
Section I

THE STRINGS

1 DEFINITIONS

The string body occupies a primary position in the constitution of the orchestra. This is not merely so in a visual sense—their position at the front of the concert platform—but because the very presence of multiple strings can be taken to determine whether a group of instruments should be described as an orchestra at all. Even the presence of single strings (that is, one player of each department) is barely sufficient to qualify an ensemble as an orchestra, though borderline cases exist such as Jean Françaix's *Sérénade* which, scored for twelve instruments including five solo strings, is actually—if perhaps incorrectly—described as being 'pour petit orchestre'.

In English, an instrumental group entirely without strings is always a band; wind, brass, percussion, or military band, the latter being made up of all the other groups. This corresponds with such Italian formations as are to be found in, for example, Verdi's *Rigoletto* which contains passages for 'Banda interna' conventionally laid out in short score on two staves. In French and German, however, a wind ensemble containing either or both woodwind and brass is termed *Harmonie*, while French military bands may be simply *Musique*—e.g. *Musique de la Garde Républicaine*.

The French *les cordes* parallels the English 'strings' but the Germans with typical punctiliousness specify *Streichinstrumente*, i.e. stroked instruments as distinct from *Saiteninstrumente* which is, on the contrary, a blanket term including equally those whose strings are not only bowed but plucked, hammered or whatever, such as the instruments in Section VI: harp, piano, harpsichord, mandoline, guitar etc. Hence Bartók's *Musik für Saiteninstrumente, Schlagzeug und Celesta* is a title hard to translate since the straightforward English equivalent (*Music for*

Strings, Percussion and Celesta) fails to indicate that the score includes harp and piano. In the German title only the celesta has to be singled out, since its keyboard operates hammers that strike not on strings but metal bars.

The Italian term for the string group presents a curious anomaly. Although the word for string is *corda* (similar to the French) the section as a whole is called not *le corde* but *gli archi*, i.e. not the strings, but the bows.

2 NOMENCLATURE OF THE SECTION'S COMPONENTS

It can next be laid down for purposes of definition that the standard string section of the orchestra consists of four members of a single family subdivided according to size, and hence register: violins, violas, cellos and basses.

Although many scores use their language of origin in giving the names of the instruments, the international custom is generally to preserve the Italian. There is, however, no question of uniformity and different composers and publishers have their own idiosyncrasies, the languages even being mixed up at times.

Thus violins may be: *Violini* (It.), *violons* (Fr.), or *Violinen* (Ger.), though the Germans also sometimes use *Geigen*, a word derived from the old Italian *giga*, since in its early days the instrument was closely associated with the jig (= the French *gigue*). The English 'fiddle' is also sometimes used, though primarily as a colloquial term (Percy Grainger's attempt to introduce it into printed scores gives a quirky appearance and has had no following). The Germans also have *Fiedel*, which came to acquire a folkly flavour and was exploited by Mahler to depict the macabre country fiddler of his Fourth Symphony:

Ex. 1

1 Solo VI.
gestimmt in

(wie eine Fiedel)

mf < *p* < *f* *p* etc.

The purpose of the raised tuning is to add a more wiry, penetrating, unsophisticated quality to the playing (see also p. 103).

Violas may be: *Viola* (It.), *altos* (Fr.) or *Bratschen* (Ger.). The French use of *alto* is certainly logical, though unexpected since all other French names are in line with the Italian, while *Bratsche*, the most common of German deviations from Italian, has in fact an Italian origin—i.e. [*viola da*] *braccio* (= arm) as opposed to *viola da gamba* (= leg).

Cello seems to be the one word to have been taken over universally without exception. The full form 'violoncello' is of course widely used and this will be found with numerous endings, such as the French *violoncelle*, or without one at all as in one German form, *Violoncell*. Occasionally the howler 'violincello' does still make the odd appearance. For 'Cello' is in fact merely an all-purpose diminution (as in *vermicelli*), just as the suffix '-one' is an augmentation (e.g. *padrone*). Thus violoncello (literally) means 'a little violone'—i.e. a little big viola.

The violone, the precursor of our modern double bass, was strictly a double-bass viol and will often be found in scores by Bach and other early composers, though they may also include all the bottom string instruments within the blanket term 'continuo' or (as in Monteverdi) *bassus generalis*.

There are many differences between the members of the consort of viols and of the violin family both in shape and in methods of playing. Only in the evolution of the orchestral bass have some of these differences survived, such as the curvature of the shoulders and the so-called Dragonetti bow. The Italian *basso* or *contrabasso*, or even—strangely enough—*contrabbasso*, converts naturally into *contrebasse* (Fr.), or *Kontrabass* (Ger., spelt either with a C or a K). In English, in addition to the usual 'bass' or 'double bass,' the term 'string bass' is sometimes used, especially in groups like dance or military bands in which string instruments are a minority.

3 EARLY INSTRUMENTS

Although violins, violas, cellos and basses constitute the body of the string section, a few of the more interesting historical string instruments may sometimes be encountered in the symphony orchestra though these are never to be found in sections, only as solo players. The most familiar are the viola d'amore and the viola da gamba, the latter principally introduced as a continuo instrument or for purist performances of Monteverdi, Schütz or other early music. Perhaps its

chief claim to a repertoire status in the orchestra derives from the parts in Bach's Sixth Brandenburg Concerto, in the Passions and in some of the Cantatas. Bach's notation for it is generally similar to that of the cello, but in Cantata No. 106, *Gottes Zeit ist die allerbeste Zeit*, the first of the two gambas is notated in the alto clef and the second in the tenor and bass clefs:

Ex. 2

The musical score for Ex. 2 consists of five staves. The top two staves are for the two gamba parts. The first gamba part is in the alto clef (C4 on the second line), and the second is in the tenor clef (C3 on the second line). Both parts feature a rhythmic pattern of eighth and sixteenth notes, with dynamic markings of *piano* and *forte*. The third staff is a vocal line with lyrics: "mein Schlaf" and "vor". The bottom two staves are for the basso continuo and another gamba part, both in the bass clef. The basso continuo part has a simple harmonic accompaniment, and the second gamba part has a similar rhythmic pattern to the first. The score is in 3/4 time and features a key signature of one flat.

The viola da gamba has six strings and unlike the cello has no spike, being gripped between the knees. Moreover, as with all viols, the bow is held from beneath much like the Dragonetti bass-bow. A disconcerting feature of this gamba bow-style is that the bow strokes work the opposite way to the regular strings—i.e. the down bow travels from point to heel.

The gamba has not been revived in nineteenth- and twentieth-century music, unlike the viola d'amore which makes periodic reappearances, such as the obbligato at the beginning of Raoul's aria from Act 1 of Meyerbeer's *Les Huguenots*, the offstage solo in Act 2 of Puccini's *Madama Butterfly*, or Pfitzner's inclusion of it in *Palestrina*. Yet even in the latter opera it oddly appears only briefly in a not particularly exposed passage, whereas the many obbligatos which portray a sixteenth-century instrument in the hands of one of the characters on stage are taken by one—or at times two—ordinary violas. This is perhaps because players of the extraordinary viola d'amore, with its seven strings plus a further seven sympathetic strings, are extremely rare; in practice all such examples of these are usually played by the conventional viola, which is even given as an

ossia for the solo in the 'Parting of Romeo and Juliet' from Prokofiev's ballet. In the case of the Puccini at least, it must be admitted that the imaginative subtlety in the composer's choice of colour for Butterfly's touching night vigil largely goes for nothing, played as it is behind the scene in unison with the offstage chorus.

None of the other ancestors of the violin family have sufficient status orchestrally speaking to warrant inclusion here despite their appearance in scores by Schütz or other Baroque composers. The *violino piccolo* of Bach's First Brandenburg Concerto, Schütz's *violetta* and the numerous other instruments listed and described by Terry in his book *Bach's Orchestra*¹, belong wholly to the specialist and to history.

4 PERSONNEL

While the orchestral string section consists of groups of four related instruments, it has a basic fivefold organization. This arises out of the standard division of the violin strength into 1sts and 2nds, which are as much complete and self-contained units as are the violas, cellos and basses. The Germans refer to the strings equally as the *Streichquartett* or *Streichquintett* according to whether or not the 1st and 2nd violins are considered collectively as a single instrument genus. In this context these terms, normally associated with the solo string quartet or quintet of chamber music, are occasionally usurped in the instrumental lists at the beginning of orchestral scores, or in analyses. The abbreviation 'Q' may thus also be found in piano arrangements or vocal scores in German editions where these give indications of the instrumentation.

However true it may be that the repertoire ranging from early to contemporary music can be found to show similar divisions for instruments other than the violins, or different divisions (into three, etc.), or *no* divisions whether for violins or any of the others, these variations are far less frequent and do not affect the constitution or administration of the orchestra.

Professional orchestral musicians are employed on three scales of seniority: principals, sub-principals and rank-and-file. Of these, the last group only applies to the strings and does not exist in any other

¹ Charles Sanford Terry, *Bach's Orchestra*, Oxford University Press, London, 1932.

department. The players so designated are the lowest paid for they bear the least individual responsibility. Moreover, although rank-and-file players are all administratively equal in status, they may compete avidly for desk positions, outside or inside, nearer the front or back, first or second violin etc., and this often causes strife and discontent within a badly disciplined orchestra.

Experiments have been made in some organizations with a rotation system of rank-and-file players. This has some clear advantages but there are also equally serious drawbacks. Certainly there is an obvious overall increased responsibility, but the apparent gain in incentive through being rescued from the oblivion of the back desks is offset by the loss of potential reward through promotion. And the conductor's valuable gain in personal contact with players he otherwise only sees and controls from a distance is counteracted by the unsettling effect upon the players of being required to readjust to new partners and environment. Apart from training orchestras, therefore, such schemes remain the exception rather than the standard practice.

The principal and sub-principal players of each section, i.e. the two players at the first desk, are especially selected and auditioned both as personalities and with a view to their heavy artistic responsibility. The 1st violins are, however, a special case with the principal and sub-principal of the section the no. 2 and 3 players respectively. For the no. 1 1st violin is the Leader, that is, not just of the 1st violins, or even of the string department, but of the whole orchestra. The Americans, for whom the word 'Leader' may often signify the conductor, call this primary figure 'Concertmaster', a direct translation of the German *Konzertmeister*. The French use either *Chef d'attaque* (a splendidly graphic title) or simply *Premier violon*, corresponding with the Italian *Primo violino*, although *la spalla* is also in current use, *spalla* meaning shoulder, i.e. for the conductor to lean on (figuratively, perhaps) since the leader, with his overall authority, is the liaison between conductor and orchestra. He may also act as spokesman for the orchestra *vis-à-vis* the management, except in matters that properly fall into the province of an appointed union steward. But in addition the leader may share this role with the chairman of a representative committee formed by the members of the orchestra in such duties as addressing the assembled players on points of procedure or internal dispute.

Should the leader have extended solos to play during the course of a work, the second player automatically assumes the leadership of the

section; if both players of the first desk are playing solo lines, the tutti has to be led by no. 3 and so on. One may find as many as four solo violins used (as in the 'Gretchen' movement of Liszt's *Faust Symphony*), thus putting the onus of temporary leadership further and further back.

In recognition of the leader's position and responsibility it is the custom in Britain for him to receive special mention, as it is also to make a solo entrance on to the platform, both at the beginning of the concert and after the interval. He also takes the initiative of choosing the strategic moment to lead his colleagues off at the end. These marks of distinction are nevertheless not universal, and on the Continent the leader will mostly take his place together with the rest of the orchestra, though he may stand up to obtain silence and either give or request the A for the orchestra to tune (see also p.169).

One world-wide tradition is that the conductor shakes hands with the leader at the end of the concert. This courtesy, sometimes viewed cynically as savouring of a Mutual Admiration Society, in fact provides the conductor with the opportunity to show his appreciation of the whole orchestra, as well as the leader's cooperation. Many conductors signify their enthusiasm by shaking hands also at the very beginning of the proceedings before a note is played, or even shaking hands with all the other leaders of the sections in his immediate environment, though this last is less customary in Britain.

String players always sit in pairs at their desks, including the larger instruments up to the cellos and basses. Only in amateur orchestras does one find individuals who have managed to insist on having a desk to themselves on account of bad eyesight or whatever. This pair-seating is one reason why left-handed players are exceedingly uncommon, as their back-to-front movements are disruptive.

Single players will be seen in professional orchestras, however, when a section contains an odd number of players, either because the composer has so stipulated in the score or because such is the orchestral strength, whether through illness or otherwise. The single player will then generally occupy the last desk, but this may well prove unsatisfactory either on geographical grounds or because the programme contains passages directed to be played by precisely the last desk or desks, each presupposing a pair of players.

Pair seating automatically gives rise to two ranks of players, outside and inside—that is, nearer and further respectively from the audience. Accordingly some orchestras, preferring that the deputy leader should

be an outside player, engage their no. 3 1st violin in that capacity, thus leaving the subleader (no. 2) undisturbed in the event of a change of leader. On the other hand, some top-line international orchestras actually engage two leaders who share that extremely exacting office. They may then either sit together on the first desk (taking turn and turn about with the outside leading and inside supporting positions) or only appear at all in alternation if they feel that their prestige might otherwise be compromised.

5 DIVIDED PLAYING

Each string section is frequently required to be divided into numerous different parts and this can be carried out in various ways. Even the simplest *divisi a 2*¹ can be executed either at the desk or by desks. *Divisi* at the desk signifies that the file of outer players takes the upper line, that of the inner players the lower, and is the manner normally adopted by players for any two-fold division unless instructed otherwise. *Divisi* by desks, on the other hand, denotes that the two players at each desk play in unison, the odd numbered desks taking the top, the even numbered the bottom part. This is a very convenient method for page turns where the music continues without rests, as the outside player can keep the line going while the inside player turns.

Where *divisi* at the desk is adopted it is only natural that the foremost outside and inside players should represent the leaders of their respective files. But this may be confused when not only are the tutti *divisi* but at their head there is an odd number (1, 3, 5 etc.) of players with solo lines. The leader of the remainder (*gli altri, die Übrigen*) will then inevitably be seated on the inside at the head of those players with the lower line, though he himself will play the upper. An example may help to clarify this complicated state of affairs:

¹ This is often indicated in the score simply by 'a 2' producing a confusingly different use of this mark from its application to the wind; see p. 191.

Ex. 3

Strauss, 'Wiegenlied', Op. 41 no. 1

Sanft bewegt
(Sehr leicht und flüchtig)

3 erste Soloviolin (mit Dämpfer) *p*

Violine I (8) *pp*

(mit Dämpfer) (geteilt)

etc.

In this instance no. 4 1st violin will be the leader of the tutti section throughout the song (for the figure and *divisi* persist) playing the upper line although he sits at the head of the file playing the lower—the leader of whom will be no. 6.

Ex. 3 also shows the German equivalent, *geteilt*, to the standard Italian term *divisi*. The abbreviation *div.* is clear enough but the German abbreviation *geth.*, short for the old German form *getheilt* found especially in Wagner, is not always understood by players. The German contradiction *Alle* corresponds with the Italian *tutti*, while *zusammen* is the equivalent of *unisoni*.

It is rare to find one or other form of *divisi* actually specified in scores but the Germans do have the indication *Pultweise geteilt*. Unfortunately this, meaning literally 'deskwise', is misleading since it is in fact used to signify *divisi* at the desk as in Strauss's *Salome*:

Ex. 4

Etwas lebhafter

Vi. I (pultweise geteilt)

ff appassionato

1 Pult.

dim.

etc.

Here the extra staff for the first desk, introduced for the sake of a solo passage a few bars later, confirms the meaning of the instruction. This

is furthermore in keeping with normal practice in octave passages of this kind.

A third method of *divisi a 2* is by blocks, front and back. Composers sometimes force this method upon players and conductors by having two different parts printed carrying the music for only the front or back desks. Although this form of dividing may naturally be applied to any section it may have special relevance to the cellos, whose lower line will often be in unison with the basses, and so is best played by the back desks who sit nearest to them. The cello parts of Smetana's *Vltava*, for example, are printed in this way.

It cannot be said that any one of these methods is the best in all contexts. Each is freely used and the different forms of *divisi* may replace each other even within the span of a single work or movement. The choice will depend on various practical considerations arising from the musical layout, or in response to specific instructions in the score.

One outstanding example of such a choice arises when only half the section is required to play. This may be indicated by the Italian *metà*, or by the German *die Hälfte*. (The French equivalent *la moitié* is very rarely seen.) Except in the few instances where the score stipulates the front desks, it is usual for the file of outside players to take the passage by themselves. The virtue of this is not just to reduce the weight of tone but to thin out the actual quality.

Divisi a 3 (*en trois parties, dreifach geteilt*) can also be handled in different ways. Left to themselves the players for simplicity's sake generally take a desk a line, thus:

Ex. 5

$\text{♯} \quad \text{♯} \quad \text{♯} \quad \text{♯} \quad \text{♯} \quad \text{♯} \quad \text{etc.}$

But as can be seen from Ex. 5 this places the players of the third line very far back, as well as keeping each of the desks with the same line to play almost out of earshot of one another. If therefore the musical context is one of harmonic or chordal textures a better mixture is effected with a *divisi* by players:

Ex. 6

$\text{♯} \quad \text{♯} \quad \text{♯} \quad \text{♯} \quad \text{♯} \quad \text{etc.}$

(Ex. 5 and 6 show arrangements of players at their desks as seen to the right of the conductor. Those on the left would, of course, appear mirror-wise.)

Fourfold *divisi* (a 4, *vierfach*, etc.) is on the face of it a simpler affair since it is an obvious derivative of *divisi a 2* by desks, each line of which is then subdivided again. Looked at from this point of view it can be seen to equate with a *divisi a 4* by players:

Ex. 7

$$2\text{N} \quad 4\text{S} \quad 2\text{N} \quad 4\text{S} = \begin{pmatrix} 6\text{N} \\ 1\text{S} \end{pmatrix} \begin{pmatrix} 6\text{N} \\ 2\text{S} \end{pmatrix} \begin{pmatrix} 6\text{N} \\ 1\text{S} \end{pmatrix} \begin{pmatrix} 6\text{N} \\ 2\text{S} \end{pmatrix} \text{ etc.}$$

This is especially clear when the part is printed on two staves each bearing a pair of lines, but is less obvious when the publisher has been conscientious enough to lay out the whole scheme on four staves. This apparently enlightened practice in the event occupies so much space on the printed page that it carries with it the hazard of frequent and awkward, even impossible, page turns in busy extended passages. In such cases it may be necessary to condone the ‘desk a line’ method even here, where the disadvantages of ensemble already inherent in threefold *divisi* are rendered still more acute. An example occurs in the last movement of the Sibelius Symphony No. 5:

Ex. 8

II **Misterioso**
con sord.

The image shows a musical score for Violin I (VI.1) in Sibelius's Symphony No. 5. It consists of four staves of music. The first staff is marked 'II Misterioso con sord.' and 'ppp ma marcato'. The second staff is marked 'con sord.' and 'ppp'. The third and fourth staves are also marked 'con sord.' and 'ppp'. The music is in a key with three flats and a common time signature. The notation shows a complex rhythmic pattern with many sixteenth and thirty-second notes.

and so on for a further 73 bars. The page turns *can* only be executed with a *divisi* by desks although the closely-knit effect is sacrificed.