

THE TWENTIETH CENTURY AND THE ORCHESTRA AS MUSEUM



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The orchestral music of the twentieth century is distinguished by an unprecedented diversity in aesthetic, style, and technique, ranging from the familiar to the bizarre, from imitation of ancient styles to experimentation with new resources, and from immediately accessible pieces to compositions of unrivaled complexity. Yet beneath the varied surface of modern music lies a hidden unity. Composers as different as Schoenberg and Sibelius share not a common musical language but a, common problem and common strategies for solving it, and, the diversity of their music is itself a necessary part of their response.

The principal fact with which composers of our century have been confronted in writing for the orchestra is the retrospective nature of the orchestral repertoire. Even before Brahms had written his First Symphony, the orchestra had been transformed from an operatic accompanist and a courtly amusement into a museum for the display of great works of art from the past. The orchestral music of Haydn and Mozart was ephemeral when it was written, each symphony, overture, or concerto receiving very few performances over a brief period. Yet by the middle of the nineteenth century that same music had been revived and granted immortality among the first "classics" of the orchestral repertoire. Once the concept of classical music was established, in analogy to the classics of literature or the visual arts, the music of composers other than Haydn, Mozart, and Beethoven was gradually added to the canon. This included not only the more recent music of Schubert, Mendelssohn, and the first generation of romantic composers but also the older music of Bach and his contemporaries and predecessors. "New" music began entering the classical repertoire on two fronts: living composers sought to add their own music to it, and music historians sought

to revive the forgotten music of past generations.

Composers in the late nineteenth century and throughout the twentieth century have aspired to the same immortality for their music. In their quest to achieve it, they have had to compete with the music of the past for performances and for the affection of players and listeners. It is a contest in which the reigning champions have an overwhelming advantage, for the orchestral repertoire is very crowded and the classics have enormous prestige. It is in this struggle with the great music of the past that modern orchestral music has been shaped and formed.

THE ORCHESTRA AS A MUSEUM OF ART

The modern concert hall may be likened to a museum, where natural wonders or man-made artifacts are taken from their native habitats and mounted for display to an admiring and curious public. Taking an item out of its context and placing it in a museum changes our perception of it, as Marcel Duchamp demonstrated in 1913 when he chose a factory-made bicycle wheel at random from among hundreds like it, set it on a pedestal, titled it *Bicycle Wheel*, and exhibited it as a work of art. It is no longer available to be used but only to be looked at; indeed, we are forced to pay attention to it in a way we would not have when it was part of our everyday environment. The armor, costumes, musical instruments, furniture, and home furnishings in the Metropolitan Museum of Art in New York have similarly been mounted for display as objects to be admired, making it impossible for them to serve their original functions. Often the pieces least suited to a practical function—the ornate ceremonial armor appropriate for parades but too heavy for war, or the Frank Lloyd Wright chairs whose beauty is matched by the discomfort they cause the sitter—become the most admired in the museum. The aesthetic side of these objects, which was in most cases a secondary concern in their creation, is now primary. Enshrined in an art museum, they have become art.

The same is true in the realm of music. In the modern concert hall, the “classical” music we hear has been taken out of the context for which it was created, stripped of its original purposes, and fitted out with new ones. For instance, Bach’s *St. Matthew Passion*, while still a piece of religious music, is no longer liturgical. It plays no part in religious ceremonies, is rarely performed by small church choirs like the one for which it was written, and is no longer presented only on Good Friday, the one day of the church year for which it is liturgically appropriate. Instead, it is now performed year-round by large amateur and professional ensembles and is heard not by

congregations at religious services but by concert audiences. It has shed its original function to adopt new ones, offering amateur singers a chance to sing with others, offering an aesthetic rather than a religious experience to the listener, and offering performers and listeners alike a chance to touch and be touched by an artwork that has become one of the defining icons of European civilization. It no longer offers the experience shared by its first hearers, and in a sense it is no longer the same piece of music; it cannot be, for we are different people with very different expectations of it.

The standards of the concert hall, like those of other museums, are at odds with the standards of everyday life. Bicycle wheels work better when they are not attached to pedestals; comfortable chairs are not designed just for their looks; the most serviceable church music is brief and simple in comparison to Bach’s *St. Matthew Passion*. In the art museum, we are concerned not with practicality but with aesthetics: we approach the art before us with attentive concentration, and we evaluate each work according to how richly it rewards us for our trouble. The best concert music repays that concentration not only once but again and again, no matter how frequently we rehear it and no matter how intently we study it. Clearly, most of the music written in any age will not stand up to such intense concentration.

Success in the orchestral museum demands qualities different from those needed for success in other spheres. This is music that is not merely entertaining, not merely spectacular, and not associated with any particular ritual, except perhaps the social rituals of concertgoing. Museum music is music as pure art, art for its own sake. In the concert-hall museum, no matter how many others may be in the room, each of us encounters the music alone, seeking an individual aesthetic experience. The museum intensifies our experience of a work of art, visual or musical, by directing all our attention to it, away from ourselves and our fellow viewers or listeners. The museum is a place in which we take our art very seriously indeed.

THE ORCHESTRAL MUSEUM AS A PATRON OF NEW MUSIC

While all museums preserve the past, not all cultivate the new. Some record and preserve a tradition without seeking to augment it. Zoos keep animals of all kinds, including endangered species, but do not attempt to evolve new species; natural history museums do not create new kinds of rocks or plants. Folk ensembles in southeastern Europe preserve the music, dances, costumes, and other folk arts of peasant cultures that have essentially been destroyed, where the rituals that gave meaning to those arts have largely disappeared. Similar ensembles in Western Europe and America seek to revive

the music, dance, and related arts of Europe from the eleventh through the nineteenth centuries, reconstructing their sound and style as faithfully as possible. While such ensembles inevitably change the tradition they seek to preserve, they would no more invent new pieces than lexicographers would invent new words. Other museums, such as museums of science and technology, record change but do not themselves promote it; for example, London's Toy Museum preserves toys from many countries and eras, including new ones, but the new toys are developed for the marketplace, not for the museum. Again, there are parallel institutions for music: the Smithsonian Institution, for instance, supports festivals and recordings that preserve American folk and popular music just as it is, documenting its changes as well as reviving forms of popular music from earlier eras.

Art museums are different, and the orchestra is a kind of art museum. Although usually arranged on historical lines, art museums are fundamentally ahistorical. Aesthetic experiences are personal and immediate, encountered in the present moment; they have no history, although they may be shaped by a person's previous experience. The history of an artwork interests us precisely because the work of art is not simply an historical artifact but a living one. We learn about Rembrandt not because his life interests us but because his work interests us, and we believe that knowing the facts of his life or the manner of his brushstroke may help us understand his art. Similarly, in the concert hall, we enter into the music we hear with complete concentration on the aesthetic experience. We may know when and why it was created and first played, but its history concerns us only as a way to refine our expectations of the work and its performance: we expect certain things of Beethoven, others of Bach, still others of Wagner, and we can prepare ourselves for pieces we have never heard and for the music of composers we do not know by placing them in the framework of the familiar. Other than as preparation for hearing the music, a piece's history really does not matter. We are there to experience the piece for its own sake, and no amount of historical interest can compensate for a work's lack of aesthetic appeal.

By their very nature as collections of living artifacts divorced from their original historical contexts, art museums encourage the production of new works to hang on their walls next to the masterpieces of other eras. Art museums, therefore, not only preserve a tradition, but promote and influence it. Indeed, just as the folk arts of Macedonia emerged from a particular culture, art museums themselves form a culture for the creation of new art, art with no other purpose than to be displayed in a museum alongside other art, providing the stimulus for new individual aesthetic experiences.

As a kind of art museum, the modern orchestra invites the creation of new music, but of course on its own terms. New music for orchestra must behave like music that is already in the repertoire, meeting the expectations of performers and audiences for orchestral music just as a new work in any other tradition must meet the expectations of the culture that produces it. In one sense, this is no different from the situation in past centuries, for the music in the current repertoire has always influenced the shape of new orchestral music. What is different now is that such an overwhelming proportion of the music is decades or even centuries old. A composer in the eighteenth century, like a Tin Pan Alley songwriter in the early twentieth century or a rock band in the 1960s, wrote for a market with a constant thirst for novelty, and old pieces fell out of the repertoire as quickly as new pieces came along to replace them. But in the modern orchestral market, it is the old pieces that constitute the repertoire, and new works cannot hope to replace them, only to join them. The core of the repertoire changes slowly, if at all; the last major body of work added to the canon was the Mahler symphonies, which were finally admitted into full partnership only half a century after their composition. Only peripheral works leave the repertoire, and the newest entries, whether newly written or just revived, remain the most peripheral. Competition for acceptance into the repertoire has intensified with each generation over the past century and a half, until the chance of a new orchestral work joining the permanent repertoire seems very remote indeed.

The slow progress of much modern music in establishing itself in the repertoire cannot simply be attributed to the number and quality of the works already there. What is expected of modern orchestral music has become so difficult to achieve that the museum curators and the musical public no longer agree on which new pieces belong in the repertoire or even on the criteria for making choices.

THE PROBLEM OF COMPOSING FOR THE MUSEUM

If it is to find a place in the museum's permanent collection, new orchestral music must meet the expectations of performers, audiences, and critics for how orchestral music should act, as defined by how music in the existing repertoire does act. This presents the composer with an interesting but sometimes contradictory set of demands: lasting value, links to tradition, individuality, and familiarity.

By definition, the classical repertoire consists of "classics," pieces of lasting value that withstand repeated rehearsals. The more central a work is

to the repertoire, the more often it is performed. The most successful pieces, such as the symphonies of Beethoven, still offer fresh rewards long after they have become familiar. Many compositions fail this test: purely functional works, like Beethoven's German dances, often have little interest as concert music; occasional pieces, such as Beethoven's cantatas on the death of Emperor Joseph II and the accession of Leopold II, are usually as ephemeral as the occasions they celebrate; and pieces such as Beethoven's *Wellington's Victory*, in which superficial razzle-dazzle masks an almost complete absence of content, quickly lose their charm and can survive only as curiosities. These compositions receive occasional modern performances not because of their own merit but simply because they are by a composer whose symphonies, sonatas, and string quartets have become a central part of the classical repertoire. While they contributed to Beethoven's critical and financial success during his lifetime, they add little or nothing to his status in the museum, because they have little enduring value in their own right.

Thus, the first and most important problem confronting the composer who seeks a place for his compositions in the orchestral repertoire is to create musical works of lasting value, works that reward many and frequent rehearsals and so have the capacity to become classics. As we will see, judging which pieces meet this criterion is a matter of no little difficulty.

Not every "classic" is part of the museum repertoire. There is no denying that *La Marsellaise*, *Dixie*, *The Stars and Stripes Forever*, the score to the film *Citizen Kane*, and *Sgt. Pepper's Lonely Hearts Club Band* are all classics of their genres, musical works of lasting value that stand up to repeated rehearsals, but they are not considered to be classical music. The classical repertoire is not just music that is of enduring value or is old but "art music" as the museum defines it. Any candidate for admission to the repertoire, no matter what its age or origin, must be recognizably part of the tradition of Western art music. Recent utilitarian and popular music is normally excluded. This is ironic, for many pieces that were originally utilitarian or part of popular culture, from medieval dances through the operas of Verdi, have been included in the collection and now form part of the tradition of art music; only popular and functional music of more recent vintage seems to be beyond the pale.

The need for a new work to demonstrate links with the classical tradition tends to exclude not only new popular music but also art music that seems too radically innovative. To its first hearers, much of the music of Schoenberg and Webern seemed to have nothing whatsoever in common with the Bach, Beethoven, and Brahms to which they were accustomed and thus was not recognizably a part of the tradition of Western music at all. The

composers countered with lectures and articles designed to prove how intimately their music was linked with the past and how logically it resulted from past developments in the history of music. In order to establish their credibility as candidates for acceptance into the classical repertoire, these composers had to demonstrate what their music shared with the music that was already familiar to performers and audiences, taking to lectures and articles when the musical relationships that were so obvious to them were not recognized by the musical public.

Thus, the second important problem confronting the composer of new orchestral music is to demonstrate how his music is like the music already in the repertoire. When this is not readily apparent in the music itself, composers and their disciples resort to polemic. This is one reason that so many modern composers take to print in words as well as in notes.

The requirement that new music recognizably take part in the tradition of classical music limits the freedom of contemporary composers, but it is balanced by a corresponding limit on the other side. New music cannot be too similar to music that is already in the repertoire, or it will be ignored. Why listen to an imitator of Beethoven when we can hear Beethoven? New music must be both traditional and innovative, like the music of the past, yet different from it—a neat and not altogether simple conundrum.

Indeed, one of the most remarkable traits of works that have entered the permanent repertoire is that each composer's music, and to a certain extent each piece, is seen as distinctly individual. In the concert-hall museum, it is common for music from all periods to be presented side by side, stripped of the social functions and historical contexts that gave rise to the differences between Vivaldi and Beethoven, Haydn and Schumann, or even Handel and Bach, and all that seems to distinguish one composer from another is musical style. All of the music in the repertoire now serves as concert music, experienced in the same ways by the same audiences, and the stylistic variety from one work to the next is a source of pleasure. The great composers are esteemed for the strength of their personalities, and their most distinctive music is the most highly prized. If new music is to compete with theirs, it must have an equally distinctive personality.

Thus, a composer of new music for the orchestral museum must find a distinctive personal style that sets his music apart and makes it recognizably his own. Each generation of modern composers has responded by reproducing the diversity of the existing repertoire in their own time, creating music that sounds as different from that of their contemporaries as does the music of composers writing in very different eras. Indeed, the music of Scriabin, Reger, Rachmaninoff, Schoenberg, Ives, Ravel, Falla, Ruggles, and

Dohnányi, all born between 1872 and 1877, is as diverse in style and technique as was the entire orchestral tradition at the time they were born. The variety of styles has multiplied with each succeeding generation of composers, until the very concept of style no longer seems useful for comparing one composer's work with another. The resulting absence of stylistic consensus among modern composers makes the twentieth century unlike any previous period in Western art music and unlike any other tradition among the musical cultures of the world.

The problem of familiarity is the hardest to solve. The classical music that is already in the repertoire is, by definition, familiar and well loved. Even when we hear a piece of classical music from the eighteenth or nineteenth century for the first time, we are likely to know other works by the same composer or by his better-known contemporaries, so we will at least be already acquainted with the style. But new music is by definition as unfamiliar as classical music from those centuries is familiar, and when composers must stake out an individual style in order to distinguish themselves from their predecessors and contemporaries, the style they adopt may be unlike any idiom we know. The more unfamiliar a piece is in style, sound, and aesthetic, the more likely it will be difficult for listeners to understand and enjoy on first hearing; the less enjoyable or comprehensible a work is on first hearing, the less likely it will receive the repeated hearings that will allow it to become familiar and well loved. The stylistic diversity of twentieth-century music exacerbates the problem, for our familiarity with one modern composer's work will as likely confuse us as help us in approaching the work of another. Knowing the music of Steve Reich, for instance, is no preparation for encountering an orchestral work by Elliott Carter for the first time. As a result, learning how to listen to modern classical music is much harder than learning how to approach the music of any other era; ironically, the very distinctiveness the museum demands of each composer makes it more difficult for modern music as a whole to appeal to a wide audience. Knowing other kinds of contemporary music is also of little help, for the strong links that once united art music, dance music, popular song, and musical theater have been broken. Only slowly, as the sounds and textures of modern classical music find their way into music for films and television, does this isolation begin to break down.

To compete with the familiar and beloved classics on their own ground, new compositions must be in some respect familiar and lovable, making use of well-known musical styles and gestures and speaking in a language that listeners can understand. While this places obvious limits on a composer's novelty and individuality, it also provides a creative tension between the

familiar and the unique that can be one of the greatest pleasures of classical music, particularly since the mid-nineteenth century. The tension between immediate appeal and lasting value tends to be harder to calculate; if the balance is not right, a piece may enjoy brief success before disappearing into oblivion, or may find an enduring but tiny cadre of enthusiasts.

CRITERIA FOR SUCCESS

These four demands are challenging enough in themselves, but what makes the task of the modern composer so formidable is that there is no clear-cut method of determining if they have been successfully met. When composers sought to please a patron, to make money, or to achieve immediate popularity, they knew soon after their music was performed whether they had succeeded. Although each new piece was a gamble, they could learn from past successes and failures. Their experience of what pleased and what sold allowed them to predict what would succeed in the future, and they could shape their new music accordingly.

Modern composers have no such control over their success. Their expectations of immortality, by definition, cannot be realized in their lifetimes. They cannot learn from their own past successes in achieving lasting value and cannot apply their experience to their own new compositions. The entire corpus of music they compose is a gamble whose result they will not know.

Unable to predict their future success from their own experience, modern composers have turned to the experience of past composers for guidance. Unfortunately, the historical record only demonstrates the unpredictability of fame. The selection of pieces for the permanent repertoire has been somewhat capricious, depending not only on intrinsic quality, for which there are no agreed criteria, but also on concert politics, publicity, influence, and accident: Franz Schubert, Gustav Mahler, and Charles Ives might be as obscure today as Cipriani Potter, Franz Schreker, and Leo Ornstein, had not later generations of critics, composers, conductors, and performers enthusiastically promoted their music.

Some of the great composers in the current repertoire, including Handel, Haydn, Beethoven, and Verdi, achieved great fame and popular success in their own lifetimes. Some modern composers, from Richard Strauss to Philip Glass, have likewise sought and gained a wide audience in their own time, hoping that current popularity might predict lasting acceptance—though they are well aware from the examples of Dittersdorf, Salieri, Hummel, Spohr, Raut, and countless other once-famous composers that contemporary

renown is no guarantee of immortality. Other great composers, from Bach to Mahler, had relatively modest reputations as composers during their lifetimes and found a wide audience only after their deaths, largely through the efforts of a few committed partisans. Recognizing that popularity can be ephemeral, most prominent modern composers have opted for this second path to immortality, seeking to write music that, whatever its appeal or lack of appeal to a wide audience, will be rich enough to attract a small coterie of disciples devoted to keeping it alive. While not exactly proclaiming unpopularity as a virtue in new music, these composers make clear that it is no vice; meanwhile, by making their music rich enough to attract the devoted fans who will (they hope) become its advocates, they virtually guarantee that many listeners will find it impenetrable.

The measure of success for new music becomes not its popularity, which becomes irrelevant, or its immortality, which composers cannot know, but its intrinsic value. But there are no universally accepted criteria for intrinsic value in a piece of music. Indeed, the very notion of intrinsic value in music is philosophically suspect, for artworks no less than other human artifacts acquire value because of their usefulness and attractiveness to human beings; their value is instrumental, not intrinsic, but based on the experience they occasion. The only way to evaluate new music is to compare it directly to the great music already in the repertoire, whose high value is universally accepted, and demonstrate that it exhibits to a high degree the same qualities that are valued in the classical masterpieces—what-ever qualities the critic, composer, or listener may esteem. A modern composer naturally seeks to exemplify in his music the qualities he finds most precious in the music he admires. In a way, he becomes the sole judge of his own success.

EMULATION AND PROGRESS

The four demands delineated above—lasting value, links to tradition, individuality, and familiarity—would not be so difficult to meet and the criteria for success would not be so vague if the repertoire of Western classical music were not so heterogeneous. Creators in other musical traditions, such as jazz, bluegrass, or the classical musics of Asia, work within a prevailing style; familiarity and links to tradition are assured by their materials, and they achieve individuality through their distinctive approaches to the general style. The same was true of European composers in the eighteenth and early nineteenth centuries, who wrote music in the prevailing styles of their own eras for audiences who knew little of the music of earlier generations. But

the repertoire of European classical music, by definition, has no common style. It is not a unified body of work from a single artistic tradition, like the classical music of Persia or the genre painting of the Netherlands. Instead, like the works displayed in an art museum, it is a collection of works created over the course of several centuries by artists in many regions representing many different styles and approaches. Verdi's music has much less in common with Vivaldi's than it does with the popular music of its own day, yet both are considered classical music, as is music in countless other styles from different eras, nations, and composers. In this respect, Western classical music is unique among musical cultures, creating unique problems for its composers. There is no prevailing style on which the modern composer can put his stamp. Instead, there are many different styles, each so closely identified with a composer, school, or period that none is immediately available to a contemporary composer who wishes to write original music. The originality that the master composers achieved through innovation within the common style of their own time can be achieved by the modern composer only through other means.

What holds the classical repertoire together despite its extreme diversity of style and origin is the notion that the pieces in it are the products of a single evolutionary process and represent individual stages of this process. While this interpretation is very much open to question, it has proven to be an idea of tremendous power, serving to organize the history of Western classical music into a coherent pattern, providing a rationale for the coexistence of music from many different periods within a single repertoire and suggesting to younger, historically-self-conscious composers what their place in the panorama of music history might be.

In the early years of the conscious formation of the classical repertoire, it fell to the new field of music history to rationalize the collection, to explain what all those very different pieces from very different eras had in common and in what sense, despite radical disparities of sound, style, and aesthetic, they were all part of one tradition. Nineteenth-century music historians offered varying accounts, but most shared the themes of autonomy and progress. First, music was seen as an art or science developing on its own principles, shaped by fundamental laws of nature and aesthetics. Thus, its history could be studied as an autonomous stream, independent of political or intellectual currents, and with little concern for music's social functions, except as they imposed limitations on the freedom of music in any age to fulfill its innate destiny. This view of music history corresponded to (and perhaps helped to establish) the new function of musical compositions as autonomous artworks to be admired for their own sake. Second, the idea

that music developed independently of wider historical forces raised the question of why it should change at all, and the notion of progress provided the explanation. The history of music was conceived as the development over time of musical techniques and aesthetics to a point of perfection, variously placed in the present, recent past, or future, and each great composer took his place in a long chain of influence, learning from the example of his forbears, refining and improving their techniques and introducing new ones, and serving as a model for those who followed. According to this view, music evolved like a scientific discipline: new techniques were seen less as inventions than as discoveries, as if there were one true way to write music that was gradually revealed through the contributions of individual composers. In such a view, innovation itself was part of a composer's greatness, if his discoveries were valid extensions of the known laws of music (determined in part by whether they were adopted by other composers); at the same time, past discoveries continued to be valued and were synthesized with the new, guaranteeing the continuity of the tradition.

Composers of new music for the museum, as well-informed students of their art and its history, naturally thought of themselves in similar historical terms. They took older composers as their models—not as past composers had actually lived and worked, writing constant streams of ephemeral music for immediate use, but as the museum and its curators had reconstructed them. Since the history of music was seen essentially as a history of musical styles and procedures, composers considered themselves to be making a contribution to the technical and stylistic progress of music, a task requiring not only the creation of a unique personal idiom but also the discovery of new devices in order to match the greatness of past innovators.

Considered in these terms, the solution to the problem of composing for the musical museum was readily apparent: a new composition must take its substance from the classical tradition while adding something new, combining emulation of the past with progress toward the future. Certainly, dependence on any one classical style would result in music with too little of its own character to be successful. But since the entire tradition was available to be emulated, sounds, techniques, and textures from different eras could be synthesized in a new work, linking it to the past without making it sound like any music ever heard before. In juxtaposing old elements in new ways and developing new techniques based on old procedures, composers wrote music that was at once traditional and innovative, classical in aspiration and inspiration yet wholly individual. Emulation and progress were not antithetical but were two sides of the same coin.

SOMETHING OLD, SOMETHING NEW

Arnold Schoenberg was the quintessential modernist, knowledgeable about past music, self-conscious about his relationship to it, and obsessed with his position in music history. His music exhibits this blend of emulation and progress in a characteristically extreme fashion. He made clear in his writings that for him the great music of the past was great precisely because it was new:

There is no great work of art which does not convey a new message to humanity; there is no great artist who fails in this respect. This is the code of honor of all the great in art, and consequently in all great works of the great we will find that newness which never perishes, whether it be of Josquin des Prés, of Bach or Haydn, or of any other great master.

Because: Art means New Art. (pp. 114–115; emphasis in original)

Thus, for Schoenberg, the very newness of his music was, paradoxically, part of his emulation of the classical masters. Yet despite its newness Schoenberg considered his music to be intimately linked to the German tradition in aesthetic and technique. He regarded the German classical masters from Bach to Reger as his mentors and claimed to have written “truly new music which, being based on tradition, is destined to become tradition” (p. 174).

Schoenberg's solutions to the problem of writing music that was like the music of the classical masters yet different from it were ingenious and are characteristic of modern composers in general. His orchestral music may be divided into three groups, each exhibiting a different strategy in this regard: (1) in terms of technique, by extending procedures derived from earlier music to new extremes; (2) in terms of structure and shape, by creating pieces whose substance entirely depends upon nontraditional techniques (usually derived through extension from earlier procedures yet which establish strong analogies to classical models at every level from surface gestures to core structural principles and overall form; and (3) in terms of style, by borrowing not only structural devices and formal patterns but even stylistic clichés or actual compositions from the past and overlaying them with recognizably modern stylistic traits. Naturally, these three strategies are not mutually exclusive, nor are they limited to Schoenberg. Indeed, they are the most common strategies modern composers have utilized in their reconciliation of tradition with innovation and they underlie a great deal of the orchestral music of the twentieth century. Thus, they merit examination in some detail, both in Schoenberg's own music and in the works of other composers.

The tonal orchestral works of Schoenberg's first period—*Verklärte Nacht* for string sextet (1902, arranged for string orchestra in 1917), the symphonic poem *Pelleas und Melisande* (1905), and the two *Chamber Symphonies* (no. 1, 1907, arranged for full orchestra in 1922 and 1935; no. 2, begun 1906 and finished 1939)—and the *Five Pieces for Orchestra* (1912), the sole orchestral work from his free atonal period, are highly individual works that take to new extremes traits common in earlier music: complexity of counterpoint; saturation of the texture with thematic and motivic material; constant variation of ideas; inequality of phrase lengths; displacement of rhythmic patterns and accents; novel instrumental sounds and techniques; use of timbre to highlight motivic relationships or as a means of organization in its own right; and, in general, a severe economy of means in pursuit of a rich network of relationships. None of these originated with Schoenberg, and he carefully attributes them to his “teachers” in the German classical tradition. His dependence on these techniques makes his music like that of the past, yet his music sounds very different from his models; indeed, these links to the past become more abstract and less immediately audible as Schoenberg's music develops and as he takes these common traits to their logical extremes.

In this process of intensifying common elements of the nineteenth-century tradition, Schoenberg is typical of his generation. The music of the early twentieth century is very diverse, but it is paradoxically united in the common themes of extremism and idiosyncrasy. The hour-long second movement of Mahler's Eighth Symphony (1910) and the fifteen-second-long fourth movement of Webern's *Five Pieces for Orchestra*, Opus 10 (written 1913, premiered 1926) are examples not of contradictory trends within music but of the same trend toward extremes. Nor is the hothouse chromaticism of Richard Strauss's operas *Salome* (1905) and *Elektra* (1909) contradicted by the smooth tonality of his *Der Rosenkavalier* (1911); even in the earlier operas, blistering dissonance alternates with blissful diatonicism, as Strauss portrays emotional extremes through the most extreme contrasts tonal harmony can offer. The tone poems of Debussy and Scriabin and the early ballets of Stravinsky extend the search of Berlioz, Rimsky-Korsakov, Mussorgsky, and Wagner for new musical and orchestral resources to the point that the very structure of pieces like Debussy's *La Mer* (1905) and Stravinsky's *Rite of Spring* (1913) depends as much on new scales, new chord types, new means of establishing pitch centers, and orchestration and timbre as structural devices as on more traditional motivic and tonal organization. All of these composers extend and exaggerate traits common to classical music, serving to make their own work innovative and distinctive while linking it intimately to the existing repertoire.

The same chemistry has worked for later generations, who have responded as often to their modernist predecessors as to the older classical heritage. The sound-masses of Edgard Varèse derive in part from the static or slowly changing blocks of sound in much of Debussy and in Stravinsky's *Rite of Spring*, but in works like *Intégrales* (1925) and *Arcana* (1927) he attains a monumentality wholly unlike his models. Since World War II, composers for orchestra such as György Ligeti (as in *Atmosphères*, 1961) and Krzysztof Penderecki (as in *Threnody for the Victims of Hiroshima*, 1960) have blended orchestral effects inspired by electronic music with the tradition of novel timbres built upon the pioneering work of the early modernists. In his *Variations for Orchestra* (1956), *Double Concerto for Harpsichord and Piano with Two Chamber Orchestras* (1961), *Piano Concerto* (1967), and *Concerto for Orchestra* (1970), Elliott Carter simultaneously reached back to classical genres and entirely transformed them in terms of a modern language that synthesizes the achievements of Schoenberg, Stravinsky, Ives, and Varèse in the realms of pitch, rhythm, and texture with his own contributions: gradual changes of meter and tempo, forms based on cycles and slow processes of evolution, and a personal vocabulary of expressive gestures. Like Schoenberg, each of these composers bases his innovations on the innovations of the past; their progressivism is predicated on their emulation of the classical masters and finds its meaning solely in terms of the classical tradition.

Schoenberg's second solution for reconciling new ideas with old models can be seen in his development, around 1921, of the twelve-tone system and its use in his orchestral works: *Variations for Orchestra*, Opus 31 (1928), *Accompaniment to a Cinematographic Scene*, Opus 34 (1930), the *Violin Concerto* (1940), and the *Piano Concerto*, Opus 42 (1942). The fusion of old and new in these works is in one sense obvious: using the new twelve-tone language, Schoenberg re-creates the familiar tonal genres of variations, film or program music, and the concerto. While the substance of his music is entirely new, its surface has all the expected gestures of romantic music, including shifting moods, dramatic climaxes cadenzas and virtuosic passages, and classical forms. Some references are even more specific: his orchestral variations resemble those of Brahms in their sharp contrasts of style, tempo, and figuration, and his *Piano Concerto* gathers four movements into one unbroken stream, harking back to both Brahms's Second *Piano Concerto*, which is the only major piano concerto in four movements, and to Liszt's First *Piano Concerto*, whose three movements are played without pause, whose middle movement is really two (*adagio* and *scherzo*), and whose final movement recapitulates the concerto's opening theme, as does Schoenberg's finale.

But Schoenberg's reinterpretation of the past extends far beyond traditional forms and gestures to permeate his use of the twelve-tone technique as well. Schoenberg pairs each transposition of the original form of a tone-row with a transposition of the inverted form, whose hexachords are complementary (that is, the last six notes of either form are the same as the first six of the other, but in a different order). Together with their retrogrades, each such pair uniquely defines a tonal field, just as the diatonic chords in a key uniquely define that key, and there are twelve possible transpositions of this twelve-tone complex, just as there are twelve major and minor keys. The theme of the Variations uses two such related rows and their retrogrades and is stated in its original transposition in all but one of the variations; this consistency holds Schoenberg's twelve-tone variations together in the same way consistency of key unifies tonal variation sets. In other twelve-tone works, Schoenberg made explicit the analogy between his tonal fields and the keys of the tonal system in various ways: by using only rows from one transposition at a time, just as tonal music is in one key at a time; by changing transpositions, just as tonal music changes keys; by treating one transposition as a "tonic" associated with major structural events, such as statements of the principal theme and the beginning and end of the work; by establishing transpositions of secondary importance for the presentation of thematic material, in analogy to the secondary key areas in classical forms; and by restricting his use of some transpositions to transitional passages, just as classical tonal works may touch many keys briefly but emphasize only a few. Using this analogy, Schoenberg could reproduce the flexible structure of his tonal models in every respect, including not only rhythm, phrasing, and gesture but also tonal polarities and the expectation of tonal resolution. Here, the observation that the new in Schoenberg's music is part of his emulation of the past is quite literally true.

Schoenberg's development of the twelve-tone system has been one of the most influential innovations in modern music, precisely because it offers a system as flexible and complete as tonality itself. As might be expected of an era that requires individuality for success, every major composer who has adopted twelve-tone procedures has used them in an entirely personal way. Berg's approach in his second opera, *Lulu* (written 1929–1935), and his Violin Concerto (1936) accommodates tonal effects within the twelve-tone system by including triads, scale segments, and diatonic melodic elements in his rows. Moreover, both of these pieces, like Berg's non-twelve-tone opera *Wozzeck* (1925), refer constantly to earlier models in their use of stereotyped melodic and rhythmic gestures and archetypal forms from the music of the eighteenth and nineteenth centuries. Webern's music is condensed and

self-reflective where Berg's is expansive. Webern's twelve-tone works, including the Symphony, Opus 21 (1929), Concerto for Nine Instruments (1935), and Variations for Orchestra (1940), while laid out in classical forms such as sonata, rondo, and variations, are full of canons and palindromes, their rows and themes based on manipulations of small melodic cells in a concentration of ideas that Webern learned from studying Renaissance music, notably that of Heinrich Isaac.

Since World War II, composers such as Milton Babbitt, Pierre Boulez, and Karlheinz Stockhausen have shunned direct references to the past in favor of further systematization, extending the twelve-tone system to include serial organization of rhythm, timbre, and dynamics. Their music is deeply influenced by the history of the musical language yet is entirely novel in structure and sound—and, of course, wholly unlike. In a way, these composers have applied Schoenberg's first strategy, that of intensifying existing procedures, to serialism, a product of his second strategy. Some younger serial composers have returned to classical forms; Charles Wuorinen, for instance, has written symphonies, two piano concertos, concerto for amplified violin and orchestra, several concertos for soloist and chamber ensemble, and other works in classical genres. The variety of music produced using some facet of serial procedures can be gauged by comparing the music of Roger Sessions, Luigi Dallapiccola, Nikos Skalkottas, Elizabeth Lutyens, Humphrey Searle, Bruno Maderna, and Luigi Nono with that of each other and of the composers already named; even among these composers, there is no prevailing "style," only individual idioms shaped by their common heritage.

Other composers, while not adopting serialism, have evolved theoretical systems of comparable rigor and flexibility for their own music. Paul Hindemith opposed the twelve-tone system as being unnatural, creating as an alternative a harmonic language based on simple diatonic intervals and on tonal relationships derived from the overtone series. Olivier Messiaen's music exploits systematic melodic modes, bird calls rhythmic patterns adapted from Hindu theory, and chords and chord progressions based on the upper partials of the harmonic series, to achieve a distinctive idiom. In the music of Iannis Xenakis, large gestures are built up from the accumulation of many small events determined through mathematical models, particularly probability theory. In their efforts to create modern analogues to the tonal system, these and other composers demonstrate their conviction that new systems are necessary if new music is to match the classical masterworks in logic, power, originality, and comprehensibility.

Schoenberg's third solution to the problem of creating music that is like the music of the classical masters yet different from it is, in a sense, the most

radical and ingenious of the three. In his Concerto for Cello and Orchestra in D Major (1933), freely adapted from a harpsichord concerto by the Viennese composer Matthias Georg Monn, and his Concerto for String Quartet and Orchestra in B-flat Major (1933), freely adapted from the Concerto Grosso, Opus 6, no. 7, of Handel, Schoenberg reshaped his models into works that could only be Schoenberg's, marked on every page by his distinctive signatures: special effects in the solo strings such as harmonics, tremolos, mutings, bowing on the bridge or with the wood, and a varied vocabulary of articulations; use of orchestration and added pitches to emphasize motivic relationships; rhythmic displacements; enhanced counterpoint; and a complex network of musical ideas overlaid on the simple structure of his models. This music is obviously like eighteenth-century music because it takes its very fabric from the past and because composers of that era, notably Handel, also indulged in such free reworkings. Yet, at the same time, it is wholly modern; Schoenberg does not borrow from the past but rather possesses it, obliterating the earlier composer's personality with his own.

Stravinsky earlier had accomplished the same feat in his ballet scores *Pulcinella* (1920), based on music attributed to Pergolesi, and *The Fairy's Kiss* (1928), based on songs and piano pieces by Tchaikovsky. Stravinsky changed his models as little as necessary to accommodate his distinctive style of ostinatos, superimposed layers of sound, dry and percussive writing for strings and winds, diatonic harmonies other than triads, "wrong" notes and offbeat accents, and textures that alternate with and interrupt each other without transition. Webern's 1935 orchestration of the *Ricercare* from Bach's *Musical Offering* is even more restrained; without changing a note, Webern puts his own stamp on the piece by redistributing each entrance of the fugal subject among several instruments in ways exactly analogous to the canonic entrances in his own concerto and symphony, producing the *Klangfarbenmelodie* ("melody of tone colors") that is so typical of Webern and so untypical of Bach and highlighting motivic relationships, latent in the original, of the sort that underlie Webern's own music.

In contrast to Webern's restraint, Paul Hindemith's *Symphonic Metamorphoses of Themes by Carl Maria von Weber* (1944) is even freer than Schoenberg's reworkings but demonstrates a remarkable reconciliation with the earlier composer's style. Lukas Foss's *Baroque Variations* (1967, on pieces by Handel, Domenico Scarlatti, and Bach), the third movement of Luciano Berio's *Sinfonia* (1968, based on the third movement of Mahler's Second Symphony), Mauricio Kagel's *Variationen ohne Fuge* (Variations Without Fugue, 1972, on Brahms's *Variations and Fugue on a Theme by Handel*), and Hans Werner Henze's *Il Vitellino raddoppiato* (1977, on the

chaconne for violin and *continuo* attributed to Tomaso Vitali) are all highly individual reworkings in the same vein, transforming their models by addition, omission, reordering, and superposition. Henze's piece, in which he inserts one or two original variations after each of Vitali's, is a perfect metaphor for the work of the modern composer, who spins variations on the classical tradition, setting his contribution beside that of his predecessors, aiming not to displace them but only to join them in the repertoire, asking of his audience an understanding of how his new music reflects the past. The metaphor is also ironic: modern orchestral music is often played in the middle of concert programs, sandwiched between warhorses, so audiences must sit through it, however unwillingly.

None of these compositions are typical of their composers—one can get away with this sort of thing only once or twice. But evocations of archaic styles are extremely common in modern music, ranging from Prokofiev's imitation of Haydn in his *Classical Symphony* (1918) and Hindemith's resurrection of the forms, gestures, and aesthetic of Bach's *Brandenburg Concertos* in his *Kammermusik* series (1922–1928) to Hugo Distler's choral music modeled after that of the baroque composer Heinrich Schütz and Carl Orff's neomedieval *Carmina Burana* (1937) and neocantique *Catulli carmina* (1943) for voices and orchestra. Indeed, neoclassicism, broadly defined as the revival of sounds, techniques, and stylistic features identified with pre-romantic music, has been more influential in twentieth-century composition than any other movement. It is so important because it provides such flexible solutions to the demands of the museum: links to the past are obvious, yet composers may choose their models from many different eras, and the combination of style traits from past music with a composer's own idiosyncrasies is almost guaranteed to create music unlike any heard before, freshening the clichés of each era through their juxtaposition. Neoclassicism resolved the dilemma of the modern composer as surely as did the twelve-tone system, and while not as obviously novel in its musical language, had the undeniable advantage of speaking to a much wider audience in a language it could understand.

For Stravinsky, neoclassicism solved a double problem, for he had to compete over his long career not only with the masterpieces of earlier generations but also with his own early success. He won his reputation with the three ballets that are still by far his most popular works, *The Firebird* (1910), *Petushka* (1911), and *The Rite of Spring*. In the last of these Stravinsky established a dry, rhythmically obsessive style that was to give all his later music a distinctive signature. Faced with the problem of writing new music without repeating himself, Stravinsky turned to the past for renewal,

beginning with *Pulcinella*. The result of his “collaboration” with Pergolesi was quite different from its models, clearly Stravinskian and yet very different from his own earlier music. Most of his later music depends on the same principle of integrating his personal style with another to which it is essentially alien, whether that be Bach’s *Brandenburgs* in the *Dumbarton Oaks* Concerto (1938), the symphonic idiom of Haydn and Beethoven in the Symphony in C (1940), the operatic Mozart in *The Rake’s Progress* (1951), medieval music in his *Cantata* (1952), or popular styles in his *Tango* (1941), *Circus Polka* (1944), and *Ebony* Concerto (1946) for clarinetist and jazz band. Even Stravinsky’s adoption in his last period of the structural principles of serialism, after the deaths of Schoenberg and Webern had made that most modern of procedures in a sense an artifact of another age, may be seen in this light.

Other composers have also sought to renew classical music by infusing it with ideas from other traditions. In general, their music is classical in its fundamental techniques and aesthetics, extending common procedures of the past, and it absorbs from other traditions primarily surface features of style. Jazz has been a frequent source of new ideas, not only for Stravinsky but also for Darius Milhaud in his ballet *La création du monde* (1923) and many later works, George Gershwin’s *Rhapsody in Blue* (1924) and his other “classical” pieces, Leonard Bernstein’s *The Age of Anxiety* (Symphony no. 2 for piano and orchestra, 1949), and many others. Asian music has been an important influence on American composers such as Colin McPhee, Lou Harrison, and Harry Partch and, of course, on Asian composers working in the Western tradition, such as Japanese composers Toru Takemitsu and Toshio Mayuzumi.

Both Béla Bartók and Charles Ives achieved a distinctive and successful synthesis of the classical tradition with another. Neither was a “folkloristic” composer, smoothing out folk materials to fit classical forms and harmonies; instead, the two traditions are fully integrated without compromising the integrity of either. Bartók synthesized his classical heritage with peasant music from southeastern Europe and Turkey by emphasizing both the points of contact, including pitch centers, scalar melodies, motivic repetition and variation, and phrase structure, and the elements from each tradition that make it most distinct from the other: from classical music, elaborate contrapuntal and formal procedures like fugue and sonata; from peasant music, modal scales, ornamentation, dissonance, folk instruments or imitations of their timbres, and complex meters and rhythms. In his late orchestral music, such as *Music for Strings, Percussion, and Celesta* (1937) and Concerto for Orchestra (1944), the modality and complex rhythms of peasant music and

the forms of classical music are so completely abstracted from their sources that the music sounds little like folk music and nothing like that of any other classical composer.

In *Three Places in New England* (written 1903–1914, premiered 1931), the *Holidays Symphony* (written 1904–1913), the *Orchestral Set no. 2* (1915), and the Fourth Symphony (written 1909–1916, premiered 1965) Ives devised novel forms, based on the traditional classical procedures of variation and development, that use American tunes as their source material. The tunes are more often paraphrased than quoted, never left unchanged, often transformed beyond recognition; the last movement of *Three Places in New England*, for instance, spins a long melody of ravishing beauty out of a simple gospel hymn tune that is never stated in its original form. Even if one recognizes none of the tunes, this music sounds distinctly American because of its melodic sources; even if one recognizes none of the common procedures of European art music that are its foundation, this music could be nothing but classical concert music.

The music of Bartók and Ives is important not only because it blends the classical tradition with another, although that is an important part of its appeal, but also because these composers solved in unique ways the same compositional problems as Schoenberg, Debussy, and Stravinsky, extending the heritage of nineteenth-century art music to new extremes. Neither Bartók nor Ives founded a national school or spawned successful imitators, despite the renewal of the classical tradition that their music represents, but the intense originality and individuality that has made their music impossible to imitate has won it success in the modern concert-hall museum.

A few composers have attacked the problems posed by the concert-hall museum by refusing to play the game. Their most prominent spokesman is John Cage, who has suggested that contemporary music is and ought to be “adding to the disorder that characterizes life (if it is opposed to art) rather than adding to the order stabilized truth beauty and power that characterize a masterpiece (if it is opposed to life)” (p. 46). Pieces created through chance operations, like Cage’s *Music of Changes* (1951) for piano, certainly do not express the personality of the composer, as museum pieces are expected to do. Indeterminate pieces, like Cage’s Concert for Piano and Orchestra (1958), can hardly become classics, because they are different at each performance; in this work, the number of players, the coordination of parts, which pages are played and in which order, and even how the notation is to be translated into sound are all left to the performers to determine. This is music that is purposeless, which is not to say it is useless: Cage intends it to open our ears to the purposeless and beautiful sounds around us, to extend

our aesthetic sensibilities beyond the picture frame and beyond the museum walls to embrace everything we experience. Cage's vision of music embodies both the good-natured anarchism of everyday life and the discipline and cooperation that for him are the hallmarks of the ideal society. His is perhaps the most thorough and consistent philosophical challenge the museum of classical music has faced since its inception.

THE PROBLEM OF POPULARITY

The most "modern" of modern composers, from the twelve-tone Schoenberg to the neoclassic Stravinsky, have solved the conundrum of writing musical works of lasting value for display in the orchestral museum by posing the question primarily in terms of musical technique. Their music is indeed of lasting value, at once richly traditional and remarkably novel and individual, rewarding many rehearsals and thorough study of their scores. These are the composers favored by historians committed to a music history in which progress in musical technique is the overarching theme, by critics concerned with the new and unique, by theorists interested in the complex development of musical language, and by connoisseurs who can follow the elaborate commentary on the past that forms the core of modern music. These are the composers who figure most prominently in the textbooks and critical literature on modern music. And these are the composers whose music audiences tend, with a few exceptions, rather not to like.

The conundrum of creating musical works of great and lasting value is not to be solved only on the safe ground of musical technique. What made the music of Haydn, Mozart, and Beethoven so popular in its day and keeps it popular still was not its techniques *per se* but its double appeal, to the musically learned for its structure and intelligence and to the general audience for its tunefulness and emotional expressivity. These two groups unite in endorsing Bach, Beethoven, and Brahms as great composers but for different reasons, and the success of modern composers in winning over the musical elite is no guarantee that audiences will join the chorus of praise, now or in the future. The lay listener demands different things of the music he loves, and much modern music fails to provide them. For the mass audience of classical music lovers, Schoenberg's twelve-tone music is not tuneful, Stravinsky's neoclassical music is not expressive, and most of the modern music that the critical establishment most deeply respects is too unfamiliar and confusing to be heard as beautiful, melodic, or moving.

For these listeners, another group of twentieth-century composers for orchestra is far more important than the composers mentioned thus far.

These composers are equally modern in outlook, although not so novel in sound; like other composers of their time, they recognize that to compete with the classical masters, they must write distinctive music of lasting value that continues and yet renews the tradition, and they aspire to a place in the permanent repertoire. But these composers are more aware than their somewhat elitist peers of the importance of speaking in a language listeners understand. They write music in which the layman's values of tunefulness and expressivity are paramount. Theirs is the music of the modern romantics, composers who are considered conservative in style and are often associated with national schools: Puccini, Respighi, Sibelius, Nielsen, Rachmaninoff, Shostakovich, Kabalevsky, Khachaturian, Delius, Vaughan Williams, Holst, Britten, Bloch, Copland, Barber, and many others. The music of these composers has demonstrated not only immediate appeal but also a remarkable staying power. This cannot be because the concert audience cannot tell schlock from substance; it must be, instead, that there are indeed new things to be said in the classical vernacular. If anything, it is more difficult to speak with an individual voice in the common language of tonal romanticism than in an idiosyncratic style, and the great tonal composers of the century have been as concerned with establishing their distinctive musical personality as their peers. They write in a conservative tradition of concertos, symphonies, ballets, and tone poems, and in that tradition their works have a character all their own. If the music of twentieth-century tonal composers were to fall out of the repertoire, something distinctive and irreplaceable would be lost, as sure a test of success in the museum as there is.

In the long run, perhaps the most enduring modern music will be that of composers who have appealed to both the learned and the mass audience, such as Mahler, Debussy, and the young Stravinsky. Like Haydn, Mozart, and Beethoven, these composers appeal to these two competing constituencies on very different grounds, combining the complexity, depth, and novelty expected by the connoisseur with the tunefulness, expressivity, traditionalism, and immediate appeal expected by the average listener. It is not an easy juggling act, but even today it is not impossible, as demonstrated by the recent successes of David Del Tredici, Steve Reich, and Philip Glass. It remains to be seen whether the concert audience will become as enamored of Schoenberg, Webern, Carter, and the modernist mainstream as is the critical establishment. It may yet happen; the most obvious difficulties of dissonance and unusual sounds have diminished over time, and orchestras and audiences are seeking a more varied repertoire. But if lay listeners embrace the modern masters, they will do so on their own terms.

BIBLIOGRAPHY

- Adorno, Theodor W. *Philosophie der neuen Musik* (rev. ed., 1972), translated by Anne G. Mitchell and Wesley V. Blomster as *Philosophy of Modern Music* (1973).
 Adorno, Reinhold Brinkmann, ed., *Die neue Musik und die Tradition* (1978).
 J. Peter Burkholder, "Brahms and Twentieth-Century Classical Music," *Nineteenth-Century Music*, 8 (1984); and "Museum Pieces: The Historicist Mainstream in Music of the Last Hundred Years," *Journal of Musicology*, 2 (1983).
 Cage, John, "Silence (1961)," *Michael Kowalski*, "The Exhaustion of Western Art Music," *Perspectives of New Music*, 21 (1982-1983).
 Ernst Křenek, "Tradition in Perspective," *Perspectives of New Music*, 1, no. 1 (1962).
 Lipman, Samuel, *Music After Modernism* (1979).
 Leonard B. Meyer, "Innovation, Choice, and the History of Music," *Critical Inquiry*, 9 (1983).
 Robert P. Morgan, "Secret Languages: The Roots of Musical Modernism," *Critical Inquiry*, 10 (1984).
 Parakilas, James, "Classical Music as Popular Music," *Journal of Musicology*, 3 (1984).
 Henry Pleasants, *The Agony of Modern Music* (1955).
 Hans-Peter Reinecke, *Das musikalisch Neue und die neue Musik* (1969).
 John Rockwell, *All American Music: Composition in the Late Twentieth Century* (1983).
 Schoenberg, Arnold, *Style and Idea*, Leonard Stein, ed. (1975).
 Stephan, Rudolf, et al., *Zwischen Tradition und Fortschritt. Über das musikalische Geschichts-bewusstsein* (1973).
 Treitler, Leo, "The Present as History," *Perspectives of New Music*, 7, no. 2 (1969).
 Webern, Anton, *Der Weg zur neuen Musik*, Willi Reich, ed. (1960), translated by Leo Black as *The Path to the New Music* (1963).

MUSICOLOGY AND THE RISE OF THE INDEPENDENT ORCHESTRA



Jon W. Finson

The science of music [musicology] is coeval with the art of music," Glen Haydon once asserted (p. 4), and the interaction between the orchestra in its various guises and modern musicology provides a particularly good case in point. The beginnings of musicology in its modern manifestation are usually traced to the period around 1600, when the great systematic treatises by men like Michael Praetorius, Marin Mersenne, and Pietro Cerone appeared. Though these authors contributed very little directly to the formation of the autonomous orchestra as we now know it, their interest in organology helped to lay the foundation for the modern ensemble and deserves at least brief mention here. The orchestra that dominates modern musical life in so many western European cultural centers is more intimately connected with historical musicology. Musical scholars of the late eighteenth and nineteenth centuries heavily influenced the concept of the symphony orchestra and its literature. As musicological activity became increasingly centered in academic institutions during the twentieth century, the discipline assumed another, advisory role in the life of orchestral institutions. Throughout all of these changes, however, musicology has consistently taken part in the structure of Western instrumental music.

THEORETICAL ROOTS

That many of the early printed musicological treatises deal at great length with instruments may seem merely the result of their authors' relentless encyclopedic intent. Cerone in *El melopeo y maestro* (1613), Praetorius in *De organographia* (1618), Mersenne in *Harmonie universelle* (1635-1636), and Kircher in *Musurgia universalis* (1650) discuss instruments known only