STUDIES IN ORCHESTRAL FRENCH HORN PLAYING

VOLUME I

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for the Degree Master of Arts

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INTRODUCTION

As an instrument in the orchestra, the French horn has undergone profound changes both in structure and usage since its introduction. Modification both in its structure and usage is in a constant state of evolution which shows no sign of diminution, even at the present time.

Since present-day symphonic repertory includes music of all periods and styles, it behooves the horn player to master a variety of techniques in order to facilitate his performance in an orchestra. Mastery of such techniques involves a type of practice which, as nearly as possible, simulates the conditions of performance. The player will be successful in performance only to the degree that he is able to anticipate the demands which will be made upon him in the orchestra, and to the degree he shapes his practice technique to the purpose of satisfying these demands.

Practice studies which have been written for the horn up to the present time have tried to prepare the horn player for orchestra work with varying degrees of success. Most have attempted either specifically or by inference to point out certain aspects which are part of a well-rounded technique.

Among the factors which are generally included in technique is tone quality. Teachers and players alike stress the importance of tone quality in performance. Probably nowhere is it emphasized more than on the horn. Most horn players agree that tone is the first requisite of performance. With the purpose of developing tone
quality, etudes and other types of tonal studies have become a part of the practice repertory. However, only a small percentage of the available literature is written in such a manner that the student can concentrate on tone. Furthermore, most of this small percentage involves melodies written in a flowing romantic style which, in spite of its beauty, confines the student's study to a small part of the entire orchestra repertory.

Other factors include problems in execution such as tonguing, slurring, accenting, fingerling, and rhythmic problems. An abundance of this type of practice material is available to assist the horn player to acquire a virtuoso playing facility. Again, most of these studies are limited to a period during which the horn made rapid strides as an integral part of the orchestra. Their purpose is definite, but their perspective is limited.

There are also a special variety of factors which pertain directly to the horn. Transposition, muting, hand stopping, lip trills, and glissandos might be mentioned among others. All of these have been included in practice methods treated as isolated problems, and often in a manner which does not correspond to their usage in the orchestra.

Still there remain a variety of problems of which every orchestra player is acutely conscious, but which most practice studies overlook or ignore. Intonation, decisive entry after long periods of rest, balance between players, extension of the dynamic range, playing in the style of the period, and endurance: these are a few among many musical problems which the horn player faces in the orchestral situation.
The teaching literature should prepare the horn player to deal adequately with these problems before he takes his place in the orchestra.

At the risk of overgeneralizing, it might be possible to say that the bulk of practice studies cover only a limited technique and are presented in a certain style. This style is designed to encourage the horn player as a solo performer, as indeed he is in the practice room; however, few horn players are privileged to become solo performers alone. Furthermore the technique which these studies emphasize is solo performance. This is an admirable technique, but not directly related to most orchestral playing for horns.

The purpose of this study is to propose a supplement to the practice material already available, which will enhance it, if possible, with additional material not necessarily of the romantic-virtuoso type, but to be drawn from all phases of the orchestra repertory and to simulate conditions of actual performance.

Since the problems vary greatly with different periods of music, a first specification is to construct studies by reference to the music of the period. The first four chapters include historical data from which the studies are compiled.

Composers, when not concerned with the horn as a solo instrument, generally tend to write for horns in two, four, and occasionally three parts. This practice necessarily imposes a second specification on such studies. They should be written as duets, trios, or quartets. This would not, however, preclude their usefulness for individual practice, but solo playing limits the number of problems with which the student can contend.
A third specification would be that they simulate the conditions of orchestral performance as nearly as possible. John Dewey, the eminent American philosopher has maintained that, "Everything depends upon the quality of the experience (in training or education) which is had . . . . Hence the central problem of an education based upon experience is to select the kind of present experiences that live fruitfully and creatively in subsequent experiences," an opinion with which this writer is in full accord.

For this reason, the studies which were written in support of this thesis are constructed directly from the material found in horn parts of orchestra scores. They are elaborated only in such a manner that the problems inherent in the given situation are pointed up. It is hoped that such emphasis will give the player added security when performing the actual part in the orchestra.

The studies supporting this thesis are found under separate cover listed as Volume II. This addendum consists of fifty studies constructed as duets and based upon the material presented in Chapters I, II, III, IV.

Chapter V discusses the construction of these studies and how this construction relates to the data presented in the preceding chapters.

1. John Dewey, Experience and Education, pp. 16-17.
The Mozart-Haydn Period

The horn played an important but not a prominent part in the orchestra of the Mozart-Haydn period. We can note that the horn was called upon to add weight to the rhythmic patterns and the general sound of the orchestra by means of sustained and repeated tones. At times they outlined the general chord structure by means of simple arpeggios in quarter and half note rhythms which rarely extended more than an octave. Occasionally the horns were instructed with a melodic fragment involving simple diatonic movement and often resembling the hunting calls of their ancestry.

A further analysis of the music of this period indicates that the horn players practically always functioned in pairs, playing either octaves, fifths, fourths, sixths, thirds, and occasionally seconds or sevenths moving to resolution. Because of the consonance of most of these intervals, intonation is especially important in securing a good performance. A considerable portion of the music of this period is written in octaves in the following manner. (Example 1 and 2).

Another characteristic device of this period is the "horn fifths" which occurs in practically every major work. This figure is referred to as "horn fifths" because the two horns move into and out of the perfect fifth interval in the same direction. "Horn fifths" are so universal in the Classic literature that they occur in a wide variety of rhythmic figures and at various dynamic levels and tempi. (Example 3 and 4).
Unison playing is not uncommon. Generally, however, such playing is restricted to sustained or repeated tones. Dynamics evidently were not the sole consideration in doubling the part as there are several scores in which a "piano" unison is demanded. (Example 5).

A consideration of these examples would indicate that evenness of balance and blending of tone are of paramount importance since both horns are presenting one musical idea.

The horn spends much of its time playing reiterative rhythmic figures. The following may be cited as examples. These occur both in exposed sections as well as tutti passages. Precision and evenness of dynamic level become very important in playing such passages. (Example 6 and 7).

The playing of sustained tones takes a prominence in the Classical repertory that few other styles can emulate. Surprisingly these tones require considerable practice to build the endurance and steadiness necessary for successful performance. These notes usually occur in octaves, occasionally in unison. They are found in all registers including the bass clef. (Example 8).

Facility in transposition is exceedingly important as the composers of this period wrote the horn parts either in the key of the composition or in a closely related key. The horn player of that day was expected to carry a set of crooks, each of which put the horn in a different key. Modern usage has discarded this practice since it is both inconvenient and unmusical, thus making transposition mandatory. The most common transpositions are for
horns in E♭, G, D, C, B♭ alto, and B♭ bass. Occasionally one finds parts in A, E, and B. Transposition for both horns is generally the same; however, the parts occasionally call for different transpositions for each horn. In this case the parts are often more independent of each other.

The register that the horns employed during that period is much the same as that of today. (Example 9). It must be remembered that bass clef parts were written during this period one octave lower than the transposition required. This tradition extended through the Nineteenth Century. Thus low "C" was actually written an octave lower (Example 10). The second horn must be especially versatile in reading the bass clef.

Another basic requirement of the second horn is that he have a facility for large interval jumps. This stems partly from the scale limitations of the "natural" horn, which was used during that period. This horn had no valves and was incapable of playing anything "open" but the tones of the harmonic series. (Example 11). A few additional notes could be obtained by inserting the hand farther into the bell of the horn thus raising or flattening the tone depending on degree of the hand insertion; however, with the addition of valves, this practice became unnecessary in performing music of the Classical period.

As can be seen by the illustration, the larger interval skips occur in the lower register and become progressively smaller as one passes on through the middle and high registers. The entire horn repertory of this period is governed by the interval relationships of this overtone series. The following are examples of the type of
skips expected of the second horn. At times the second horn is asked to jump from the low-middle register to the high register in order to play a unison passage or melodic figure with the first horn. (Examples 12, 13 and 14).

The first horn is required to show complete control of his register up to at least high b, in all types of rhythmic figures and at all dynamic levels. Entries on such notes as high f, g, and a, just as often as not, are unprepared. Sometimes such entries occur after long periods of rest and in exposed sections.

Endurance is not a prominent problem in playing music of this period. In fact, just the opposite situation often exists. At times, intervals of rest are so great that the player may find himself stiffening before making an entry of a delicate nature. The player must anticipate this exigency in practice by enforcing frequent rest periods of five minutes or so in his practice, and then attempt an accurate entry on an excerpt. Much of the music of this period, however, is written with short rests of a few measures.

The slurs that are called for during this period rarely exceed skips of more than a second or a third. Tonguing is of major consideration and is found in all styles. (Examples 15, 16 and 17).

The dynamic range called for is not too great, probably because of the size of the orchestra, and also because dynamic indications of any nature were relatively new. Dynamic indications are rarely softer than one piano or louder than one forte. Changes in dynamics are usually definite. Gradual changes using crescendi and diminuendi do occur; however they are found in the parts of the instruments
carrying the melody. "Echo" effects are not infrequent. (Example 18).

In tutti sections, a good forte adds real weight to the orchestral sound; however, the player is likely to distort such an idea if he insists on playing such sections with the fortissimo style of the late Nineteenth and Twentieth Centuries. Such playing not only overbalances the orchestra, but produces a type of tone not consistent with the character of the music.

As a final consideration, it must be remembered that the horn of the classical era was expected to add a limited type of color to the orchestral sound. This color is expected to be constant in all types of rhythmic figures, at all registers, and at all dynamic levels. It is important not to pervert the simplicity and moderation of this color by overplaying the part.

With the work of Mozart and Haydn, an important function of the horns can be said to have been established. "They were closely allied to the woodwinds and, owing to their tone coloring would blend well with strings. Their (the horns) ability to combine artistically with all instrumental sections of the orchestra served as a binding agent which . . . . . helped to weld the entire mass of instruments into one compact body of tone."¹

Before Mozart and Haydn the use of the horn in the orchestra had been ornamental, now its use became vital.

THE GERMAN SYMPHONISTS

The Horns of Beethoven and Mendelssohn

The use of the horn in the orchestra music of both Beethoven and Mendelssohn represents in no way a break with the traditional classical idioms employed by Mozart and Haydn. One might, however, characterize the usage of horns by Beethoven and Mendelssohn as a distinct enlargement of the groundwork laid by the two earlier composers in several respects.

Actually, the horns of the Beethoven and the slightly later Mendelssohn period differed little in construction from those of the Mozart-Haydn period. The limitations of the hand horn were carefully respected by both Beethoven and Mendelssohn. The horns were still primarily an instrument used to reinforce the texture and rhythmic figures of the works of these composers. Yet their genius enabled them to introduce certain innovations which pushed the use of the old hand horn practically to the limit of its capacity.

A most obvious change came with greater activity and fewer rests in the horn parts. No longer were the horn parts omitted from long passages or whole movements. The horns figured prominently in a greater variety of orchestral textures and reinforced a greater number of rhythmic figurations. This more frequent activity mitigated the problem of infrequent and consequently difficult entries. For the first time, endurance was becoming a new problem which superceded the old one of infrequent playing.

Horns in pairs was still the standard practice; however these
composers made more frequent recourse to the use of double pairs of four horns, a device that Mozart had used in operas such as Don Giovanni and Cosi Fan Tutte. Though the two pairs continued to play much of the time independently, both Beethoven and Mendelssohn became aware of the advantage of using both pairs to create a complete harmonic texture and did so with increasing frequency.

An early and most successful deviation from the old pattern of horns in pairs came with the Beethoven Eroica Symphony. This symphony is scored for three horns, the most obvious reason being the execution of the famous horn trio in the third movement. Throughout the rest of the symphony, Beethoven uses this amazing innovation very infrequently. The first two parts constitute the traditional pair and the third part is written either independently or as an occasional double to one of the other parts. This, of course, mars in no way the significance of the famous trio. Beethoven, however, did not use two pairs until his Ninth Symphony.

Mendelssohn, in his Scotch Symphony makes admirable use of four horns, and though they play as two pairs in different keys, there are many passages in which the parts overlap and produce a fuller four part harmony.

Incidental solos and duets are much more frequent in the works of both these composers. Practically every major work has at least one section in which the horns are given an important melodic part with other instruments. These melodic fragments are not so isolated as those of the Mozart-Haydn period and occur more frequently. At times they are of longer duration than had previously been attempted.
The horn figures prominently in the attempts of these composers to enlarge the bounds of musical expression. One can note the more frequent use of a greater variety of dynamic markings. Crescendos, dimuendos, sforzandos, and other types of dynamic markings become an integral part of the horn player's equipment.

It was Beethoven who made the most significant contribution to a new style of horn playing by giving to the instrument the full breadth and length of the melody in the finale passages of many of his symphonies. The sound and weight of these finale passages of the 3rd, 5th, 6th, 7th, 8th, and 9th Symphonies certainly point the way to the future consideration of the horn as a definite melodic asset to the orchestra.
Schumann

Robert Schumann wrote his four symphonies between the years 1841-50. These were exceedingly important years in the development of the French horn, especially in the matter of transition from the older hand horn to the more versatile valve horn. Nowhere is this change more clearly reflected than in the diversity Schumann exercises in writing the horn parts for his First Symphony in 1841 and the Third or Rhenish Symphony in 1850. The Rhenish Symphony must be considered as his last original composition in the form of a symphony as the Symphony No. 4 was written in 1841 and revised in 1851, the revision probably accounting for the catalogue number.

Since three of Schumann's symphonies were written in the period between 1841-46, the horn parts are similar in construction. The first and fourth call for two pairs of horns, the second for one pair. When four horns are used, Schumann follows rather loosely the traditional pattern of writing independently for each pair. There are sections however, where he takes advantage of the quartet to write four-part harmony. These occasions are, however, hardly frequent enough to be considered as an innovation.

Schumann's symphonies capture the spirit of the new romantic era of music. The compositions are strong vigorous, noble, lyrical, depending on the idea to be presented. They always have a certain restraint and coherence which seems to indicate the ideal which Schumann had set for himself. His temperament did not permit him to indulge excessively in new devices or forms as did that of Berlioz. Yet the freshness and originality of his ideas resulted
in greater and more important usage of the horns in these three earlier symphonies.

In the First Symphony, the horns supported by trumpets sound the opening theme of the symphony. In the *Molto Vivace* of the first movement, the horns have a prominent part in the development of the rhythmic theme.

Occasionally Schumann wrote completely exposed passages for the horn, and more than once the horn is given an extended melodic passage in conjunction with other woodwinds. One also notices the frequent voicing of two horns with two bassoons.

The parts of these three earlier symphonies, while not difficult in comparison with contemporary horn usage, certainly were as difficult technically as those of his contemporaries.

The *Third Symphony*, however, marks a considerable departure from this earlier method of writing and introduces several new devices which developed into frequent usage in the later romantic and modern eras.

The *Rhenish Symphony* (first movement) calls for four horns, all pitched in $E^\flat$. Here Schumann abandons the older idea of two pairs pitched in different keys. The theme of the first movement is lively and energetic. The horns figure prominently in its development, but in a manner which had not been frequently employed before. Much of the time the first and third or the second and fourth parts are doubled, sounding the theme in octaves. At Letter L, a later place in the movement, the entire section sounds the theme in unison at a *forte* dynamic level. (Example 3). This device came to be
employed more frequently by later composers.

In the second movement the writing for horns is such that it could hardly be played on any but valved instruments. (Example 1). Here, Schumann uses the horn section as a four voice choir. The sound is dark and rich.

At letter F in the second movement Schumann uses the same kind of unison horn effect that is characteristic of parts of the first movement. (Example 2).

The fourth movement marked Maestoso requires special notice as the horn section passes the broad, expansive theme back and forth for practically the duration of the movement. (Example 4). Though this is quite frequently doubled in other instruments the color is predominantly horn.

The fifth movement, marked Lebhaft, also contains considerable unison work and relies on horns exclusively to bring out certain rhythmic melodies.

In this symphony we can see an evolution towards the manner of horn writing that Wagner used extensively in his later operas. Orchestral horn writing of this style had its inception with Schumann and is evident in the early works of Wagner. It was used extensively by Brahms and Bruckner; finds its culmination in the works of Strauss and Mahler. Today this well established tradition is evident in the writings of Ernest Bloch, Reger, Vaughn-Williams and Shostakovich.
Brahms

Though a German composer, Brahms stood apart from the other German composers of his period. His individual style, a unique mixture of what was the old and new in orchestral writing gives him the stature to command his own niche in any compartmentalized discussion of composition.

In his writing we find many of the elements used by Wagner and Bruckner, as all techniques are really common property. The manner in which they are used makes them individualized. Brahms orchestral compositions are rich and heavy-textured. This is quite in keeping with the time in which he lived. Yet we find many of the older concepts of composition in his scores, considering the orchestra as a whole as well as just the horn parts. For instance, Brahms paid strict attention to form. The structure of his symphonies was perfected to scale which caused many of the contemporaries to consider him the first symphonist since Beethoven. He certainly did much to curb the inroads which "program music" had made on form. In fact, he retained an established confidence in the symphony as a vehicle for aesthetic expression contrary to the prevailing opinion of his time.

His themes are carefully plotted, somewhat restricted; never do they become so extended or disjointed so as to interrupt the careful balance so essential to form which he always maintained. His harmony was certainly colorful, but never so colorful as to protrude unnecessarily. His writing has that carefully planned quality that makes the playing of his music so demanding in
perfect control and understanding, much like Mozart; for Brahms, like Mozart, was eclectic rather than pioneering. He made the highest artistic use of the materials already available and left exploration to others.

Lest the impression that Brahms was reactionary might be given, it is important to realize that Brahms used many if not all of the newer devices, but with the moderation that results from proven usage rather than indulgence. The medium with which he was working, the symphony, is much more demanding in this respect than that of Wagner's, the opera.

Brahms never devoted whole phrases or periods to a horn quartet as Wagner did in Die Meistersinger for example. Nor did he at any time write such an extended horn call as is found in Siegfried. His symphonies demanded a more interwoven, less exposed texture. In Brahms orchestral works we find a large number of incidental solos, generally short and fragmentary. Sometimes the horn plays a long melodic line generally doubled with other instruments such as the flute, oboe or other woodwinds, but nothing like the Andante Cantabile of Tschaikowsky's Fifth. Brahms also used the unison sectional solo, but never in such a pronounced manner as to indicate its subsequent usage by Mahler and Strauss.

In his part-writing, Brahms followed the earlier tradition of Mendelssohn and Schumann. His four horns were divided into pairs, each pair in a different key. The third horn often had as high and difficult a part as the first. The third horn also divided an unusual amount of incidental solos with the first horn which further
demonstrates the decided cleavage of the two sections in the composer's mind.

Brahms wrote the horn parts in the key or near related key of the selection, a method that was fast becoming anachronistic to all but the German composers. This practice has tended to make Brahms' music difficult in certain sections. Horn players should acquaint themselves with the difficult B transposition in his symphonies. The more difficult transpositions are generally found in the third and fourth parts.

Brahms' horn writing demands a thorough understanding of the other parts. The very fragmentary nature of his solo writing, the delicate harmonic nuances demand practice and understanding. One must understand just where and how these elements fit into the entire symphony. It is also important to notice that the frequency with which Brahms is currently played would signify the importance of being acquainted with his works.
CHAPTER II

THE FRENCH HORN IN OPERA AND PROGRAM MUSIC

The purpose of this thesis is to devise a method of study that bears close relation to orchestra horn playing. An examination of opera and program music is necessary because of the large amount of this type of music in the orchestral repertory. Specific attention will be paid to composers of opera whose music has been adopted for concert hall performances.

It is important to realize that many of the innovations of music came as a result of demands from the stage or related musical endeavors such as program music. The first consistent use of four horns in an orchestra is to be found in opera. "In the Eighteenth Century Handel had written for four horns in his opera Gicello Cesare, and an engraving of the interior theater at Milan shows four horns being played in the orchestra at a performance of Cacani's Tigrane in 1750". There is an important reason for this, as the sudden key changes which enhance the dramatic effect required more than one set of players. Proper crook adjustments could not be made quickly, and the only solution was to have an alternate pair of players. Thus we see the first quartet of horns originating as two pairs in different keys, in order to have a greater variety of notes from which to choose. Von Weber, Wagner, and Strauss in opera, and Stravinsky in the field of ballet all made other significant innovations for horn which found their way into the orchestra literature. Before analyzing these contributions, a brief discussion of the Italian and French Schools is in order.

Italian School

Rossini, Bellini, Donizetti were the earlier leaders of this school, followed by probably the greatest Italian operatic composer of all Giuseppe Verdi (1813-1901). No other composer of opera has managed to command so enthusiastic a public as has Verdi. Other Italian opera composers following Verdi, such as Puccini, Mascagni, and Leoncavallo, attempted to dramatize contemporary, common-folk situations in keeping with the nationalistic movement found in all the arts of the late Eighteenth and early Nineteenth Centuries. All of these composers, however, reflected in their writing for horn a conservative usage for the times in which they lived.

Though dramatic situations have brought about many orchestral innovations, traditional Italian opera, with its emphasis upon the aria and bel canto singing style has forced the orchestra to run a poor second in importance.

Rossini

The major part of Rossini's creative endeavor was directed towards opera. He composed a total of forty, all in the first half of his life. For reasons never definitely established he practically ceased composing after the completion of William Tell. At this time he was only 37 years old.

Being the son of an opera singer and a theater horn player, he became well acquainted with opera at an early age, and his interest in musical composition probably through association,
was manifest in writing for the stage. A gift for melody is evident in his creative work. His operas display an abundance of melodies of all descriptions; charming, sentimental, catchy, rhythmic.

At present, few of his operas other than *William Tell* and *The Barber of Seville* are produced, but the overtures to many of his other operas, long since dropped from the operatic repertory, continue to be performed on the concert stage. These overtures hold their popularity through a grace, elegance, and charm which had led to speaking of Rossini as "the Italian Mozart".

From the musicologists' point of view, Rossini's scores contain many illuminating musical facts: the cleanliness and energy of his musical sound, his flawless handling of instrumentation, the resources he draws upon to achieve the desired musical effect. Probably most notable among his abilities are the famous crescendos he employed to achieve his climaxes.

Rossini gave a new importance to the brass and percussion family. Trombones especially were given a new prominence. One needs only to list for the exciting trombone parts of the storm scene in *William Tell* or *La Casse Ladre* to name only two examples. The bulk of Rossini's writing for horn utilized this instrument in its familiar and important capacity of providing a rhythmic and harmonic background for other aspects of his works which would attract the more immediate attention of the listener.
Rossini was also generous in his use of the horn as a solo instrument as well as a supporting one. The styles of his solo writing for horn range from the sectional "horn call" found in *William Tell* to the tender quartet in *Semiramide* and the technical solo demands of *La Gazza Ladra*. The diversity of these solos demonstrates Rossini's thorough knowledge of the resources of the instrument.

In performing Rossini overtures, the horn player must be thoroughly versed in various transpositions, "G", "E"*, and "D" being most common. The player must be further prepared to change transposition in the middle of an overture. First and third parts lie high but not excessively so. Endurance is important as Rossini commonly used the device of repeating a rhythmic or melodic figure several times. *Crescendo* and *tutti* passages require a solid *forte* sound.

Proper execution of some of the solo passages requires facility in rapid tonguing and fingerling not demanded by any composer up to this period. Other solos such as the third horn solo in *La Gazza Ladra* demand flexibility in slurring from the middle to the high register. These solo passages are significant in that they impose technical considerations of fingering, tonguing and slurring that had not been demanded before in symphonic writing.
French School

The French opera progressed much in the Italian manner and largely ignored the efforts of Berlioz and Wagner to create music drama by clinging to traditional operatic concepts. The history of French opera includes many composers, Thomas (Mignon), Gounod (Faust), Saint-Saëns (Sampson and Delilah), Bizet (Carmen), Delibes (Lakmé), Massenet (Manon); however, it remained for Debussy to give French opera a startling new turn with the creation of Pelléas et Mélisande a type of music-drama in which the words and music achieve the greatest rapport in emphasizing the dramatic situation.

The performance of horn parts in operatic scores is a technique unto itself. Much of the music is difficult to perform but not always because of the technical limitations of the performer. Playing this type of music successfully requires the utmost familiarity. The performer must have the greater part of his attention centered upon the conductor who acts to cue the parts and control the usually fluctuating tempos and dynamics. The dynamic and register range is extensive.

Opera horn parts require the greatest versatility in transposition, changes often occurring several times in one aria. The performer must be acquainted with the particular work in order to perform properly sudden dynamic, tempo, and transposition changes.

Berlioz

Hector Berlioz is the subject of considerable controversy in
regard to his status as a composer. However his genius as an orchestrator and innovator of original and sometimes startling effects is relatively undisputed.

Berlioz was intensely interested in the theater, consequently he attempted to stress the dramatic, the striking and sometimes the unusual in his music. He was so successful in realizing many of his ideas in that field that he has since become known as one of the pioneers of the so-called "Dramatic" Symphony.

One of the great influences of Berlioz, (which more directly pertains to the subject under discussion) is the orchestration he used to achieve his dramatic effects. Berlioz was a pioneer in the true sense of the word. He introduced new usages for practically every instrument of the orchestra. He also extended combinations of instruments to produce new and sometimes bizarre sounds.

Berlioz's writing for horn followed the untrammeled pattern he had set in the rest of his writing. A close scrutiny of one of his major orchestral works, The Fantastic Symphony, illustrates many digressions from the writing of previous composers.

The symphony is scored for four horns used in various keys as the composer needs them. The first of Largo movement, entitled Reveries Passions, calls for four horns, the first and second being pitched in E♭, the third and fourth in C. In this movement, which is of rather expressive and lyrical quality, the horns function as an added weight to the woodwind sound, by holding sustained tones with the flutes and clarinets. At the in poco piu mosso, the horn, in its capacity as a woodwind voice, starts a rhythmic figure which
eventually spreads throughout the woodwind choir (Example 1). Immediately following this short passage, the horn is doubled with the flute and clarinets in a flowing melody, a sort of refrain which concludes with a set of horn fifths. (Example 2).

In the second measure after the return of the main theme of the Largo, the first and second horns appear prominently in an appoggiatura chord. (Example 2). The weight of the horns playing "ff" in the low register makes a very somber effect. This same device is used in the March of the Pilgrims from Berlioz's Harold in Italy.

Toward the end of the Largo section (14 measures before the Allegro), the horn plays a lyrical but phlegmatic solo as a contrast to the rather restless main theme; the first and third horns are then used to push this new idea to a conclusion in a most unusual manner of writing. (Example 3).

It is obvious, from the style of these excerpts, that Berlioz was attempting to make the horn a more integral part of the woodwind family. Even in the subsequent allegro section, the horn continues to join the woodwinds in frequent fragments of melody besides assuming its more traditional function of support. Here the horns seem to be especially important in transition passages where their frequently sustained parts seem to weld the different sections together.

In the second movement, titled A Ball, it is interesting to note the heavy reliance that Berlioz places on the technique of
his horns evidenced in the writing at the *animato* where the first and second horns play the counter-theme with other woodwinds. Such technique was rarely called for earlier.

The third movement is written for first and second horns in F, third in E♭, and fourth in C. The reason for the special division becomes apparent when the fourth horn handles a melodic passage toward the middle of this movement. (Example 4). In Berlioz's music, it is not uncommon to find all four horns pitched in four separate keys.

Only by such a device could Berlioz be sure to have the effect he desired. Even though valves had been invented at this time, their use was infrequent in the orchestra. Berlioz even resorted to dividing a melody among all the horns if one were incapable of playing it completely. An example of this can be found in the *Queen Mab* scherzo.

Probably one of the most unusual orchestral devices used in that time occurs at the beginning of the *March*. Contra-basses are divided into four parts, and along with the timpani provide the percussive background for the horn section, which sounds a fragment of the march in the low middle register at a pianissimo dynamic level. (Example 5). The writing here has a particularly ominous, oppressive color. The horns are prominent in developing this fragment of the march at other pitch and dynamic levels until the material evolves into the march itself. Here
the horns with the other brass give full exposition to the march.

The *Dream of a Witches' Sabbath* movement is punctuated with melodic fragments and horn calls which add a great deal of color to the orchestration.

The symphony closes with a spectacular development of the liturgical *Angus Dea* in which the horn figures prominently, playing both in unison, and in sectional harmony.
EXAMPLE 4

Example 4 shows a musical passage from Berlioz's The Fantastic Symphony.

EXAMPLE 5

Example 5 illustrates another musical excerpt with specific indications of expression and dynamics.
German School

Von Weber

Weber, a contemporary of Beethoven, represents the musical model of a transition of all art forms in Europe. In music, the elevated and reflective style of the great classical composers was beginning to break down and in its place a new dramatic and lyric style was emerging. In what better field could this new technique be exploited than in that of opera? Whereas, Beethoven concentrated the great part of his efforts to the adaptation of this new romantic style to the purely musical forms, Weber represents the imminent fusion of poetry with music, and his main contribution to music, the founding of a new German national opera, is the result of that fusion.

Opera has always been the main proving-ground for new orchestration techniques. Here the concern is musical expression of dramatic considerations. Emphasis on perfection of established musical techniques is of secondary consideration. That the music be the reflection or even elaboration of the dramatic situation is the essence of Weber's operatic style.

Opera then acted as a constant force in expanding the orchestration technique. A dramatic libretto called for the infusion of drama into the music; the necessity to create a greater variety of orchestral colors. Weber achieved this by expanding the existing dynamic, tempo and harmonic possibilities, and by using a greater
variety of instrumental tone colors. Wind instruments were the recipients of the new expansive idea. New combinations and independence of writing for woodwinds were essential to Weber's style. Whereas with Beethoven the use of trombones and four horns was the exception, with Weber it became the rule.

It would be a mistake to characterize Weber's writing for horn as essentially florid. Rather it could be both florid and dramatic as the occasion demanded. In other instances, Weber adhered to traditional writing for the horn. Even with these traditional uses, the horn is given a greater variety of expressive possibilities by more extensive and careful use of a much greater variety of dynamic markings.

A careful analysis of the overture to Der Freischütz will indicate the effect of Weber's dramatic technique on the horn. The composition is scored for four horns, which operate in pairs, each pair in a different key. The first and second horns are in F, the third and fourth, in C. After a brief eight-bar introduction the horns, not one, but the entire section, are given a two-part theme which completely sets the mood for this mysterious-romantic opera. The melody is no mere fragment but an entire sixteen-bar theme. Weber demands the entire section, the C horns playing when the melody dips into the lower register and the F horns handling the theme when in a higher register. It was inconceivable at the time that this theme should be played with anything other than an unstopped sound, and consequently its execution was
impossible on a single pair of horns. This melody as one can see, offers all the logical expressive possibilities of the horn. The remainder of the overture, marked Allegro Vivace uses the horn in a much closer related manner to its traditional usage, but with important exceptions.

The use of four horns is maintained throughout the entire overture. Furthermore, these are used in quartet (four-part harmonic fashion) 121 measures out of a total of 134 measures which the horns play in the overture.

Activity for the horns is much more frequent than in the Mozart-Haydn period. Periods of long extensive rest are much fewer. Weber employs an amazing variety of dynamic markings, which indicates that he expects horn players to handle their parts with the same sensitivity to expressiveness that had heretofore been reserved for the strings and woodwinds.

We also find an abundance of accent marks, staccatos, fortissimos, pianissimos, crescendos, diminuendos,

Later German Composers

A succession of composers, from Franz Liszt to Richard Strauss and Gustav Mahler were responsible for what amounted to a complete development in composing music depicting a dramatic or explicitly objective concept. Liszt, a pioneer in this field along with Berlioz, is generally given credit for developing the Symphonic Poem into a standard orchestral form. The Symphonic Poem is the
name given to a type of Nineteenth Century symphonic music which is based upon an extramusical idea, either poetic or descriptive...
The term is usually restricted to compositions in one movement..."²

Extramusical inspiration brought about many changes in orchestral music. The musical structure or form which had always received paramount consideration tended to be relaxed and became more adaptable to the idea to be projected. Whatever the source of the extramusical idea, be it literary, pictorial, or subjective, the demand was for more pungency, more vividness, more color. This was achieved by developing a greater variety of harmonic progressions and coloring the harmony itself with the addition of appogiature, added tones, sevenths, ninths, and elevenths. The degree to which this harmonic development took place increased from Liszt through Wagner, reaching its apex with the music of Richard Strauss.

The expression of dramatic situations led to the development of an extended, more lyrical, expressive melody, generally soaring above a more pungent harmony. The importance of melody cannot be emphasized too greatly, as a composer such as Wagner strove to develop what he called a "continuous melody." Naturally such a development tended to confuse or obscure the direction or intent of the music, hence the development of the Leitmotif, or leading motive, which tended to establish the music's direction.

Harmony and melody alone were not enough to satisfy these composers intentions. There had to be a greater variety of sound

emanating from the orchestra. The brass and woodwind sections came
to share the musical situation more equally with strings. Actually
the ideas of these composers meant more work for everybody. Orchest-
ral compositions increased in length and size to the large combined
orchestral-choral scores called for in some of the Bruckner masses
and Mahler symphonies.

The projection of an extramusical idea could give the composer
an excuse for unusual instrumental usages. Liszt's *A Faust Symphony*
uses a cornet solo in a most tranquil section, an unusual develop-
ment for brass for that time. (Example 1)\(^1\) This emphasis on
orchestration was expanded by Wagner and reached its apex in
the superbly orchestrated tone poems of Richard Strauss as well
as the epic Symphonies of Mahler.

Each of these famous German composers established a leadership
in his own particular field. Orchestrally speaking, Franz Liszt
concerned himself with the tone poem, while Richard Wagner went
even further in attempting a kind of music-dramatic synthesis
which resulted in a new type of German opera.

The effect of Wagner's changes in opera have been revolution-
ary. When Wagner started composing opera it was principally a
collection of recitatives and arias strung together at times by
the simplest sort of plot. Wagner's intention to put the drama
on an equal level with the music, however, only served to increase
the importance and artistry of the music itself. Probably no
other opera composer is played so frequently in the concert hall,

\(^1\) Example 1 illustrates a melodic use of the brass by
Liszt.
for in much of his work Wagner achieved a self-sustaining, expressive
whole in the orchestra part itself. The ramification of Wagner's
ideas on opera are many, "but nothing more important than the new
place of dominance given to the orchestra. For him it was a hundred-
tongue instrument for the revelation of the inner motives of his
characters and for the shaping of their environment. It was not a
symphonic ensemble that existed for the creation of musical beauty
in terms of form. It was not an accompaniment for a drama, it was
the drama."

Wagner's influence upon Nineteenth Century German music at
the time and in retrospect seems titanic. "Because Wagner had
used a large orchestra, bigness became an ideal. Because Wagner's
chromaticism led him into passages that were tonally more insecure
than ever before, that insecurity became an ideal. The whole musical
world went "Wagnerian" tentatively at first, but finally wholeheart-
edly."

Bruckner is considered to have applied Wagner's artistic ideals
to the symphonic form. His works are written in a melodic and
harmonic idiom akin to that of Wagner's; philosophically, they are
considered quite introspective. However, the comparison abruptly
ends here. Bruckner very rarely deviated from the path of "absolute
music". His orchestration was much more rigid and economical than

Wagner's. His aim was clarity and definition in orchestral colors rather than tonal blend.

Mahler, a pupil of Bruckner and Wagner, was also a symphonist of larger scale than even his masters. Mahler is known today chiefly for his many orchestral innovations. Following Bruckner's lead, he too worked for a clearer delineation in the orchestral parts. "His vast experience as conductor helped him to grasp and exploit a variety of psychological nuances and possibilities in instrumentation that had been hitherto neglected in symphonic scoring". Mahler regarded all instruments of the orchestra as capable of a wide variety of expressive possibilities; consequently we find a profusion of incidental solos in all of his symphonies. Mahler marked the close of a period in respect to his aesthetic aims, but opened entirely new vistas in his solo writing for instruments which Twentieth Century composers were quick to follow.

Richard Strauss' main contribution to the orchestral literature are his tone poems which were the logical extension of ideas which Liszt had begun. These tone poems marked the culmination of the German music-drama thesis. Strauss is especially famous for his colorful orchestration. It had both the clear delineation of Mahler and the rich color of Wagner. It was especially difficult; never before had an orchestra been used in such a virtuoso manner.

To this group of German composers contemporary music owes much. Though their aesthetic ideal may have been abandoned, the practical aspects of their work have been adopted whole-heartedly.

**Liszt**

Most of Liszt's Symphonic poems are very objective in that they follow a definite program. Besides the Symphonic poems Liszt wrote two symphonies, both descriptive, two concertos for piano and orchestra and numerous other compositions and arrangements. His orchestral works represent only one facet of his genius as he composed in all mediums. As a composer for piano he ranks with Chopin. In recent years his orchestral works have been heard more infrequently. *Les Préludes* is practically the only symphonic poem remaining in the standard orchestra repertory.

Liszt's writing for the horn faithfully forecasts the style that was to come with the German composers. The parts, however, are not so demanding in endurance or technical aspects as those of Wagner or the later German composers. In many places examples can be found of the lyrical solo style which this group of composers developed so elaborately. (Examples 1 and 2).

The horn quartet from *Les Préludes* ranks among the best for that particular instrument. (Example 3).

In a lighter style, Liszt wrote a type of horn call much in the manner of Beethoven excepting the unusual number of non-harmonic tones. (Example 4). In the Symphonic Poem *Battle of the Huns*, Liszt uses the horns forcefully.
Wagner

Had Wagner never composed, the French horn could not have achieved the important place it holds in the contemporary orchestra. Practically all of the contemporary trends in horn writing in some way or other find their origin or at least development in the scores of his operas. This might be said of many more instruments as Wagner vastly changed the complexion of the symphony orchestra even though he did not claim to be a symphonist.

In Wagner's writings, the horn became an integral part of the texture, and Wagner's music was a vast panorama of ever-changing textures. The horn quality weaves in and out of these modifications of colors with a nuance never before realized.

Wagner also realized a vast diversity of color within the section itself. The second and fourth horns became established as the low horns, while the first and third horns became known as the high horns. Thus Wagner knit together the four horns in a quartet fashion that persists to this day, for in Wagner's writing much of the earlier division into two parts of first and second, third and fourth, lost its meaning.

The low horns especially were elevated in importance. Much of the previous writing had restricted the low register to long sustained tones for mechanical reasons. With the full acceptance of pistons, Wagner was able to write melodically and attain a variety of other expressions chromatically to the bottom of the register.
Wagner's writings from his earlier operas, Tannhäuser and Lohengrin through Die Meistersinger, Tristan, The Ring, and Parsifal clearly illustrate the discovery of and increased reliance upon new technical usages of the horn. In Tannhäuser, he uses four horns, two with pistons and two natural or "waldhorns". So intense was his desire to find new methods of tone color that he introduced a new instrument now known as the "Wagner horn", a hybrid of the baritone, and French horn, into the orchestra.

His innovations were not confined to low horns. The extreme high register from high G and high C also was used more frequently. His approach to the register however was made with due regard to its difficulty as he nearly always allows the player to "lead up" to that register. Generally these notes are written as a high point in some melodic pattern. Rarely are they used as background or color effects.

The players endurance is taxed by Wagner as it rarely is by any other composer. Sustained high tones occur as high as G2 and there are long periods of fortissimo playing. Control of dynamic extremes is important in realizing the many sudden variances of mood and color.

All of the standard orchestral usages for horn are found in his music from the traditional horn calls to the sustained harmonic background; melodic solos to unison forte rhythmic themes.

Wagner's scores demand playing of virtuoso proportions for horn.
Mastery of these parts finally brought the horn player to a playing level equal to that of the most proficient instrumentalists in the orchestra.

**Bruckner, Mahler and Strauss**

These composers faithfully followed the style of horn writing established by their illustrious teacher. All of Wagner’s technique of horn writing are incorporated in their scores even to the extent of continuing to write for horns in the key or related key of the music. This practice had been rapidly diminishing in Russian and French music, but with the exception of Mahler was carried into the Twentieth Century in German music.

Bruckner, who depended less on gradual changes of texture, but wrote more with block changes of color, used the horn more as a solo and harmonic device. Mahler’s own particular style of solo writing affords the horn longer, more exposed, incidental solos than had previously been attempted. Strauss emphasized greater facility in technique. His music demanded great flexibility in sudden leaps to odd intervals.

Mahler and Strauss made most effective use of the unison horn solos. Their solos skillfully lead the horns through a sometimes bewildering, sometimes dazzling theme which generally reaches its apex at the high register limit.

No period of contemporary composers has succeeded in revolutionizing the orchestra writing for horn as these composers did. That is to be expected, as Liszt, Wagner, Bruckner, Mahler
and Strauss had brought the horn to full maturity. It remained now to develop the resources they had discovered.
CHAPTER III

THE USE OF THE FRENCH HORN BY OTHER NINETEENTH CENTURY
COMPOSERS

Russian Composers

Borodin

Borodin was an unusual man whose claim to fame lies in scientific as well as musical fields. Often called an amateur, his music was amateurish only so far as the epithet means "that he did not take up music as a profession, devote the whole of his time to it, or expect any advantage, financial or other, from it. But no evidence of amateurishness could be found in the music of his maturity".1 Borodin has written less than any other great composer, yet the small amount he did write is of great significance. Much of his thematic material is, at least in spirit derived from the Russian folk literature. He had an unusual gift for orchestration which accounts in no small measure for his success.

A cursory scrutiny of his Second Symphony will afford the reader some comprehension of his style of writing for horns. The symphony contains an unusual amount of writing for brass. Borodin's scoring for the trombones is unusually advanced for the period. The opening theme in fact is handled numerous times by the bass trombone and tuba. (Example 3).

The horn parts are four in number, all in F as was the custom of all Russian Composers of this period. The horns play an important but supporting part, often lending weight to the woodwinds on such

pronounced themes as the following. (Examples 1 and 4). Horns are also used harmonically with supporting long tones and with block chords fortissimos.

In the second or scherzo movement marked Prestissimo (one beat per measure 108 = ) the horns play the basic rhythm in a staccato piano style. (Example 2). This same figure is used later in the movement to accelerate from a slower tempo to the return of the first theme. Borodin also used an "echo" device where the horn with oboe and clarinet answer a short rhythmic figure played by the entire orchestra.

The third movement commences with a horn solo which achieves clarity and beauty in a cantabile style that few composers have realized. It has none of the turgidness of the more celebrated incidental solos found in Tschaikowsky or Rachmaninoff. It is written for the horn in its most beautiful solo register, between middle F and high F. (Example 7). Subsequently in the same movement Borodin achieves a beautiful sectional solo. (Example 5). Later the horns in unison set the stage for a new section of the movement with a figure which seems to drive downwards. (Example 6a). With the other brass the horns then sound a dynamic theme against the accompaniment of woodwinds and strings. (Example 6b).

The fourth movement, heavy and march-like is distinctive because of the continuous intermixing of four-four and three-four meter.
FIGURE 10
EXAMPLE 5
\[ d = 72 \]
\[
\begin{align*}
\text{in F} & \quad \text{canti} \quad \text{ble} \\
\text{in F} & \quad \text{canti} \quad \text{ble}
\end{align*}
\]

EXAMPLE 6
\[ \text{Poco piu animato} \quad d=80 \]
\[
\begin{align*}
A & \quad \text{canti} \quad \text{ble} \\
B & \quad \text{canti} \quad \text{ble}
\end{align*}
\]

Example 7
\[ \text{Andante} \]
\[
\begin{align*}
1. \text{Solo} \quad p \\
C & \quad C
\end{align*}
\]
Tschaikowsky

It is interesting to note that the music of this man, so regularly snubbed by many who at least affect some musical knowledge, is nevertheless among the most popular on present day concert programs. The very pardonable reason for this snobbish attitude probably is because Tschaikowsky's music does not hold up under continued listening. He seems to fail to achieve that higher artistic level where repition only enhances ones enjoyment of the music.

The musical world would be much poorer today financially, numerically, and aesthetically had Tschaikowsky never composed. Few people, no matter how uninitiated fail to receive an immediate impression from his music. This very active stimulus-response feature of his music is the very factor that makes it so popular on concert and music appreciation programs.

He appealed to his listeners through melody. This device is something that the neophites as well as the cognoscenti can understand. Melody coupled with a flair for writing energetic climaxes is bound to evoke some kind of response from the listeners. This source of his appeal; however, precludes his achieving a higher artistic level. Tschaikowsky's music is too lopsided, relying heavily on melody and emotional appeal. The melody completely suppresses the harmony, the polyphony, the form. These same lyrical, extended melodies do not readily lend themselves to development.

Tschaikowsky's orchestration also suffers as a result. Though fundamentally sound, it lacks the certain cohesiveness as the music
itself does. Tschaikowsky's work contains a prolific supply of frills and figurations which color but are not an integral part of the work. So well does he handle the instrumentation of these figures that at times the orchestration becomes almost garish.

Such ideas as the preceeding are on an aesthetic plane which should concern but never prejudice the orchestra performer. A good performance of a Tschaikowsky symphony takes both energy and concentration. It can be quite invigorating.

Tschaikowsky's horn writing is modern in that he wrote for four horns all pitched in F and he favored the "quartet" style rather than the use of two pairs. One might suspect that on a comparative basis, Tschaikowsky wrote more straight four-part harmony for the horn section than had any other composer up to this time.

In much of his writing the horn is used as a harmonic background, supporting the melody with some slight rhythmic figuration. (Example 1). Occasionally these background figures become more complex, leading to problems in articulation and rhythm. Tschaikowsky used the horn section in occasional unison solo passages. (Example 2). He sometimes used horns in octaves on a sort of dramatic countermelody. (Example 3). The horns are used in figurations which result in being more difficult that their importance warrants. (Example 4).

From the standpoint of endurance a Tschaikowsky symphony is moderately demanding but not quite so much as Wagner's music. Tschaikowsky generally affords ample opportunity for short rests during performance.
Besides his symphonies, *The Nutcracker Suite, Overture 1812*, and *Romeo and Juliet, March Slave, and Francesca di Rimini*, are frequently performed as well as selections from his opera *Eugene Onegin*.

**Rimski-Korsakoff**

Rimski-Korsakoff achieved much fame in his time as a teacher, orchestrator, and composer. His diligence led him into many musical fields in which he distinguished himself. He seemed to lack enough originality in any one field to become its top Russian composer, but he demonstrated enough versatility to be considered the best all-around writer.

His horn parts are similar to those of Borodin and Tchaikovsky, probably resembling the former more in that Korsakoff did not indulge in excessive figuration as did Tchaikovsky.

Korsakoff's transparent style became a successful antidote to the rich, sometimes confusing sonority of Richard Strauss. His *Spanish Caprice, Scheherazade, Russian Easter Overture*, and orchestral excerpts from *The Golden Cockerel*, are standard orchestra repertory today.
French Composers of late Nineteenth Century

French symphonic music of the late Nineteenth Century was influenced greatly by the comparatively few orchestra writings of César Franck. His *Symphony in D Minor*, *The Symphonic Variations* for Piano and Orchestra, and the tone poem, *Psyche*, are standard orchestra repertory. Franck's reputation as a teacher is no less than that as composer. In his teaching capacity he exerted enormous influence on such composers as Chausson, D'Indy, Vidal, Duparc, and Pierne; which shows more accurately his bearing on French music than his few compositions might.

Franck's compositional technique was a unique mixture of the traditional and the modern. He used the classic forms such as the sonata form, fugue, and variation as a basic part of his style but enriched this with a harmony involving frequent use of ninths and elevenths. This richer sound led to occasional ambiguity of key, unusual key relationships, and fluctuations from major to parallel minor. His orchestration is often heavy-textured. Fauré, Chabrier, Chausson, D'Indy all wrote in much the same style as did Franck, if anything, enlarging upon techniques with which he pioneered. In the works of these composers harmonies became thicker with the addition of sevenths and ninths; the instrumentation likewise is fuller, more diffused. Franck generally relied upon basic rhythms but the later French composers used many of the more complicated compound meters.
The tendency of all these composers might be summarized by stating that they were working toward a fuller, richer sound. St.-Saëns, however, remained apart from this general trend. A prolific, highly intelligent composer, his works are distinctive for their clarity, the comparative transparancy of the instrumentation, and for their rigid devotion to the traditional concepts of structure.

French composers of this period had largely settled on two pitches of horns, F for flat keys and E for sharp keys, much in the manner that the B♭ and A clarinet were used. As the music of this period is generally heavy-textured, horn parts are rather continuous. Often they provide the harmonic rhythmic background. Often they follow a melodic line. Generally this line is amply doubled so that it looses individuality. Incidental solos are frequent but always short, rarely consisting of more than a phrase. Many of the writing techniques of the period come into more complete realization with the impressionists.
CHAPTER IV

THE USE OF THE FRENCH HORN BY TWENTIETH CENTURY COMPOSERS

The Double Horn

In many cases, Twentieth Century compositions sound vastly different from those of previous periods. Many of these changes are discussed under both the Twentieth Century composers and the later Nineteenth Century German composers. The earlier decidedly definite change in composition came with the breakdown of the Mozart-Haydn style and the emergence of the so-called "Romantic" composers, with their emphasis on richer harmonic textures, more vivid instrumental colors, more extended lyrical melodies and the general relaxation of the strict rules of musical form.

Each of these major changes in compositional style had its repercussion on part writing for the instruments of the orchestra. In the case of the first change, four horns were used in different keys to make available a greater number of tones. Finally pistons were added, and the horn became completely chromatic. The F horn became established as the standard orchestra French horn.

The F horn was considered quite acceptable tonally. However, the fact that its most used range lay high in its upper partials made it an instrument of definite limitations. The higher a brass player plays in the upper harmonic tones of his instrument, the less control he has. The importance of valves diminishes greatly because of the greater number of notes one is able to play with the same valve combination. Practically all of the control must come from the breath and the embouchure, which is correspondingly less
flexible because of the greater amount of tension used in the higher register. The notes on the instrument are more brittle, capable of less dynamic and pitch fluctuation or shading.

These limitations became more apparent as composers during the late Nineteenth and earlier Twentieth Century made increasing demands in their writing for horn from the standpoint of endurance, range, flexibility, dynamics, facility and general control.

From the demands of the composers' scores came the development of the double horn. The double horn is really a combination of two older horns, the standard F horn and the $B^\flat$ horn, whose fundamental is a perfect fourth higher. This instrument is generally built on a standard F horn design with the addition of $B^\flat$ horn valve tubing and an extra valve which, when depressed, cuts off the F horn tubing and allows the air to circulate through the $B^\flat$ portion of the horn only. The mouthpipe and bell are common property of both horns. The $B^\flat$ horn was chosen originally because the higher harmonic series of the instrument (perfect fourth higher) kept the "high horn player" from playing so high in the $B^\flat$ horn harmonic series when performing standard F horn parts. This gave the player greater flexibility and freedom in the higher register. The middle and low register of the F horn was retained because of its superior tone quality.

It is hardly pertinent to this thesis to make an exhaustive survey of the method of using this instrument; however a few of its commonly accepted practices might be described. It is generally conceded that the most effective place to change horns is at written
"g", second line, treble clef. (Example 1). This note and all others above are to be played on the B♭ horn. The notes from "g" down are to be played on the F horn. Since the part writing is in F and does not take this change into account the horn player must transpose the part a perfect fourth down when using the B♭ horn. Actually it is well to memorize a new set of fingerings to account for this change.

This practice varies of course from player to player, some preferring to use the F horn up to written C (Example 2). While others rely upon the B♭ horn almost throughout the entire register. Most players agree upon the use of B♭ horn in the higher register. The main disagreement comes with its use in the middle-low register. (Example 3). Proponents of its use argue that establishing a point of change interferes with the technical facility and makes playing more sluggish, less accurate. Opponents of the use of the low B♭ horn maintain that the tone in this written register is harsh and the pitch is nearly always decidedly sharp.

Since for every argument on either side an effective counter argument can be made, it rests with the individual to discover for himself the best method of performing on this instrument, taking into account his own limitations and those of his horn.

Based upon the teaching and playing experience of this writer, the following arrangement has seemed the most satisfactory in a majority of cases. (Example 4).
As far as the notes of the controversial range are concerned (Example 3), the writer advocates use of the F horn generally with the reservation that the B♭ horn can be used in passages where tone is secondary to technical facility or definition in tonguing. Naturally these notes must be practiced on the B♭ horn to develop accurate intonation if they are to be used at all. The double horn is used today as the standard horn by practically all symphonic horn players.
Impressionism and its Diffusion

The term "impressionism" has been applied to a new style of musical composition which prevailed particularly in France during the turn of the Nineteenth Century. Impressionism had its inception largely because "Romantic ideals were in danger of becoming oversentimental, when their purity was threatened by exaggerated beliefs as to the importance of introspective self-expression, and by the encroachments of the other arts". Debussy is largely credited with being the innovator of this new style and probably as nearly as any one man's music can be said to represent impressionism the honor is his. The style itself is so distinctive, that it can be codified into definite technics. Debussy's aim was to use these techniques in a manner to convey musical ideas, not personal or intensely subjective as in the manner of the Romanticists, but rather impersonal and objective. The end result was something not tangible or realistic but rather idealistic. In the place of a clear delineation was a suggestion. The technics on the other hand were definite:

1) Chordal combinations came into new importance for their own sake. The older rules of preparation and resolution were reduced in importance. In Debussy's own words:


2. The following categories represent a condensation of the points listed under *Impressionism*, an article by Marion Bauer, taken from the *Cyclopedia of Music and Musicians*, p. 861.
"What are you so shocked about, can't you listen to chords without wanting to know their status and distinction? Where do they come from? Whither are they going? What does it matter? Listen, that's enough".  

The result was the appearance of chords foreign to the tonality in new and strange positions which gives the music increasing ambiguity.

2) The added second appeared as a definite part of the chord rather than as the result of contrapuntal movement.

3) Parallel motion frequently appears in all voices resulting in the so-called "gliding chords".

4) Whole chords became used as pedal points.

5) The revival of organum, a style of writing in which voices move in parallel fourths, fifths, and octaves.

6) The use of the whole tone scale.

7) The use of new, more complicated rhythms.

8) The revival of mediaeval modes.

9) The development of chromaticism pointing toward the twelve-tone technique.

All of these devices Debussy used to create his own personal idiom, but it would be foolish to consider these technics as restricted to the Impressionistic school.

3. Leon Vallas, Claude Debussy, Life and Works.
These techniques Debussy used to create what has been called impressionism. Other composers used these techniques to develop their own particular styles. Ravel, Satie, Dukas, Roussel, Delius, Scott, Holst, Scriabin, Kodály, Albeniz, De Falla, Respighi, Casella, Schoenberg, Loeffler, Griffes, Block, are all composers who used a part of the techniques from which Impressionism evolved. The work of these composers shows that the techniques have outlived the school.

In order to understand just how the use of these techniques modified orchestra horn writing, an examination of the scores of Debussy and composers most closely allied with Debussy and therefore most representative of Impressionism must be undertaken.

Much of the music of Debussy has a shimmering or veiled quality. An instrument capable of diversity or even ambiguity of sound would be an asset in this situation and would be heavily relied upon. As a solo instrument, however, the horn could hardly hold any more important position than it had in the music of Wagner, Strauss, Mahler, or Bruckner. Here the traditional identifications of nobility, or sentimentality, heroism, had been already exploited. With the Impressionists the horn was valuable for an occasional short individual solo but hardly with the intense subjectivity that it had been accorded before. The idea was not to notice the horn but rather the sound. As an example, in even the very exposed parts of "Afternoon of a Faun" the horn is hardly noticeable as such. (Example 1). To
the performer this means increased diligence. to the composer's exact intention. One could hardly be accorded the freedom of expression in performing this passage that he might be given in playing the Andante Cantabile from Tschaikowsky's Fifth Symphony, or a sectional solo passage from Strauss's Don Juan.

Rarely do the Impressionists call for the sustained power and drive that Strauss, Mahler and Bruckner demanded in their music. Often the music will reach fortissimo proportions, but generally it will quickly subside. However, it should be noted that many of the Impressionists returned to such demands as their own styles crystallized. Ravel in his Piano Concerto for the Left Hand writes long intervals of forte playing, as does Roussel in his G Minor Symphony.

The use of extended unison horn solos so typical of Mahler and Strauss was reduced. Unison horn passages were now largely written for color rather than both weight and color. (Example 2). Often horns were scored briefly in unison to point up some definite effect, often one of fluctuating dynamics. (Example 2).

Color, in fact, was largely the purpose underlying the use of instruments by the Impressionists. The many distinctive color possibilities of the horn are much used. By changing the dynamic level, the tone color of the horn can be changed from a soft, nebulous, veiled quality to a loud, raucous, brassy quality. To a certain degree the position of the hand in the bell can make the same alteration from a closed position to a more open one. The holding position,
whether held close to the body or out in a "bells up" position, can effect the same change. The type of instrument, mouthpiece, or embouchure used also brings about a similar change; however, these latter factors cannot be so easily controlled by an individual player.

The horn has additional resources in color variance over which the composer can exercise additional control. The instrument can be muted to produce a stuffy quality, and stopped to produce a totally different color.

In the beginning of The Sorcerer's Apprentice, Dukas called for three different kinds of horn color in the space of 16 measures. In the score these are found between rehearsal numbers three and five. First he calls for the echo sound, followed by a strident high stopped sound, then a more relaxed open sound at a lower pitch. (Example 3).

Ravel writes a very unusual muting effect in the Second Suite from Daphnis and Chloe. The second and fourth horns alternate tones stopped and open on a gradually ascending chromatic scale (Example 4).

The greatest resources for color variety come from factors over which the performer exercises little or no control, but the composer can exercise complete control. The horn is capable of blending with many different instrumental combinations in many different ways. The works of Ravel, Debussy, Dukas, Roussel, Delius, Loeffler and so many others illustrate this so effectively. Furthermore the color of the horn varies considerably according to the part of its register utilized. For a sound which is as
inconspicuous as possible the lower register is utilized. In the middle register the tone of the horn tends to stand out in combination with other instruments and above concert C2, the high register of the horn, the quality will assume an intensive sound which will dominate any combination with other instruments. The Impressionists were not the first to discover this, but they did capitalize on the results more frequently than composers of any other period.

Another method of producing color variances which had hardly been touched upon until the emergence of the Impressionists was the discovery that different types of repeated rhythms and figurations would produce strikingly individual colors. Debussy and Ravel were the forerunners in exploiting this discovery. (Examples 5 and 6).

Naturally all of the techniques of Impressionism mentioned before produced new pleasing tone colors whether played by the horns as a section or in combination with other instruments. Added seconds, pedal chords, organum, modal scales, whole tone technics, gliding chords and glissandos, became almost clichés for the horn section. (Examples 7 and 8).

As the techniques of Impressionism expanded into other musical directions, many of the problems which occupied horn players in the old German Romantic school emerged. Roussel's Symphony in G Minor made demands upon range and endurance which equaled if not exceeded Mahler's scores. Dukas' scores also call for extremes in register. (Examples 9, 10 and 11). Rhythms became more complicated. Composers demanded more technical virtuosity. Playing in a new
and strange idiom made greater demands upon such factors of musicianship as hearing the note and playing it with correct nuance, dynamic and phrasing. In conclusion, it can be said that Impressionism not only expanded the horns' technical demands, but added many new and exciting ideas in musical expression which considerably added to the artistic usefulness of the instrument.
Other Twentieth Century Techniques

Stravinsky

The Rites of Spring, ballet music from Stravinsky's earlier period, will long be remembered. This work stands at the crossroads of Stravinsky's career. After the Rites, he turned to the production of music for smaller ensembles as well as music which Stravinsky envisioned as purely intellectual or unemotional. The Rites, however, have enough of the characteristics of both the old and new Stravinsky to warrant an analysis. Stravinsky has been one of the musical giants of the Twentieth Century. Many composers have, at least in part, modeled their own efforts after his. An analysis of Stravinsky's writing for horn would serve as a good indication of how many Twentieth Century composers now write.

The score calls for eight horns, an unusual situation for practical reasons. Stravinsky uses the eight horns in a variety of ways. At times one quartet plays antiphonally with the other. Again the section is two-voiced with four on a part, or four-voiced with two on a part. Horns seven and eight spend much time in the bass clef.

The parts themselves consist of short melodic-rhythmic patterns often repeated a number of times. This seems to be a characteristic of much of Stravinsky's music. Many of these patterns are complicated rhythmically and melodically. Extremes of range and dynamic levels are as called for.
One spot in the composition which contains the traditional singing melodic style of the horn is found in the *Dance of the Adolescents.* (Example 1). Later in this same dance the horns are employed in a characteristic four-measure harmonic-rhythmic pattern written so as to alternate between two quartets of horns for a total of twenty-four bars. (Example 2a). The pattern is finally interrupted by the first quartet erupting into *glissandos.* (Example 2b).

The use of eight horns permits Stravinsky the opportunity to write the following *tutti* passage in both extremes of the horn register and still have a solid horn sound throughout the entire register. (Example 3). This creates quite an endurance problem for the first horn, which is written in this range for eleven measures.

Example 4 illustrates a typical melodic-rhythmic fragment which the horns repeat several times at various intervals in the *Jeux des Cités Rivals.* The figure is played in a driving, forceful manner. Later in the same dance and part of the next one, the following figure runs in the first, second, third and fourth horns for twenty-seven bars. (Example 5a). The second quartet at first plays a *cantabile* figure against this sustained sound (Example 5b) and then plays a rhythmic figure upon entering the next dance. (Example 5c).

Occasionally Stravinsky uses a type of writing which the Impressionists often relied upon to create a type of color. (Example 6).

As the *Rites* increases in dynamic and rhythmic pace the horns are used to project a driving rhythmic figure. This requires
accuracy and sustaining power in the high register. (Example 7). The rhythm of the melody refuses to fit into the meter, a typical Stravinsky device. A most confusing feature of Stravinsky's music is the sudden changes of metrical pattern which he uses. The following example, near the conclusion of the Rites represents an extreme instance. (Example 8a). Here the rhythmic fluctuations are built on a definite metrical pattern, perhaps more complicated than usual, but are nevertheless ascertainable. (Example 8b).
Other Twentieth Century Composers

The breakdown of Nineteenth Century Romanticism resulted in an era of excessive experimentation with many new techniques of composition. Those listed under the chapter on "Twentieth Century Techniques" were used by the "Impressionists". Twentieth Century music made strides in many other directions, however. Historically speaking, every movement seems to generate its own counter-movement so it is really no surprise to discover the rise of a group of anti-Impressionist composers sometimes referred to as Expressionists. Milhaud and Arthur Honegger were outstanding composers of this group.

In one sense, Milhaud seems to return to a simple, older style with clear well-defined melodies, yet his music sounds startlingly new often because of his frequent use of polytonality. Polytonality has become a definite feature in many Twentieth Century compositions.

Milhaud, Hindemith, Stravinsky, Schoenberg and many other contemporary composers have actively sought to enlarge the uses of rhythm in composition. Often rhythmic patterns become the basis for a whole composition with these patterns substituting for the phrase in making the composition intelligible.

Melody has undergone considerable change. Many contemporary composers have built their melodic material in a very fragmentary form often consisting of sudden leaps and skips. Schoenberg, Alban Berg, Webern and others have worked assiduously developing this type of melody as part of a system of atonality. "Atonality means literally 'without tonality'. By substituting twelve independent
centers with new tonal and chordal relationships, Schoenberg has removed what he considers the limitations of having a single tone center.\(^4\) Atonal composers frequently use the juxta-position of dissonant sounds, rhythmic patterns in place of phrases, and dissonant counterpoint.

Dissonant counterpoint has become an important feature of contemporary music. This consists of writing two or more dissimilar melodic ideas concurrently and has become an important feature of the music of Paul Hindemith.

An important harmonic innovation has been the building of chords in other intervals than thirds. Chords in fourths may be found in the work of Satie, Ravel, Debussy, Scott, Hindemith, Casella, Milhaud, Honegger, Copland, and Harris among others.

Other composers have made new and significant use of folk music. Béla Bartok and Kodály in central Europe, Villa-Lobos in South America, Charles Ives in the United States and Vaughn-Williams and Gustav Holst, Edward Elgar in England have welded folk themes and rhythms into many diverse compositional forms.

American Jazz has had an important effect on the symphonic literature, sometimes directly as in the case of George Gershwin and Ferde Grofe. More frequently, the influence, especially the rhythmic ramifications, have been absorbed by a great number of composers such as Milhaud, Villa-Lobos, Hindemith, Virgil Thompson,

---

Roy Harris, and others.

Much music is still being written in a distinctly Romantic style. Jean Sibelius though still living wrote many of his more popular compositions in the early Twentieth Century. His idiom is romantic but strikingly individual.

In America, the music of Howard Hanson has made its appeal through its flowing, lyrical melodies and rich harmonic textures. Samuel Barber uses a melodic-harmonic and structural idiom closely-related to the Nineteenth Century sometimes referred to as a Neo-Romanticism.

This brief discussion serves to point out much of the diversity in the music being written today. Problems of performance from the position of the horn player are largely those of conception and understanding of the many diverse styles. The technical resources of the instrument had reached maturity by the turn of the century. However, all demands for technical proficiency, created during the Nineteenth Century are enlarged. Only in the case of the atonalists has any new startling device been created for the instrument, this being the rapid execution of extreme interval jumps and augmented intervals.
CHAPTER V

THE RELATION OF THE STUDIES TO THE ORCHESTRAL REPERTORY

It was stated in Chapter One that the purpose of this thesis was to formulate a method of preparation for orchestral horn playing which would simulate as nearly as possible conditions of actual orchestral performance. Since such performance involves ensemble playing it is necessary to impose a situation upon the horn player which will make him respect the new conditions and relationships which are set up when two or more people perform music together. The examination of the orchestral repertory in the previous chapters shows that in practically all cases, the horn is performing with other horns of the section, as a solo with other instruments, or as a section with other instruments of the orchestra. In order to keep the Studies which support this thesis as practical as possible and still consistent with orchestral demands, they are constructed in duet form. This practice condition takes into consideration such ensemble techniques as intonation adjustment, dynamic balance, tonal matching, tempo and rhythmic precision and agreement as to interpretation. The Studies have been edited in a manner closely related to the material from which they were derived. Tempo indications and all expressive markings in regard to style, the standard aids to ensemble playing, are included in the Studies.

There are also a large number of individual techniques which the horn player must master as well as those of ensemble playing. One of the foremost is transposition. The data collected concerning transposition shows many variances in key for the horn depending upon the tonality
of the composition. In the case of the many composers of the Nineteenth Century, changes in transposition can occur many times in a single work. Thirty-four of the fifty practice studies are written to require transposition for horns pitched in F. Approximately half of the thirty-four transposing studies require two or more transpositions. (Numbers 17, 19, 20, 22, 25, 26, 28, 31, 32, 33, 40, 43, 44). In many of these the two horns play in different keys.

Other techniques mentioned in the preceding chapters relating especially to the orchestral horn such as muting, hand stopping, lip trills and glissandos have been included in the studies. (Numbers 2, 27, 33, 43, 46, 47, 48). These special techniques which have been used more frequently during the last fifty years are used similar to the manner of their original orchestral usage.

Tone quality has been mentioned as another important consideration in orchestral technique. For this reason a variety of studies have been included to offer tonal practice similar to the tonal demands of the orchestra. The studies go a step further with regard to tone by including melodic passages from the orchestra repertory which are not necessarily played by horns in the original composition but are nevertheless characteristic of melodic horn solos and offer valuable practice in this respect. (Numbers 20, 32, 34, 37, 39, 42, 45, 46).

A large number of the studies emphasize such general technical problems as tonguing, slurring, accenting, fingerling, register and rhythm problems. Studies corresponding to these problems are listed in the Table of Contents of Volume II.

Other studies emphasize such special orchestral problems as playing melodic fragments interspersed between periods of rest,
endurance, extension of range, and style. In many cases the range of
special orchestral horn parts is extended by repeating these parts
in different keys both higher and lower. (Numbers 1, 2, 3, 4, 6, 7, 9,
12, 13, 15, 16, 24 and 35). In nearly all of the studies special
problems of rhythm and technical facility are emphasized by repetition
in both the original and in other keys.

An attempt has been made to give continuity and musical meaning
to each of the studies. In the case of a few of the Eighteenth and
many of the Nineteenth and Twentieth Century composers the continuity
and musical meaning is inherent in the horn parts themselves so that
little arranging was necessary. Numbers 6, 8, 10 and 17 are based
upon earlier literature in which little arranging was necessary. In
the case of the famous horn quartet from Von Weber’s overture to
Der Freischütz (Number 17) the parts have been arranged as a duet.

Some studies have been arranged to emphasize one specific
technical problem alone. The particular problem becomes the continuity
factor for the entire study. (Numbers 1, 3, 4, 5, 7, 9, 11, 12, 16,
23, 24, 25, 28, 29, 31, 33, 35, 36, 39, 40, 41, 44). A complete list
of the problem or problems found in each study is found in the Table
of Contents of Volume II.

Other studies are a miniature composition built around the horn
parts and follow closely the form of the original composition,
usually emphasizing more than one problem including style.
(Numbers 14, 15, 19, 20, 22, 30, 32, 34, 39, 40, 42, 43, 44, 46, 47).
Since the continuity of these studies has been established upon either a musical or a problematic situation or both, the performer can glean an understanding on the basis of the continuity used. The fact, however, that there is a continuity or understanding to be grasped in each study should enhance the performers' interest in the material. If this condition of continuity and musical meaning is not met, the studies can be of little more value than the standard orchestral excerpt books. In this writer's opinion, the primary deficiency of the excerpt books has been the presentation of material in such fragmentary form that comprehension of the musical significance of the material is difficult. Satisfactory learning cannot take place without as complete an understanding of the problem as the teacher is able to offer.

Complete analysis of the entire orchestral horn repertory was, of course, neither possible nor pertinent to this thesis. By basing the research on common orchestral works and organizing it on a historical basis, the studies themselves become representative of the entire repertory, but in no way should they be considered inclusive. The purpose of this thesis has been to present a method of preparation for orchestral horn playing and to develop a sufficient amount of material to illustrate its validity.

In all of the Studies, the problems have been magnified by the various types of repetition. This has been done not only to increase technical efficiency but also to develop acumen and understanding of such problems, a condition mandatory to good orchestral performance.
The very nature of the learning process itself would seem to indicate some sort of arranging to emphasize the problems of a particular situation as well as arranging to give the situation some type of meaning. John Dewey has said, "We thus reach a technical definition of education: it is that reconstruction or reorganization of experience which adds to the meaning of experience and which increases the ability to direct the course of a subsequent experience." In consideration of this proposition the Studies have been arranged to provide a realistic experience which will provide increased control of performance when the student takes his place in the orchestra.

BIBLIOGRAPHY


STUDIES IN ORCHESTRAL FRENCH HORN PLAYING

VOLUME #1

A Thesis
Presented In Partial Fulfillment of the Requirements
for the Degree Master of Arts

THE OHIO STATE UNIVERSITY

By
WILLIAM K. KEARNS, B.Sc.
1954

Approved by:

[Signature]
Adviser
School of Music
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\[ \text{\textit{Sous d'alo}} \]

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