

Brass instruments today generally can be said to have homogeneous sonorities, whether within a single instrument's compass or among the various types, no matter where or by whom they were made or are played. This contrasts with the sounds of earlier instruments, which reveal a decided difference in tone quality between types of brass instruments; within a given type, the sound quality differs from note to note, instrument to instrument, and region to region. National differences between playing styles also created distinct sonorities. In summary, one might say that a unified sound characterizes the instruments of today, whereas those of the past were distinguished by diversity and variety.

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## ROMANTIC COMPOSERS RESPOND TO CHALLENGE AND DEMAND



Alan Houtchens

Creative activity during the nineteenth century, as in every other historical period, was greatly influenced by social and political developments, by general cultural and aesthetic trends, and by economic demands on artists and on the consumers of their art. The aim of this essay is to examine how some of those factors led romantic composers to cultivate further the forms, compositional styles, and instrumental techniques attendant upon the use of the orchestra. It will also be necessary to touch briefly on such matters as the influence of Beethoven's orchestral technique on composers; the impact of Wagner on his contemporaries; and the effect of technological improvements in the construction and manufacturing of instruments, with special attention to the French horn and the piano.

Most composers of the time managed to function very well—though perhaps not always too happily—in a society racked by changes resulting from the spread of a new social-revolutionary spirit and from the rapid industrialization and urbanization of a vast part of Europe. Their position in this new society was much more similar to what it is today than to what it had been in the eighteenth century. Perhaps the most striking development was that composers for the first time could claim a truly professional status. All of their working hours could be devoted solely to musical activities—composition, performance, teaching, publishing, or writing about music. Concomitantly, they did not necessarily have to depend on a patronage system binding them in servitude to (usually) royal benefactors on a personal level.

Some perspective in this matter can be gained by considering the manner in which Julie Ritter, Otto Wesendonck, and King Ludwig II of Bavaria supported Richard Wagner. The relationship between the composer and his

patrons represents a middle ground between Haydn's experience in his dealings with the Esterházy family and the way in which the majority of nineteenth-century composers sought their livelihoods. Regardless of the station they may have had by birthright (here Mendelssohn, who was born into an especially wealthy, well-situated family, comes specifically to mind), there is no reason to believe that composers were other than workaday musicians simply trying to make a living.

#### THE COMPOSER AS CONDUCTOR

Since it was not possible to survive financially by concentrating on only one musical activity—least of all composing—many composers became associated with opera houses or independent large orchestras by serving as their directors and/or conductors. Others traveled throughout much of the world as guest conductors, laying the foundation for modern conducting and rehearsal techniques.

Trying to discharge adequately the duties of a full-time conductor while finding the energy and time to compose took a heavy toll. Mendelssohn found his rigorous activities as conductor of the Leipzig Gewandhaus Orchestra to be very draining yet also rewarding, as he wrote to Ferdinand Hiller:

Two months of such constant conducting takes more out of me than two years of composing all day long; in the winter I hardly get to it at all here. . . . I often think I should like to retire completely and never conduct any more, but only write; but then again there is a certain charm in an organised musical system like this, and in having the directing of it. (p. 274)

Part of the charm of working with an orchestra was that a composer could gain firsthand knowledge of the capabilities and sound qualities of each instrument and experiment with them in his own works. Bedřich Smetana regularly made corrections and improvements in scoring after conducting performances of his own compositions. Since he no longer could rely on this procedure after becoming totally deaf, some of his later scores are fraught with miscalculations in terms of balance and part-writing. The cycle of tone poems *Má vlast*, for example, has many awkward passages that have, on the one hand, discouraged conductors from programming the work in its entirety and, on the other, spawned hundreds of "retouchings" by those willing to struggle with the material. It was not until 1983 that a serious, concerted effort was made by some musicologists, conductors, and orchestral players to resolve these problems. The resulting practical

performing edition (published by Supraphon) has helped to rekindle interest in a truly brilliant symphonic composition. <sup>reav, var</sup>

Especially during the first half of the century, the public wanted to hear new works. Adam Carse has demonstrated that, of the music played from 1830 to 1839 on the programs of the three great orchestral societies of the period (the Société des Concerts du Conservatoire, the Gewandhaus Concerts Society, and the London Philharmonic Society), between four-fifths and five-sixths was less than forty years old (pp. 7–8). Although no statistics are available, a similar preference probably existed with regard to opera productions, especially in Italy. Composer-conductors thus had the opportunity of becoming familiar with a vast amount of music composed by their contemporaries.

#### THE DEMANDS OF MUSIC PUBLISHERS

Even if a composer managed to get an orchestral work performed, there was no guarantee that it would ever be published. Consumer demand and the economics of the publishing business favored pieces for solo piano or for small ensembles that included the piano. Publishers were disinclined to accept orchestral compositions, and if they did, they found it more practical and financially rewarding to issue them in piano reductions only. Fritz Simrock, one of the principal publishers of the music of Brahms, Dvořák, and Max Bruch, expressed this position very clearly in a letter to Dvořák in 1890:

If only I did sufficient business with your symphonies to be repaid for my enormous expense! But this is far from being the case! and I am thousands down on them. That is how it is—and nothing can change it. What use is it if I make money on one or six works and lose it again on four others? I can't carry on my business like that! . . . So unless you also give me small and easy piano pieces . . . it won't be possible to publish big works. (quoted in Clapham, 16)

Like many of his fellow composers, Dvořák rebelled at this attitude purely on artistic grounds. He did not necessarily want to write what was in vogue or thought to be marketable. Five years earlier, when the same subject had strained his relationship with Simrock almost to the breaking point, Dvořák had responded to similar arguments:

If you take and consider all that you indicated in your last letter from a common-sense point of view, then we reach a very simple conclusion: not



to write symphonies and large vocal and instrumental works, but only publish here and there some songs, piano pieces or dances and I know not what all: this, as an artist who wants to make his mark, I cannot do! (quoted in Šourek, 92)

### THE IMPACT OF THE PIANO

The piano had an extraordinary impact on almost every aspect of musical life during the nineteenth century. The number of pianos in middle-class households increased as the instrument became more affordable, and composers could barely keep up with the demand for new works suited to the abilities of amateur musicians. As a result of improvements in its construction, materials, and design, the piano could stand up to the orchestra in terms of sonority and sheer volume, though it certainly could not cover an ensemble composed of a hundred players—or the screams of a faithless lover and her retinue being crushed to death in a collapsing steel-framed summerhouse. In his *Evenings with the Orchestra* (292–296), Berlioz had envisioned an instrument called the “orchestra-piano” that could be commanded by a single godlike artist and that was capable of producing powerful sounds of infinite variety.

Putting such fantasies aside, Berlioz and his contemporaries found the acoustic ideal of the piano to be spectacular enough. Since most composers played the piano—Berlioz was an exception—and many composed at the keyboard, its capabilities with regard to dynamics, counterpoint, and voice leading influenced them in their orchestral works. For example, the arpeggio figure that is first stated by clarinets and recurs throughout the orchestra in Mendelssohn’s *Fair Melusine* Overture, regardless of whether it is idiomatic to the particular instruments involved, indicates that it was conceived with the piano in mind—or, at any rate, at the piano. Similarly, pianistic figurations and textures are very common in the orchestral music of Schumann and Brahms.

Carl Maria von Weber recognized that there could be a danger in working at the piano. His discussion of the matter as it appears in his uncompleted novel “Tonkünstlers Leben” provides insight into how a romantic artist typically viewed the act of creation:

Life’s problems seemed to weigh unbearably upon me. . . . Even the pianostool, on which I had sat hoping to compose, seemed to have turned from my last resort into an object of sinister foreboding. The composer who finds the material for his work in that way is almost always poorly endowed

from birth or on the way to entrusting his spirit to the commonplace and everyday. For these hands, these accursed piano-fingers, take on a kind of life of their own after years of practice to obtain mastery, and they become unconscious tyrants and despots over the creative faculty. They never invent a new idea, as all novelty is inconvenient to them. Secretly and on the sly, like the manual labourers whom they resemble, they cobble together whole works out of long-familiar, routine phrases. These almost look as though they were new, and because they sound well and flatter the ears which they have, as it were, bribed in advance, they are immediately accepted and applauded.

The composer whose inner ear is the judge of his composition works in quite a different way. This inner ear is an amazingly able judge of musical shapes—something peculiar to the art of music and a sacred mystery which the layman cannot fathom. (p. 322)

### THE DEMAND FOR VIRTUOSITY

In keeping with the nineteenth-century view of the artist as a marvelous, superhuman being endowed with mysterious powers, a special premium was placed on virtuosity. Previously accepted limits of technical capability no longer were accepted. Concert societies gave top billing to those singers and instrumentalists who were known primarily for their technical prowess, and their programs mainly included bravura arias, concertos, paraphrases, fantasias, quadrilles, potpourris, and other vehicles of virtuosity. Conductors who could lead a gargantuan orchestra and chorus without using a score were admired above virtuoso soloists. But perhaps the loftiest position of all was accorded to those conductors who were also composers. They were idolized as priests of a sacred muse.

Berlioz fantasized about a utopian town called Euphonia where the exalted art of music is nurtured under the despotic rule of a composer-conductor-director. After lesser deities—the various directors of rehearsals acting as prefects—have finished their preparatory work for a performance by working with each section of the orchestra and with the chorus and soloists separately, the whole is brought together:

The grand ensemble next undergoes the composer’s criticism. He listens from the upper part of the amphitheater, which the public will occupy; and when he finds himself the absolute master of this huge intelligent instrument, when he is sure that nothing remains but to communicate to it the vital nuances that he feels and can impart better than anyone else, the moment has

come for him to become a performer himself. He climbs the podium to conduct. (p. 286)

This frenzied preoccupation with virtuosic display was reflected in the way composers wrote for this "huge intelligent instrument." Berlioz enthusiastically sought to expand the ranges of all the instruments and to make them more versatile, capable of producing new effects and sonorities. He was fond of assigning a specific role to a particular instrument and using it extensively in a soloistic capacity. A solo viola represents Byron's Childe Harold in *Harold en Italie*; Berlioz wrote the part expressly for Niccolò Paganini. Throughout the *Symphonie fantastique* various transformations of the *idée fixe* are rendered by a solo flute, oboe, or clarinet.

The same technique was developed by many other composers and was especially appropriate in opera. For example, Wagner clothed leitmotifs associated with specific characters, objects, or abstract ideas in distinct monochromatic instrumental garbs. Weber's fascination with the clarinet was a result of his association with the virtuoso Heinrich Bärmann, while Richard Strauss's style of writing for the horn reflects the impression made on him by his own father's playing. Liszt's piano paraphrases of operatic and orchestral works went far beyond being mere arrangements and established not only a new genre of composition but also a style of performance that is still pursued today, as exemplified by Vladimir Horowitz's rendition of Sousa's *Stars and Stripes Forever*.

The techniques displayed by virtuosic players were transferred not only to specific instruments but often to the orchestra as a whole. Berlioz's "Queen Mab Scherzo" from *Roméo et Juliette*, Mendelssohn's saltarello finale of the *Italian Symphony*, and the scherzo of Schumann's *Second Symphony* are three examples of a new genre of composition, the bravura showpiece for orchestra. Similarly, the intensely dramatic style of singing developed by the great virtuosos at midcentury, though rooted in the art of *bel canto*, provided new impetus to Meyerbeer, Wagner, and especially Verdi. In order to support and match this vocal style, they developed a kind of instrumental writing that took on a forcefulness and vigor hitherto unknown in opera.

Sometimes a composer's delight in virtuosity led him to overstep the bounds of artistic discretion. The last movement of Max Bruch's *Violin Concerto in G Minor* provides a good example. The rondo theme has an excitingly brilliant, gypsy flavor that is particularly well suited to virtuosic violin technique. Even though the woodwind and string players in practically any nineteenth-century orchestra were able to play this theme in the same manner

as the soloist, it never seems to have occurred to the composer that having them toss fragments of it back and forth in the *tutti* sections would reduce the impact and effectiveness of the solo part.

#### REACTION TO THE VALVE HORN

It is not possible to determine whether this interest in virtuosity fostered improvements in the construction and design of musical instruments, or vice versa. Whichever the case, the new technologies that were applied not only to the piano but also to almost every orchestral instrument expanded composers' horizons in terms of timbre, range, and execution. This was especially true with regard to the woodwinds and brass. The instrument that benefited most from technological improvements and drew composers' attention perhaps more than any other was the French horn. The romantic instrument par excellence, it captured their imagination not only because of its rich, dark, mellifluous tone but also because specific associations had become attached to it: the hunt and, by extension, the forest and nature; the roebuck as a symbol of the cuckold; anything mysterious or exotic. Following the invention of the valve around 1815, which freed the horn from the fetters of a single overtone series, composers quickly assigned to the instrument an expanded melodic role in the orchestra.

Weber, whose hunting choruses spiced with lively horn calls in *Der Freischütz* became models of their kind, seemed eager to experiment with, and improve upon, novel techniques even on the traditional hand horn. In his *Concertino in E Minor* for horn and orchestra the soloist is required to sing into the instrument while playing certain notes in order to produce chords. Though the technique had been used before, Weber gave it an air of legitimacy. Berlioz wrote in his treatise on orchestration that one of the distinct advantages of the valve horn over its predecessor is that stopped notes can be achieved on all the notes of a scale. This statement may seem curious today—we are more appreciative of the fact that all the notes can be played open—but Berlioz's interest was in utilizing isolated stopped notes for specific coloristic effects.

In his enlarged and revised edition of Berlioz's treatise Richard Strauss pointed to Wagner's extensive use of the horn. There is no question that Wagner's orchestration would lose much of its characteristic color and excitement without the sound of this instrument. Following a practice established by Meyerbeer and others, he included four horn parts in his early operas, indicating that two of them could be played on valve instruments and two on hand horns. Actually, all of the parts can be executed on either



instrument, and the use of valve horns undoubtedly depended on the availability of instruments and on players' preferences. In *Lohengrin*, Wagner manifested a decided preference for the new horns. He began writing for them exclusively in *Tristan und Isolde* and occasionally increased the number of parts to eight. Nevertheless, in the score of *Tristan* he took pains to issue a warning concerning their use:

The composer feels called upon to recommend that special attention be given the treatment of the horns. The introduction of the valve has doubtless done so much for this instrument that it is difficult to ignore this improvement, although the horn has thereby suffered undeniable loss in the beauty of its tone, as well as in its powers of smooth legato. In view of this great loss, the composer, who is concerned with the preservation of the true character of the horn, would have had to refrain from employing valve horns, had he not learned that excellent performers have been able to eliminate these drawbacks almost completely by especially careful execution, so that it was barely possible to tell the difference in tone and legato. In expectation of a hopefully inevitable improvement of the valve horn, it is urgently recommended that the horn players study their parts in the present score with great care in order to find the proper application of the appropriate tunings and valves for all requirements of execution.

Brahms apparently never felt comfortable with the valve horn, arguing even more vehemently than Wagner that it could not produce the same kinds of tone qualities peculiar to the hand horn with its various crooks. Schumann, on the other hand, was fascinated by its capabilities. His later symphonic works show a special sensitivity to the instrument and in 1849 he composed the first important solo piece for it, the Adagio and Allegro, Opus 70, as well as the brilliant Konzertstück for Four Horns and Orchestra.

Gustav Mahler was especially enamored of the horn's power, versatility, and penetrating beauty of sound, and he wrote magnificent solos for it in all of his symphonies and song cycles. The obbligato solo part in the scherzo of his Fifth Symphony is especially noteworthy because of the considerable intensity and dramatic impact that it adds to this central, pivotal movement. In the finale of his First Symphony he even directed all seven horn players to stand at the climax. Mahler had a flair for the grand theatrical gesture, and it is a pity that the closest he came to writing for the stage was to complete Weber's *Die drei Pintos*.

The technical demands on horn players made by Mahler and other

composers almost surpassed human capability. An anecdote concerning Richard Strauss bears repeating, even though this particular version of it cannot be documented. During a rehearsal of *Ein Heldenleben* a member of the horn section could not play his part well enough to suit the composer and, when apprised of this fact, retorted, "With all due respect, Maestro, you may be able to play this passage on the piano, but I assure you it is quite impossible on the horn." Strauss replied that the poor fellow was in error: he himself could not play the passage on the piano.

#### DEVELOPMENTS IN OPERA

Opera provided fertile ground for the introduction of new or unusual instruments and for experimentation with novel orchestral techniques. Part of the reason lies in the fact that, even after the middle of the century, nearly all orchestras, especially those in Italy, were theater orchestras established principally to present opera. Concert performances were arranged by drawing personnel from the opera establishment and by renting the theater itself or whatever ballroom, hotel entertainment hall, or university commons might be available. Few concert halls were intended specifically as such, and still fewer halls of any kind had satisfactory acoustical properties or could accommodate a large orchestra, chorus, and audience. It was largely through the efforts of the concert societies and choral institutions, which had grown in number and size, that the situation improved as the century drew to a close.

In any event, many developments in the art of orchestration during the early nineteenth century took place in the world of French grand opera. Here an evening's entertainment was expected to incorporate as much of the grandiose, the novel, the shocking, and the spectacular as possible, whether it came from the orchestra, the vocalists, the ballet troupe, or the stage machinists. Composers sought ways to provide contrast and variety in their scores and to titillate audiences with new sounds and modern techniques. Halévy was the first to use valve trumpets and horns in opera (in *La Juive*, 1835) and Meyerbeer was the first to use the bass clarinet (*Les Huguenots*, 1836). Important parts for the harp, for the English horn, and for percussion instruments hitherto not found in pit orchestras also began appearing in opera scores. Brass fanfares and difficult solo passages for all the instruments—especially for the woodwinds, which in the hands of French players sound quite penetrating—were written to provide special brilliance and dramatic impact.

Auber, Halévy, and Meyerbeer were influenced, in turn, by such composers as Grétry, Cherubini, Méhul, and Le Sueur. The orchestral writing in their "rescue" operas was especially worthy of imitation, for it matched the

intense, suspenseful, and violent genre of opera, where the endangering situations, usually involving unjust imprisonment and last-minute rescues, mirrored everyday, real-life events during the French Revolution. This orchestral style likewise catered to the demands of a French public accustomed to ceremonial music composed specifically for outdoor fetes organized for national festivals and political rallies. Pieces for such occasions incorporated huge orchestral forces, military bands, and large choruses, usually of only male voices. Novelty and bombast were valued above profundity or musical quality.

Some of the finer coloristic touches in their scores also influenced composers like Beethoven, Berlioz, and even Brahms. Cherubini's *Les deux journées* (1800) is the first work of any kind to call for three horns in the orchestra instead of the usual two or four. Although Cherubini did not always give each of the horns an independent part, his practice anticipated that of Beethoven in the Third Symphony and in Leonore's "Abscheulicher, wo eilest du hin" in the first act of *Fidelio* (1805). Berlioz recognized that the advantage of having massive orchestral forces at one's disposal was not to use them all at once but, rather, to employ them singly or in small groups to create exquisitely delicate instrumental combinations and to provide contrast. Brahms, who knew Méhul's work intimately, very likely was influenced by *Uthal* when he omitted violins from his own Serenade in A and the first movement of the *German Requiem*.

As an opera director, Carl Maria von Weber favored the French style. In Prague, for instance, he mounted 21 French operas (in a total of 191 performances) during the years 1813–1816, 30 German (but only in 141 performances), and a paltry 9 Italian works (70 performances). Most of the German operas either were fashioned directly on French models or were simply translations of them. Salieri's opera *Tarare* is included in the Italian count because Weber used Da Ponte's version of the libretto. Thus, the French repertoire clearly presented a stronger imaginative force to Weber than his native *Singspiel*, which was only in its first tentative stages of development. The articles he submitted to various newspapers in Prague and Dresden discussing the works of Nicolò Isouard, Pierre Gaveaux, Boieldieu, Charles-Simon Catel, and Nicolas Dalayrac indicate that he was especially attracted to these composers' brilliant, imaginative strokes of instrumentation and to their effective use of the orchestra to comment on the action.

Spontini and Rossini also had embraced this French operatic tradition when they composed for the Paris Opéra's multifarious orchestra. There is a distinct difference in style, for instance, between *Guillaume Tell* and Rossini's many earlier Italianate, Mozartean operas. Nevertheless, in all of

his works the orchestra plays an important role, one that goes far beyond being mere accompaniment, not only in the arias and choruses but also in the accompanied recitatives. Rossini presented a challenge to other composers merely because of the extraordinary popularity that his operas enjoyed throughout Europe. This craze was so strong during the 1820s that if a composer was not willing to imitate Rossini's style there was little chance his operas would be performed.

Richard Wagner's operatic efforts from *Rienzi* to *Lohengrin* are firmly rooted in the French grand-opera tradition and are rather conventional in style of orchestration. The music dramas that followed—*Tristan und Isolde*, the tetralogy *Der Ring des Nibelungen*, and *Parsifal*—are more venturesome and had a greater impact on other composers. Wagner increased the number of wind instruments to enable multiple doublings and the homogeneous scoring of complete chords in every section of the orchestra, and as a consequence, he had to call for a much larger contingent of string players. In some works he wrote exceptionally prominent parts for the English horn and bass clarinet and added the bass trumpet, contrabass trombone, and tuba to provide support in the lowest register. He devised a new instrument, the Wagner tuba, which is made in two sizes, tenor and bass, and is designed to accommodate a French-horn mouthpiece. While freer-blowing than the horn, it has a more primitive, opaque tone quality.

Other operatic composers likewise called for enlarged orchestral forces to suit particular artistic needs. Their wishes usually could be fulfilled in performance, but there were exceptions. For the first production of *Kate and the Devil* (1899), for example, Dvořák was surprised to learn that the part for a contrabass clarinet he had written to give a ghoulish flavor to the scenes involving the devil Marbuel had to be omitted: the theater in Prague did not have such an instrument, and when one was sent from Paris, the clarinetist could not play it because he knew only the German fingerings.

The fact that Dvořák did not consult with the management of the National Theater concerning the availability of a contrabass clarinet or of a player capable of executing the part serves to illustrate an important point: when conceiving their works nineteenth-century composers did not have to be as concerned as in earlier times about taking into account the size of a specific orchestra or the capabilities of its members. Most orchestral musicians were highly skilled, professional players. Many were trained in conservatories and had learned to play a single instrument very well instead of several only moderately well, as in the previous century. If there was an occasional shortage of good players, it was due to the ravages of war or—as Mendelssohn



pointed out (p. 292) in his appeal for the establishment of a music academy in Leipzig—to the fact that young aspiring musicians preferred to take up the piano rather than an orchestral instrument.

### THE SPIRIT OF NATIONALISM

It has been mentioned that the aesthetic framework of romanticism elevated the creative artist to a level approaching the divine. Wagner, more than any other personality, was viewed by many as nothing less than a god. He considered each of his music dramas to be a religious rite, and he was able to realize the construction of a new “temple” at Bayreuth, a theater designed to meet his own artistic specifications. Even Wagner’s detractors could not avoid being influenced in some way by the man, his ideas, and his works. In many cases, positive developments resulted from opposition to his compositional style and artistic premises.

During the second half of the nineteenth century in France, composers reacted not only against the extravagances of grand opera but also against Wagner’s music dramas. With the encouragement and support of the Société Nationale de Musique (founded in 1871), they strove to establish a modern style of music exuding atmosphere above all, specifically a French atmosphere, “without sauerkraut.” Bizet provided a model in *Carmen*, where the orchestra takes on an expressive power born of transparency, lightness, fluidity, flexibility, and subtlety of color. Composers after him rarefied this manner to the extreme. One of the most striking passages in all of French music, for example, is that found at the end of the second movement of Saint-Saëns’s Violin Concerto no. 3 in B Minor. Against a lightly orchestrated, pastel background, the solo violin and a clarinet in its lower register whisper the same rising and falling arpeggio figures over a tonic pedal. Harmonics in the violin part give the passage a marvelous timbre, and when this is combined with the sound of the clarinet at the distance of two and sometimes three octaves below, the total effect is unforgettable.

No German composer could have conceived such a light, airy, atmospheric sonority, one that mixes instruments from different families so exquisitely. Indeed, most nineteenth-century German composers did not break away from the traditional method of orchestration established by their predecessors, wherein the string section is used as the core, with the woodwinds and especially the brass serving to provide support and add variety. As late as the 1840s their reliance on the strings was reflected even in the format in which they wrote out their scores: the violins appear at the top, above the winds. This is in contrast to the layout used today, which

became fairly well standardized in all countries except Germany by the end of the eighteenth century, wherein the instruments are arranged in the following order, from top to bottom: woodwinds, brass, percussion, strings.

Nationalistic composers in countries other than France also realized the usefulness of stressing not merely color in their works but local color. Spanish composers found popular folk dances and the sound and technique of guitar playing to be rich sources of inspiration. Their zarzuelas and guitar concertos, tone poems, and other symphonic pieces have a special flavor that derives in no small measure from their ability to translate these influences into orchestral terms. Russian composers, influenced by their own folk music and the special vocal quality cultivated by Russian basses, preferred orchestral textures in which the warm, virile tone color resulting from the massing together of the lowest-sounding instruments is contrasted with that “white,” icy timbre characteristic of the high woodwinds, especially the flute and piccolo.

Similarly, the uniqueness of Dvořák’s music can be attributed, in part, to certain features of his style of orchestration that reflect the characteristics of Czech folk music. These include the importance given to the woodwinds (especially the clarinet) and horns, often playing in thirds or sixths, with the traditional horn fifths; the light, transparent, outdoors quality; the occasional drones, melodic contours, and embellishments characteristic of bagpipe music; and the string writing, which occasionally takes on a gypsy flavor and is never as ponderous or consciously virtuosic as that of German or Austrian composers.

Most nationalistic composers found the orchestra as they knew it to be suitable for creating local color. Thus, instead of introducing bagpipes into their symphonic and operatic scores—for which a precedent already had been set by Lully, Boieldieu, and Meyerbeer—Dvořák, Smetana, and Janáček usually preferred to imitate their sound by using traditional orchestral instruments. Indeed, the basic conception of how an orchestra ought to be constituted remained remarkably unchanged throughout the nineteenth century, even though the many orchestras in Europe and America grew variously in size. Their “personalities” differed in subtle ways, according to the manner in which instruments were constructed or played and according to the sound ideal of each conductor. Several examples come immediately to mind. The tone quality produced by a Frenchman playing a narrow-bore French-made horn has always been strikingly different than that produced by a German using a wide-bore instrument. The French prefer a thinner, brighter, lighter, more “brassy” sound. French and Russian wind players have tended to use a considerable amount of vibrato, so that it is not diffi-

cult to distinguish the sound of their orchestras from German or Italian ones. As conductor of the court orchestra at Meiningen from 1880 to 1885, Hans von Bülow fashioned a distinctive sound quality and performance capability for that body by requiring all of his musicians to stand during performances and by insisting on the use of five-string basses, Hermann Ritter's larger *alta violas*, and pedal timpani.

#### COMPOSERS' RESPONSE TO CRITICISM

During the nineteenth century, music criticism became a significant force in the lives of composers and audiences. Beginning in 1808 with the musical columns written for the *Vossische Zeitung* in Berlin by J. C. F. Rellstab, general daily newspapers all over Europe devoted space to the musical arts. The reviews and informative feuilletons that appeared in their pages and in the several music journals served to educate an ever-growing number of amateur musicians and concertgoers. Even so, a gulf gradually developed between composers and lay audiences. Some composers—most notably Weber, E. T. A. Hoffmann, Schumann, Berlioz, Liszt, Wagner, Smetana, Hugo Wolf, and Tchaikovsky—turned to writing criticism themselves, as a means either of ensuring financial stability or of explaining their own artistic aims and gaining a following for them. It did not always help matters when Berlioz, Wagner, and Wolf, who were the most caustic among these composer-critics, regularly derided the public for its ignorance in musical matters and its lack of taste.

Berlioz was in turn bitterly attacked by P. Scudo, while Wagner and Wolf suffered under a torrent of criticism from Eduard Hanslick and Max Kalbeck. The exact nature or degree of influence that critics may have had on composers cannot always be ascertained, least of all with regard to the use and makeup of the orchestra. In Dvořák's case, we can feel reasonably certain that the pressure exerted on him by the highly influential music journal *Dalbor* played an important role in his artistic development, encouraging him to focus his patriotic fervor in specific directions. The ideas and aspirations of the Czech national revival took on an anti-German—and, in music, sometimes specifically anti-Wagnerian—stance, just as in France. When a few of Dvořák's vocal works were published outside of Bohemia by the German publisher Simrock with German texts and titles only, concern was expressed:

We must observe with regret that so far Dvořák has not shown enough consideration for our musical heritage and our public to provide for the printing of Czech texts and titles in addition to the German. We are con-

vinced—and it won't be long in coming—that the covetous Germans will be writing about our highly gifted Dvořák: "unser Dworzak"! If it matters to Dvořák to remain one of us—and we think it does matter—he should forestall any further unpleasant consequences while there still is time by vigorously standing up against the German publishers. (*Dalbor*, 2, no. 28 [1 October 1880], 222)

One of the "consequences" was that during the three months following this complaint nothing was published about Dvořák in *Dalbor*, whereas his name had previously appeared in almost every issue. Dvořák responded by notifying the editor in chief, Václav Juda Novotný, that henceforth he would make sure his vocal works were offered with the original Czech texts along with whatever translations were demanded. This experience must have made him even more determined in his resolve not to stray away from Slavic, and specifically Czech, subjects and to maintain the personal compositional style that he had developed during the 1870s.

Adverse opinions expressed not only publicly by Hanslick but also privately by such close friends as Hermann Levi, Franz and Joseph Schalk, and Ferdinand Löwe may have compelled Anton Bruckner to revise extensively many of his symphonies. We cannot fault him for being a perfectionist or for wishing to alter these works to suit a new and different conception of symphonic form, but it is difficult to understand why in some cases he allowed others to recompose entire passages and to perform them as authorized revisions. Most of these so-called corrections produce unfortunate results. They tend to obscure the clarity and brilliance of the original orchestration and fail to take into consideration that Bruckner's ideal of sound in the symphonies, which helps govern their formal design, grew out of his knowledge of the organ and the nature of its sound in a large cathedral.

In some cases, Bruckner himself made changes in orchestration and altered the internal proportions of his works to make them shorter, apparently in an effort to accommodate what he thought consumers of his music would prefer or be able to tolerate. In a tone conveying at once dejection and determination, he wrote to Felix Weingartner that he knew the original, longer version of the finale to his Eighth Symphony would ultimately be comprehended "only by a circle of friends and connoisseurs" (p. 130).

Like all creative artists, composers tend to be extremely self-critical, and Schumann presents a special case in point. With regard to matters of both form and orchestration in his large-scale symphonic pieces, Schumann initially felt incapable of surpassing the achievement of Schubert's Ninth Symphony (the *Great C-Major*); then, after suffering a mental breakdown,



he was motivated by a peculiar inner drive to rework some of his earlier compositions. Charles Rosen has argued for a number of years that Schumann tamed the first versions, smoothing over certain harmonic novel-  
ties, rhythmic complexities, and piquant turns of phrase, very likely because he feared that these features might be taken as indications of his insanity. Rosen has concentrated on the composer's piano works, but a careful study of the various versions of his orchestral compositions, especially the Symphony no. 4 in D Minor (begun in 1841 and revised in 1851), would doubtless yield interesting results as well.

Brahms knew intimately the artistic and technical problems that Schumann had tried to solve in his D-minor symphony. He owned the autograph of the 1841 version and prepared a critical edition of it. His own approach to symphonic composition was influenced to a large extent by Schumann. It is doubly significant that Brahms chose the key of D minor for his first effort at composing a symphony and that it eventually became a piano concerto (no. 1). He struggled in the same way as Schumann did, not only with questions of form and the treatment of melodic material but also with techniques of orchestration. He wisely refrained from writing another symphony until he had reconsidered the artistic problems involved and had gained experience in writing for the orchestra with such choral works as the *German Requiem*, *Rinaldo*, *Alto Rhapsody*, *Song of Destiny*, and *Song of Triumph*.

#### AESTHETIC CONSIDERATIONS

Still to be examined are the more weighty philosophical, artistic, and aesthetic considerations that may have led nineteenth-century composers—with perhaps the single exception of Chopin—to expend much of their energy in the composition of works for large instrumental forces. The intensity with which they devoted their attention to the orchestra cannot be explained merely as a response to public demand. Although average music lovers re-  
lished the bombastic festival overtures and solo concertos designed as vehicles for the display of virtuosity, their interest in new serious-minded concert works—secular or sacred—was much less than one would suspect judging from the large number of such compositions that were written.

The extreme popularity of opera and operetta provided a practical stimulus for composers to deal with the orchestra. But another important, less practical one seems to have impelled them to regard the orchestra in a special light: the prevailing conception of the “sublime” in music. In the *Dictionnaire des beaux-arts* (1806), Aubin Louis Millin's definition of the sublime as “the highest perfection of art” also included the idea that this art

must have a monumentality, a grandiose nature that should “excite powerful impressions within the soul” and that “is essential whenever intellectual activity is to be stimulated or curbed” (quoted in le Huray and Day, 294–296). Typical of romantic thought is the notion that the sublime never can be experienced in perfection, just as the ideal never can be attained, the ineffable never spoken, divinity never achieved. It is the struggle for these things that is of paramount importance; and the greater the effort expended, the greater the reward.

Romantic artists felt that the attempt to express the sublime ought to be effected with the grandest possible artistic gesture, as Gustav Schilling clearly stated in his *Universal-Lexikon der Tonkunst* (1835–1838): “For something to be sublime it must be on a large scale: large in itself, in its power or in its extent or shape” (quoted in le Huray and Day, 472–473). Operatic, liturgical, and symphonic forms grew to such monumental proportions that the participation of a massive orchestral entity was required. Conversely, large-scale performing forces somehow fostered grandiose artistic conceptions with expansive formal structures.

To properly complete the mystical, sublime world view that Wagner had envisioned in the first of the librettos he penned for the *Ring* cycle, *Götterdämmerung*, he found it necessary to create three more; and in the process of setting all four to music he assigned to the orchestra a new and expanded role and size. Mahler told Jan Sibelius and Natalie Bauer-Lechner on separate occasions that he considered each of his symphonies to be a world unto itself, embracing everything. For him such a vision clearly required vast architectural designs and a correspondingly large performing apparatus. Even the most modestly orchestrated of Mahler's symphonies, the Symphony no. 4 in G Major, calls for a sizable and ingeniously variegated ensemble that excludes the trombones but incorporates an English horn, an E-flat clarinet, an enlarged percussion section, a harp, and a soprano soloist.

It is indicative of the romantic conception of sublimity that to Robert Schumann, who “discovered” Schubert's *Great C-Major Symphony*, the most appealing feature of the work was its “heavenly length.” After hearing Mendelssohn conduct it with the Gewandhaus Orchestra in December 1839, he described it to Clara Wieck in the letter quoted below and in the following March published a very similar review in the *Neue Zeitschrift für Musik*:

Oh, Clara, I have been in paradise today! They played at the rehearsal a symphony of Franz Schubert's. . . . The instruments all sing like remarkably intelligent human voices, and the scoring is worthy of Beethoven. Then



the length, the heavenly length of it! It is a whole four-volume novel, longer than the choral symphony. I was supremely happy, and had nothing left to wish for, except that you were my wife, and that I could write such symphonies myself. (Walker, 279)

Schumann's reference to Beethoven and his Ninth Symphony introduces an interesting subject: the supposed challenge presented by the specter of that titanic artist to the next generation of composers. In his own lifetime and throughout the nineteenth century, Beethoven was viewed by writers, painters, sculptors, and musicians alike as one of the most imposing artistic figures of all time, and his works were considered achievements of almost unsurpassable perfection and power. The greatest compliment one could pay to a composer would be to describe him as the "successor to Beethoven." But even Schumann recognized the folly of thinking that all subsequent musical developments should—or even could—grow out of Beethoven's achievements. In his own case, the works of Schubert had greater impact. This also is true of Brahms, who, in any event, was slow to approach the composition of symphonies as a natural consequence of his own artistic development, not because he was in awe of the shadow cast by the figure of Beethoven. As regards achievements that could spawn new developments in orchestral writing, the fact remains that Beethoven did not bequeath as much to romantic composers as Haydn and Mozart had bequeathed to him.

Yet a few specific instances can be cited in which composers drew heavily from Beethoven's works, especially from the Ninth Symphony—in what example, the opening movement of Bruckner's Third Symphony—in what ever version—bears a remarkable likeness to the Ninth's first movement. It is in D minor and unfolds with what might be called the same dramatic contrasts. These include the placement of and means of achieving climaxes, sudden contrapuntal complexities, and the use of extreme dynamic contrasts, and the den harmonic shifts, and striking changes of timbre. The overall formal design, which incorporates a characteristically weighty coda, and the breadth of its scope likewise strike one as being very Beethovenian. Other common features are the long-sustained pedals, the undulating *ostinato* accompaniment figures, and the "unison" statements of the first principal subject. It is also noteworthy that Bruckner placed the scherzo movements of his Eighth and (unfinished) Ninth Symphonies in second (not third) place within four-movement schemes and that the figure that begins the Eighth is very similar rhythmically to the opening motif of Beethoven's Ninth Symphony. Finally, it may not have been mere coincidence that Bruckner

again returned to the key of D minor for his last symphony.

Perhaps the most significant responses to Beethoven's Ninth Symphony resulted from composers' attempts to come to terms with the aesthetic questions posed by the inclusion of voices in its last movement. Liszt's *Faust* Symphony and *Dante* Symphony both have choral finales, and Berlioz and Mahler incorporated vocal parts in a number of their symphonic compositions. But Beethoven's work also had an impact outside the realm of the symphony. It was reinterpreted, in a sense, by many romantic artists to suit their own aesthetic interests. The primary concern for them was the matter of the relationship of music to the other arts, especially to literature. Berlioz, Wagner, Mendelssohn, and E. T. A. Hoffmann, among others, felt that Beethoven had reached a point where a new liaison should be established between purely instrumental music and, ideally, all of the other arts, or, at least, between it and poetry.

Wagner attempted to solve the aesthetic problems presented by the notion of art-synthesis within the realm of opera, while Berlioz worked within the framework of the symphony; yet both composers considered the orchestra to be an extremely important tool for the realization of their artistic aims. Taking as his starting point what he thought constituted Greek tragedy, Wagner imagined a new kind of opera that would be an all-embracing, universal work of art (*Gesamtkunstwerk*, a term first coined by Hoffmann). In such essays as "Art and Revolution," "The Artwork of the Future," and "Beethoven," and in *Opera and Drama*, Wagner argued that the perfect work of art is drama in which all the arts—primarily poetry (speech), dance and mime (gesture), and music (tone), but also painting and architecture—are combined in such a way that the result has greater scope and expressive power than any one of its constituent arts taken singly. In this way "deeds of Music" are "brought to sight," as he wrote in "On the Name 'Musikdrama'" (5: 303).

Wagner conceived his music dramas in terms of the operatic stage, but since his compositional methods were firmly rooted in the German symphonic tradition, it was only natural for him to assign a special role to the orchestra. The musical means by which he was able to create a new world within opera included the systematic use of leitmotifs found principally in the instrumental parts and the manipulation of an enlarged performance apparatus to produce new textures and colors. In addition, partly in keeping with his ideas concerning the relationship of word and tone—to some degree in response to Beethoven's Ninth—and partly from his love for experimenting with timbres, Wagner added the human voice to his orchestral mass of sound. There are passages in his last music dramas, especially in *Tristan und*



*Isolde*, where words serve merely as vehicles by which the singers add color to the orchestral texture, by which they can become drowned in oceans of harmony, to use Wagner's own metaphor.

Berlioz's conception of an all-embracing work of art seems to have been based on the fundamental premise that visual action presented on the stage can be replaced by action envisioned in the mind's eye—by imagination. This imagination must be guided in its course in two ways: by the knowledge and thorough understanding of either a program appended to the work or the literary sources upon which it is based; and by the music itself, which has phenomenally expressive, even pictorial, capabilities. Thus, the compositions that best reflect Berlioz's notion of art-synthesis are not his operas but those to which he applied, significantly enough, such descriptive terms as *légende dramatique*, *monodrama lyrique*, *symphonie dramatique*, or *épisode (de la vie . . .)*. These include *Roméo et Juliette*, *Symphonie fantastique* and *Lélio*, and *La damnation de Faust*. Here again the apparent disparity between a composer's fundamental compositional style and his aesthetic aims presents an interesting paradox. Berlioz's muse was strongly rooted in the Gallic vocal tradition, yet he worked toward a new symphonic conception.

Mendelssohn, Liszt, Tchaikovsky, Smetana, Dvořák, Mussorgsky, and Richard Strauss, among others, also added extramusical connotations to some of their purely instrumental works by appending programmatic titles or literary descriptions to them or, in the case of Mussorgsky's *Pictures at an Exhibition*, references to pictorial art. In addition, many composers wrote incidental music for plays. These extramusical sources frequently inspired them to treat the orchestra in new ways. Mendelssohn's *Hebrides Overture*, for example, is awash with a vibrant, uniquely colorful splash of sound. The "special effects" that Strauss concocted to explicitly depict Don Quixote's escapades with a herd of sheep or with a windmill (Strauss devised a wind machine to suit the purpose) are only isolated examples of his brilliant use of an entity that, by the end of the nineteenth century, had become a veritable color machine.

It was, of course, against such attempts to be strictly pictorial that a composer like Erik Satie reacted by giving humorously absurd titles to his own works or by quipping—even though he knew Debussy's intentions were otherwise—that the most impressive part of "De l'aube à midi sur la mer" ("From Dawn to Noon at Sea," the first movement of *La Mer*) is the section at a quarter to eleven o'clock. Yet Satie himself composed programmatic music with perfectly serious intentions and in his own way was also a colorist in search of new ways of creating atmosphere. In his ballet *Parade* (1917), for example, he was able to make the orchestra speak as a represen-

tative of the mechanistic world about him, using not only traditional orchestral instruments but also typewriters, steamship whistles, and sirens. Such works belong to an age beyond the scope of this essay, but it is necessary to stress that, with regard to both the aesthetic and technical considerations pertaining to the use of the orchestra, they owe more to developments which took place during the nineteenth century than is generally assumed. To cite two final examples, Schoenberg's use of the orchestra as a vast palette of colors in the *Gurrelieder* or his treatment of a smaller group in the *Five Pieces for Orchestra*, Opus 15, would have been unthinkable without the *Symphonie fantastique*, Tasso, *Das Rheingold*, the *Tragic Overture*, Dvořák's *Carnival Overture*, or Debussy's *Nocturnes*.

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## ORCHESTRAL TEXTURE AND THE ART OF ORCHESTRATION



R. Larry Todd

The modern symphony orchestra developed from the instrumental ensembles standardized in the middle of the eighteenth century. The fine details of this evolution still elude the grasp of scholars and will probably remain unresolved, but the idea that the Mannheim symphonists were the first to experiment with the gradation of orchestral dynamics at least may be put to rest; that technique appeared earlier, in the operas of Niccolò Jommelli from the 1740s and in Rameau's *Hippolyte et Aricie* of 1733. But other questions remain. At what point did composers adopt clarinets into the woodwind group, and when did they align the section into its customary pairings of instruments? How early did stopped horn notes appear in the orchestra? When exactly did the four-part string texture of early classical scores expand to five parts? These questions admit of no easy answers. But the general development of the orchestra from its modest origins to the institution we know today is more or less clear. Once the basic principles of contrasting and combined groups of wind and string instruments had been established, the inevitable process of experimentation with, and expansion of, orchestral resources—still continuing today—could begin.

As steady and irreversible as that process has been for more than two centuries, recognition of orchestration—the study of instruments and their use to create distinctive orchestral textures—as a discipline came relatively late. To be sure, instrumentation manuals began to appear with some frequency in the second half of the eighteenth century, especially in France, as detailed by Bartenstein (1971). The improvement of some wind instruments and the adoption of others encouraged the flow of new manuals to assist musicians eager to learn how to write for winds, among them Valentin Roeser's *Essai d'instruction à l'usage de ceux qui composent pour la*