The Cambridge Companion to the

ORCHESTRA

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1 The history of the orchestra

TIM CARTER AND ERIK LEVI

The orchestra before 1800

Any history of the 'orchestra' will depend significantly on how the term is defined. One can start from two quite different premises: that an orchestra is a corporation of instrumental musicians; and that an orchestra is a corporate musical instrument. The distinction is, in effect, that of the orchestra as an institution and as a sounding body. The history of the institution is a matter for economic, social and other historians dealing with the musical profession and its broader place in Western (or Westernised) art traditions. The history of the 'instrument' is more inherently musical, concerning how composers have been motivated by, and have motivated, changes in the constitution of the orchestra in different genres, forms and styles through the ages. These histories are contiguous – one cannot have the instrument without the body of instrumentalists – and yet not necessarily congruent: corporations of instrumentalists existed long before the orchestra as such came into being. For example, it is a moot point whether one can use the term 'orchestra' for a group of ceremonial trumpeters at a medieval court, for a Renaissance string or wind band, or even for the 24 violons du Roi in the Versailles of Louis XIV of France. It is no less moot whether one can speak of orchestration, as distinct from the use of instruments, in the works of Monteverdi, Lully, Bach and Handel or even, perhaps, early Haydn.

Most would probably agree that the history of the orchestra – whether as an institution or as an instrument – in any useful sense of the term begins somewhere in the seventeenth century, for all the important precedents in, say, the instrumental bands in late Renaissance churches such as St Mark's, Venice, or in the North Italian courts. The Renaissance had already seen established the notion of instrumental consorts – instruments of the same or similar family covering more or less the equivalent of the four 'voice' ranges of soprano, alto, tenor and bass – that allowed for independent instrumental ensembles. Mostly these consorts were kept distinct, not least in terms of where they might perform: hence the distinction between 'indoor'/bas and 'outdoor'/haut instruments (respectively, strings and brass, with various wind families somewhere in between), or between consorts of viols (viole da gamba) in the chamber and 'violins' (the viole da braccio that developed into the modern violin, viola and cello) in the ballroom.

However, such groupings could be combined for larger entertainments. Renaissance theatrical works involving music, such as the Florentine *intermedi*, also established associations of instrumental colouring – strings for heaven-scenes, soft winds for the pastoral, trombones for the Underworld – that would last in opera through the centuries. But two issues come together in the Baroque period, one concerning mechanisms of production and the other concerning their product. Both had a profound effect on the changing status of instrumental music and its performers.

Crucial in terms of production was the expected or intended mobility of musical repertories within and across national boundaries. In this case, the composer must be able to assume the presence of a reasonably standardised body of instrumentalists wherever his music might be performed, be it Venice, Rome, Vienna, Paris, London or even the New World. The standardisation of musical resources prompted by music-printing is clearly one issue here, just as it was for vocal repertories during the sixteenth century: for print to be a commercial proposition (not that it always was), musical works must be performable outside the narrow confines of the composer's immediate circle. But the most mobile repertory in the seventeenth, eighteenth and perhaps even early nineteenth centuries was (Italian) opera, which did not primarily rely on print for its dissemination. Here, rather, the mechanism of transmission was initially by way of performers and impresarios, whether singly or, more often, in companies modelled on the touring groups of theatrical commedia dell'arte players. Opera also became implicated in emerging notions of the canon, the work standing of and for itself, reproducible in time and for all time. But if a Venetian opera by Monteverdi was to be performed in Naples (L'incoronazione di Poppea in 1651), if Cavalli wrote an opera for Paris (Ercole amante, for the celebrations of the marriage of Louis XIV in 1660, although it was performed only in 1662), or if Lully's Cadmus et Hermione could be staged in London in 1686, that presumes at least the expectation of reasonably consistent instrumental resources, for all that some adaptation might be needed to suit local circumstances. Thus the early history of the orchestra is closely tied to the opera house; the same applies to the early history of orchestral music, not least the symphony. Indeed, the influence of the opera orchestra whether as an institution or as an instrument remained powerful long after we prefer to focus our attention elsewhere in the late eighteenth and nineteenth centuries. Our reluctance to accept that point arises from ingrained prejudices against opera and its modes of production in favour of more 'abstract', and therefore less commercially tainted, instrumental genres. Second in importance was probably the instrumental groupings encouraged in churches and similar institutions both Catholic and Protestant; but then, sacred music, too, tends not to come high up in our musical canons.

In terms of product, at least two specific aspects of the musical Baroque demand consideration. One is the duality of styles normally, if inaccurately, expressed as the stile antico versus the stile moderno: the stile antico involves the interaction of contrapuntal lines of relatively equal status (as in Renaissance counterpoint and its Baroque extensions, chiefly fugue); the stile mod*erno* instead relies on melody and accompaniment. The role of instruments within the *stile antico* is necessarily limited to doubling (or substituting for) a vocal line, although in polychoral writing one or more of the separate choirs might be entirely instrumental. The stile moderno offered more possibilities. Although its melody was usually vocal, the accompaniment was instrumental, whether notated in full (as in lute- or keyboard-tablatures) or by way of the shorthand known as 'figured bass', comprising a bass line – the basso continuo – with explicit or implied figures revealing the harmony. The basso continuo may be realised by one instrument (say, a harpsichord) or by several (say, harpsichords, organs, chitarroni and bass viol(in)s), such that it has become common to talk about the continuo 'band' or even orchestra in this period; even in Monteverdi's first opera, Orfeo (1607), the constitution of the large continuo group changes according to dramatic circumstance. But that accompaniment can also, and increasingly does, involve upper instrumental parts that both support and interact with the voice, whether to colour the vocal utterance (as in, say, tone-painting) or to place it within a formal frame (as with instrumental ritornellos).

Granting instrumental music coloristic or structural roles involves perhaps the most significant shift of the Baroque period: conceding aesthetic status and semiotic power to wordless music. True, the Renaissance had its instrumental preludes, fantasias and dances, but such music was low down the pecking-order of Renaissance styles because it appealed to the senses rather than (by way of the text) to the intellect; it was but an imperfect representation of some harmony of the spheres. It was also largely functional, whether to create a moment of respite between one action and another (an interlude between chamber madrigals; an organ fantasia within the Mass), or to create the time and space for an action to take place (a dance; the consecration of the Host). But new notions of musical rhetoric emerging in the Baroque period granted music per se a communicative power independent of its text. They did so by adding to a semiotic system based on symbols (somehow resembling the meaning to be conveyed) one based on signs (somehow representing that meaning). These signs could be interpreted by the competent listener thanks to their conventional association: for example, a descending chromatic tetrachord represents 'lament' even without a lamenting text. At that point, wordless music conveys meaning; a sonata can be 'read' much as one might read a painting. Add to that the principles of tonal patterning that also emerged in the Baroque, and instrumental music

thus gained both structural force and expressive power to determine the shape and flow of a musical argument.

The processes were neither swift nor straightforward. Instrumental music only slowly escaped the limits of functionality: most purely instrumental items in most operas have a specific function, if only to cover changes of scenery or allow for stage movement, while even in the nineteenth-century concert hall the symphony (or its separate movements) was often preludial to some other musical act, be it vocal (a virtuoso opera aria) or an instrumental equivalent (a concerto). Likewise, the orchestra as in effect a single musical instrument did not emerge fully formed. The notion of the strings as core became apparent early on, chiefly, one assumes, because of the range (whether of pitch or of dynamic), flexibility (also in terms of temperament) and cohesiveness of the *viole da braccio* family, but also, perhaps, because of the core role of the string band in late Renaissance dance. The early model in Italy, which lasted much longer in France, was a five-part scoring (one soprano, two altos, one tenor and one bass). However, this gradually changed to a standard four parts (in effect, SATB), with or without an additional 16' instrument on the bass line sounding an octave lower (Monteverdi's specification of a 'contrabasso di viola' for the Combattimento di Tancredi e Clorinda of 1624 is an early example).

By the mid-seventeenth century, any opera house had to have on hand a string band and a continuo group – plus occasional wind players as needed – but in the case of the strings it might get away with just one to a part and perhaps no viola, assuming that the theatre was on the small side. It is probably pointless to argue over whether such instrumental groups were an 'ensemble' or an 'orchestra'. Having more than one player per (string) part – often considered a defining feature of an orchestra – was not a sine qua non. The string parts in Monteverdi's Orfeo seem to have been doubled (ten players for five parts), but this was essentially a matter of increasing the sound rather than to create a specific sonority; thus Monteverdi claimed in the performance notes for his Ballo delle ingrate printed in 1638 that the five instrumental parts 'can be doubled according to the needs of the size of place in which it is to be performed'. However, by the second half of the century genres such as the concerto grosso became predicated upon the contrast between one-to-a-part soloists (the concertino) and a larger group (the ripieno). Other instruments were optional and essentially coloristic; they were also usually played by individuals with a range of responsibilities. A very early example is, again, Monteverdi's Orfeo, where even two of the violin players (Giovanni and Oratio Rubini) also probably each played the chittarone. Such multi-tasking remained common in the profession through the eighteenth century (wind players shifting from flute through oboe to clarinet; a situation not unknown in modern pit orchestras) and to

the present day (clarinettists playing saxophone), even as rising standards of instrumental performance forced increased specialisation just on specific instruments rather than their families. However, in the early Baroque period instrumental parts were not always so idiomatic that they could not be scored differently: the dance music in Monteverdi's *Ballo delle ingrate* was originally performed (in 1608) by 'a large number of musicians playing both string and wind instruments', and not just the strings presumed indicated in the 1638 print.

'Orchestra' as a term for a body of instrumentalists - as distinct from the area in the theatre where they played – was in use in France and Italy by the 1670s, and in Germany and England by the first quarter of the eighteenth century. By the 1730s there were numerous orchestras across Europe recognisable in the modern sense of the term. Charting their changing composition through time, as in Appendix 1, permits one to see quite clearly the gradual establishing of a standard orchestral constitution starting with the strings, to which were added individual wind and brass (plus associated percussion) instruments, and then their complete families. Some of the apparent oddities in the number and distribution of instruments may just be quirks of taste, but they also no doubt reflect both function (the greater the number of players, the grander the occasion) and environment. For the latter, the tendencies towards large groups of oboes and bassoons in the late Baroque and pre-Classical periods, or towards a bottom-heavy string section with surprising numbers of double basses later in the eighteenth century, presumably derive from attempts to cope with acoustic realities: even indoors, performance spaces constructed in wood, and the tendency for audiences to wear heavy clothing, would dampen the sound (hence the penetrating double-reed instruments) and would also favour the upper frequencies (hence the bass reinforcement). Such statistics as those in Appendix 1, however, mask quite striking variations across time and place, and also a tendency to preserve older performing and other practices, whether out of preference or just because of an innate resistance to change. The Paris Opéra retained the distinction between the *petit choeur* (the continuo group, plus some obbligato instruments) and the grand choeur (for the larger-scale instrumental items such as overtures and dances) until 1778; even Haydn directed his 'London' symphonies from the keyboard in the manner of a Baroque continuo player, adding improvisatory flourishes in the process; and most orchestral music was published and sold in single parts, requiring further copying for larger-scale performance.

The rise of the orchestra was further supported by, and prompted, changes in instrument design and manufacture, newly emerging systems of musical training (for example, the conservatoires established in Naples and Venice in the seventeenth century), and even the development of standard

tunings and temperaments, although absolute pitch standards continued to vary quite widely. It also reflected emerging notions of a corporate orchestral 'sound' produced by a disciplined body of musicians, and necessitated new modes of musical direction, whether from the continuo player, the principal violinist, or a conductor. Both Lully in France and Corelli in Italy were famed for their abilities in co-ordinating large ensembles – in Corelli's case often up to sixty instrumentalists, and at times more - by way of unison bowing, careful intonation and a clear beat. Lully also did much to establish a standard orchestral scoring in his operas – strings plus two oboe and two bassoon parts (to which other wind and brass instruments might be added as required) – which by virtue of its transmission across Europe by his pupils and admirers provided the basis for the orchestra of the Classical period; the majority of symphonies by Haydn and Mozart are for this scoring, with the addition only of two horns. The French, too, made orchestral colour an integral part of their style, such that the orchestration of, say, Rameau or Gluck (in his Paris operas) was invariably more subtle and more varied than the music of most Italians.

The majority of the 'orchestras' before 1800 listed in Appendix 1 are, in effect, house ensembles, be that 'house' a royal or noble patron's, a church or a theatre, for all that such an ensemble might perform different music in a variety of places. The emergence of the independent orchestra as a more or less permanent professional, even self-governing, body is quite a late phenomenon, and one tied to the rise of the concert hall and related institutions (e.g., pleasure gardens) as a viable - later, perhaps the chief - space for musical performance: important early examples from the second half of the eighteenth century are the Concert spirituel in Paris, the Grosse Konzert in Leipzig, and in London the Bach-Abel and the Salomon concerts (the latter famously involving Haydn). Inevitably, this is an urban phenomenon involving the rising taste for musical entertainment within a civic middle class, and the new possibilities arising thereby for composers and performers to embrace freelance professional careers. The mechanisms of the opera house (for both composer and consumer) were thus transferred to equivalent non-operatic environments. But such concerts became fixed as a primary mode of musical production only when various former roles of individual patrons or institutions were subsumed by the city (in the nineteenth century) or by the state (in the twentieth), and only when musical art achieved aesthetic independence from its more immediate purposes.

Composers have always been influenced by the performers for whom they have written, and Bach's obbligato instrumental parts in his cantatas, or Haydn's in his early symphonies, were clearly motivated by specific musicians available to them. The emancipation of orchestral wind and brass instruments so noticeable in the second half of the eighteenth century – where

they could take part in the thematic presentation rather than just playing a supporting role – also reflects the increasing virtuosity of (often German or Bohemian) players. But an orchestra is more than just a collection of soloists, and by the mid-eighteenth century, one can detect the notion of the orchestra itself as a single virtuoso body, indeed one for which 'concertos' might be written. The specific ensembles for which Handel wrote his orchestral concertos, or Bach his orchestral suites, remain obscure, but by the second half of the eighteenth century orchestras in Mannheim and Paris had distinctive reputations as highly disciplined musical bodies. The famous 'Mannheim style' adopted by the Stamitz family, Mozart's excitement over the performance of his 'Paris' symphony, or the rich variety of Haydn's 'London' works mark a new relationship between composers and the medium. They also establish the point where the symphony becomes high art, and good orchestral writing a *sine qua non* of the composer's profession.

The orchestra after 1800

Political and social upheavals at the end of the eighteenth century had a profound impact on almost every aspect of music. Yet the orchestra after 1800 evinces features of continuity as much as change. For example, the sustained growth of public concerts and concert societies and the inexorable shift from private to public patronage of orchestral activities had already started in the eighteenth century. The success of public ventures such as the Hanover Square Concerts in London (1775) or the Gewandhaus Concerts in Leipzig (1781) in effect therefore provided the prototype for the formation of numerous orchestral societies in the nineteenth century. Yet during this process the middle classes began to exercise an increasing influence over the aristocracy as arbiters of musical taste, even if a number of major composers still worked for princely patrons. Thus, circumstances varied considerably depending on political contexts, whether 'absolute' monarchy, or a tendency in theory or practice towards republicanism, or in cases where the power of the monarch was constitutionally limited.

Many aspects of the orchestra that changed after 1800 are explored more thoroughly later in this volume. They include such important issues as the incorporation of more woodwind, brass and percussion instruments into the orchestral fabric, as well as the evolution of sophisticated technological designs that enhanced these and other instruments' capacities for greater tonal power, range and agility. The growing influence of the conductor was no less significant in shaping the future character of the orchestra. In the eighteenth century, the conductor's role was normally taken by the leader

of the orchestra or by the keyboard continuo player and limited to that of maintaining the pulse, indicating cues and ensuring co-ordination of ensemble. Yet by the 1850s, the conductor wielded a baton, and rarely if ever directed from an instrument. This change was certainly initiated in the opera house, primarily because of the increasing complexity and size of the orchestral forces that were required for nineteenth-century operatic works. Moreover, conductors were no longer exclusively composers, as they had been before. While composer-conductors continued to demand the right to control performances of their music, in part for pragmatic reasons and in part because of their vision and romantic self-imaging, their work could also be exploited by a professional entrepreneur such as Habeneck who regarded himself as a performer and interpreter in his own right, utilising the orchestra as a vehicle for demonstrating his own virtuosity.

The venues and social contexts in which orchestras performed were far more varied than before. This makes it difficult to generalise about the size of an orchestra, particularly in the earlier part of the century, where orchestral players were not contracted exclusively to one ensemble, and records of personnel have not fully survived. None the less the statistics provided in the Appendices illustrate a pattern of growth that is reasonably consistent throughout most countries in Europe, and also a move towards greater standardisation. This was particularly the case after the emergence of large and independently constituted concert orchestras such as the Berlin Philharmonic and the Boston Symphony Orchestra towards the end of the nineteenth century.

As well as expanding in size, orchestras were disseminated across wider geographical areas than before. Whereas in the Baroque and Classical eras orchestral activity had been largely restricted to provincial courts and longestablished musical centres, economic growth and population movement saw the establishment of orchestral societies in newly industrialised urban towns. In England, for example, the flourishing textile industries of the North-West created a burgeoning demand for regular musical activity which was realised in Liverpool through the creation of the Philharmonic Society in 1840, and in Manchester through the efforts of Karl (later Charles) Halle who in 1857 founded the orchestra that bears his name. Likewise, the flood of European immigrants to the larger cities in the United States provided the cultural backdrop to the formation of the New York Philharmonic Society in 1842 and the Boston Symphony Orchestra in 1881. In all these examples, the creation of a new orchestra becomes a matter of civic pride and even obligation. It is a case not just of the democratisation of the arts, but also of the notion that the arts serve a civilising function. Significantly neither Britain nor the United States adopted the German model of creating an opera house in every city, and one can argue that the emergence of large

symphony orchestras in these countries represents one further example of the downgrading of opera in the artistic canon.

Yet despite developments in Britain and the United States, it should be emphasised that the opera house remained the focal point for much orchestral activity. Orchestral musicians contracted to opera houses in large urban centres such as Paris, Vienna and Berlin continued to work primarily in the theatre, venturing relatively infrequently into the concert hall before 1850. Attempts to correct this imbalance met with varying degrees of success. In Dresden, for example, regular subscription orchestral concerts were only established as late as 1858 despite the valiant efforts of a succession of dynamic court opera directors including Weber and Wagner. In Vienna the Philharmonic Orchestra established by Otto Nicolai in 1842 drew its membership from the orchestra of the court opera. But in its early years the ensemble gave only two concerts per season, increasing this number to six by 1861.

One explanation for opera's continued prominence related to the greater commercial opportunities it afforded to composers. By and large composers were able to experiment more creatively with orchestral sonority in the theatre than in the concert hall. Opera orchestras employed a larger number of personnel and were able to accommodate novel or unusual instruments, many of which only gradually gained acceptance in purely orchestral works. It is therefore not surprising that some of the earliest nineteenth-century treatises on orchestration draw most of their examples of scoring and instrumental potentiality from operatic literature. For example in Kastner's Cours d'instrumentation (Paris, 1839, rev. 1844), the chosen musical excerpts derive from operas by Mozart, Gluck, Meyerbeer, Beethoven, Winter, Boieldieu, Weber, Halévy, Méhul and Berlioz, with only two references to Beethoven's symphonies. Admittedly Beethoven's orchestral works are featured more frequently in Berlioz's widely disseminated Traité d'instrumentation (Paris, 1844). But it should also be noted that of the sixty-six extended music extracts, thirty-nine are taken from operas by Gluck, Weber, Halévy, Meyerbeer, Rossini, Mozart and Beethoven.

Despite the wider ramifications of the French Revolution and the Napoleonic Wars, the court maintained some degree of influence over orchestral matters. Yet its power to harness the cultural environment had certainly declined. In Germany and Austria, for example, the position remained variable. Although court orchestras in larger cities survived periods of financial and political turbulence through realising a fruitful partnership between private and public enterprise, those in the provinces were less fortunate. Indeed, many court orchestras that had established an international reputation during the eighteenth century, such as those at Bonn and Trier, were disbanded, often on financial grounds. Yet aristocratic patronage of orchestral activities in the provinces by no means collapsed. One

remarkable feature of musical life in the first half of the nineteenth century is the extent to which a number of the leading composers of the period secured employment as directors of provincial court orchestras. One thinks in particular of the work of Louis Spohr, employed as court Kapellmeister in Kassel, and later in the century of Brahms, whose brief tenure with the court orchestra in Detmold in the 1850s sharpened his gifts as a composer of orchestral music. Perhaps the most tangible demonstration of the flourishing relationship between the aristocracy and the composer was realised in the small town of Weimar where the piano virtuoso Johann Nepomuk Hummel was appointed court Kapellmeister in 1819, considerably enhancing the repertory and standards of performance over the next twenty years. The most important of Hummel's successors was Franz Liszt, who abandoned his career as an itinerant virtuoso in 1848 to take charge of the orchestra with the objective of making Weimar one of the most enlightened cultural centres in Europe, promoting operas by Wagner and Berlioz as well as his own symphonic poems.

Remarkably, aristocratic patronage of orchestral activity did not entirely subside even after the unification of Germany in 1871. Despite limited numbers of players, the Weimar Staatskapelle prospered at the end of the nineteenth century, thanks partly to the founding in 1872 of the Großherzoglichen Musikschule for the training of instrumental musicians. Thus when Richard Strauss became court Kapellmeister in 1889, the orchestra had the technical capability to give the first performances of such challenging works as the composer's tone poems *Don Juan* and *Macbeth*. No less remarkable were the standards of execution achieved at the court orchestra of Meiningen, where Duke George II supported a court orchestra which under the directorship of Hans von Bülow (1880–4), Richard Strauss (1885–6) and later Max Reger (1911–15) attained a reputation for excellence that was recognised and admired throughout Europe.

Yet in the increasingly industrialised environment of the mid-nineteenth century, the achievements at Weimar and Meiningen were exceptional. By and large, orchestral enterprise became synonymous with musical activity in metropolitan centres where it was supported by a mixture of civic initiative and individual entrepreneurial skill. Arguably one of the earliest concert orchestras to establish itself on this basis was the Société des Concerts du Conservatoire in Paris. Founded in 1828 by the violinist François Antoine Habeneck, it drew its initial membership from the finest instrumentalists from Paris's orchestras, received a generous subsidy from the government of Charles X, and rehearsed with sufficient frequency to attain an unrivalled precision of ensemble. Although Habeneck led the orchestra with an iron grip, its charter was established along democratic principles so that it was run essentially by the members of the orchestra.

While the Grande Salle at the Conservatoire had an audience capacity of nearly a thousand, the relative expense of concert tickets, coupled with the difficulty of obtaining season subscriptions, gave the orchestra a reputation for exclusivity. But with the wider dissemination of music, in which publishing played a vital role, came a burgeoning desire to bring orchestral works to a less affluent public. In Paris in 1861 this objective was accomplished by Jules Pasdeloup, who initiated a series of Concerts Populaires which took place in a far less salubrious district of the French capital. Pasdeloup charged ticket prices that were almost half those of the Conservatoire and enjoyed success with the public until 1884, when his efforts in this direction were superseded by those of two further orchestral entrepreneurs, Eduard Colonne and Charles Lamoureux. The success of Pasdeloup, Colonne and Lamoureux challenged the exclusivity and conservatism of certain sectors of French musical life. Apart from establishing a high personal profile for these particular conductors, their particular enthusiasm for new French music changed the very nature of musical developments in the country, helping to establish a cultural environment that prompted a strong national awareness amongst audiences.

Similar contrasts between social exclusivity and populism, determined to a certain extent by the performance venue, were also manifested in London, where several concert societies thrived during the nineteenth century. The oldest and best known, the Philharmonic Society founded in 1813, sustained its reputation through engaging high-profile soloists and commissioning important new works such as Beethoven's Ninth Symphony. Performing in the relatively confined Hanover Square Rooms, with a capacity of 900, it charged high ticket prices and maintained a reputation for exclusivity which only changed after 1869 with a move to the much larger St James's Hall. Conversely, the New Philharmonic Society, which was founded in 1852 but survived only until 1879, evolved in the opposite direction, beginning its existence in the spacious Exeter Hall, but moving four years later to the Hanover Square Rooms, where higher admission prices were charged. Both organisations were however challenged by the entrepreneurial skills of the Frenchman Louis Jullien, whose promenade concerts drew enormous and socially diverse audiences between 1840 and 1859, and later by the equally successful German-born August Manns, who established the Crystal Palace Concerts series after 1854.

The repertory of the orchestra after 1800 underwent considerable changes from that of previous eras. During the latter part of the eighteenth century, concert programmes in the majority of European cities were tied to conventions that normally required the alternation of short vocal and instrumental items and the avoidance of performing two pieces in the same genre consecutively. A typical sequence of works adopted in such places as Leipzig

between 1780 and 1800 would open with an overture followed by an aria, a concerto or a solo number, and concluded with a vocal or choral finale drawn from an opera or oratorio – a pattern that was almost exactly replicated in the second half of a concert. This mould was gradually broken, however, through a combination of factors. In particular the increasing length and significance of the symphony, as represented in the works of Beethoven and later composers, made it much more difficult to retain such rigid principles of programming. Thus, during the first decades of the nineteenth century Beethoven's 'Eroica' Symphony, for example, was often featured as the opening work of the second half of a concert, sometimes being followed by an operatic aria.

Although concert programmes up to the end of the nineteenth century often continued to feature a mixture of operatic, vocal and instrumental material, the elevation of the symphony as the most important orchestral genre also served to hasten the emergence of a museum repertory based upon the musical canon of the great German composers from Haydn to Brahms. The American musicologist William Weber describes this development as beginning in the 1840s when orchestras generally stood outside the mainstream of musical taste. During this period, critics and theorists, as well as a number of composers, reacted against the intense commercialisation of music as reflected in the wide dissemination of simplified editions of popular operatic arias and piano works. Within this context the symphonies of Mozart and Beethoven were regarded as emblematic of loftier musical principles, and such works increasingly formed the backbone of orchestral programmes. After 1848 when many orchestras had moved from being private concert societies into civic cultural institutions, the taste for commercial musical entertainment was better satisfied by emerging salon and café orchestras whose repertory focused on light instrumental music and operetta.¹ Meanwhile the orchestral concert attained a much more hallowed status, commemorating high art and the new social order through the works of great masters. As Weber remarks, 'the canon of great works emerged among the most important bastions of high culture in the new industrial society, providing high-minded art as a counterpoise to the increasingly aggressive profit-seeking in the market place.'2

To substantiate this argument, Weber examines concert programmes in four European cities in some detail. In Leipzig, for example, the repertory of the Gewandhaus concerts during the period 1780 to 1870 demonstrates an increase in the proportion of repertory by dead composers from 13 to 76 per cent. This manifestation of extreme conservatism was only challenged temporarily in the 1860s by the Euterpe series which favoured the progressive music of Liszt, Wagner and their disciples. The programmes of the Philharmonic Society in London, although adhering more closely to

the conventions established in the eighteenth century, also reflect similar tendencies to those at the Gewandhaus, with music by living composers constituting only a quarter of the repertory presented in the 1870s. In Vienna, the Philharmonic concerts, firmly established in the 1860s, provided even greater focus on symphonic repertory than in those cities. Although music by living composers such as Brahms, Bruckner, Dvořák and Smetana appeared on its programmes during the 1880s, the organisers maintained a strong reliance upon the symphonies of Mozart, Beethoven, Schubert and Mendelssohn. This purist and conservative approach to programming may have been modelled on that of the concerts presented by Habeneck at the Conservatoire in Paris between 1828 and 1847, where salon music and popular bel canto arias were studiously avoided, and the performance of music by living composers was restricted to one piece at every other of the dozen concerts presented each season. The popular concerts presented by Pasdeloup and Colonne between 1860 and 1880 offered audiences much more opportunity to hear new French music and works by Wagner, although in the case of Colonne's programmes, over 70 per cent of the repertory still remained rooted in the past, and much of the new music was made up of operatic extracts.

The end of the nineteenth century marks the birth of the modern symphony orchestra. It was during this period that many of the major European and American symphony orchestras were formed, and with this development came an increasing standardisation in terms of size, instrumentation, employment structures, and repertorial policy. For example, the membership of the Boston Symphony Orchestra in 1906 and 1970 numbered 96 and 104 players respectively, while statistics for other orchestras throughout the twentieth century have demonstrated a membership averaging around 100.³ In terms of the disposition of instruments in the modern symphony orchestra, the tendency towards providing greater strength in the first violins over the seconds was prevalent at the turn of the century, while the augmented numbers of wind and brass players, and even harps, were already in place to cope with the extravagant orchestral demands made by composers such as Richard Strauss and Mahler. The only major change to the instrumental balance of the orchestra since 1900 has been the considerable augmentation in the percussion section. But while the symphony orchestra has readily accommodated the percussion (and to some extent also the piano as an orchestral instrument), it has remained notoriously conservative with regard to accepting wind and brass instruments such as saxophones or Wagner tubas that were invented during the nineteenth century. This may be as much for economic reasons as for artistic ones.

While there are tangible connections between the size and instrumental make-up of an early and late twentieth-century symphony orchestra, it

should be pointed out that the modern symphony orchestra sounds rather different from its predecessors. Changes in instrumental design and the raw material used for instruments, coupled with the increased employment of vibrato in the strings and woodwind, have served to create a tonal quality that is far stronger in volume, offering greater brilliance to the listener. Performance styles have also changed, but more significantly, the advent of broadcasting and recording has served to fix a standard and idealised orchestral sound. An inevitable consequence of these developments is that many orchestras have lost the distinctive elements of timbre that remained unique to certain countries before the First World War.

The organisational structures of the modern symphony orchestra can be traced back to the late nineteenth century and have been shaped by different political traditions. For many European orchestras, the state or municipality has taken over their financial stewardship much in the way that the court fulfilled such a role in earlier eras. The members of the orchestra are therefore employed as civil servants, and their managers assume positions as government or civic functionaries. In the free-market economy of the United States, orchestras are generally organised in a different manner. Following the structures that were established in some of the country's older orchestras, many operate as independent non-profit corporations that are controlled by a lay board of directors and business managers. Government subsidies remain at a modest premium, making the orchestra reliant upon industry or commerce to provide necessary funding. A third system of organisation, adopted by such orchestras as the Vienna Philharmonic, Berlin Philharmonic and London Symphony Orchestra, is that of the co-operative in which the orchestra is owned and organised by the musicians with the help of a professional administrator, and financed through a mixture of state and private sponsorship. These structures are discussed further by Stephen Cottrell in chapter 15 of this book.

Although opportunities for employment in orchestras have been open in theory to both genders, in practice the symphony orchestra has remained strongly resistant to engaging women until relatively recently. Although the Second World War radically changed women's position in the workplace, be it on the factory floor or on the farm, the only female instrumentalist who was almost guaranteed employment in an orchestra was the harpist. Some orchestras in the United States employed a few women in the string sections, but rarely if ever in the wind and brass. Even after 1945, when many countries ostensibly outlawed sexual discrimination in the workplace, the percentage of female orchestral members has risen very slowly. A study by Julia Allmendinger and J. Richard Hackman published by the University of North Carolina Press in 1995 suggested that in 1994, the representation of women in US and UK orchestras stood at 36 per cent and 30 per cent respectively, while

those in Germany and Austria were much lower at 16 per cent. Further investigation revealed that women continued to be poorly represented in the major orchestras, where in many instances they counted for far less than 7 per cent of the personnel. Amongst the most chauvinist institutions was the Vienna Philharmonic, which only admitted a few women into its ranks in 1997, but continues to oppose any dilution of the sexes on the grounds that women might endanger the unique sound quality and performing traditions of the orchestra.

No discussion of the orchestra in the twentieth century can ignore the impact of modern technology on its activities. The invention of broadcasting, film and recording not only opened up new possibilities for the wider dissemination of orchestral music, but also enhanced opportunities for employment. From the 1920s radio stations in Europe began to establish their own orchestras which broadcast regular concert programmes over the airwaves, and occasionally provided background music for plays. Although transmission was initially rather primitive, special studios were built which enabled sound engineers to experiment with recording techniques and to avail themselves of increasingly sophisticated equipment. Since most national broadcasting systems are financed by the state, radio orchestras are in essence public institutions working both in the studio and the concert hall. From the outset, generous subsidies enabled them to explore more enterprising repertory than the conventional symphony orchestra. For example, British musical life during the 1930s would have remained parochial and conservative had it not been for the BBC Symphony Orchestra's active promotion of contemporary music. Likewise, the rebuilding of German music, and also Italian, after the Second World War could not have been accomplished without the dynamic contribution of the radio orchestra.

The relationship between the orchestra and the cinema has been more turbulent. During the silent-film era, cinema orchestras of varying sizes were established in picture houses throughout Europe, either performing originally composed scores or providing a pot-pourri of familiar musical extracts as directed by the conductor. Their function was both aesthetic, in that they attempted to heighten the emotional impact of events taking place on the screen, and practical, in that their sounds drowned out the whirr of the projector. In Germany cinema orchestras became especially popular and by 1929 employed over 6,000 musicians.

After the advent of the soundtrack in 1930, the cinema orchestra became obsolete almost overnight, with obvious catastrophic consequences for many musicians. But in America, the booming film industry began to draw instrumentalists to Hollywood where competing studios formed their own orchestras to perform synchronised background music. Since many of the composers who were contracted to compose film scores were influenced

by the Austro-German late romanticism, studio orchestras were generously endowed with large instrumental personnel, their extravagant and opulent sonorities providing audiences with the necessary means of escape from the disturbing political realities of the period.

By the 1970s changes in public taste and commercial pressures had sounded the death-knell for many American studio orchestras, such as those at MGM and Warner Brothers. Since the cinema was now competing with television for mass audiences, film companies could no longer afford to sustain orchestral ensembles on the same scale as before. Besides, the lateromantic film score was out of fashion, having been superseded by a widespread use of pop music. Yet orchestral music has by no means disappeared from the film world. High-profile composers such as John Williams and James Horner continue to write scores following the traditions established by Steiner, Korngold and Waxman in the 1930s, the major difference being that symphony orchestras are more regularly employed to perform their music. Moreover, in today's pluralist environment, some film music has entered the standard orchestral repertory and features regularly in concert programmes.

Although recording soundtracks for the latest blockbuster films undoubtedly provides a lucrative source of income for an orchestra, its profile in the music world is more enhanced by regular work in the recording studio. Indeed, throughout the twentieth century, commercial recording has proved to be a vital component of orchestral activity. Its importance can be measured in many ways. On a purely historical level, it has provided orchestras with the opportunity to give a degree of permanency to certain performing traditions. It has also acted as a useful documentary means for chronicling orchestral achievements over a period of years. Some ensembles such as London's Philharmonia Orchestra were initially formed by the EMI record company in the mid-1940s for the sole purpose of serving a burgeoning consumer demand for high quality long-playing records. This connection between commercial enterprise and orchestral activity has strengthened in recent years to the extent that recording has become an essential marketing tool for establishing an orchestra's identity, bringing its work to the widest public, and thereby attracting greater financial sponsorship.

More than in any other century, the orchestra has been utilised as a propaganda tool, particularly by politically repressive regimes. During the Third Reich, for example, the NS Reichs Sinfonie Orchester was created as the orchestra of the Führer, drawing its membership from musicians who had lost their jobs during the financial crisis of the early 1930s. The orchestra was based in Munich but spent most of its time touring the country. Propaganda speeches from local Nazi officials accompanied its concerts, which were given mainly in local town halls or schools. Long-established German orchestras

also served to bolster the regime, participating in concerts organised by the 'Strength through Joy' movement, or honouring special days in the Nazi calendar. During the Second World War, orchestras such as the Berlin Philharmonic made regular tours to the occupied territories and politically friendly countries to enhance morale and emphasise the supposed superiority of German culture. At the same time, many musicians were forcibly transferred to occupied Poland where local gauleiters pursued a resolutely imperialist policy in establishing their own German orchestras. While the Ministry of Propaganda nominally handled cultural issues, it is interesting to note that during the 1940s Hitler played a leading role in the creation of the Linz-Bruckner Orchestra – an ensemble of 140 players designed to confirm the Austrian city's position as the capital of the Greater German Reich. Much the same could also happen on the opposite side of the political coin. In the Soviet Union, the regime may not have appeared to pursue such an overtly aggressive policy towards its orchestras, yet from the 1930s onwards it operated a rigorous censorship of their programmes. Also, after the Second World War, Soviet orchestras regularly appeared in Eastern European countries with the purpose of solidifying political ties. The cultural ministry supervised orchestral tours to the West after the mid-1950s in which orchestras such as the Leningrad Philharmonic or the USSR Symphony Orchestra likewise acted as ambassadors for Soviet musical life.

1.1 Rudolf Kempe conducting the BBC Symphony Orchestra at the Royal Albert Hall, London, 29 August 1975



It is somewhat ironic that the conservative policies towards repertory upheld by repressive regimes such as Nazi Germany and the Soviet Union have also been replicated in many orchestral programmes in democratic countries. Outside the special conditions of the radio station and the recording studio, the symphony orchestra has remained one of the most implacable guardians of a museum culture, its programmes increasingly orientated towards music of the past.⁵ This situation has arisen largely as a result of the increasing dislocation between the modern composer and his public. Audiences have remained notoriously conservative, vehemently rejecting the composer's desire to extend the boundaries of orchestral technique and sonority. As a consequence, relatively few stylistically advanced twentieth-century works have established a secure place on the concert platform, and during periods of financial uncertainty, concert promoters have proved even more reluctant to support music that was not readily accessible.

Some impresarios and conductors have been sufficiently enlightened to try to bridge the gulf created between contemporary composers, orchestras and audiences. Utilising the orchestra's potential for financial patronage - and the tendency for rich Americans to see such patronage both as an obligation and as a convenience - Serge Koussevitsky commissioned several leading composers, including Stravinsky, Hindemith, Roussel and Prokofiev, to write works in celebration of the fiftieth anniversary of the Boston Symphony in 1930. During the 1960s the BBC Promenade Concerts under Sir William Glock pursued aggressive policies of programming modern, new or otherwise 'difficult' music. Similar opportunities were afforded to composers in the New York Philharmonic's 125th anniversary series in 1967. A more recent trend, espoused particularly in the United States and Great Britain, is the appointment of composers-in-residence whose function is to provide new repertory for the orchestra. The scheme has enjoyed some success, although it remains to be seen whether such an arrangement will ultimately affect the monochrome nature of many concert programmes.

One remarkable feature of the modern symphony orchestra has been its dissemination over a much wider geographical sphere than the metropolitan centres of Europe and the United States. Since the beginning of the twentieth century innumerable orchestras have been established in many regions of the world, including Latin America, Australia and the Far East (see Appendix 3). Initially such orchestras drew their membership, conductors and audiences from immigrants who desired to retain a connection between European culture and their new environments. But this trend changed with the development of national music conservatories which were able to train native musicians to the same high standards as their European and American counterparts. Inevitably a certain degree of cross-fertilisation between indigenous musical traditions and those of the West took place in

Latin America and the Far East, though the European musical canon still occupies hallowed status in concert programmes.

Perhaps the most dramatic expansion of orchestral activity took place in Asia in the aftermath of the Second World War. In Japan, for example, concerts and recordings of Western classical music have attracted huge audiences. Regular appearances by European and American orchestras stimulated local interest and encouraged talented Japanese instrumentalists to study at European and American conservatories with government support. In order to satisfy a growing market for orchestral music, the number of orchestras in the country since 1945 has risen from two to twenty-five, of which eight are based in Tokyo. One cannot of course ignore the darker side of this process, since Japan was aggressively and explicitly Westernised by the allies after its defeat in the Second World War. And in general, the marketing of Western music in Asia comes close to a form of cultural or colonial imperialism. Nonetheless a similar intensification of orchestral activity has been experienced in other countries of the Far East such as South Korea and Taiwan, and in China orchestras survived the Maoist Cultural Revolution to flourish in many of the larger cities by the 1980s.

While the increasing globalisation of orchestral culture has been a very distinctive feature of the twentieth century, an equally important component of musical life during this period has been its fragmentation and increasing tendency towards specialisation. Although symphony orchestras continue to thrive, albeit by offering programmes that are often confined to a rather limited repertory, their pre-eminence has been challenged by the chamber orchestra, which provides audiences with an alternative instrumental ensemble of greater flexibility and stylistic diversity, and also, more recently, by the move towards period performance. Chamber orchestras emerged during the period after the First World War partly as a result of an aesthetic desire to counter the bloated sonorities of the late-Romantic orchestra, and partly in response to a more unstable economic climate that could no longer support large performing bodies. With its limited instrumentation and reduced running costs, the chamber orchestra could afford to promote contemporary music more wholeheartedly than its symphonic counterparts. In 1926 for example the conductor Paul Sacher founded the Basle Chamber Orchestra with this purpose and over the next fifty years forged close working relationships with many leading composers, including Bartók, Stravinsky, Strauss, Honegger, Henze and Lutoslawski, all of whom contributed major works for the ensemble.

Another important feature of the chamber orchestra repertory was its focus on music of the eighteenth century – an area that, with the exception of a few classical symphonies and a number of Bach's Brandenburg Concertos, had largely been overlooked by the symphony orchestra. Once

again the desire to rediscover music of the Baroque and Classical eras was emblematic of the reaction against Romanticism and a growing frustration with the symphony orchestra's tendency to promote a limited number of canonic works. The chamber orchestra therefore provided the perfect forum for reappraising the music of such forgotten masters as Vivaldi, Telemann and Johann Christian Bach, while allowing much wider access to the early symphonies and concertos of Haydn and Mozart.

Although orchestras modelled on the pattern of the Basle Chamber Orchestra have continued to play an important role in musical life up to the present day, their influence has been considerably diminished by the rise of ensembles that have specialised almost exclusively in one area of the repertory. For example some specialist ensembles began to concentrate their attention almost exclusively on contemporary music. Since the 1950s many avant-garde composers have adopted complex performance techniques and utilised extravagant combinations of instruments that could not be easily accommodated by the conventional chamber orchestra. To rehearse and perform such repertory in a commercially viable situation requires musicians of commitment with superb reading skills and unusual instrumental dexterity – talents that were absorbed into orchestras such as the London Sinfonietta which was founded in 1968 to establish the rapport with living composers that was largely absent from the symphony orchestra.

A further threat to the standard chamber orchestra came in the 1970s when early music increasingly became the sole province of orchestras which employed period instruments and adopted performing conventions drawn from Baroque or Classical treatises. This phenomenon is explored in chapter 8 of this book. Initially such ensembles confined their exploration to music composed before 1800, but in the 1990s increasing attention was paid to nineteenth-century repertory, often with stimulating and provocative results. These developments are interesting in that they suggest a reaction in certain sectors of the musical world against standardisation and conglomerate cultural enterprise, and a concern with the preservation or reclamation of a past heritage that has much in common with the late twentieth-century environmental movements.

As we move into a new century, the future survival of the orchestra continues to arouse much heated debate, whose substance is reflected within the following chapters of this book. The orchestra faces serious challenges on a number of fronts, not least the problem of securing sufficient sponsorship either from the state or from commerce, to support its activities. Since an increasingly ageing population attends orchestral concerts, it has to find new ways of presenting its repertory and making it more accessible to younger people. To overcome these problems, many symphony orchestras have established educational programmes, at least partly in an attempt to