THE FUTURE OF THE SYMPHONY ORCHESTRA
BASED UPON ITS HISTORICAL DEVELOPMENT

DOCTOR OF MUSICAL ARTS DOCUMENT

Presented in Partial Fulfillment of the Requirements for
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in the Graduate School of The Ohio State University

By

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* * * * *

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Music Theory
Symphony Orchestra
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INTRODUCTION

The symphony orchestra is like an organism and like any organism, it undergoes change. Some changes are beneficial, and some are not. Positive change contributes to the life or the health of the organism, such as in the case of a developing fetus. Negative change detracts from or points to a lessening of the life of the organism, such as the detrimental alterations in the human body caused by cancer. Experimental change, in which different paths or possibilities are explored, is positive if the experimental process or its results add to the health of the organism. While an organism can give the appearance that no change is taking place, in reality, change may be occurring but at a very slow and imperceptible rate. In many cases, this change is negative.

It is also possible for an external force to cause a dramatic increase in the rate of change or even to alter the type of change taking place. An example of this would be the theory that a meteorite struck the earth and created alterations in the atmosphere that ultimately led to the early demise of the dinosaurs. Identifying the type of change can aid one in predicting the future of an organism or an organization, but one must keep in mind that external forces and events can alter those predictions.
In order to predict the future of the orchestra in the United States, one must look at the type of changes within the orchestra that have taken place in the past and that are occurring at the present time. Positive change can be seen in the replacement and the addition of instruments to the orchestra, a change initiated by the composer. Experimental change can be seen in the evolution of orchestral seating patterns. An example of an organization that appears to be in a state of no change can be seen in the orchestra of the last forty years. Financing the orchestra has always been that external force which has the potential for creating a dramatic change within the orchestra or even for leading to its downfall. By examining this information, one can make a reasonable prediction as to the future of the symphony orchestra in the United States.
CHAPTER I
CHANGES IN INSTRUMENTATION

The orchestra has historically undergone many changes in instrumentation. Before the eighteenth century, the orchestra was characterized by a variety of instrumentations. Ensemble groups in the sixteenth century were consorts of like instruments or mixed consorts consisting of a combination of viols, recorders, and lutes. While sixteenth-century ensembles tended to be very small by modern orchestral standards, there is an early instance of an orchestra in 1581 with the *Balet comique de la Royne*, which used doubled strings.\(^1\) One of the earliest attempts at a large group of diverse instruments was made by Monteverdi in 1607. His orchestra for the opera *Orfeo* consisted of thirty-seven players.\(^2\) Unlike the small ensembles usually found in the Renaissance, the orchestra of *Orfeo* was larger and more diverse. It consisted of two violins, ten violi, three bass violi, two double-bass viols, one recorder, one high trumpet, three "soft" trumpets, two cornetts, four trombones, timpani, two harpsichords, two organs with wooden pipes, one regal, one harp, and two

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bass lutes.\textsuperscript{3} The Twenty-four Violons du Roi of Louis XIII of 1626, discussed by Mersenne in his \textit{Harmonie universelle}, was a five-part ensemble made up of six violins, six cellos, four \textit{haute-contres}, four \textit{tailles}, and four \textit{quintes}.\textsuperscript{4} The \textit{haute-contres, tailles, and quintes} are thought to have been violas of different sizes.\textsuperscript{5} Throughout the seventeenth century, the modern concept of orchestras playing strictly orchestral literature did not exist as such. With the growth of opera in the seventeenth century, however, there was a corresponding growth of the orchestras used in conjunction with opera. The only constant factor in these groups was the utilization of string instruments, although the number of parts could vary from three to possibly five, toward the end of the century. Instruments such as trumpets and percussion were employed when the opera called for fanfares or for a martial-type of music.

A common instrumentation for an orchestra at the beginning of the eighteenth century was violins, violas, cello, keyboard continuo, a pair of oboes and a pair of horns. Other instruments were variously found such as recorder, flute, oboe d'amore, bassoon, and trumpet. The beginning of the eighteenth century also saw the inclusion of the double bass into many orchestral groups. The double bass was used in the court and opera orchestras of Paris as early as 1701.\textsuperscript{6}

\textsuperscript{3} Apel, \textit{Harvard}, 605.
\textsuperscript{4} Westrup, \textit{Orchestra}, 679.
\textsuperscript{5} Westrup, \textit{Orchestra}, 679.
\textsuperscript{6} Westrup, \textit{Orchestra}, 679.
Like their predecessors, orchestras in the middle of the eighteenth century varied in size and instrumentation from place to place. This can be seen by examining Table 1.

Table 1. Comparison of size and composition for selected orchestras. Adapted from Westrup, *Orchestra*, 690.

<table>
<thead>
<tr>
<th>Year</th>
<th>Orchestra/Location</th>
<th>Violins</th>
<th>Violas</th>
<th>Cello(s)</th>
<th>Double Basses</th>
<th>Viols</th>
<th>Flutes</th>
<th>Oboes</th>
<th>Clarinets</th>
<th>Bassoons</th>
<th>Horns</th>
<th>Trumpets/Cornets</th>
<th>Trombones</th>
<th>Tuba</th>
<th>Timpani/Percussion</th>
<th>Keyboard</th>
<th>Plucked Strings</th>
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<tbody>
<tr>
<td>1751</td>
<td>Paris Opera</td>
<td>16</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>11</td>
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<tr>
<td>1754</td>
<td>Court Orchestra, Berlin</td>
<td>12</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>4</td>
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<tr>
<td>1756</td>
<td>Court Orchestra, Mannheim</td>
<td>20</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>1770's</td>
<td>Court Orchestra, Mannheim</td>
<td>20</td>
<td>4</td>
<td>4</td>
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<tr>
<td>1783</td>
<td>Court Orchestra, Esterháza</td>
<td>10</td>
<td>2</td>
<td>2</td>
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<td>2</td>
<td>2</td>
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<tr>
<td>1791</td>
<td>London Concerts, Haydn</td>
<td>16</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>1814</td>
<td>Teatro alla Scala, Milan</td>
<td>25</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
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<td>1</td>
<td>2</td>
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<tr>
<td>1839</td>
<td>Gewandhaus Orchestra, Leipzig</td>
<td>17</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>1865</td>
<td>Gewandhaus Orchestra, Leipzig</td>
<td>30</td>
<td>8</td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
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<td>3</td>
<td>1</td>
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<tr>
<td>1876</td>
<td>Bayreuth Festspielhaus</td>
<td>32</td>
<td>12</td>
<td>12</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>8</td>
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<td>4</td>
<td>1</td>
<td>4</td>
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<td></td>
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<tr>
<td>1895</td>
<td>Till Eulenspeigel</td>
<td>32</td>
<td>12</td>
<td>12</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
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As is evident in Table 1, the nineteenth century continued to see the expansion of the orchestra in both number of instruments and types of instruments. The string section was increased numerically over typical string sections of the eighteenth century. Compare the figures for the Leipzig Gewandhaus, for example, for 1839 and 1865. (Table 1). Composers by the end of the nineteenth century asked for a much larger orchestra than was commonly used one hundred years before. *Till Eulenspeigel* (1895) by Richard Strauss was typical for the era in that it required a very large orchestra for its performance.

While the orchestra of the nineteenth century was characterized by growth in both numbers and types of instruments used, the twentieth century has seen little expansion within the orchestra. There have been technical improvements to the instruments themselves, but no new instruments have been added to the string, woodwind, and brass sections. The only section of the orchestra that has seen additions in this century is the percussion section. Latin American and other exotic percussion instruments have found their way into the orchestra. An instrument new to the twentieth century, the vibraphone,
has also been added to the percussion section. Other new instruments and technologies, however, have not been included.

Technological improvements of the instruments have led to changes within the orchestra. The Hotteterre and Chédeville families of the late seventeenth century produced the Baroque flute, the recorder, the oboe, and the bassoon by redesigning Renaissance instruments. During this same time period, the viols were replaced by the newer violins because of the better sound projection of the violin. The recorder eventually gave up its position in the orchestra to the flute because the sound of the recorder proved to be too weak for the emerging orchestra. A perfect case of replacement due to technology is the introduction of the tuba to the orchestra. The orchestra of the early nineteenth century was searching for an adequate bass instrument for the brass section. Instruments such as the serpent, the ophicleide, and the Russian bassoon were employed with less than perfect results. With the invention of the tuba around 1835, the parts written previously for these instruments were now performed on the tuba.

In the nineteenth century technological improvements of existing orchestral instruments changed their capabilities and sometimes even their roles in the orchestra. Improvements made upon the string instruments allowed for a greater tension on the strings. This increased tension in conjunction with the Tourte bow in approximately 1786\(^7\) permitted a more brilliant tone quality as well as a greater volume of sound.\(^8\) In the nineteenth century, Theobald Böhm

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\(^8\) Westrup, *Orchestra*, 683.
aided the cause of woodwind instruments with a system in which he put the
finger holes in the proper acoustical position and yet still fit them to the hand.
With the Böhm system and better key mechanisms, the flute, oboe, and clarinet,
consequently, were able to take a more soloistic role in the nineteenth-century
orchestra. The brass instruments became more prominent in the orchestra with
the addition of rotary or piston valves, which enabled them to become more
effective chromatic instruments. While these changes allowed for a greater
flexibility on the part of the composer and the performer, they were not always
uniformly accepted. Performers accustomed to playing a particular instrument
many times balked at learning a different type of instrument or even an
improved version of the same instrument. Keyed bugles and crooked horns
were used long after the invention of valves.

While it is evident that the orchestra in the past has undergone many
changes in instrumentation, it is important to note that these changes usually
were initiated by the composer. Since the last part of the sixteenth century,
composers have designated which instruments should perform their
compositions. Giovanni Gabrieli was one of the first to specify parts for specific
instruments. His Symphoniae Sacrae of 1597 were written with certain
instruments in mind. The Consort Lessons of Thomas Morley in 1599 were
designated for lute, bandora, cittern, two viols, and flute. With the ability to
specify what instruments should perform a particular piece, the composer
consequently had the ability to introduce new instruments into the orchestra.
The transverse flute was introduced by Lully in his ballet, the Triomphe d'amour
of 1681.\(^9\) While the oboe first appeared in the 1660’s, one of its first uses was in the opera, *Pomone*, by Cambert in 1671.\(^10\) Although the trombone had been used in the orchestra of the opera long before, it was introduced to the symphony orchestra by Beethoven in his *Fifth Symphony*. The piccolo and the contrabassoon also appeared for the first time in the symphony orchestra in this composition. One of the first uses of the valve trumpet was in *Waverly* by Berlioz and in *William Tell* by Rossini.\(^11\) Wagner introduced the bass tuba in *The Flying Dutchman* and the contrabass tuba in *Das Rheingold*.\(^12\) Tchaikovsky employed the newly-invented celesta for the first time in *The Nutcracker*. As can be seen, composers are the primary initiators of instrumental change within the orchestra.

The motivation for requiring new instruments and even new instrumental techniques is the composer’s attempt to discover the new sounds that enable the composer to express what he or she wants to express. The introduction of the piccolo and the contrabassoon into the symphony orchestra by Beethoven appears to have been an attempt to expand the pitch range of the orchestra, the woodwind section in particular. Wagner caused new instruments to be

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invented, such as the bass trumpet and the Wagner tuba, not to increase the volume of the orchestra but to add to the range of sounds and timbres. Composers have even re-introduced instruments into the orchestra in order to achieve a different tone color. The oboe d'amore, although utilized by J. S. Bach, fell out of use by the end of the eighteenth century.\textsuperscript{13} The instrument was revived in 1884 by Charles Mahillon in order to create authentic performances of the music of Bach.\textsuperscript{14} Richard Strauss introduced the oboe d'amore to the modern orchestra in 1904 in his \textit{Symphonia domestica}. The basset horn, which is thought to have originated in the 1760's,\textsuperscript{15} was used by Mozart in his \textit{Requiem} and by Beethoven in \textit{Prometheus}. Even though this instrument died out as an orchestral instrument in the middle of the nineteenth century, Richard Strauss revived the basset horn by writing for it in \textit{Elektra}.

Monteverdi, besides asking for a large and diverse orchestra in \textit{Orfeo}, also introduced the idea of pizzicato and measured tremolo in his \textit{Il combattimento di Tancredi e Clorinda} of 1624.\textsuperscript{16} Lully, who was a major influence in the efforts of the Hottetere and Chédeville families, was one of the first to call for the use of mechanical mutes for strings in \textit{Armide et Renard} of 1686.\textsuperscript{17} The first employment of muted trumpets is thought to have occurred in

\begin{flushleft}
\textsuperscript{13} Bate, \textit{Oboe}, II, 800.
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\textsuperscript{14} Bate, \textit{Oboe}, II, 800.
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\textsuperscript{17} Read, \textit{Orchestration}, 18.
\end{flushleft}
the opera, Der geduldige Socrates, by Telemann in 1721. Notated string harmonics premiered in Tom Jones by Philidor in 1765. Rameau was one of the first composers to use pizzicato chords and bowed arpeggiation. Richard Strauss called for the first tuba mute in Don Quixote. It is interesting to note that many new instruments and new techniques were found first in the orchestra of the opera before they were discovered in the symphony orchestra.

It is not enough that an instrument is introduced by a composer, however, since that particular instrument must be employed by other composers in order to attain a permanent membership in the orchestra. An example of this introduction with confirmation can be seen with the clarinet. The clarinet first appeared in the orchestra of the opera in 1763 with the opera Orione by J. C. Bach. Beginning in about 1758, two clarinets were used in the Mannheim orchestra with composers such as Christian Cannabich, C.G. Toeschi, and Carl Stamitz. Throughout the remainder of the eighteenth century, the clarinet was used sporadically in the orchestra and often as an alternative to the flute and the oboe. It was not until the nineteenth century that the clarinet, after many technical improvements, was considered by composers to be a regular member


19 Read, Orchestration, 14.

20 Read, Orchestration, 21.


22 Shackleton, Clarinet, I, 400.
of the orchestra. Likewise, the bass clarinet dates from the 1790's with Heinrich and August Grenser.\footnote{Nicholas Shackleton, "Bass Clarinet," The New Grove Dictionary of Musical Instruments, 3 vols., ed. Stanley Sadie (London: Macmillan Press Limited, 1984), I, 170.} Although the bass clarinet had an important part in the opera, Les Huguenots, by Meyerbeer in 1836, it was not really incorporated into the symphony orchestra until the last part of the nineteenth century and the first part of the twentieth century with composers such as Wagner, Mahler, Schoenberg, and Stravinsky.\footnote{Shackleton, Bass Clarinet, I, 170.} The first recorded orchestral use of an English horn was in Dioclesian by Purcell in 1691.\footnote{Philip Bate, "English Horn," The New Grove Dictionary of Musical Instruments, 3 vol., ed. Stanley Sadie (London: Macmillan Press Limited, 1984), I, 801.} During the eighteenth century, however, the English horn was used primarily outdoors.\footnote{Bate, English Horn, I, 801.} The English horn did not become a confirmed member of the symphony orchestra until the nineteenth century. The admittance of the trombone into the orchestra is another example. Although the trombone dates from the fifteenth century, it did not become an expected orchestral member until the nineteenth century despite of its previous use in sacred and operatic music. Even then, only the tenor and bass trombones have survived while the alto trombone did not. The celesta was invented in 1886 and introduced into the orchestra by Tchaikovsky in 1892. The celesta is found in many scores of the early twentieth century with composers such as Stravinsky, Debussy, and Schoenberg. While it has been used sporadically by composers throughout the rest of the twentieth century, the
celesta had been confirmed to the point that most modern orchestras own a celesta and provide a player when it is called for by the composer.

There are many examples of instruments which have been introduced into the orchestra but have not become regular members because they had not been sufficiently confirmed. The saxophone, an invention of the nineteenth century, has been used periodically in orchestral pieces such as *Pictures at an Exhibition*, but the saxophone, despite its ubiquity elsewhere, has not been able to gain a permanent place in the orchestra. Likewise, the euphonium has an important role in pieces such as *The Planets*, but it is not considered a standard orchestral member. New musical instruments are always being created, but their newness does not guarantee membership into the symphony orchestra. The French attempted to replace the contrabassoon with the sarrusophone, but the contrabassoon retained its position. The heckelphone was invented by Wilhelm Heckel in 1904 as a kind of baritone oboe, and even though it was employed by Richard Strauss in *Elektra* and *Salome*, it never did gain entry into the symphony orchestra. The Ondes Martenot, an early electronic instrument, was invented by Maurice Martenot in 1928. While it was called for by Honegger in *Jeanne d'Arc au Bûcher*, and Messiaen in *Turangalîla*, the Ondes Martenot is now nothing more than an historical curiosity. A similar fate was achieved by the theremin, in spite of the fact that Varèse used two of them in *Equatorial*. In fact, instruments which are not accepted into the orchestra often become a liability to the composition which employs them in that it sometimes discourages future performances. A case in point is the use of the cimbalom by Kodály in the *Háry János Suite*. While this composition can be heard on record, the *Háry*
János Suite is rarely heard in live performance due to the problem of finding a cimbalom as well as a player.
CHAPTER II
CHANGES IN SEATING PATTERNS

Beginning in the eighteenth century, the seating pattern of the orchestra underwent many changes. These changes, like the changes in instrumentation, were an attempt to discover the best sounds. In order to understand the rationale behind the positioning of the orchestra in the eighteenth century, one must examine the structure of the orchestra of that time. The orchestra was headed by a Kapellmeister, who superintended the overall performance while seated at a keyboard instrument. It must be remembered that the Kapellmeister and the composer were often the same person. The Konzertmeister was the first violinist and was often in charge of the actual performance. He sometimes set the tempo with his violin bow, although the time keeping duties were shared by both the Kapellmeister and the Konzertmeister. The first cello and the first bass player sat next to the Kapellmeister and assisted in maintaining a steady tempo.

While some of the seating plans of the eighteenth century were based upon the architecture and the acoustics of particular concert halls, many of the plans were influenced by Jean Jacques Rousseau and Johann Joachim Quantz, who were both composers. Rousseau espoused the opinion that not only should the cellos and the basses be placed near the keyboard instruments, but they should also be placed throughout the orchestra in order to régler et
soutenir (regulate and sustain). He also recommended that the musicians have a clear line of sight with the first harpsichordist and the first violinist. In his *Dictionnaire de Musique* of 1768, Rousseau stated that one of the best placed orchestras with the best ensemble sound was that of the opera orchestra of Dresden under Hasse. He was so impressed with the orchestra in Dresden that he included its seating plan as it appeared in 1754. (Figure 1).

![Seating plan for the Dresden Opera in 1754 from Rousseau's *Dictionnaire de musique* (1768).](image)

Each harpsichord has a cello and a bass next to it. There are also bass instruments on the right side of the orchestra. With the cellos and the basses spread throughout the orchestra, it is easy to understand why Rousseau considered this orchestra to be well distributed. In this plan, the strings and the winds are on separate sides of the orchestra with the first harpsichord in the

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middle. The horns at this time are grouped with the woodwinds. A plan for the orchestra in the theatre of Versailles in 1773 also exhibits the principle of distributing the double basses throughout the orchestra. This detailed plan shows a bass in each one of the four corners of the ensemble.

Johann Quantz, a composer as well as a flutist, describes a seating plan for a theatre orchestra and for a concert orchestra in his essay on playing the flute. The plan that Quantz advocates for an orchestra in the theatre is very similar to the Dresden plan admired by Rousseau. (Figure 2).

![Stage diagram](image)

Figure 2. Seating plan for an orchestra in a theatre based on Versuch einer Anweisung die Flöte traversiere zu spielen (1789) by Quantz.

Quantz recommends two harpsichords with their accompanying bass instruments in the same positions. A cello and a bass are also found on the right side of the orchestra. The strings and the winds are on opposite sides just

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like the plan suggested by Rousseau. The plan recommended by Quantz for a large ensemble in a concert hall is very different but follows the same principles of seating. (Figure 3).

Figure 3. Seating plan for an orchestra in a concert hall based on Versuch einer Anweisung die Flöte traversiere zu spielen (1789) by Quantz.

Quantz is in agreement with the Rousseau principle of distributing the cellos and the basses throughout the ensemble. As we have seen before, there is a cello and a bass next to the harpsichord as well as cellos and basses in the far end of the orchestra. Quantz stresses the importance of the bass instruments in the orchestra by stating that "in a large ensemble, and especially in an orchestra, where one person cannot always see the others or hear them well,
the double bass player, together with the violoncellists, forms the point of equilibrium, so to speak, in maintaining the correct tempo."3 The instrumentalists are placed in such a way that they have a clear line of sight with the harpsichordist and the first violinist. The flutes are positioned in front of the ensemble in order for their sound to project. Having a seating plan for an orchestra was very important to Quantz. In his Versuch, Quantz states that "the leader must know how to distribute, place, and arrange the instrumentalists in an ensemble. Much depends upon the good distribution and placement of the instruments, and upon their combination in the proper ratio."4

The wide distribution of the lower string instruments as well as the division of the higher string instruments can be seen by examining the seating plans for the orchestras in Berlin, Mannheim, and London during the latter half of the eighteenth century. The Berlin Opera Orchestra in 1776 under Johann Friedrich Reichardt, who was also a composer, employed some of the principles of seating advocated by Rousseau and Quantz but also exhibited other developing trends of that time. (Figure 4).


4 Quantz, Flute, 211.
The keyboard instruments were removed, but the Kapellmeister was still positioned near the center of the orchestra. A harp was used in place of a keyboard instrument. Like many other orchestras of the Classical period, the first and the second violins were separated. The violas were also divided, and the bass instruments were placed throughout the orchestra. The horns were still grouped with the woodwind instruments.

Unlike the plans used for orchestras in the theatre, the Mannheim Hofkapelle plan of 1782 was utilized for a concert situation. (Figure 5).
The members of the orchestra were placed in a semicircular fashion around the Kapellmeister, who was the principal time keeper of this orchestra. As a carry-over from when the bass instruments were located near the keyboard instrument, a double bass was positioned near the Kapellmeister. The violins were separated as they were in the orchestra of the Berlin Opera. In both of these cases, the positions of the first and second violins were reversed from the way that they are usually found in the nineteenth century.

Haydn made use of an amphitheatre style of seating for the Salomon concerts in London from 1791 to 1793. Neal Zaslow has reconstructed this seating plan from accounts given by contemporary sources. (Figure 6).
Figure 6. Seating plan that Haydn used for the London concerts based on a reconstruction by Neal Zaslaw as found in The New Grove Dictionary of Music and Musicians.

In this arrangement, the violins were separated as before, but the first violins were on the left while the second violins were on the right. Not only were the violins divided, but the rest of the strings were divided as well. Haydn, who was at the keyboard, and Salomon, who played the violin, were positioned at the center. The wind and percussion instruments sat on risers behind the string instruments. Jack Westrup claims that seating plans similar to this one were used throughout England well into the nineteenth century.

Certain trends in orchestral seating plans became evident in the latter half of the eighteenth century. The first and the second violins were separated; the position of the violins, however, varied from orchestra to orchestra. The violas could be found just about anywhere. Sometimes the violas were divided as in the Haydn model, or they were unified in a position away from the front of the orchestra. The Kapellmeister, with or without a keyboard instrument, tended to be located near the center of the orchestra and in clear view of the
musicians. While the concert orchestra did not divide into two halves with string
instruments on one side and wind instruments on the other side like the theatre
orchestra, the string instruments of the concert orchestra gravitated toward the
front, while the wind instruments moved toward the back of the orchestra.

During the first half of the nineteenth century, the orchestra underwent an
important change. While some orchestras were conducted from a keyboard
instrumentet and others were conducted by the first violinist⁵, many orchestras
began using a baton-wielding conductor instead. There are accounts of Spohr
and Weber conducting with a baton as early as 1817.⁶ Once the position of the
Kapellmeister at the keyboard disappeared, the composer and the conductor
were not always the same person. While there are some notable exceptions,
the separation between the conductor and the composer increased as the
century progressed.

A variety of seating plans for the orchestra existed during the nineteenth
century in the search for the best sound. Adam Carse states that "a full account
of the various ways of placing the players in the orchestra is rendered
practically impossible owing to the fact that there were just as many different
arrangements as there were orchestras."⁷ In his travels in Italy and Germany in
1801-02, Georg von Unold discovered a variety of seating plans, but none that

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⁵ Daniel J. Koury, Orchestral Performance Practices in the Nineteenth Century


⁷ Adam Carse, The Orchestra from Beethoven to Berlioz (New York: Broude
Brothers, 1949), 472.
he considered satisfactory. These variances in seating plans were due to different circumstances for each orchestra. Édouard Blitz in 1887 stated that "the arrangement of the orchestra on the platform depends on the acoustics of the hall, the type of music to be performed, and the preferences of the conductor." While a wide variety of seating plans existed during the first half of the nineteenth century, certain principles of seating were still held in common. The differences and similarities in seating plans can be seen by examining the seating plans used by orchestras in Leipzig, Dresden, Munich, and London during the 1830’s and 1840’s. The Gewandhaus Orchestra in Leipzig was a very important performing ensemble during the nineteenth century. Composers such as Mendelssohn, Schumann, and Wagner spent time in Leipzig, and they knew the Gewandhaus Orchestra very well. In fact, Mendelssohn was conductor of the Gewandhaus in the 1830’s. A diagram exists which shows the seating plan used by the Gewandhaus Orchestra under Mendelssohn in 1835. (Figure 7).

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8 Kouny, *Orchestra*, 493.

Figure 7. Seating plan for the Gewandhaus Orchestra in 1835 as found in *The American Symphony Orchestra* by Mueller.

The orchestra sat in a semicircular fashion, which reflected the shape of the Gewandhaus Hall. As was commonly found in the nineteenth century, the first and the second violins were separated. The cellos and the basses were not divided, but instead, they were placed together in the middle of the orchestra. The violas were located in the same row as the woodwind instruments. The brass and percussion instruments were positioned in the back of the orchestra.

The Dresden Orchestra of the 1840's performed on the old stage of the court theatre and sat upon temporary tiers. The Dresden plan was somewhat different from other nineteenth-century seating plans in that the violins were grouped together and not separated. (Figure 8).
<table>
<thead>
<tr>
<th>Percussion</th>
<th>Trombones</th>
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<tr>
<td>Bass</td>
<td>Horns</td>
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<td>Trumpets</td>
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|---------|--------|------|-----|-------|

Figure 8. Seating plan for the Dresden Orchestra in the 1840's as found in Schünemann's *Geschichte des Dirigierens*.

The woodwinds were located opposite the violins. Unlike the Gewandhaus Orchestra, the violas were positioned directly in front of the conductor. The cellos and basses were grouped in the middle as they were in the Gewandhaus Orchestra. The seating plan of the Dresden Orchestra is very different from most of the other nineteenth century orchestral seating plans. The only principle that it holds in common with other orchestras of the century is the placement of the brass and percussion instruments toward the back of the ensemble.

The Odeon Orchestra of Munich during the 1840's performed on a semicircular stage with rising tiers. These conditions dictated an amphitheatre style of seating. (Figure 9).
Figure 9. Seating plan for the Odeon Orchestra in Munich in the 1840’s as found in Schünemann’s *Geschichte des Dirigierens*.

The violins were divided and were on opposite sides of the stage, in the fashion of the nineteenth century. The cellos and the basses sat directly in front of the conductor. The violas were positioned behind the double basses. While the wood, brass, and percussion instruments were located behind the string instruments, it is interesting to note that the timpani resided with the woodwind instruments.

The seating plan for the London Philharmonic Orchestra under Michael Costa in the 1840’s was a model for seating plans used by orchestras in England during the latter half of the century. According to Carse, Costa did not face the audience as was the custom up to this time, but instead, he "faced his
troops. The diagram provided by Adam Carse shows that the London Philharmonic employed a somewhat semicircular seating plan. (Figure 10).

Figure 10. Seating plan for the London Philharmonic Orchestra in the 1840's as found in Carse's The Orchestra.

As was commonly found in seating plans of this century, the violins were divided. The violas were located between the violins as in the Dresden and Odeon plans. The cellos and the basses were divided and placed toward the back of the orchestra. The principal cello and bass players, however, sat directly in front of the conductor just as they had in the eighteenth century. The woodwind instruments, along with the horns, were placed in a line behind the

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10 Adam Carse, The Orchestra from Beethoven to Berlioz (New York: Broude Brothers, 1949), 478.
high string instruments, and the brass and percussion instruments were located behind the woodwinds.

During the nineteenth century, the ideas of Hector Berlioz were not only influential in the area of orchestration but also in the area of seating formats. The basic orchestral seating plan, which Berlioz describes in his *Grand traité d’instrumentation et orchestration* of 1843,\(^{11}\) called for a semicircular shape. (Figure 11).

![Orchestral Seating Plan]

Figure 11. Seating plan reconstructed from description given by Berlioz in his *Grand traité d’instrumentation et orchestration* of 1843.

The first and the second violins are separated but in reverse order of what is usually found. The violas are between the violins, just as they were in the London Philharmonic plan. The cellos and the basses are also divided and

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placed on each side of the orchestra. Reflecting the orchestrational practices of this time, the horns are grouped with the woodwind instruments. Berlioz, however, did not believe that this seating arrangement should be strictly followed. Instead, he maintained that the seating of the orchestra should be flexible. According to Berlioz, the ultimate decision for the seating of the orchestra resided with the conductor. The decision of the conductor, however, was to be based upon the shape of the room, the number of musicians, and the composition to be performed.\textsuperscript{12} Berlioz also admonished composers for not designating the seating plan to be used for a particular composition. Following his own advice, Berlioz gave specific instructions for the placement of instruments in pieces such as \textit{Harold en Italie}, \textit{Romeo et Juliette}, and \textit{Requiem}.

In the later half of the nineteenth century, the conductor had completely emerged. While there were composers who were also known as conductors, such as Richard Strauss and Gustav Mahler, the roles had completely separated. Seating plans, while becoming more firmly established, reflected experimentation on the part of the conductor rather than the composer. This experimentation can be seen by inspecting some of the plans of Theodore Thomas, Georg Henschel, and Artur Nikisch. Theodore Thomas, who helped to begin many of the major orchestras in the United States, did not use a fixed seating plan but was constantly changing his orchestral set-up. A painting of his orchestra at Gilmore's Gardens in New York\textsuperscript{13} shows divided violins, cellos, and basses. The woodwind instruments are in a raised row behind the

\textsuperscript{12} Koury, \textit{Orchestra}, 517.

string instruments, and the brass and percussion instruments are placed toward the rear of the group. A photograph,\textsuperscript{13} found in his autobiography, of Thomas' orchestra in Steinway Hall also shows divided violins and double basses; the cellos, however, are grouped together in the middle of the orchestra. A diagram of the Chicago Symphony Orchestra, which is found in his \textit{Memoirs},\textsuperscript{14} demonstrates another seating plan. (Figure 12).

![Diagram of Chicago Symphony Orchestra seating plan](image)

Figure 12. Seating plan of the Chicago Symphony Orchestra under Thomas in the 1890's as found in his \textit{Memoirs}.

This plan of the Chicago Symphony in the 1890's shows that unlike the previous plans, all the string instruments were divided. The placement of the rest of the instruments is very similar to modern orchestral plans.

When Georg Henschel became conductor of the Boston Symphony Orchestra in the 1880's, he employed a seating plan similar to the one advocated by Berlioz. According to John Mueller, "Henschel...inexperienced in conducting, was probably happy to adopt the recommendation of the most authoritative text on orchestras of that day."\(^{15}\)

A photograph\(^{16}\) and a diagram of the Boston Symphony Orchestra at this time shows the similarities between the plans of Henschel and Berlioz. (Figure 13).

Figure 13. Seating plan for the Boston Symphony Orchestra under Henschel in the 1880's as found in Mueller's *The American Symphony Orchestra*.

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The violins are divided by the violas. The cellos and the basses are also divided on each side of the orchestra. Even the harp is located right in front of the conductor. While the brass and the percussion instruments are toward the rear of the orchestra, the woodwind instruments were placed by Henschel in front of the brasses. Henschel also experimented with other seating plans during the 1880's. One of the experimental plans used by Henschel abandoned the common semicircular shape. (Figure 14).

![Diagram of orchestra seating plan]

Figure 14. Seating plan used by Henschel with the Boston Symphony Orchestra, as found in Woolridge's *Conductor's World*.

In this plan, the orchestra was positioned in rows facing the audience. The cellos and the basses were still divided and located on either side of the orchestra.
Artur Nikisch became conductor of the Boston Symphony Orchestra in 1889. A photograph dating from 1891 shows some changes from the orchestral plan of Henschel.\textsuperscript{17} Instead of being positioned in the wings, the basses are stretched across the back. The cellos are in a row in front of the woodwind instruments. Nikisch later became conductor of the Gewandhaus Orchestra in 1895. In the plan that Nikisch utilized for the Gewandhaus, the first violins and the second violins were on opposite sides of the orchestra; The violas, however, were placed next to the second violins, and the cellos were next to the first violins. (Figure 15).

![Diagram of orchestra seating plan]

Figure 15. Seating plan for the Gewandhaus Orchestra under Nikisch in 1896, as found in Nösselt's Gewandhaus.

\footnote{\textsuperscript{17} David Woolridge, \textit{Conductor's World} (New York: Praeger Publishers, 1970), Plate IV.}
Unlike many orchestras of this period and earlier, the basses were not divided but instead were grouped together in the left rear of the orchestra. The seating of the wind instruments reflected a very modern type of plan.

While certain aspects of orchestral seating had become standard by the end of the century, the placement of the double basses was highly variable. As can be seen, the violins generally were separated and positioned on the outside of the orchestra. The wind and percussion instruments were located in the back of the orchestra with the woodwind instruments in front of the brass instruments. The double basses, however, could be found almost anywhere. The basses could be found in the wings in the manner of Theodore Thomas, or they could be stretched across the back of the orchestra in the style of Artur Nikisch. Some accounts even tell of the basses being positioned in front of the orchestra and below the stage level. Finally, the basses were sometimes spread throughout the orchestra and next to other instruments. This mixture of double basses within the orchestra can be seen in a painting by Degas of the orchestra of the Paris Opera.\(^{18}\)

An account related by Parke in his memoirs also demonstrates that the basses were in a different position from today:

Fischer, the celebrated oboe player, died in the early part of this year. He was seized with apoplexy whilst performing a concert at Buckingham House, in the presence of their Majesties, and fell on the double bass instrument of the musician next to him.\(^{19}\)

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\(^{19}\) Koury, *Orchestra*, 541.
The seating plan for the orchestra became more standardized in the twentieth century, but the positioning for the string instruments was varied. A very popular plan for the seating of the string instruments was a carry-over from the nineteenth century and was known as the European plan. (Figure 16).

![Seating Plan Diagram]

Figure 16. The European plan for seating the string section, as found in Del Mar's *Anatomy of the Orchestra*.

A variation of this plan placed the cellos and the basses on the opposite side of the orchestra. (Figure 17).
Figure 17. Variation on the European plan, as found in Del Mar's *Anatomy of the Orchestra*.

As was often seen in the nineteenth century, the first violins and the second violins are in front of the orchestra and are on opposite sides. The European plan was used by conductors such as Toscanini, Furtwängler, Kemperer, and Boult. One of the primary reasons given for this plan is that it allows for interplay between the first and second violins. Sir Adrian Boult supported this plan by saying that "in almost every orchestral work there are passages where firsts and seconds answer each other, and the obvious expectation of the composer was that the sounds should come from opposite sides of the platform." In his biography of Arturo Toscanini, Howard Taubman relates that:

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He [Toscanini] likes the old-fashioned way of seating an orchestra, with the first violin section to his left and the second violins to his right. 'The first and second violins,' he says, 'are like a pair of shoulders, and like shoulders they must be strong and equal.' He rails at conductors who fool around with the seating of the orchestra, insisting that they are throwing out the balance sought by the composer.\(^{22}\)

Those who oppose the European plan claim that the second violins will be weaker than the first violins since the f-holes of the seconds are facing away from the audience. Ensemble problems also can result due to the distance between the first and second violins. The European plan is still employed by many European orchestras.

Another version of the European plan places the violas on the outside position and moves the second violins next to the first violins. (Figure 18).

![Diagram of orchestra seating](attachment:image.png)

Figure 18. Variation of the European plan with the violas on the outside, as found in Del Mar's Anatomy of the Orchestra.

The rationale for this plan was to help the violas project more since they tend to be a weaker instrument in terms of projection. The reason given for not using this seating plan is that the violas may sound even weaker since their f-holes will face away from the audience. This variation on the European style of seating was used by conductors such as Goosens, Koussevitsky, and Barbirolli.\textsuperscript{23} Charles Munch used this particular plan with the Boston Symphony Orchestra in 1951.\textsuperscript{24} The violas in the Boston Symphony did not move to the inside of the orchestra until 1970.\textsuperscript{25}

The seating plan for the string instruments that is most often used in the United States places the first violins and the cellos on the outside of the orchestra. This type of seating is often called the American plan.\textsuperscript{26} It is also known as the "Stokowski shift" since Leopold Stokowski introduced this plan to the Philadelphia Orchestra in the 1920's. According to Jack Westrup, this type of seating plan, however, had already been employed by English conductors such as Beecham and Wood.\textsuperscript{27} (Figure 19).

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\textsuperscript{23} Koury, Orchestra, 695.

\textsuperscript{24} Koury, Orchestra, 705.

\textsuperscript{25} Koury, Orchestra, 707.

\textsuperscript{26} Westrup, Orchestra, 687.

\textsuperscript{27} Westrup, Orchestra, 687.
Those who favored the American plan like it because this particular set-up placed the high strings on one side of the orchestra and the low strings on the other side. Since the first and second violins are located next to each other, good violin ensemble playing is promoted. Stokowski supported this plan because he believed that this type of seating allowed for the best direction of tone from each section. Those who opposed this plan, such as Sir Adrian Boult, did not like it because it placed the high string instruments and the low string instruments on opposite sides of the orchestra. Boult related that:

> When Sir Henry Wood...placed all his violins together, I remember an old friend of mine, who had always sat in the middle of the Queen's Hall circle, saying that he couldn't sit there any longer: all the bass came into his right ear and all the treble to his left and he had to sit round at the side to get a blend.²⁸

Another argument against putting the violins together is that much of the antiphonal interplay between the first and the second violins will be lost. Ormandy introduced the American plan to the Minneapolis Orchestra in 1931. He also used this plan when he became conductor of the Philadelphia Orchestra in the 1950's. The New York Philharmonic adopted the American plan of seating in the 1940's. After World War Two, experimentation in seating patterns had ended.
CHAPTER III
THE LOSS OF POSITIVE CHANGE

The orchestra, which has historically been characterized by positive and experimental change, appears to be in a state of little or no change. The orchestra of the last forty years has admitted no new instruments and does not seem eager to make any significant changes in instrumentation. The experimentation with seating patterns, which was seen in the nineteenth century and which continued as recently as the 1920's and the 1930's with Leopold Stokowski,¹ has ceased. The repertory of the orchestra has seemingly stagnated into a repetition of the same orchestral masterworks. In other words, the symphony orchestra of the last forty years has exhibited little change, and as stated before, what appears to be no change is most likely a very slow, negative change.

Much of this lack of positive change relates to a lack of new music in the orchestral repertoire. As seen throughout history, the prime initiator of positive change within the orchestra is the composer. Composers of today, however, have lost much of their power to initiate positive change through their

compositions. It is very difficult to have a new piece of orchestral music performed today because the concert program is already full of pieces from the past. Even when a composer is able to have his compositions performed, the composer will often avoid instrumental innovations for fear that these changes will subsequently make it more difficult to have the piece performed in the future. After the composition is performed, there is very little chance that it will enter into the orchestral repertoire. Bartók was the last composer to have a significant number of pieces to enter into the repertoire of the orchestra.\(^2\) No American composer has ever achieved more than one per cent of the total orchestral repertoire.\(^3\) Since modern orchestral compositions are not able to enter into the American orchestral repertoire, the prime initiator of positive change within the orchestra, the composer, is hindered from causing positive changes to take place.

Resistance to allowing new music into the orchestral repertoire was not a characteristic of the orchestra of the past. New music itself was the reason for the establishment of the some orchestras and concert series in the first place. As Philip Hart has observed, "The creative achievements of the Viennese masters and their followers became the raison d'être of the symphony orchestra, the magnet that drew performing musicians out of the theater pit onto the concert stage."\(^4\) According to Henry Raynor, the impetus for the founding of the Philharmonic Society in London in 1813 was to play the best modern music


\(^3\) Hart, *Orpheus*, 416.

of the time.\textsuperscript{5} The Société des Concerts du Conservatoire was also established in 1828 with the purpose of performing new music. Jules Pasdeloup founded and conducted the Société des Jeunes Artistes in 1852 in order to provide an orchestra that would perform the works of himself and other new composers. Besides introducing new French composers to Paris, Pasdeloup was also able to introduce Parisian audiences to the orchestral pieces of Robert Schumann. The prospectus of the New Philharmonic Society in London, which was established in 1852, read: "The growing taste for the arts, more especially for music, in this country, demands a new institution where the greatest works by the greatest masters of all ages may be heard by the public at large."\textsuperscript{6} (Italics mine). Charles Lamoureux, a violinist, founded the Nouveaux Concerts, which later became Concerts Lamoureux, in 1881. These concerts featured the music of D'Indy, Royer, Chabrier, and Debussy. The Concerts du Châtelet, which was founded in 1874 by Édouard Colonne, featured the works of younger composers such as Franck, Massenet, and Lalo.

Even though the composer/conductor of the eighteenth century had developed into two separate persons in the nineteenth century, the conductor of the nineteenth century was still an ally of the composer. At the instigation of the conductor, new music was performed by already established orchestras. Carl Bergman, conductor of the New York Philharmonic from 1855-1876, introduced the new music of Liszt, Wagner, and their followers into his concerts.\textsuperscript{7}

\textsuperscript{5} Henry Raynor, Music and Society Since 1815 (London: Barrie & Jenkins, Ltd., 1976), 101.

\textsuperscript{6} Raynor, Music, 104.

\textsuperscript{7} Hart, Orpheus, 26.
Theodore Thomas, the founding father of many orchestras in the United States, performed new music throughout his career. Thomas conducted the first American performances of Brahms, Dvorak, Liszt, Saint-Saëns, and Wagner. Thomas, who was an ardent fan of Richard Strauss, performed many of the tone poems of Strauss soon after they were composed. Thomas also championed the music of American composers such as John Knowles Paine, Frederick Converse, Silas Pratt, and Henry Chadwick. Frederick Stock, who succeeded Thomas at the Chicago Symphony, carried on this practice. Prior to World War One, Stock performed the music of the French Impressionists and introduced Chicago to the music of Schoenberg, Scriabin, and Mahler. After World War One, Stock performed the music of Hindemith, Stravinsky, and Prokofieff. The dedication of Frederick Stock to new music can be seen in the number of world premieres that he conducted while at Chicago. From 1910 to 1919 he conducted twenty-three, from 1920 to 1929, twenty-four, from 1930 to 1939, thirty-seven, and from 1940 to the end of his tenure in 1942, he conducted an outstanding number of sixteen. Fritz Reiner, when he conducted the Cincinnati Symphony Orchestra from 1922 to 1931, had a reputation for having performed every significant orchestral piece of the twentieth century up to that

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8 Hart, Orpheus, 37.

9 Hart, Orpheus, 22.

10 Hart, Orpheus, 44.

11 Hart, Orpheus, 44.

time. Reiner performed the music of Stravinsky, Hindemith, Prokofieff, Milhaud, and Bartók. In fact, the Cincinnati Symphony gave the American premiere of the First Piano Concerto by Bartók in 1928 with Bartók at the piano. While the composer is the prime initiator for positive change within the orchestra, he can fulfill this role only with the aid of the conductor, since their roles have separated.

Today there seems to be a resistance to change within the orchestra in general and toward new music in particular. The loss of positive change within the orchestra can be seen in the successors to Frederick Stock with the Chicago Symphony Orchestra. The great number of world premieres that Stock conducted with the Chicago Symphony Orchestra has already been noted. Later conductors, Kubelik and Reiner, conducted a total of only nine world premieres between the years 1952 to 1960. Today, many conductors seem to be reluctant to perform or even examine new orchestral scores. As the roles of the conductor and the composer have moved further apart in this century, the conductor seems less equipped to conduct and to interpret new scores. Conducting new music requires time which conductors appear to be unwilling to invest. Performing an untried piece also contains the element of risk that it will not be a popular success. Philip Hart has said "that nothing so satisfies the ego of some conductors as producing spectacular orchestral effects and

13 Hart, Orpheus, 267.
14 Hart, Orpheus, 267.
enjoying the thunderous applause from the audience, and nothing arouses greater dismay than having these efforts received coolly.\textsuperscript{16}

The problem is not with just the conductor, however, for the orchestral musicians themselves resist the performance of new music. Leonard Hindell, an orchestral bassoonist, reports that, "It's true that many players resist innovations, new programmes, new ideas, new initiatives. They feel they are trained musicians in a major orchestra and this is not the place to experiment with new music or new directions."\textsuperscript{17} Sometimes the members of the orchestra do not resist the new music itself but the problems often associated with new music, such as learning a new notational system. Christopher Weait, a bassoonist with the Toronto Symphony for seventeen years, recalls an experience that occurred with a composition that utilized a new notational system: "We had the ridiculous situation at one time in a recording session in which we went forty-five minutes without playing a note. Finally the producer came in and said, 'Can I have some levels?' And the conductor said, 'Well, I'm still explaining the first bar!'"\textsuperscript{18}

Composers who employ traditional notation but provide error-filled and illegible parts for a new orchestral piece also contribute to the resistance to new music on the part of some orchestral musicians.

\textsuperscript{16} Hart, \textit{Orpheus}, 458.

\textsuperscript{17} Andre Previn, ed. \textit{Orchestra}, (Garden City, New York: Doubleday and Co., Inc., 1979), 209.

\textsuperscript{18} Interview with Christopher Weait, The Ohio State University, Columbus, Ohio, 4 May 1987.
This resistance to new music in the orchestra has also spread to the public. Leonard Bernstein claims that since World War One the public has not anticipated the premieres of new works as they have in the past:

The hideous fact remains that composer and public are an ocean apart and have been for half a century. Can you think of any other fifty-year period since the Renaissance when such a situation obtained? I can't. And if this is true, it signifies a dramatic qualitative change in our musical society: namely, that for the first time we are living a musical life that is not based on the compositions of our time. This is purely a 20th-century phenomenon; it has never been true before.  

It is ironic that in the twentieth century, with the greatest availability of orchestral music than ever before through the number of orchestras, concerts, radio and television broadcasts, and recordings, there appears to be the least interest in new music. Orchestral management and orchestral boards, citing box office statistics, also resist musical change within the orchestral repertoire. Christopher Weait claims that "the accountant mentality is ruling the orchestras." He further states that it affects everything from the design of new performance halls to the planning of programs. "They program, of course, what the community wants to hear." Howard Taubman, in a tour of foreign orchestras for the American Symphony Orchestra League, reports that, "I remember sitting late into the night with three committee members of the Israel Philharmonic as they agonized over this problem. Since their orchestra was

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dependent on holding onto its immense subscription list, they were particularly cautious about change." The composer of today finds himself in an enigmatic position in that his pieces cannot be performed unless he is popular, but he cannot become popular unless his pieces are performed. Consequently, the modern composer is left out of the orchestral repertoire.

Positive change, which has been an historical characteristic of the symphony orchestra, is also the key to the survival of the orchestra. It is natural for a new organization to go through a period of positive change and experimentation, and this was seen in the changes in instrumentation and seating patterns. Unless that organization is careful, however, it can become resistant to change. This characteristic of being resistant to change seems to have been always lurking within the orchestra. While the Philharmonic Society of London and the Société des Concerts du Conservatoire were founded upon the principle of the performance of new music, both organizations within thirty years of their establishment were being criticized for their lack of new music. Henry Raynor comments upon this trait by saying that "the style of its founders, however, becomes a norm and without anyone realizing it, the taste of the founders becomes an orthodoxy beyond which no particular expansion is acceptable." 

Like its biological counterparts, survival of an organization depends upon continual positive change. While the experimental seating patterns of the


23 Raynor, Music, 104.

24 Raynor, Music, 104.
nineteenth-century conductors must have been disconcerting to many orchestral members and patrons, it must have inserted an element of expectation and curiosity into the concerts. Blitz in the 1880's believed that the reason the orchestra needed new instruments and new sonorities was to relieve that uniformity of sound the orchestra had fallen into. Adam Carse, in commenting upon the development of the orchestra, has stated that "the real driving force behind such evolution is after all the insistently growing demand of musical art for fit means of expression. The impelling power of a constantly advancing art has always carried with it the realization of better and more worthy means of expressing itself."

Since the modern composer is prevented from having his orchestral pieces performed and from entering into the orchestral repertoire, instrumental changes can not and will not take place. The orchestra will slip into the uniformity of sound that Blitz cautioned against. The lack of new music also prevents changes in musical style from taking place. Philip Hart has stated that, "Only by giving our composers adequate exposure is there any hope of advancing the historic process by which major figures may emerge and take their place in the repertory alongside Prokofiev, Shostakovich, Bartók, or Stravinsky." Robin McGee, an English double bassist, comments that, "If somebody doesn't form a vital link between what's being played and what's


being written, eventually the whole thing is going to stop."\textsuperscript{28} If one accepts the fact that positive change is a key to survival, then greater attention must be paid to the performance of new music for orchestra. John Fletcher, tubist with the London Symphony Orchestra, states, "We must get more used to modern music, and we must do it better, and the public - why not? - must stir itself."\textsuperscript{29}

Since there seems to be an overall resistance to change in the orchestra of today, how can the element of change, through new music, once again be re-introduced? Part of the answer is the conductor. Gunther Schuller claims that part of the problem is the lack of ability of many conductors "to evaluate new music or perform it adequately, merely from reading the score."\textsuperscript{30} Perhaps this ability should be stressed more in the training of conductors and in the selection of a new conductor for an orchestra. The conductor also appears to be the key in overcoming the resistance to new music by both the performers and the audience. Lukas Foss, in his tenure as conductor at Buffalo, was able to excite an orchestra that had traditionally played a very conservative repertoire to perform newer pieces. According to Hart, he failed to attempt to win over the audience.\textsuperscript{31} It is possible, nevertheless, to also convince the public to give new music a chance. André Previn, due to his popularity, was able to get an audience for almost anything that he programmed for the London Symphony Orchestra. According to Anthony Camden, oboist in the London Symphony Orchestra.

\textsuperscript{28} Previn, \textit{Orchestra}, 216.

\textsuperscript{29} Previn, \textit{Orchestra}, 214.

\textsuperscript{30} Hart, \textit{Orpheus}, 423.

\textsuperscript{31} Hart, \textit{Orpheus}, 220.
Orchestra, "He [Previn] stands so well with the public that they'll come to his concerts for almost anything. He's done Messiaen's Turangalîla Symphony, in the Festival Hall, to an eighty percent capacity audience." 32 He goes on to say that another conductor with very good credentials but without the same rapport with the audience could not get a good audience for a more popular program. 33 A similar phenomenon can be seen recently with the Cincinnati Symphony Orchestra. The public resisted the programming of modern works by Michael Gielen during his tenure as conductor of the orchestra. After Gielen left the orchestra, the orchestra still programs many new works, but seemingly with greater success, under the leadership of Jesús López-Cobos, who is more popular with both the orchestral musicians and the public. In order for change to once again to become an element of the symphony orchestra, the conductor must be the conduit and even the salesman for new works for the orchestra. He must once again become ally of the composer.

32 Previn, Orchestra, 214.
33 Previn, Orchestra, 214.
CHAPTER IV
FINANCES AND THE ORCHESTRA

Throughout the history of the symphony orchestra, the problem of financing such a venture has always contained within it the potential for change and even for elimination of a particular orchestra. From the beginning, finances have influenced the size of an orchestra and even its very existence. From the late sixteenth century through the eighteenth century, orchestras could only survive by an association with an opera house or with a particular royal court. Toward the end of the sixteenth century, permanent French and English court ensembles grew out of the Italian viol consorts.¹ Orchestras appeared in the royal courts of Germany and Austria in the late seventeenth and early eighteenth centuries. The size of these court orchestras and even their very existence depended solely upon their aristocratic benefactors. The largest orchestras, however, were associated with the large opera houses. The string section of the orchestra of the Teatro San Carlo in Naples numbered thirty-nine in the middle of the eighteenth century.² In contrast, the string section of the court orchestra of Frederick the Great during the same time period numbered


² Westrup, Orchestra, 690.
about 23.3 The orchestra of the Paris opera house in the 1770's consisted of twenty-four violins, five violas, twelve cellos, five, double basses, four flutes, four oboes, two clarinets, eight bassoons, two horns, two trumpets, timpani, and keyboard.4 The court orchestra at Eszterháza around 1783, on the other hand, was made up of ten violins, two violas, two cellos, two double basses, two oboes, two bassoons, two horns, and timpani.5

Coinciding with the decline in royalty, public concerts featuring the orchestra became popular in the last part of the eighteenth century and in the first part of the nineteenth century. Without the patronage of a royal benefactor, however, the court orchestra died out. The nineteenth century saw a proliferation of orchestras and orchestral music available to the public, but these orchestras varied as to size and quality. Without royal patronage, many orchestras were made up of amateur musicians and town bandsmen, and many strategies emerged in the nineteenth century to finance the symphony orchestra. The Philharmonic Society of London, which was founded in 1813, depended upon borrowing members from the orchestra of the opera.6 The musicians were not hired by the season but by the individual concert. The majority of income for orchestral concerts in nineteenth-century London came from ticket sales. This necessitated either very high ticket prices for a small hall or lower ticket prices for a very large hall, assuming the large hall could be

3 Westrup, Orchestra, 690.
4 Westrup, Orchestra, 690.
5 Westrup, Orchestra, 690.
filled. Attracting a large audience influenced the selection of music which had to please the audience. Another strategy devised to attract a large audience was the engagement of popular soloists. John Ella, who founded the Musical Union/Chamber Concerts, which lasted from 1845-1880, stated, "My expenses...are considerable, the subscription very low and without attracting visitors by the engagement of new and eminent professors from the continent, I could not afford to pay my artists." Since the orchestra could not survive very well just upon ticket receipts, another method for financing orchestras emerged in the nineteenth century. Many orchestras attempted to sell memberships or to recruit wealthy patrons in order to solidify their financial existence. The Philharmonic Society of New York, which was founded in 1842, attempted to rely at first just upon ticket sales, but they later established a membership plan in which payment of a membership fee entitled its members to attend the rehearsals and the concerts. Wealthy patrons became an important key in the establishment and continuation of a symphony orchestra. Theodore Thomas, in his tenure with the Chicago Symphony Orchestra, created the Orchestral Association, which was made up of a number of wealthy patrons, in order to financially support the orchestra. This method, creating a group of rich patrons to sustain the orchestra, was employed by other orchestras in St. Louis, Philadelphia, Cincinnati, and Minneapolis. It is worth noting that during the nineteenth century, there were very few full-time professional orchestras. Large professional orchestras in Europe were often associated with the opera houses.

7 Raynor, Music, 107.

In the United States in 1891, there were only two full-time professional orchestras, the Boston Symphony and the Chicago Symphony.⁹

The twentieth century has seen the establishment of many more professional full-time orchestras in the United States, and this century has also seen an increase in the amount of money needed to support a symphony orchestra. Coinciding with a move toward more full-time orchestras and expanded seasons, orchestral budgets have grown in the United States, especially in the last ten years. In 1975-76 season the annual budget of the Chicago Symphony Orchestra was 7.5 million dollars.¹⁰ In six years, this budget almost doubled to $14 million and by the 1985-86 season, had reached a little over $19.2 million. The New York Philharmonic and the San Francisco Symphony have also reached this same budgetary level. The budget of the Boston Symphony Orchestra, however, was the highest of any orchestra in the United States during the 1985-86 season at $25 million. A similar situation can be seen with the Cincinnati Symphony Orchestra. In the 1975-76 season, the Cincinnati Symphony Orchestra had a budget of $3.6 million. In six years it almost doubled to $6.4 million, and by 1986, it had grown to $12.4 million. The Detroit Symphony, the Minnesota Symphony, the National Symphony, and the Pittsburgh Symphony have also attained this level.

The salaries of the musicians have often been considered to be the bulk of the orchestral budget, and the fact that there have been large increases in their salaries is often given as the reason for the corresponding increases in

⁹ Hart, Orpheus, 33.

¹⁰ Wage Scales and Conditions in the Symphony Orchestras: 1975-76 Season, (New York: American Federation of Musicians). Unless otherwise noted, all figures come from this publication for the appropriate seasons.
orchestral budgets. On the surface, this would appear to be the case. In 1964, the average contract of a leading orchestra was $5,000 and only four orchestras offered a full-year contract.¹¹ Most symphony orchestras in the United States offered contracts for only thirty weeks or less. In the 1985-86 season, there were nineteen orchestras which offered a full year contract and the entry level salaries ranged from $33,000 to $52,000 a year. This move toward fifty-two week employment with the corresponding increase in salaries and expenses has contributed to the considerable rise of orchestral budgets.

There is another side, however, to this increase in orchestral budgets. In the 1975-76 season, musicians' salaries made-up as much as sixty percent of the New Orleans Symphony budget and sixty-three per cent of the Cincinnati Symphony budget. In Chicago during the same season, however, musicians' salaries were only thirty-nine percent of its orchestral budget. In the 1981-82 season, the amount paid to the musicians had increased in New Orleans to sixty-five percent, but in Chicago it had decreased to thirty-two percent and in Cincinnati to fifty-three percent. In major orchestras during the 1985-86 season, the amount of the budget paid for salaries to the musicians ranged from a low of thirty-two percent in Cleveland to a high of fifty-five percent in St. Louis and Philadelphia. On a regional level, the percentages span a low of thirty-three percent in Spokane to a high of sixty-two percent in Charlotte. The amount had risen to forty-three percent in Chicago but had lowered to forty percent in Cincinnati and forty-two percent in New Orleans. While it is true that the salaries and benefits paid to the orchestral musicians have risen dramatically

over the years and that this amount is a significant portion of the total orchestral budget, the salaries of the musicians are not the only reason for the increase. Costs in the area of administration, promotion, conductors, and soloists must also share the blame in the rapid growth of orchestral budgets.

The move to full-time professional orchestras in the United States has contributed to a perilous financial situation for many orchestras. Gunther Schuller, himself a former orchestral member, makes the observation that:

Some years ago, musicians and unions launched a drive for full employment and a fifty-two week year, not in itself a reprehensible goal - indeed, a perfectly normal aspiration. Many orchestras got what they wanted. The only trouble was that they had given no thought to the harrowing question of how the mangements were to fill those fifty-two-week season: Where would the concerts, the fees, the income to support that policy come from?12

The maintenance of reasonable ticket prices has been a tradition in the United States since the times of Henry Lee Higginson with the Boston Symphony Orchestra. Increased budgets, therefore, required other sources of income. The nineteenth-century strategy of looking to wealthy patrons would no longer suffice. A point was reached where governmental or private subsidy was seen as the answer. In 1955, ninety per cent of orchestral trustees polled were opposed to any kind of subsidy. Just ten years later, however, ninety per cent of trustees were in favor of subsidies.13 It is not coincidence then, that in 1965 the National Foundation on the Arts and the Humanities Bill was passed. This bill provided for an advisory National Council on the Arts, a Federal Council on the


13 Swoboda, American Symphony, 195.
Arts and the Humanities, as well as $10 million each year for 1966, 1967, and 1968. In this same year, the Ford Foundation established an $85 million matching funds program for American orchestras. The purpose of this fund was "to advance quality by enabling more musicians to devote their major energies to orchestral performance; to strengthen symphony organizations and enlarge the audience for orchestral music by permitting orchestras to increase their seasons."

As a consequence of turning to subsidies, orchestras have seen a smaller portion of their budget coming from earned income. In the 1975-76 season, earned income ranged from a low of twenty-two percent of the budget in Buffalo to a high of seventy percent of the budget for the Utah Symphony. In this same season, fifty-six percent of the budget for the Chicago Symphony and fifty-three percent of the budget for the Cincinnati Symphony came from earned income. In the 1981-82 season, earned income for major orchestras ranged from a low of twenty-nine percent for the Indianapolis Symphony to a high of seventy-six percent for the Boston Symphony. While the total budget for the Cincinnati Symphony increased greatly during these years, the earned income percentage for this orchestra had dropped to forty-four percent of its budget. In the 1985-86 season, the ratio of earned income ranged from a low of twenty percent for the New Jersey Symphony to a high of eighty percent of the Los Angeles Philharmonic. Budget deficits have become a way of life for many orchestras. In the 1985-86 season many orchestras had outstanding annual deficits: Baltimore - $1 million; Chicago - $1.1 million; National - $2.5 million; Phoenix - $1.6 million; and Cincinnati - $718,967. Other orchestras also had a

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14 Swoboda, American Symphony, 196.
very large accumulated deficit: Rochester - $3.2 million; Detroit - $2.7 million; and San Diego - $1.3 million.

The move toward a full-time professional orchestra in the United States has allowed finances to change many aspects of the orchestra. During the last twenty years many orchestras acted as though they would have agreed with Theodore Thomas, who once stated that he would go to hell for a permanent orchestra. It now appear that many orchestras are now paying the price. Rafael Druian, an orchestral musician, has commented on the effects of the full-year employment upon the orchestral member:

A serious problem resulted by entering the 52-week season without sufficient preparation and research into its consequences. For example, the dramatic budget increase caused by year-round employment forced management to create more outlets for performances. To earn more income, more concerts were given. But no more services were provided for. As a result, many concerts were under-rehearsed and thrown together hastily. This is demoralizing for the players and has the effect of making an orchestral career more of a job than a profession.15

With the increased pressure of financial worries, orchestras have become more box-office oriented, for any reduction in funds would have serious consequences. As a result, orchestras have tended to be conservative in their programming. Roger Scott, who plays double bass in the Philadelphia Orchestra, comments, "If we don't give our audience a reasonable amount of what they want, we lose subscriptions and cut our throats. Young firebrands say, 'We should play pure music, and we should do contemporary pieces.' But

can we risk the audience dropping away? We walk a tightrope in programme planning."¹⁶ New music is also affected due to the expense of rehearsal time and the resultant lack of time to prepare for a new piece. Always aware of finances, orchestra boards of trustees, in searching for a new conductor, have sometimes held 'star' quality and the ability to sell tickets to be as important as musical abilities. Unfortunately, many conductors who have a 'star' quality also have egos that sometimes adversely affect orchestra morale and programming. The box-office orientation results in the performance of pieces adored by the public, and in the failure to play pieces, such as new compositions, that do not result in high ticket sales. The influence of the box-office affects not only American orchestras but orchestras in other countries as well. Howard Taubman, in a report on orchestras overseas to the American Symphony Orchestra League in 1970, stated:

I found it fascinating to sit and talk with members of governing committees of cooperatives. They never forgot that the preponderant portion of their income came from the sale of tickets - whether subscriptions in Israel and Austria or single seats in London. They had at their fingertips the statistics of seat sales. They were sensitive to rises and falls in patronage. They studied the impact of programs and guest artists on ticket sales...They were preoccupied by the box-office.¹⁷

As a consequence, the problem of finances has caused many orchestras today to be influenced by the box-office and many times to make decisions based more on money than art.


CHAPTER V
THE FUTURE OF THE ORCHESTRA

Although the orchestra has exhibited positive change in the past, it will probably experience little or no positive change in the future, unless it can once again incorporate the vital element of change through the performance of new music. It is not enough that new music is performed, however, for it must also gain a place in the repertory in order for positive change to take effect, whether it be instrumental or musical. Even with the new technical innovations in music-making which are occurring today, there will probably be little, if any, changes in the instrumentation of the orchestra. Since it appears that the orchestra has instrumentally balanced out the string, woodwind, and brass sections, there is little room for new instruments. The only section of the orchestra that has accepted many new instruments in this century and even seems capable of accepting even more instruments is the percussion section. The new instruments which are being designed and invented today are electronic instruments, but these instruments are rarely introduced into the orchestra and are far from being confirmed into the regular instrumentation.

Since the orchestra of today performs primarily music of the past and since there are no instrumental changes taking place within the orchestra, the symphony orchestra is in danger of becoming a "living museum." What the
orchestra is and what it is to become is tied very closely to the music that it performs. The rise of the orchestra in the eighteenth century was very closely connected with the emergence of a new art form known as "the symphony." The Union Thematic Catalogue of the eighteenth-century symphony lists over 12,350 entries of pieces known as symphonies between the years 1720 and 1810, the same time period that the modern orchestra evolved.¹ The symphony as an art form appears to be dying out in the twentieth century, and another art form, with the same dynamic, has not replaced it. The orchestra has come to a point that its primary function appears to be to preserve the past. Think what architecture would be if it only studied and admired structures of the past without designing and building new structures. It would be a "dead art," and orchestral music is in danger of slipping into that same status.

If one accepts the fact that the symphony orchestra has become a caretaker of the past, one also has to wonder why that has happened. When older pieces were performed in the nineteenth century, many times they were performed for the first time for a particular audience. Without the modern techniques of recording, a mission of preservation crept into the function of the orchestra, a very valid function for that particular time. Yet, new orchestral pieces continued to be composed and performed in the nineteenth century. Also important is that the orchestral pieces of Mozart and Haydn were barely fifty years old when they were performed in the first half of the nineteenth century. The symphony orchestra was very much part of a dynamic art. Since the twentieth century has the ability to record compositions for posterity, why are certain orchestral pieces performed over and over again in live performance?

How many times does the Fifth Symphony of Beethoven need to be performed, and for that matter, how many versions of this symphony must be recorded? Those who defend its proliferation would point out the fact that it is a masterpiece and therefore must be preserved and constantly reproduced. The problem is that the symphony orchestra has become like an art museum which hangs its masterpieces on the wall for presentation but does not leave any room on the walls for new masterworks. Unless the performance of new music is again at the heart of the function of the symphony orchestra, the orchestra will become nothing more than a museum of the past. As stated earlier, this element of preservation has always lurked within the structure of the orchestra. Berlioz, in commenting on the Société des Concerts du Conservatoire, made the observation that although the Société had an excellent concert hall and some of the best musicians, it had a major flaw:

... the Conservatoire Society has limited its aims to conserving a certain number of masterpieces by the famous dead; for the Society, the living do not exist. Its aims are splendid nevertheless: it does its duty with dignity, and the works which are heard in its concert hall, and the composers who make their way through the hall of Society of the Conservatoire concerts are treated with respect as they cross its threshold, just as French officials look at the Great Pyramid in which the Egyptians, through the ages conserved the mummies of their Pharaohs.²

While being a museum may be a very good reason for the existence of the orchestra, that alone may not ensure its survival.

Since the orchestra has been preoccupied with looking toward the past, it has not always concerned itself with its future or even its very existence. Gunther Schuller has stated:

If the symphony orchestra is to survive, musicians, management, and the trustees must collaborate seriously on their collective future, must develop a respectful, serious, substantive dialogue rather than yell at each other from entrenched positions... And as long as the three parties continue to beat each other over the head in a kind of fratricide, the old dictum 'divide and conquer' threatens to prevail.3

Lynn Harrell concurs, "I'm amazed that the preparation for the future is so little, and so poorly done."4 It is a common complaint among orchestral musicians that they are bored and unhappy. Their response to this condition, like the response in many other professions, is continually to seek more money. Yet the rapid increase in orchestral budgets, if allowed to continue at the present rate, could threaten the future of the symphony orchestra in the United States.

If orchestras do not become more cognizant of the future, financial considerations could force negative changes within the orchestra. In recent years, many orchestras in their push toward a full-time and major status have operated with a deficit. Part of the problem with orchestral finances is that the orchestra is not like a factory, which has the potential for covering increased


expenses by producing more of a product or producing that product more efficiently through technological advances. Performing a shorter program or playing a symphony at a faster tempo will not result in an increased amount of earned income for the orchestra. The orchestra has very few choices at the present time in order to raise more money, whether in salaries for the musicians or fees for guest artists. The alternatives are increased ticket prices, more performances, or increased subsidies. Ticket prices do not rise in proportion to the rise in budgets due to the tradition of keeping tickets within the range of most of the public. Additional performances usually fail to raise the needed funds. Philip Hart has claimed, "For an orchestra with a equal distribution of performance and supplemental income, a five-percent increase in expenditures can necessitate ten percent greater supplemental income." Many orchestras have turned to subsidies in order to meet their financial obligations. While governmental funds and corporate sponsorship have increased the quality of orchestras in the United States, dependence upon these funds could jeopardize the existence of many orchestras. If an orchestra operates with a large deficit and at the same time relies heavily upon unearned income, any reduction in these funds could cause their demise. While European orchestras have a strong tradition of governmental subsidies, American orchestras do not. Governmental funds in the United States will be always in jeopardy as long as the large national deficit clouds the future. Local governments are also cutting back their support of the Arts as federal revenue sharing ends. The private sector, while having a more promising outlook, does not seem able to fulfill all


the need. Joyce Idema, director of marketing and public relations for the Chicago Symphony Orchestra, has stated, "$30,000 or $100,000 are not easy to come by these days, if they ever were."⁷ Ella Musalino, who helped to put corporate names on sporting events and is now doing the same for orchestral concerts remarks, "Philanthropy is fine, but you've got to go after it year after year without guarantee that its going to be there the following year."⁸

In the future, some orchestras will survive, but many more may not. An orchestra such as the New Orleans Symphony is presently in danger of extinction. In the 1985-86 season, only thirty-three percent of its budget came from earned income.⁹ New Orleans also had an annual deficit of $500,000 out of a total budget of $4.9 million. With no endowment, this orchestra is in a very precarious position. Newer major orchestras such as the Alabama Symphony and the New Jersey Symphony are in similar predicaments. In contrast, the Cleveland Symphony Orchestra recognized potential financial problems and attempted to plan for the future. In the 1985-86 season, the Cleveland orchestra had received almost seventy-three percent of its budget from earned income, had no accumulated deficit with a budget of $18.6 million, and had amassed an endowment fund of over $32 million. According to their former Orchestra Manager, Kenneth Haas, the Cleveland Symphony reached this point only after


⁸ Waleson, Merrill Lynch, 27.

⁹ Wage Scales and Conditions in the Symphony Orchestra: Major Orchestra, 1985-86 Season (New York: American Federation of Musicians). All subsequent dollar figures and percentages are taken from this publication unless otherwise noted.
the implementation of a long-range planning effort. In the future if the present
trend continues, the orchestras that will survive will probably be orchestras such
as Cleveland which reside in communities with a long-standing tradition of
orchestral music, have planned for the future, and which have built and are
continuing to build a substantial endowment fund. Orchestras below the major
level will probably exist in the future only if they are financially sound and do not rely on full-time musicians. In the far distant future, only a few major orchestras will probably exist. These orchestras will have a broad regional or even a national support as the Metropolitan Opera has now. For financial reasons, these few orchestras will become the orchestra of many cities rather than just one city. This possibility can already be seen in the sharing of the Cincinnati Ballet with the city of New Orleans. If financial difficulties continue to increase for orchestras, true regional orchestras, which will also record and tour, will be the wave of the future.

Due to these financial problems and due to the fact that the symphony orchestra has stagnated musically, positive change will be forced to take another path. A new hybrid orchestral ensemble will emerge in the future. It will take the form of a small chamber-size orchestra with a mix of traditional and electronic instruments. The smaller groups will be able to contract or to expand as the music demands. The trend toward smallness can already be seen in the proliferation of chamber orchestras and chamber ensembles in the last twenty years. Due to its smallness, this new orchestral ensemble will have a better chance to survive financially. Expenses for musicians' salaries can be reduced

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by employing amateur or semi-professional musicians. Qualified musicians and conductors will be available since the symphony orchestra accepts only a very small percentage of the musicians and conductors produced by colleges and conservatories each year. The *Jeunes Artistes* of Pasdeloup consisted of ex-students of the Paris Conservatory who had not yet gained membership into a regular orchestra. Those resources of talent are still available today.

Composers who have difficulty in having their compositions performed by the symphony orchestra will have an ensemble eager for new pieces. Since the new orchestra will lack an established tradition, it will provide more opportunity for the composer, and it will more readily accept technical innovations. Not only will it include electronic keyboard instruments, but it will also contain electronic wind instruments and electronically-modified traditional instruments. With this diversity available to the composer, the composer will once again initiate positive changes in the search for new timbres and new means of expression. The beginning of this new ensemble may have already started with the recent establishment of new music ensembles.

One can see a public acceptance for this type of ensemble. While the symphony orchestra will probably always have an aura of status connected with it and consequently its own group of devotees, the new orchestra will have the potential for appealing to a wider range of people. According to a Ford Foundation study, less than one percent of the American population attends symphony orchestra concerts.\(^{11}\) Consequently, there is a large, untapped audience available to this new ensemble. When the San Franciscos

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Symphony established its New and Unusual Music Series (NUMS), it not only discovered a new audience but also one that tended to be younger than the normal symphony subscribers. The smallness of this new ensemble would also permit it to be more mobile and to reach out to new audiences. Just as many homes in the nineteenth century had pianos, many homes today have computers and electronic keyboard instruments. As the price of electronic instruments continues to lower, their popularity will continue to rise. With the prediction that our society will have an increase in leisure time, the amount of amateur electronic musicians will probably increase. These people would have a natural interest in an orchestral ensemble that utilized new technologies.

It is ironic that the new orchestral ensemble, rather than replacing the traditional symphony orchestra, could contribute to its survival. From the seventeenth century through the nineteenth century, many of the instruments and new instrumental techniques were introduced first into the orchestra of the opera before they were introduced into the concert orchestra. The reason for this is that opera encouraged a more diligent search for different and appropriate means of musical expression. This very same search for new means of expression will find its outlet in the new ensemble and could eventually reach the symphony orchestra. The new orchestral ensemble could act as a laboratory for new musical ideas that could provide positive changes within the symphony orchestra. If the symphony orchestra continues to remain static, the new orchestral ensemble might then be the only means for injecting positive change once again into the orchestra.

CONCLUSION

There are many who would claim that the symphony orchestra is already a "living museum." It certainly does appear that this organization, which was once full of positive and experimental change, has now become static and backward-looking. While it is true that museums serve an important function in preserving the artifacts and masterpieces of the past, there also needs to be organizations within our society that are willing to glimpse the future. The symphony orchestra, after many years of dynamic changes, has apparently settled into the role of a conservator of the past. The element of stasis has always been present in the character of the orchestra, and that element has seemingly won out over the element of change. The opportunities for a forward-looking musical organization in the United States are many. Our society seems to be obsessed with what is new and with what is yet to come, whether it be clothes, technologies, or even popular music. The potential exists for a time in which people would look forward to the performance and recording of the newest pieces of music for orchestra.

Many contend that the change in dynamic of the orchestra began sometime after World War One and was completed after World War Two. This contention would appear to be true. Since World War Two, the orchestra has not added any permanent instruments to its ranks. The experimental change in
seating patterns, which was a prominent feature of the nineteenth-century orchestra, is rarely found in the second half of the twentieth century. New pieces have not entered the orchestral repertoire to any significant degree.

Why did the symphony orchestra choose the path of the past instead of the future? It may not have been a matter of choice but simply the natural process in the life of an organization. Organizations like the symphony orchestra, which were once revolutionary and experimental, have a tendency to lose their health and to eventually stagnate. Once the organizations begin to stagnate, new organizations emerge from it that continue the element of positive change. An example of this can be seen with the Catholic church and the numerous reformation movements and denominations that have emerged from it. If the older organization can retain or regain an element of positive change, it can sometimes prolong its life and even live alongside the newer organization or organizations. The longer the organization retains the characteristic of positive change, the longer it can survive. The United States is an example of an organization that has survived the changes from an Agrarian to an Industrial to a Technological Society because its constitution permitted positive change and growth.

The symphony orchestra, after a period of dramatic positive and experimental change, has lost its element of positive change and has seemingly stagnated. In order to regain this element of positive change, the orchestra must look to the composer, the prime initiator of positive and experimental change within the orchestra. When the role of the Kapellmeister / composer divided into two separate roles in the first part of the nineteenth century, the potential for the loss of positive change was created. Since the
composer and the conductor were still closely allied, the symphony orchestra reached its peak as an organization of positive and experimental change in the last half of the nineteenth century and the early years of the twentieth century. Sometimes a composer and a conductor were identified with one another, such as Richard Wagner and Hans von Bülow. Many times, the conductor was simply a champion for new music, such as Theodore Thomas.

As the composer and the conductor drifted apart, the orchestra stagnated. The close relationship between composer and conductor, as found in the nineteenth century, became rare in the twentieth century. For each Koussevitzky who encouraged and supported new music, there was a Toscanini whose repertoire was made up of mostly Beethoven, Brahms, Verdi, and Wagner. The true composer/conductor, with the exception of Bernstein and Boulez, is even rarer in this century. If the symphony orchestra is to regain the element of positive change, the composer and the conductor must once again become allies.

Finances are and will probably always be an important consideration for the symphony orchestra. Not only do finances have the power to create change or to even prevent change, they also have the power to threaten the existence of the orchestra. The real problems in the orchestra, however, may be more musical than financial. Money could very well be just a symptom of an even larger problem, the lack of positive change. Positive change, through the performance of new music, could perhaps challenge the orchestral musician and subsequently solve the problem of boredom and unhappiness. New music, along with its new instruments and new technologies, could become the "new draw" for the box-office. A dynamic, forward-looking organization would entice
the young and build a better financial future. Orchestras which have made a commitment to the performance of new music have not experienced the financial disasters which are often predicted, and in the case of some orchestras, ticket sales have remained stable or even increased.\textsuperscript{1} Orchestras which have made a strong commitment to the performance of new music, such as the Buffalo Symphony during the Lukas Foss years,\textsuperscript{2} have increased their national and even their international reputations.

In the next 100 to 150 years, the symphony orchestra in the United States may become extinct, except for just a handful of orchestras. Finances may hasten the decline of some orchestras in the near future. The symphony orchestra, and those connected with it, must look to the future and decide its role. If the symphony orchestra acquiesces in becoming a museum, then its end will be hastened. The orchestra will survive only as long as tradition and status will sustain it. If the symphony orchestra wants to prolong its life, on the other hand, it must take immediate action in order to alter the direction it is now taking by once again incorporating the element of positive change within its structure through the performance of new music.


\textsuperscript{2} Interview with James Pyne, The Ohio State University, Columbus, Ohio, 8 May 1987.
BIBLIOGRAPHY


——. The Orchestra in the XVIIIth Century. Cambridge: W. Heffer and Sons, Ltd., 1940.


"Cleveland In Retropsect: The View From The Bridge." Quad-O Quarterly, Winter 1987, 2-4.


Pyne, James. The Ohio State University, Columbus, Ohio. Interview, 8 May 1987.


Weait, Christopher. The Ohio State University, Columbus, Ohio. Interview, 4 May 1987.
