; however this injustice has truly be rectified in the previous century with a wealth of new works having been composed, although they remain largely unknown. These newer works along with the increasingly popular use of transcriptions mean that there actually are a large number of varied options for the horn player to choose from for solo applications. With the new pedagogical works that have become available in recent years it is certainly hoped that lower register playing will receive due attention in the teaching of students in the future and that the display of these skills will result in these interesting compositions gaining greater prominence.
Appendix 1 – Recital Programs

No.1: Thursday 25th November 2010, 6:00pm

Franz Danzi (1763-1826)
Sonata in E flat Major, Op.28
   I. Adagio-Allegro
   II. Larghetto
   III. Allegretto

Alexander Glazunov (1865-1936)
Rêverie, Op.24

INTERVAL

Paul Hindemith (1895-1963)
Sonata for Horn and Piano (1939)
   I. Massig Bewegt
   II. Ruhig Bewegt
   III. Lebhaft

Jan Koetsier (1911-2006)
3 Pieces for Horn and Piano
   I. Scherzo Brillante, Op.96
   II. Romanza, Op.59/2
   III. Variationen, Op.59/3
No.2: Sunday 8th May 2011, 2:00pm

Ludwig van Beethoven (1770-1827)
Sonata in F Major, Op.17
   I. Allegro moderato
   II. Poco adagio, quasi andante
   III. Rondo: Allegro

Hermann Baumann (b.1934)
Elegia for Natural Horn

INTERVAL

Franz Joseph Haydn (1732-1809)
Concerto No.2 in D
   I. Allegro moderato
   II. Adagio
   III. Allegro

Paul Hindemith (1895-1963)
Sonata for Alto Horn and Piano (1943)
   I. Ruhig Bewegt
   II. Lebhaft
   III. Sehr Langsam
   IV. Lebhaft
**No.3: Friday 21st October 2011, 6:00pm**

**Kerry Turner** (b.1960)
Concerto for Low Horn and Chamber Orchestra
   I. Allegro
   II. Andante
   III. Allegro scherzando
   IV. Allegro

**Andrew Downes** (b.1950)
Sonata for Horn and Piano, Op.68
   I. *Andante molto e espressivo*
   II. Allegro moderato
   III. *Andante leggiero*

**INTERVAL**

**Daniel Schnyder** (b.1961)
Sonata for Horn and Piano
   I. *Blues*
   II. *An American Ballad*
   III. *Below Surface*

**Richard Bissill**

*Fat Belly Blues*
Johannes Brahms (1833-1897)  
arr. Scott Brubaker  
Sonata for Cello and Piano in E Minor Op.38  
  I. Allegro non troppo  
  II. Allegretto quasi Minuetto  
  III. Allegro  

INTERVAL  

Stjepan Šulek (1914-1986)  
Sonata ‘Vox Gabrieli’ for Trombone and Piano  

Michael Head (1900-1976)  
Scherzo for Horn and Piano  

Alexandr Konstantinovich Glazunov (1865-1936)  
arr. Mikhail Buyanovsky  
Elegie in D flat Major for Cello and Piano Op.17  

Daniel Schnyder (b.1961)  
Romeo and Julia Variations for Horn and Bass Trombone
Johann Wenzel Kalliwoda (1801-1866)
Ed. John Madden
*Introduction and Rondo* for Horn and Piano, Op.51

York Bowen (1884-1961)
Sonata in E flat for Horn and Piano, Op.101
   I. *Moderato espressivo*
   II. *Poco Lento Maestoso*
   III. *Allegro con spirito*

INTERVAL

Johann Christian Reinhardt (1691-?)
Ed. Robert Ostermeyer
Concerto in D Sharp Major for Horn and Piano
   I. *Moderato*
   II. *Siciliano*
   III. *Allegro ma non Presto*

Carl Maria von Weber (1786-1826)
Ed. Henri Kling
Concertino in E Major for Horn and Piano, Op.45
Examination Recital: Thursday 3rd July 2014, 7:30pm

Johann Christian Reinhardt (1691-?)
Ed. Robert Ostermeyer
Concerto ex Dis-Dur fur Corno concertato, 2 Violinen, Viola & Basso
   I. Moderato
   II. Siciliano
   III. Allegro ma non Presto

Carl Nielsen (1865-1931)
Ed. Simon Kruit
Canto Serioso for Horn and Strings

Anthony Plog (b.1947)
Nocturne for Horn and Strings

INTERVAL

Johann Wenzel Kalliwoda (1801-1866)
Ed. John Madden
Introduction and Rondo for Horn and Piano, Op.51

Daniel Schnyder (b.1961)
Sonata for Horn and Piano
   I. Blues
   II. An American Ballad
   III. Below Surface

Richard Bissill
Fat Belly Blues
Appendix 2 – University of Tasmania Research Presentations

No.1: “Developments in Low Horn Technique and composition”
   Friday 15th October, 2010

No.2: “Beethoven and the Hand Horn”
   Friday 15th April, 2011

No.3: “20th Century Works for Low Register Horn”
   Friday 9th September, 2011

No.4: “Transcriptions for Horn”
   Friday 27th July, 2012

Additional Presentations

International Horn Symposium: “Today’s ‘Cor Basse’ Player”
   Memphis, TN
   Thursday 1st August, 2013

Historic Brass Society Early Brass Festival: “Today’s ‘Cor Basse’ Player”
   Northfield, MN
   Saturday 3rd August, 2013
Appendix 3 – Marco Bordogni Ed. John Ericson

Appendix 4 – Folio of Recordings – List of Contents

DVD 1: Recital No.4

Johannes Brahms (1833-1897)
arr. Scott Brubaker
Sonata for Cello and Piano in E Minor Op.38
   I. Allegro non troppo
   II. Allegretto quasi Minuetto
   III. Allegro

INTERVAL

Stjepan Šulek (1914-1986)
Sonata ‘Vox Gabrieli’ for Trombone and Piano

Michael Head (1900-1976)
Scherzo for Horn and Piano

Alexander Konstantinovich Glazunov (1865-1936)
arr. Mikhail Buyanovsky
Elegie in D flat Major for Cello and Piano Op.17
DVD 2: Recital No.5

**Johann Wenzel Kaliwoda** (1801-1866)
Ed. John Madden
*Introduction and Rondo* for Horn and Piano, Op.51

**York Bowen** (1884-1961)
Sonata in E flat for Horn and Piano, Op.101
   I. *Moderato espressivo*
   II. *Poco Lento Maestoso*
   III. *Allegro con spirito*

INTERVAL

**Johann Christian Reinhardt** (1691-?)
Ed. Robert Ostermeyer
Concerto in D Sharp Major for Horn and Piano
   I. *Moderato*
   II. *Siciliano*
   III. *Allegro ma non Presto*

**Carl Maria von Weber** (1786-1826)
Ed. Henri Kling
Concertino in E Major for Horn and Piano, Op.45
**DVD 3: Examination Recital**

**Johann Christian Reinhardt** (1691-?)  
Ed. Robert Ostermeyer  
Concerto ex Dis-Dur fur Corno concertato, 2 Violinen, Viola & Basso  
   I. *Moderato*  
   II. *Siciliano*  
   III. *Allegro ma non Presto*

**Carl Nielsen** (1865-1931)  
Ed. Simon Kruit  
*Canto Serioso* for Horn and Strings

**Anthony Plog** (b.1947)  
*Nocturne* for Horn and Strings

**INTERVAL**

**Johann Wenzel Kalliwoda** (1801-1866)  
Ed. John Madden  
*Introduction and Rondo* for Horn and Piano, Op.51

**Daniel Schnyder** (b.1961)  
Sonata for Horn and Piano  
   I. *Blues*  
   II. *An American Ballad*  
   III. *Below Surface*

**Richard Bissill**  
*Fat Belly Blues*
CD 1: Recordings

**Ludwig van Beethoven** (1770-1827)
Sonata in F Major, Op.17
  I. Allegro moderato
  II. Poco adagio, quasi andante
  III. Rondo: Allegro

**Franz Joseph Haydn** (1732-1809)
Concerto No.2 in D
  I. Allegro moderato
  II. Adagio
  III. Allegro

**Jan Koetsier** (1911-2006)
3 Pieces for Horn and Piano
  I. Scherzo Brillante, Op.96
  II. Romanza, Op.59/2
  III. Variationen, Op.59/3
CD 2: Recordings

**Charles Gounod** (1818-1893)
Ed. Edmond Leloir

*6 Pieces Melodiques Originales pour Cor a Pistons et Piano*
   I. *Larghetto Bien Pose*
   II. *Andantino*
   III. *Andante*
   IV. *Larghetto*

**Georg Philipp Telemann** (1681-1767)
Ed. Rick Seraphinoff

*Fantasia No.2 in A Minor for Unaccompanied Horn TWV. 40:3*

**Francesco Antonio Rosetti** (c.1750-1792)
Concerto ex Dis per corno secundo principale (Kaul.III no.41 or Murray C.42)
   I. *Allegro*
   II. *Adagio*
   III. *Rondo Allegretto*

**Hermann Neuling** (1897-1967)

*Bagatelle für tiefes Horn und Klavier*

**Wolfgang Amadeus Mozart** (1756-1791)
Ed. Barry Tuckwell

Concerto No.3 in E flat Major KV.447
   I. *Allegro*
   II. *Romanza: Larghetto*
   III. *Rondo: Allegro*
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