3 The clarinet family
Introduction: clarinets in B♭ *and A*

COLIN LAWSON

No other instrument can lay claim to quite such a large and diverse family as the clarinet (Fig. 3.1), and even the player's basic equipment of a *pair* of instruments serves to distinguish him from other instrumentalists. The B♭ clarinet has reigned supreme for some 200 years, even though Mozart, Brahms and a host of other writers of orchestral and chamber music have ensured that the A clarinet also remains absolutely indispensable. Almost as familiar within the orchestra are the E♭ and bass, whilst the basset horn has a further specialist role, notably in the works of Mozart and Richard Strauss. The scope of even this select group of closely related instruments is unmatched by any other woodwind category, though in fact the clarinet family extends a great deal further – to as many as twenty-five different instruments. The tiniest is the scarcely known clarinet in high C, more than an octave higher than the normal clarinet; in increasing order of size there are then piccolo, sopranino, soprano, alto and bass clarinets ranging down to the B♭ contrabass.[1] Least familiar are perhaps those clarinets smaller in size than the E♭, though there are also some shadowy larger representatives, such as the *clarinettes d'amour* in A♭ and G (pitched just below the normal A clarinet) from the latter half of the eighteenth century. An especially significant member of the family is the soprano C clarinet, the only one sounding at written pitch, whose prominent role within the repertoire positively demands its widespread revival.

The special character of clarinets past and present accounts for the evolution of such a large family. During the early years of the eighteenth century, the two-keyed baroque clarinet was virtually confined to music within its home key, and gradually the earliest instruments in C and D were supplemented by 1764 to a total of seven, pitched in the keys of G, A, B♭, C, D, E and F.[2] As further mechanism was added, composers gradually felt able to be more adventurous, though in the 1780s Mozart advised his composition pupil Thomas Attwood to write clarinet parts only in C and F.[3] By this time the

normal orchestral instruments consisted of clarinets in A, B♭ and C, which amongst them could cover a substantial portion of the tonalities then in common use. It became significant that from an early stage observers recognised the difference in tone-quality of the various sizes. A famous illustration occurred at the Paris Conservatoire in 1812 when Iwan Müller presented his thirteen-keyed B♭ clarinet to a panel of judges, which included the composers Cherubini and Méhul. As Nicholas Shackleton has observed in Chapter 2, Müller claimed that his new invention could play in all keys and would thus render the A and C clarinets redundant, but the panel preferred the continued use of various sizes of clarinet, not merely on technical grounds (though Müller's clarinet could hardly claim to be genuinely omnitonic), but because the exclusive use of a single instrument would deprive composers of an important tonal resource.

The Paris adjudicators differentiated clearly between the sound of the B♭ ('propre au genre pathétique') and the A ('propre au genre pastoral'), and this was a viewpoint widely echoed in contemporary tutors, which tended to regard the A clarinet as gentle, melancholy and even rather dull. Every clarinettist recognises the difference in response between the two instruments, the B♭ tending to brilliance, the A towards mellowness; not all would agree whether there is actually a difference in tone-quality discernible either to player or listener. Likewise, composers seem to have varied in their perception of the two instruments. Dvořák, for example, simply selected the clarinet most appropriate to his tonality, and proved this in his Wind Serenade Op. 44, where the main theme of the first movement recurs in the finale, transposed from B♭ to A clarinet. He would doubtless have agreed with the observation in Cecil Forsyth's *Orchestration* (London, 1914), p. 255, that '... the difference between B flat and A clarinets is less than that between a Brescian and a Cremonese violin ... not even an expert Clarinettist can tell (from its tone-quality) whether a passage is being played in the concert-room on the A or the B flat instrument'. This accords with comments by the celebrated English clarinettist Henry Lazarus in his tutor of 1881: '... those various pitched clarinets (A, B flat, C) are made so as to avoid writing music in keys which would render the fingering extremely difficult were there only one clarinet, and not for the change of timbre, as many think'. Baines (p. 119) was more cautious, remarking that '... there is a small difference in tone-quality between the two instruments, the slightly darker sound of the A being most noticeable in the lower part of the upper register'. Brymer, p. 97, claimed that one could prove scientifically that the sounds of both instruments were identical, but the analysis of clarinet tone in Jürgen Meyer's book *Acoustics and the Performance of Music* (Frankfurt, 1978) suggests the contrary. Meyer noted a lower intensity for the harmonics contained within the sound in certain parts of the range of

the A clarinet, especially the lower register. Clarinet sound in general is characterised by the predominance of odd-numbered over even-numbered harmonics, but on the A clarinet the latter are even more subdued. Despite this, Baines observed that in countries such as Italy and Spain the A clarinet has often been dispensed with, some players exclusively using a B♭ clarinet furnished with an extra semitone to reach the A clarinet's bottom note. A celebrated exponent of this practice was the Spaniard Manuel Gomez (1859-1922), a founder member of the London Symphony Orchestra. He attracted criticism from the conductor Sir Henry Wood: 'Personally, I think he made a great mistake in playing everything on the B flat instrument, and I always missed the particular quality of the A instrument with its added low notes [*sic*]'.[4]

Less radical is the common practice among orchestral players of occasionally interchanging the two instruments on technical grounds (see page 161), a procedure which has scarcely been documented in print.[5] The extent to which this damages a composer's intentions is bound to vary from one context to the next, a situation which extends also to the relationship of E♭ and D clarinets, as well as to bass clarinets in B♭ and A. Berlioz, for example, reckoned that the choice of clarinet should always be the responsibility of the composer, and he found support for this from among some celebrated players. Occasionally, composers have ventured to combine B♭ and A clarinets for technical reasons. Balakirev's Second Symphony, with D minor and D♭ major as its main tonal centres, specifies two B♭ clarinets and a third in A; this allows all the principal themes to be executed in convenient clarinet keys, and also provides the bottom note of the A clarinet (sounding d♭) as a useful pedal. Other composers have clearly regarded the B♭ and A as quite distinctive colours, Stravinsky marking the first two of his *Three Pieces for Clarinet*, 'preferably Clarinet in A' and the third 'preferably Clarinet in B flat', though at least one commentator has dismissed these indications as redundant.[6] Poulenc's *Sonata for Two Clarinets* in B♭ and A makes an obvious distinction between the two instruments which can scarcely be ignored. Acutest of all the great composers in relation to clarinet timbre was perhaps Richard Strauss, who during the course of his opera *Salome* felt the difference between A and B♭ to be important enough to use pairs of each simultaneously, the A clarinets having primarily melodic material, the B♭ clarinets brilliant figures and ornaments. A similar situation occurs in the *Symphonia domestica*, whose clarinet scoring is for D, A, two B♭s and bass. Thus in Strauss's Oboe Concerto the temptation to use the A rather than B♭ for any of the highly demanding E major clarinet figuration might ideally be resisted.

Figure 3.1

Figure 3.1 The modern clarinet family (Boehm system except (b)): (a) sopranino in E♭; (b) soprano in B♭ (Schmidt-Kolbe system; note that the reed is tied on with twine); (c), (d) sopranos in B♭ and A; (e) alto in E♭; (f) basset horn in F; (g) bass in B♭; (h) contrabass in B♭; all by G. Leblanc, Paris, except (b) by Fritz Wurlitzer, Erlbach

The C clarinet

COLIN LAWSON

The C clarinet's relatively low profile during the twentieth century is highly regrettable, since the instrument has been specified by a vast range of composers and can bring its own special musical rewards. Its long-term inability to compete with the B♭ is easy to understand, since around 1800 the latter was already acquiring a warmth of sound (particularly in the chalumeau register) at a time when the harder tone-quality of the C continued to attract comment. None the less, its individual characteristics achieved some recognition, and the Paris Conservatoire judges in 1812 made a positive assessment of its tone as 'brilliant and lively'.[7] Nowadays, its quick response and relative ease of articulation remain among its most attractive features, and its extra brilliance need not be achieved at the expense of its own distinctive sweetness of tone. Composers have left us C clarinet parts in a wide variety of musical contexts – chamber music, solo sonatas and concertos, together with much orchestral repertoire, including opera. C clarinets traditionally required a different mouthpiece from the B♭ and A, since its bore was somewhat smaller, but in recent times preference for a wider bore has meant that a B♭ mouthpiece can be used. However convenient this may be in practical terms, the result may well be a certain lack of tonal focus. C clarinets tend to have something of a reputation among players as difficult to play in tune, but this is rather unjust, since few clarinettists take the trouble to accustom themselves to the noticeable differences in response from the B♭. In particular, those parts of the compass requiring only a small column of air (such as the throat notes) inevitably demand particular control and acuteness of pitching.

Is the C clarinet ever an absolute necessity? The extent to which one believes that composers used it for reasons of colour, rather than merely a matter of technical expediency, is bound to affect one's answer to this question. The situation is in fact extremely variable and somewhat complex. Strauss often featured the C clarinet in combination with the B♭ or A, and insisted that it was quite indispensable.

Classical composers expected a certain range of orchestral colours in each key, so that it is virtually impossible in the music of Mozart or Schubert to differentiate considerations of tone-quality and technical necessity. As a result, revival of the C clarinet in these contexts is unquestionably desirable. Only on very rare occasions can we be confident that a composer has introduced the C clarinet purely on technical grounds; for example, in Mendelssohn's overture *The Fair Melusine* the first clarinet changes briefly from B♭ to C for a G major statement of the arpeggiated main theme – a passage which would have been impossible on the B♭ clarinet of Mendelssohn's day, but which is of no great difficulty on the Boehm system.

Mozart differentiated the various tonalities by a variety of orchestral means, and his delicate balance can easily be upset by the wholesale transposition of his many C clarinet parts. Where the key of an aria is C or F major, for example in *Don Giovanni* and *Così fan tutte*, he is not afraid to make prominent use of C clarinets; their presence is as vital a dramatic element as the very choice of tonality. Outside opera, C clarinets appear where C or F major has been selected principally to suit another instrument, as in the oboe concerto fragment K416f and the fragment K580b for C clarinet, basset horn and string trio. For E major numbers in *Idomeneo* and *Così fan tutte*, Mozart introduces the closely related but extremely rare clarinet in B, for which (as we observed in Chapter 2) a C clarinet with longer alternative middle joints (*corps de rechange*) would have been used.

As late as *c.* 1803 Backofen's tutor (whilst recommending the B♭ clarinet) noted that the C clarinet was favoured by the French, and this is certainly borne out by the twelve sonatas contained in Lefèvre's contemporary tutor for the Paris Conservatoire, which indicate the possibility of transposing down the accompanying bass line to accommodate the B♭ clarinet as an alternative (Fig. 3.2), a practice preferred in modern editions. In Germany the C clarinet also maintained some profile outside the orchestral wind section, for example in one of the concertos by Carl Stamitz and in two of the three duos for clarinet and bassoon once attributed to Beethoven; the C clarinet also tended to be selected where alternative solo parts for other instruments were published simultaneously, as in the case of Pleyel's Concerto. The florid obbligato in Schubert's *Offertorium* D136 ('Totus in corde lanqueo') may be another example.

Beethoven's clarinet notation often reflects the difficulties brought about by his wide-ranging approach to tonality. A variety of motives seems to have prompted his choice of the C clarinet within the orchestra, and these are now difficult to distinguish. Remembering Berlioz's advice, we should perhaps be more willing to retain the C clarinet even when tonality seems the principal reason for its presence, for example in the C minor solo in the Agnus Dei of the *Mass in C*,

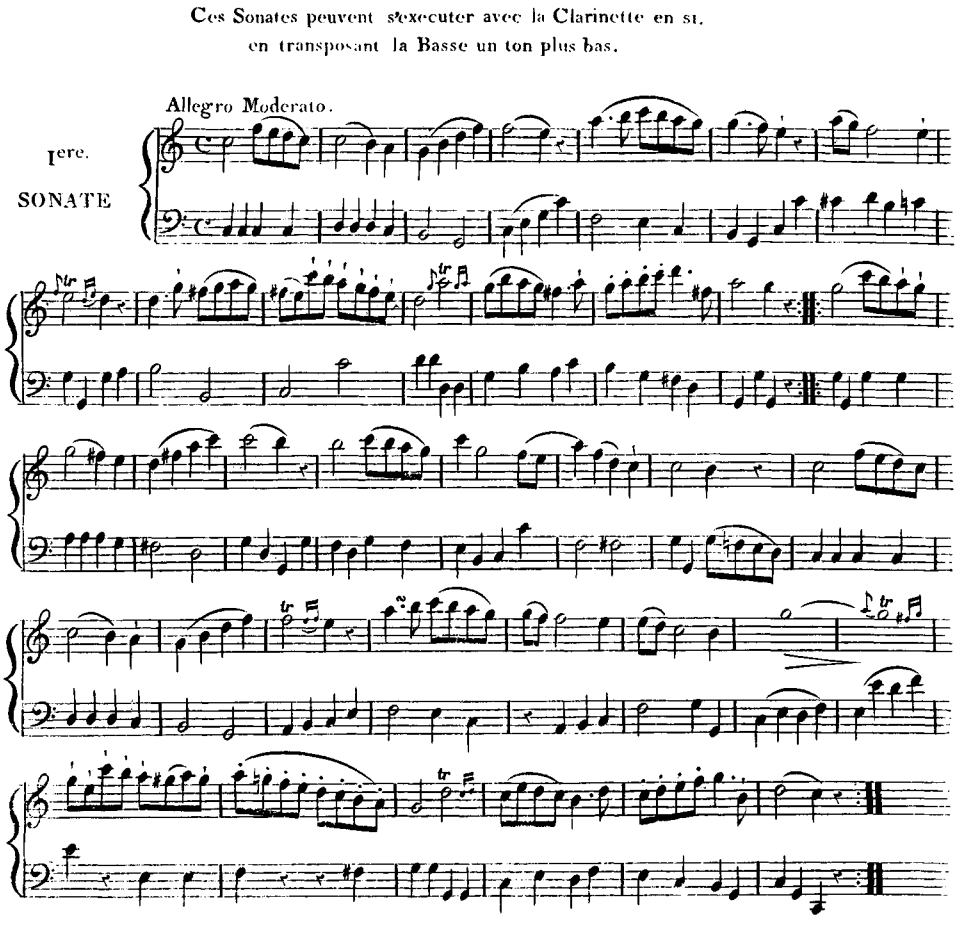


Figure 3.2 Allegro moderato from the first sonata from *Méthode de Clarinette* (Paris, 1802) by J. X. Lefèvre

which occurs shortly before a modulation to the major. The *Leonore* Overtures Nos. 2 and 3 present similar cases, with a C clarinet solo in A♭ major in the introduction preceding a principal Allegro in C. More surprising is the C clarinets' appearance in the central movement of the Violin Concerto, where A clarinets could have easily been retained from the outer movements. The use of C clarinets in the scherzo of the Ninth Symphony seems unquestionably a matter of timbre, and clearly something is lost if they are substituted. A watershed was Beethoven's 'Pastoral' Symphony, which although written in the key of F, features B♭ rather than C clarinets; within the Austro-German tradition the C clarinet was henceforth virtually confined to its home key. Schubert continued to regard it as part of his normal palette within the key of C, even though in the scherzo of his Ninth Symphony his clarinet parts modulate several degrees both to the flat and the sharp side. The C clarinet should certainly be used as part of the characterisation of the

Variation movement of the Octet. We can only speculate on the extent to which symphonic parts were actually played on the C clarinet, including those contained in Bizet's Symphony in C, dating from some fifty years later. In French opera of the classical period (but not elsewhere in Europe) there was a unique tradition of publishing scores with clarinets notated in C, even where instruments in A or B♭ were to be used, and Saint-Saëns noticed this during the preparation of his edition of Gluck's *Orphée*. This may be an important consideration for the performance of Cherubini's C clarinet parts.

As the clarinet acquired greater mobility during the nineteenth century, the necessity for the inconvenience of maintaining an orchestral set of three instruments diminished. Symptomatic was Mendelssohn's tendency within C major contexts in his symphonies to prefer the option of A clarinets notated in three flats rather than C clarinets in their natural key. Scoring for C clarinet was then increasingly a matter of colour, and this needs to be respected in works such as Berlioz's *Symphonie fantastique*. A great champion of the C clarinet, Berlioz wrote for it in as many as four flats in *Les francs-juges*, featured it over a wide compass in his *Waverley* Overture, and took advantage of its special tone-quality in the *Requiem*. It played an important part in Liszt's orchestral music, such as the Faust Symphony and the symphonic poems *Les Préludes*, *Prometheus*, *Festklänge* and *Hunnenschlacht*, all written in Weimar in the 1850s.[8] During the following decade he included C clarinets in the Hungarian Coronation Mass, even within remote tonalities such as A or E. Though Wagner abandoned the C clarinet after *Der fliegende Holländer,* Carl Loewe in 1850 published his three *Schottische Bilder*, a very rare set of character pieces for C clarinet and piano written for his son-in-law, an amateur player. Awareness of its potential must have continued even later, since Brahms specified the instrument in the scherzo of his Fourth Symphony at a stage in his career when mere convention could not have had any further influence on its presence.

In Italy and Eastern Europe the C clarinet retained an important role in the nineteenth century in both outdoor and popular music. Rossini wrote for the orchestral set of three instruments detailed in Chapter 2, and the sheer vitality of his C clarinet parts seems perfectly to match the character of the music. This tradition was continued by Verdi, whose C clarinets venture into relatively remote tonalities and therefore also seem to be a matter of colour. Whilst by the end of the century there may have been players using a single clarinet for B♭ and A (as well as C) parts, there was also a highly conservative streak amongst Italian players; when Ferdinando Busoni (the composer's clarinettist father) wrote his tutor as late as 1883 he was still advocating playing with reed-above embouchure, a technique which in Vienna had been abandoned for a century or so! Custom and practice were

doubtless highly variable with regard to all aspects of clarinet technique and equipment. In Bohemia Dvořák was happy to opt for the C clarinet when musical context demanded; in his Slavonic Dance Op. 46 No. 1, for example, that instrument's sound and articulation are as much part of the conception as the contribution of the F trumpets and the carefully calculated percussion effects. Smetana's overture to *The Bartered Bride* is a further context where C clarinets are clearly indispensable and evidently specifically intended, since some of the later operatic numbers in keys sympathetic to the C clarinet are scored instead for the B♭. In other parts of Europe (such as England) the abandonment of the C clarinet was almost complete by 1900, and it was around this time that Mahler and Strauss revived it as a special tone-colour. In Mahler's Sixth Symphony, for example, the C clarinets are an essential dramatic resource. Throughout Strauss's operas his various clarinet sections are astutely chosen and idiomatically treated, the C first appearing in *Der Rosenkavalier* and then recurring in *Die Frau ohne Schatten* (whose score has five clarinets – E♭/D; two B♭ doubling C; basset horn and bass clarinet both doubling C), *Die ägyptische Helena*, *Arabella*, *Friedenstag*, *Daphne*, *Die Liebe der Danae* and *Capriccio*. A favourite Strauss combination familiar from the late wind sonatinas became C, B♭/A, basset horn and bass. However, it is perhaps significant that his *Duett-Concertino* prefers the B♭ clarinet as soloist; even Strauss's enterprising espousal of the C was restricted to its use in ensemble.

With such a wide-ranging background, the C clarinet is bound to exert some influence on the musical life of every clarinettist, and not just for historical reasons. At least one well-known jazz player has made it a speciality, whilst from time to time contemporary composers continue to succumb to its distinctive qualities. As Baines remarks, it also retains to this day a particular niche within the café bands of central Europe. Furthermore, its advantages in size and technical mobility within an educational environment can provide yet another incentive for its espousal.

The high clarinets

BASIL TSCHAIKOV

Introduction

In general, the large family of *little* clarinets – in all there are nine, though several are no more than ghosts – has been rather neglected in books and dictionaries about the clarinet. The octave C, B♭, A, and the sopranino E, have been referred to by several authorities and it is possible that instruments may have been made, but they have never had any real musical existence, since music written to be played on them has yet to be discovered. However, for the first half-century of its existence the D clarinet was predominant, and, with the E♭, has continued to have a considerable solo, chamber music and orchestral repertoire. The other high clarinets – in F, G and A♭ – have been used in the past, though to a much more limited extent.

Playing the high clarinets

Playing any of these smaller clarinets will normally be undertaken by those who are already reasonably proficient on the B♭ and A clarinets. Indeed, it is important that the player should already have a fully developed embouchure. It is not that the music written for the E♭ and D clarinets is written to any extent in its highest register – it is infrequent that the written notes are above f'''. However, if one plays written e''' on the B♭ clarinet it will sound a tone *lower*, d''', whereas if one fingers the same note on the E♭ it will sound g''', a minor third *higher*; to sound g''' on the B♭ one would need to play a'''. It is probably this difference in pitching which causes beginners on the E♭ to tighten their embouchure too much. Remember that the E♭ is a *small* clarinet rather than a *high* clarinet – the French call it *petite clarinette* and the Italians *clarinetto piccolo*. The extracts from the orchestral repertoire, quoted below, show how composers have understood the unique characteristics and timbre of the instrument.

When purchasing any of the high clarinets, or reeds for them, look for the same qualities as when making these choices for the B♭ or A – good, manageable intonation (especially from c''' to f'''), equality of

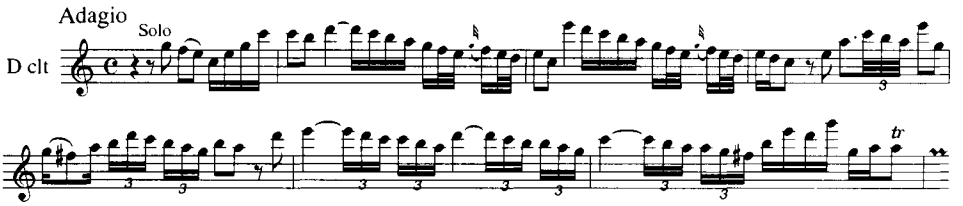
tone throughout the range of the instrument and well-made keywork. A reed is required that will allow one to play throughout the dynamic range (especially *ppp* in the upper register), both in legato and staccato. There are no study books or tutors for the high clarinets, and the collections of orchestral extracts are so limited as to be of little value. It is for this reason that a selection of compositions worth practising is provided at the end of this chapter. It is not always the solos that need most attention; in many E♭ parts, to an even greater extent than in those for the B♭ or A, the *tutti* passages are frequently the most difficult. Since the E♭ often carries the top line (in unison with the piccolo, first violins or solo), and the music is often technically demanding, these exposed passages can be very dangerous. Often they require more practice than the solos! The repertoire will provide ample material for practice.

The D clarinet

It has already been noted in Chapters 1 and 2 that the D clarinet was the most often employed in the first half of the eighteenth century. However, until the 1750s 'clarinettists' (relatively few in number) were all multi-instrumentalists, as 'session' clarinet and saxophone players are today. The *Ouverture* for two clarinets and horn by Handel is the first work with demanding parts that we can be reasonably certain was written for the D clarinet. The first major works for solo clarinet that we know were written for the D clarinet are the six concertos by Molter already mentioned on page 17. There have been suggestions that two of them might be trumpet concertos, as neither has a title page that designates them as being for clarinet, but it is now generally agreed that their musical content makes this unlikely. Four of the concertos were published in 1957 in an edition by Heinz Becker.[1] All six represent a major technical advance and still remain the best solo music written for D or E♭ clarinet. The slow movements in particular exploit the distinctive, delicate lyricism of the D clarinet (Ex. 3.1).

Of course, these concertos will have sounded very different in Molter's day; the mouthpiece, lay and reeds, as well as the construction of the instrument itself producing the 'clarino' style and sound that contemporary writers likened to the sound of the high trumpet.[2] It is very different from the sound we now associate with the D clarinet. As has been noted elsewhere, these early D clarinets were unsatisfactory in the chalumeau register, so that their effective range was really only *c″* to *f‴* or *g‴*. Once the lower register had been improved and satisfactory B♭ and A clarinets with their more mellifluous tone became increasingly available, both the D clarinet and the chalumeau gradually disappeared from the scene. For a time the D clarinet maintained its

Ex. 3.1 from J. M. Molter, Clarinet Concerto in G major, second movement



place in military bands, but after about 1780 it was increasingly replaced by the clarinet in F, which was itself subsequently replaced by the E♭ clarinet from about 1815 onwards.

The D and E♭ clarinets

In his celebrated book *Orchestration* (London, 1914), p. 279, Cecil Forsyth wrote:

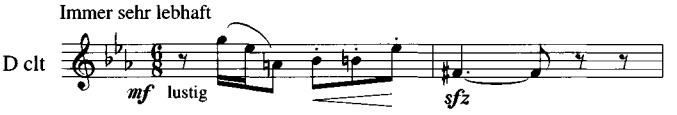
> The great advantage of the E♭ clarinet is its distinctive tone-quality. This, especially in its upper register, is preternaturally hard and biting.... In particular the psychological range of the 'E♭' is much narrower (than the B♭). It is almost confined either to passage work of a hard mechanical kind, or to a special sort of mordant humour, such, for instance, as is found in Strauss's *Till Eulenspiegel.*

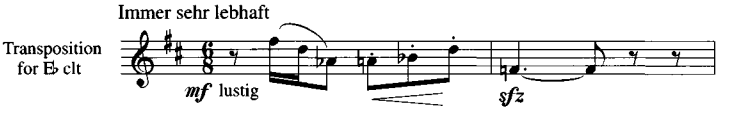
In fact, with the psychological insight granted to great composers, Strauss chose the D clarinet, not the E♭, to represent Till (Ex. 3.2*a*). The famous arpeggio, which represents poor Till being hanged, takes the D clarinet up to a♭‴, a higher and a less easily obtained note than the g‴ required on the E♭. Till is not a hooligan. He is a cheeky, impudent young scamp who just goes a bit too far. The D, with its rather warmer, but piquant tone is ideally suited to bring out that characterisation; it should not sound either *hard* or *biting* (Ex. 3.2*b*).

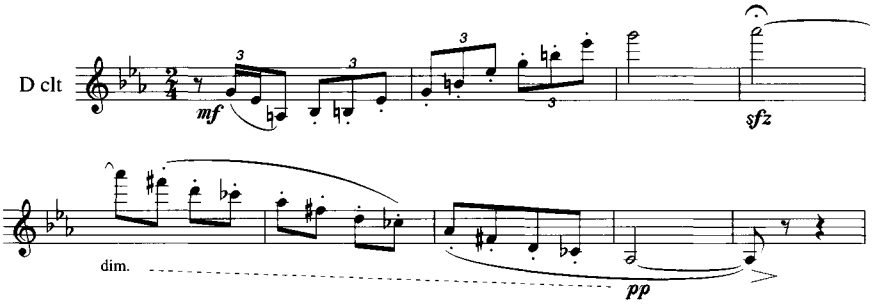
This quite false representation of the musical characteristics of the E♭ and D clarinets has been echoed by a number of writers, including Norman Del Mar. In *Anatomy of the Orchestra* (London 1987 p. 149) he writes: '... its quite individual tonal character, its shrill, hard quality giving pronounced drama and incisiveness to the wind band, as in the *Sunday Morning* opening to the second act of Britten's *Peter Grimes*'. Yet in performance it does not sound *shrill* or *hard.*

The first, and perhaps best-known, orchestral solo for the E♭ is in the *Symphonie fantastique* by Berlioz, written in 1830 (Ex 3.4). After 1845, when Wagner used the D clarinet in *Tannhäuser*, the D and E♭ clarinets were employed by an increasing number of composers, especially in Germany and Austria. It is difficult to find examples of music to justify the unpleasant characteristics incorrectly ascribed to

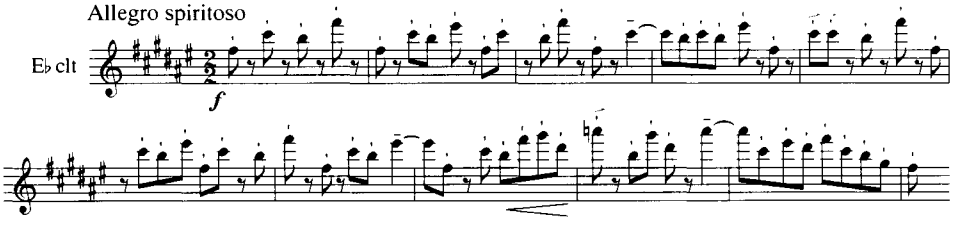
Ex. 3.2a, 3.2b from Richard Strauss, *Till Eulenspiegels lustige Streiche*



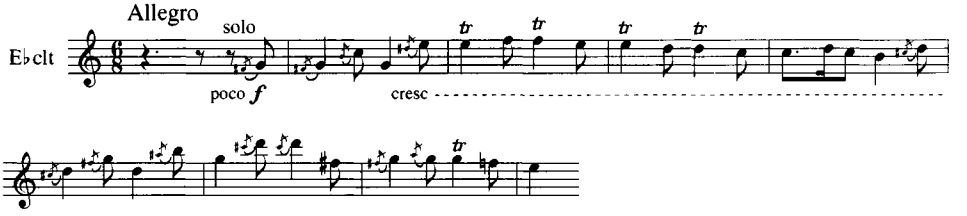




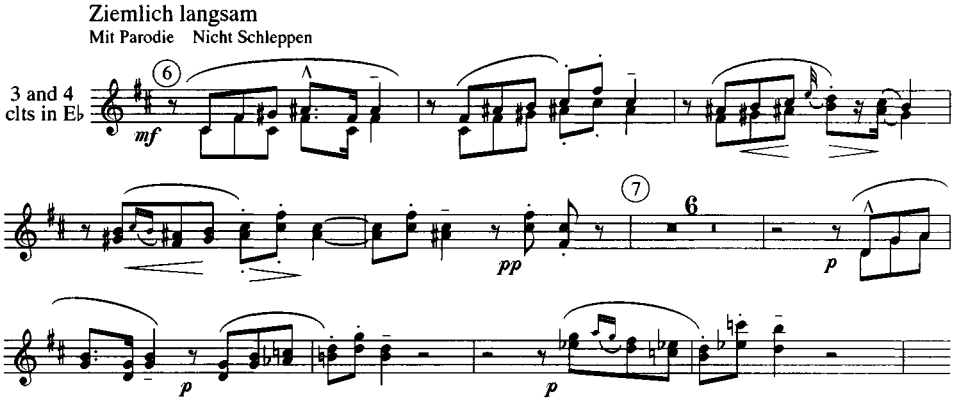
Ex. 3.3 from Benjamin Britten, *Four Sea Interludes from Peter Grimes*, 'Sunday Morning

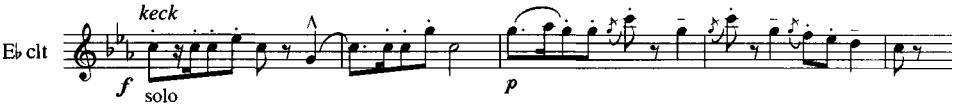


Ex 3.4 from Hector Berlioz, *Symphonie fantastique*, 'Witches' Sabbath'



Ex. 3.5*a* and 3.5*b* from Gustav Mahler, Symphony No. 1, third movement

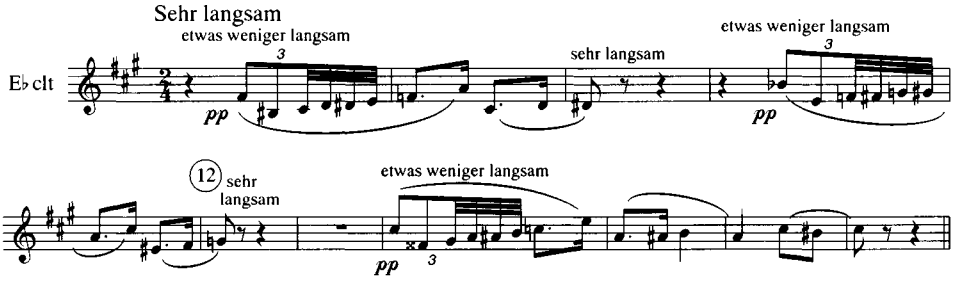




these piccolo instruments. Indeed, when composers have used them for solo passages in the orchestra or in chamber music, they have mostly taken advantage of their special qualities in the way that Molter did. They have also made use of their rather mysterious and haunting quality of tone in *piano* and *pianissimo* and their ability to produce a particular dramatic, exciting and proclamatory 'silver trumpet' effect.

Mahler, Strauss, Stravinsky, Schoenberg, Ravel, Shostakovich and Britten provide the backbone of the E♭ clarinettist's orchestral opportunities. Each of them understood the capabilities of the instrument and exploited them in their own individual way. Mahler's First Symphony at once demonstrates how well he understands the small clarinets (Ex 3.5*a–b*). In Example 3.5*a* he uses two E♭s in their lower middle register to produce a totally different effect than could be achieved on the B♭. Example 3.5*b* is in the light-hearted, devil-may-care style, the cheeky scamp beloved by Strauss. In his Ninth Symphony Mahler, with his remarkable insight into the personality of every instrument, uses the E♭ in so many different ways. In the first and last movements he demands

Ex. 3.6 from Richard Strauss, *Also Sprach Zarathustra*



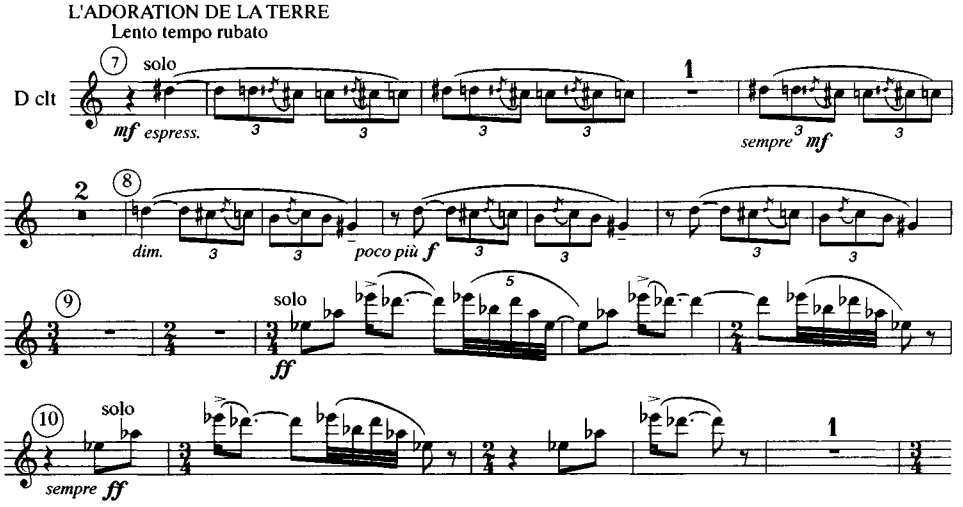
pianissimo between *g*″ and c♯‴ – a waif quietly musing – then in the second movement a complete change of character, exuberantly racing up to a high *a*‴. In the Rondo Burleske it is back to the young scamp again.

A few years later, in 1895, Strauss wrote probably his best-known part for the little clarinet – *Till Eulenspiegel*. As we have noted, this is for the D clarinet, though many think of it as being for the E♭, (including Rendall, p. 129), perhaps because outside Germany and Austria it is usually played on the E♭. Whether it makes a great deal of difference to the average audience is arguable, but to the player who has performed it on both the D and E♭ there is no question of which is more satisfactory. It is not really possible to produce the fuller tone the music requires on the E♭.

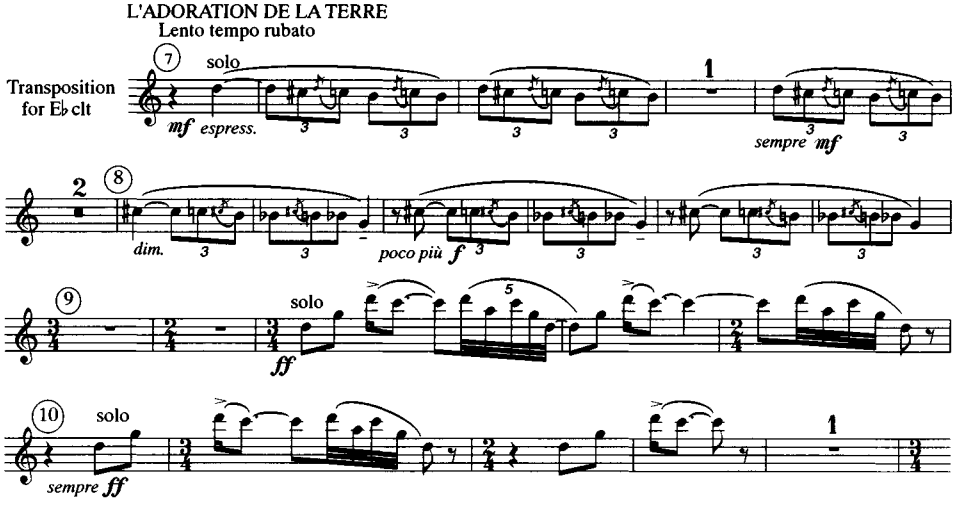
In *Ein Heldenleben* the E♭ characterises the spiteful critics: here the crisp, short staccato the E♭ can achieve can be 'biting', but not vicious! In *Also Sprach Zarathustra* Strauss makes effective use of the E♭'s often neglected chalumeau register (Ex. 3.6). Strauss frequently wrote important parts for E♭ and D in his operas; those in *Salome, Elektra*, and *Der Rosenkavalier* are particularly noteworthy.

Another composer who made use of the E♭ and D in a number of his major compositions was Igor Stravinsky. It is often suggested that composers have used the E♭ and D as they use the B♭ and A, according to which will make the passage work easier. Rimsky-Korsakov in *Mlada* did use the E♭ and D in this way; others, like Strauss and Mahler, made their choice for musical reasons. Stravinsky uses both in the *Rite* and chose the D for the *L'Adoration de la Terre* section. In Example 3.7*a*, as originally written for the D, the triplets can only be played by sliding from d♯″ to c♯″, or from c♯″ to *c*″, and the solo passage after fig. 9 is not only difficult, but uses the two worst notes on the instrument, d♭‴ and e♭‴ (cf. Ex. 3.7*b*, transposed for E♭). Why did Stravinsky choose to write for the D? Did he want a certain sound, or did he make a mistake? Later he gives the E♭ a solo in its very best register (Ex. 3.8).

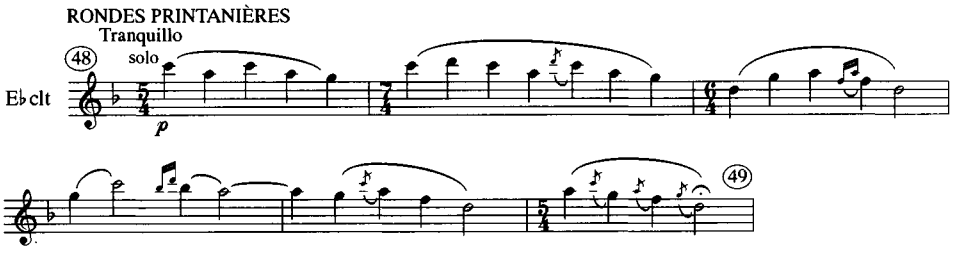
Ex. 3.7a from Igor Stravinsky, *The Rite of Spring*



Ex. 3.7b transposition of Ex. 3.7a for E♭ clarinet



Ex. 3.8 from Igor Stravinsky, *The Rite of Spring*



There is also an important part for the *petite clarinette* in the complete ballet *The Firebird* (though there is no part for it in the well-known orchestral suite), and in *Le Rossignol*, *Oedipus Rex*, and the delightful *Berceuses du chat* for soprano voice and three clarinets – B♭, E♭ and bass.

Schoenberg and Berg used the E♭ quite frequently. Berg's opera *Wozzeck* requires two and there are parts in the *Chamber Concerto*, and the *Three Orchestral Pieces*. Schoenberg, in particular, wrote music of great difficulty, involving a high tessitura to be played extremely softly. To play the E♭ or D quietly in the highest register is even more difficult than on the B♭. To do so, with good intonation and tone, requires considerable skill – and a very good reed. Amongst the many interesting parts he wrote for E♭ or D are the *Chamber Symphony No. 1* (for fifteen solo instruments) for D – though the orchestral version is for E♭ – *Gurrelieder* and *Ewartung* (D clarinet).

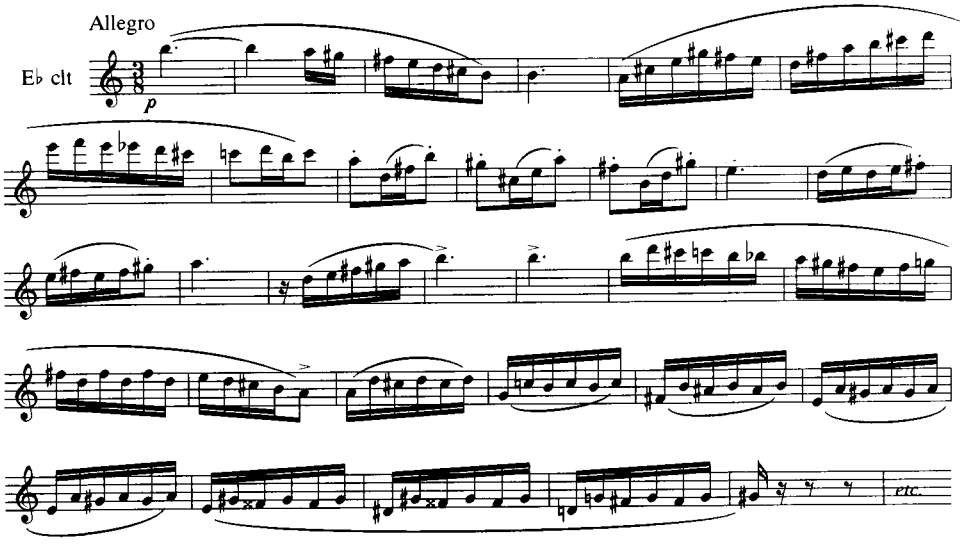
Shostakovich writes frequently for E♭ in his symphonies and in other works – The Age of Gold has some especially sparkling solos – and there are a number of solos in the symphonies. Example 3.9 from his Sixth Symphony gives a good idea of his style of writing for the E♭. In *tuttis* he often writes very fast technical passages using the whole compass of the instrument.

Ravel probably provides the E♭ clarinettist with more splendid opportunities to display a variety of styles than any other composer – jazzy, in the G major Piano Concerto, brilliant in *Daphnis et Chloé*, and in *Bolero* he has probably written the most rewarding of all orchestral solos for E♭.

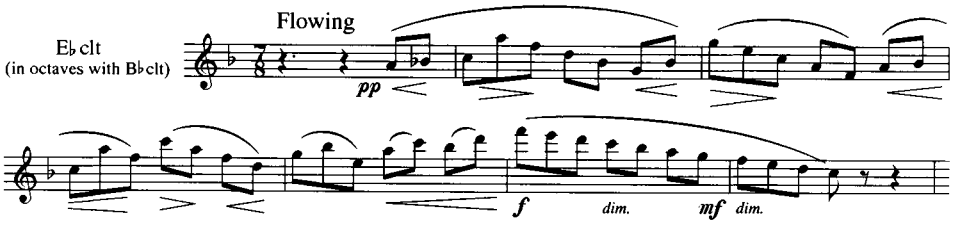
Finally, to make the case for the E♭ as a charming melodist is Example 3.10 from Benjamin Britten's ballet *The Prince of the Pagodas*, in which the E♭ and B♭ play a sensuous melody in octaves.

From the days of Lanner and Johann and Josef Strauss, who all used the D and E♭ in their waltzes and polkas (seldom played in their original orchestrations nowadays), the high clarinets have been widely used outside the symphony orchestra, in music for films and TV and in musicals – by Leonard Bernstein, in particular, in *Candide*, *West Side Story* and *On the Town*. There is not a great deal of solo music for E♭. Ernesto Cavallini composed several works for E♭ and piano; the *Carnival of Venice* variations (now in print), a *Fantasia on a Theme from Ultimo Giorno Di Pompeii*, and, with Giacomo Panizza, *I figli di Eduardo 4th*. Panizza, conductor at La Scala in Milan when Cavallini was principal clarinet, inspired by Cavallini's prodigious technique, breath control and artistry, included a set of variations, *Il Ballabile con Variazioni*,[3] for part of the ballet in his opera *The Challenge of Barletta*. Another composer who wrote extensively for the E♭ was Giuseppe Cappelli.[4] Henri Benjamin Rabaud whilst Director of the Paris Conservatoire wrote a *Solo de Concours* for E♭ clarinet, and Amicaro

Ex. 3.9 from Dmitri Shostakovich, Symphony No. 6, opening of second movement



Ex. 3.10 from Benjamin Britten, *The Prince of the Pagodas*, 'Pas de Trois'



Ponchielli has written a charming quintet for B♭ and E♭ clarinets, flute, oboe and piano. Contemporary composers are using the E♭ increasingly in chamber music and orchestral compositions, and two American composers, Jerome Neff and William Neil, have written concertos for E♭.[5]

When jazz made its appearance in the early 1900s the New Orleans marching bands were always led by a wailing 'keening' E♭ clarinet on their way to the cemetery. On the return, after the funeral ceremony, a very different kind of music was required. Upbeat music was then needed, that gave the 'second line' (those following the band to and from the funeral) the occasion for high jinks – strutting, dancing and prancing. Now the E♭ can be heard in wild ecstasies of exuberant embellishment. The famous Bunk Johnson Band, with the renowned George Lewis, who also had a band of his own, the Eureka Brass Band,[6] and John Casimir who leads his own Young Tuxedo Jazz Band,[7] can be heard on archive recordings.

Casimir lets fly with wonderful abandon; intonation and subtlety of tone may be missing in his playing, but this is the real thing – wild,

raw and irresistible! George Lewis sounds more restrained than Casimir. It seems he was not playing the E♭ regularly at the time the recordings were made. He is reported to have said that when he tried to use the B♭ in the band the effort of trying to cut through the brass gave him a sore throat! His comment brings to mind a delightful anonymous poem:

> With the lovely sound of my bright clarinet,
> I cover noise however loud it becomes.
> Even the pleasant sound of the shrill Peace-trumpet,
> Must yield in beauty to my clarinet.

The E♭ was also used at times in dance bands, but no doubt the dance hall was less suited to the excesses of the E♭, so it lost its place to the B♭, as the D clarinet had done a couple of centuries earlier.

The F clarinet

In the late eighteenth century, from about 1780 onwards, the F clarinet gradually replaced the D in most military bands. By around 1800 the F and C seem to have become the favoured clarinets in most European bands. The fact that Berlioz chose the E♭, rather than the F, for the *Symphonie fantastique* suggests that the E♭ had by then supplanted the F clarinet. Beethoven, for his *Military Marches* in F, WoO 18 and 19 (1809) and in D, WoO 24 (1816, not published until 1827), and Mendelssohn for his Overture in C major for wind instruments, Op. 24 (1816), both chose the F clarinet.

Kroll, p. 96, writes: 'for many decades the E♭ clarinet, together with the F clarinet, was the favourite conducting instrument of band masters in the German infantry, until in the 1860s it was replaced by the baton'. One does not like to contemplate the damage done at rehearsal, when, as is not uncommon, the band master struck the music stand in irritation at some poor musician's repeated mistake.

In Britain the E♭ appears to have obtained a secure place by 1839. The band list for that year in *Memoirs of the Royal Artillery Band* by Henry George Farmer (London 1904), gives the complement of the band as: one piccolo, two flutes, four oboes, three E♭s, fourteen B♭s, and four bassoons. By 1857 the band had four E♭s, and four saxophones had been added, two in E♭ and two in B♭.

There does not seem to be any evidence of the F clarinet having been employed other than in the military band or wind band.

The G clarinet

This very small clarinet does not seem to have obtained a foothold in any composer's affection, since, like the ghostly octave C and its

companions, it has had no musical relevance in orchestral or military music.

Then in about 1879, a year after the Schrammel brothers, Johann and Josef, and bass guitarist Strohmayer had formed a trio to play popular Viennese music in the *Heurigen* around Vienna, they were joined by Georg Dänzer, playing G clarinet. Their fame spread and led to international tours. It is reported that the Schrammelquartett was much admired by Richard Strauss, Brahms and Hans Richter. What prompted Dänzer to make use of this tiny instrument remains a mystery. Did he find an instrument, or have one specially made? There was already a tradition of folk and popular music played by the Hungarian gypsy bands and it is possible that a small, high-pitched wind instrument had been included. After Dänzer's death the group continued, replacing the G clarinet with a harmonica.

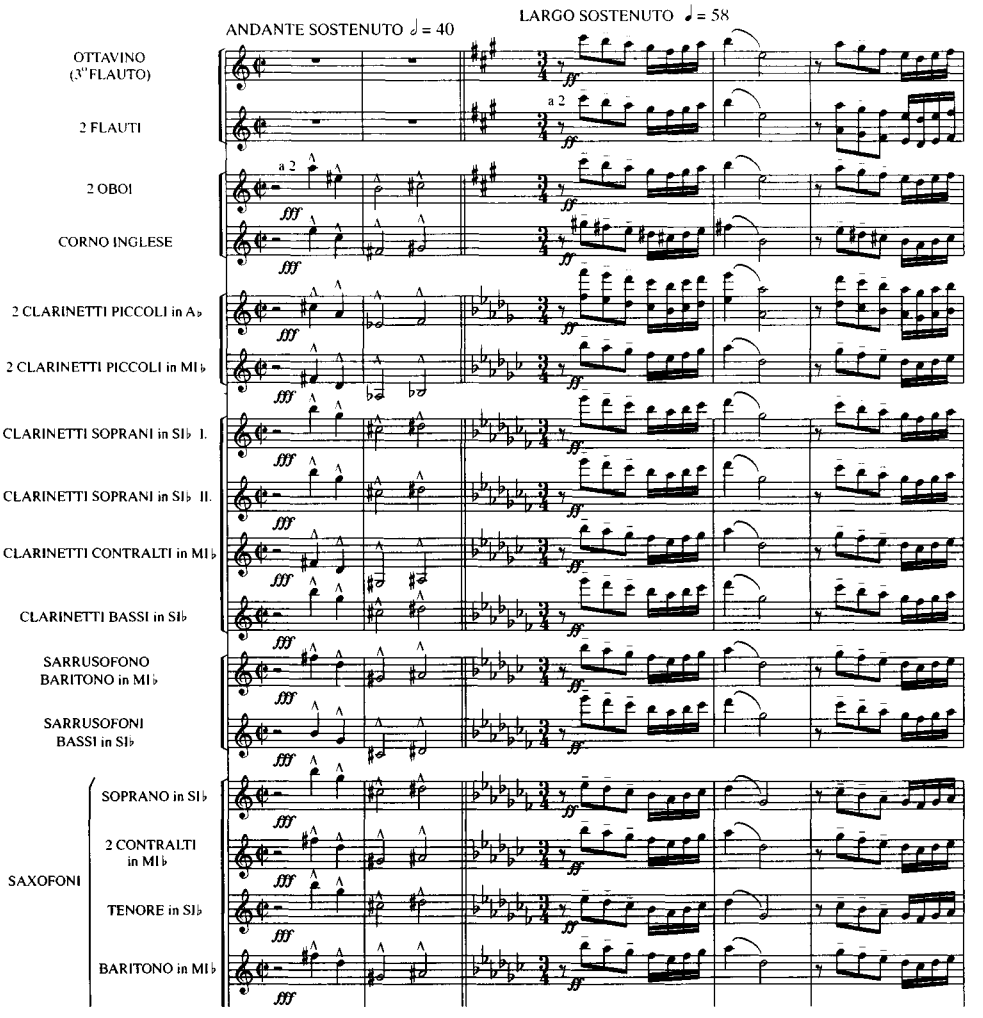
In 1890 the quartet was disbanded and no more was heard of this music until in 1964 a new group was formed to perform the Schrammel brothers' music, following the discovery, in 1963, of the autograph parts of the original music, The new group, the Klassisches Wiener Schrammelquartett, was formed by two violinists in the Vienna Symphony Orchestra, a guitarist and Richard Schönhofer, the principal clarinettist of the Vienna Symphony, playing G clarinet. There is a delightful recording[8] of the latter-day quartet playing charming, slightly sub-Strauss waltzes and polkas in which the G clarinettist, in concert with this tiny band of three string players, plays with wonderful delicacy and instrumental control. Anyone who has attempted to play the similarly small A♭ clarinet will know the unbelievable problems of playing so quietly and having to match two violins. Played like this there could be a future for this otherwise unknown instrument.

In German the G clarinet was nicknamed 'picksüsses Hölzl'. The nearest translation of what may well be Viennese slang, is 'fabulous matchstick'. Perhaps, recalling the old army nickname for the clarinet, 'liquorice stick', and the charm of the sound of this little instrument, that might be nearer the mark.

The A♭ clarinet

The A♭ clarinet is the highest in pitch of the clarinets still extant. For a long time the A♭ was an essential member of many European wind bands, especially in Spain and Italy – the large Municipal Band in Venice which could be heard regularly in St Mark's Square until the early 1950s included A♭, E♭, B♭, alto and bass clarinets. There is no evidence so far of any bands in Britain including A♭ clarinets. The Italian band scores often include two A♭s, and Kroll (p. 96) writes: 'the great miners' band of Brussels, the Harmonie de la Bouverie had three'.

Ex. 3.11 from a free band transcription of Puccini's *Turandot* by Antonio d'Elia, *Direttore del Corpo musicale del Governatorato di Roma*



In example 3.11 the principal A♭ player is in unison with the piccolo, and an octave above the E♭.

The stage-band parts for some of the Verdi operas include parts for one or two A♭s. It seems that these have never been used (certainly within living memory) in British opera productions. Examination of the original parts shows that in two of his operas, *Un ballo in maschera* and *La traviata*, an A♭ is required for the stage band, and that two are called for in *Ernani*. Neither Donizetti nor Bellini used an A♭.[9] Donizetti did not use piccolo clarinets at all, and Bellini only asks for a D clarinet in *La sonnambula*.

The A♭ has rarely been used in the orchestra; Béla Bartók provides quite a large part for it in his Scherzo for Piano and Orchestra, Op. 2,

mostly in unison with the E♭ or piccolo. More recently John Tavener used the A♭ in his *Celtic Requiem* (1969).

The lack of printed orchestral extracts for E♭ and D clarinets requires that those considering playing these instruments in the orchestra should obtain the scores of works with important and difficult passages and make copies for themselves. Beware! Catalogues and the list of instruments required printed in the score itself may only show: three clarinets, bass, when, in fact, it should be two clarinets, E♭, bass. The compositions referred to in the text and those listed below will repay study.

Orchestral music

BARTÓK: *The Miraculous Mandarin*, *The Wooden Prince*, *Kossuth*
BERG: *Lulu*: Symphonic Pieces, Three Orchestral Pieces
BERIO: *Epifanie*, *Sinfonia*
BIRTWISTLE: *Down by the Greenwood Side*, *Nomos*, Verses for Ensembles (thirteen players)
BOULEZ: *Pli selon pli*, *Rituel*
BRITTEN: *Our Hunting Fathers*, *Sinfonia da Requiem*, War Requiem
COPLAND: *The Red Pony*, *El Salón México*, Symphony No. 3
ELGAR: Symphony No. 2
FERNEYHOUGH: *Carceri D'Invenzione*
JANÁČEK: *Sinfonietta*, *Taras Bulba*
ORFF: *Carmina Burana*
RESPIGHI: *Feste romane* (D clarinet)
REVUELTAS: many works with E♭, sometimes without B♭/A clarinets
RIMSKY-KORSAKOV: *Mlada*
RUGGLES: *Sun-treader*
SCHOENBERG: *Die glückliche Hand* (D clarinet), Chamber Symphony No. 1 (D clarinet in the fifteen solo instrument version; E♭ in the orchestral version), *Moses und Aaron*, *Von heute auf morgen*
STRAUSS FAMILY: a number of the waltzes, polkas and marches
RICHARD STRAUSS: *Symphonia domestica*, An Alpine Symphony, *Salome*, *Elektra*, *Die Frau ohne Schatten*, *Josephs-Legende* (D clarinet)
STRAVINSKY: *Scherzo fantastique*
TIPPETT: Symphony No. 3
VAUGHAN WILLIAMS: *Norfolk Rhapsody*, Symphony No. 1
WALTON: *Belshazzar's Feast*
WEBERN: Five Pieces for Small Orchestra Op. 10, Six Pieces Op. 6 arr. for chamber ensemble
XENAKIS: *Akrata*, *Oresteia*.

Chamber music

ABSIL: *Quatuor* (cl qt)
ARRIEU: *Cinq Mouvements* (cl qt)
BARRETT (Richard): Trio (E♭/elec. guitar/double bass)
BERG: Chamber Concerto
HENZE: *Le Miracle de la Rose* (cl & ens)
HINDEMITH: Quintet for Clarinet and Strings (third movement for E♭)
JANÁČEK: Concertino (pn and ens)
PETRASSI: *Tre per sete*
RASMUSSEN: Italian Concerto (seven instruments)
RUNSWICK: *Main-Lining*
SCELSI: *Tre Studi* (solo E♭)
SCHOENBERG: Suite Op. 29
STRAVINSKY: *Berceuses du chat* (voice/E♭/B♭/bass cl)

This section on high clarinets was written with the assistance of colleagues and fellow clarinettists who responded so valuably to my questionnaire; I am also indebted to the staff at Boosey and Hawkes, Chester, Schott, Peters, June Emerson, the BBC, and in particular to Daniel Roberts at Ricordi. Amongst those whose help and advice has been of special assistance are Gordon Lewin, Keith Puddy, Michael Bryant, Anthony Baines and Chris Blount.

The basset horn

GEORGINA DOBRÉE

Introduction

The first reason for playing the basset horn may well arise from an opportunity to take part in some of the greatest of Mozart's works, such as the *Requiem* or the Serenade for thirteen instruments K361. An initial disappointment may well turn out to be that the basset horn available for use at the time, like all instruments relatively infrequently called for, may need immediate first aid before it can be used in performance. However, far outweighing any problems in coming to terms with the individual nature of the instrument is the ultimate fascination of an instrument with a four-octave range and distinctive tone-colourings, its strong bass notes contrasting with an almost veiled quality of sound in the upper part of the range. None the less, the basset horn is not an instrument that can ever simply be taken out of its case and played without a good deal of preparation. A cardinal rule is to obtain the instrument well before it is needed and to spend a great deal of time becoming acquainted with its character. It is the most temperamental of all the clarinets and will produce embarrassing squawks at the slightest excuse. (No wonder that Sir Thomas Beecham refused to use it at a time when no new instruments were being made and none could be relied upon!) One common mistake made by would-be players is to think that the basset horn can be played with a normal clarinet embouchure. It is an instrument that needs to be coaxed, not forced, so an open embouchure with a fairly soft reed is necessary to control it. This can, of course, make the task of doubling on other members of the clarinet family additionally hazardous.

Alto clarinet and basset horn

The alto clarinet in E♭ and the basset horn in F might be thought to have a relationship similar to soprano clarinets in B♭ and C. But this is not the case. In terms of usage they are both certainly considered the

'tenor' instruments of the clarinet family.[1] The crucial difference between the alto and the basset horn relates to the bore. The alto has a bore which begins to approach that of the bass clarinet, whereas the bore of the basset horn is closer to that of the clarinets in B♭ and A. The result is a very different tone-colour, whilst in addition to its extra low notes the basset horn is able quite comfortably to produce the upper part of its compass, giving us the marvel of its four-octave range.

The choice of tenor instrument in wind bands and clarinet choirs depends to some extent on national tradition. In the USA the basset horn is still fairly rare and almost unknown in ensembles of this kind, whereas in Europe it is the alto which is less common. This preference is also reflected in chamber music. To find a basset horn as part of the instrumentation of a clarinet quartet, quintet, etc., written by a European composer is quite usual, whilst in the USA today's composers rarely use it even in the orchestra.

Features of the basset horn

In addition to differences in bore between the E♭ alto and the basset horn, it must be noted that the bores of modern basset horns can vary more than with any other clarinet, not just between manufacturers in countries with different traditions but between different periods of manufacture by the same firm. The most fundamental of these variations may also reflect the demands of the different key/fingering systems associated with certain countries; French instruments are variously tapered in different parts of the bore, whereas German makers (of both Boehm and German system) usually favour a parallel bore down to the bell. In general, the principal French manufacturers build their basset horns with a relatively small bore – nominally *c.* 16 to 16.4 mm – while German models will range from *c.* 17 to 17.2 mm. There is, however, one French maker producing a basset horn with a nominal bore of *c.* 18 mm (which then corresponds to that of most E♭ altos). There are now also a number of independent makers experimenting with other ideas, and they will often undertake to build an instrument to the requirements of an individual player.

The wider-bore instruments are possibly easier to control, but some players contend that there is a noticeable loss of the distinctive, if somewhat lighter, tone-colour associated with the narrower bore. Furthermore, the wider-bore instrument requires a mouthpiece to match, whereas those with a smaller bore are often constructed so that a corresponding B♭ mouthpiece and reed can be used. However, even in this case it is still not advisable to use the mouthpiece from one's own soprano clarinet, since the lay may not suit the more open embouchure or the strength of reed needed for the larger instrument.

Another factor that can influence the sound of any basset horn is the

shape and direction of the bell. Many manufacturers use an upturned metal bell, which is good for sound projection; however, a number of players have felt that the continuation of the bore into a flared wooden bell is more authentic and have had these especially made for their instruments. It is not unusual now to find makers producing such designs specifically for this market. Because of its length the basset horn requires a curved crook to replace the familiar barrel between the mouthpiece and the main body of the instrument. Sometimes crooks are made of wood, but more frequently they are of metal, thereby giving more scope for introducing a tuning slide – invaluable when playing with any fixed pitch instrument such as the piano.

Playing the basset horn

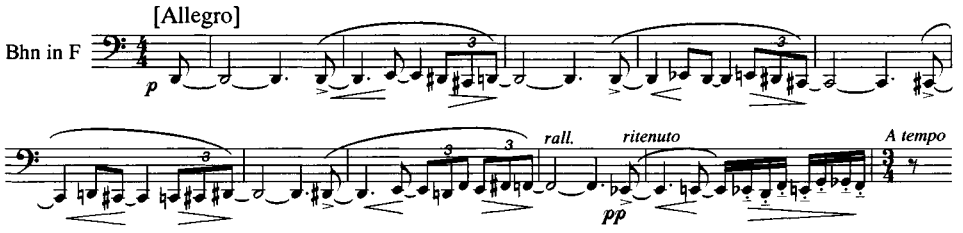
Notation

For a while it may be possible to confine oneself to reading music notated only in the treble clef, especially when playing works for wind band, clarinet choirs, etc. But inevitably the time will come when in an orchestral or solo context familiarity with bass clef notation is essential. Here it is necessary to understand the convention used when notating for the basset horn in the bass clef. Whereas in the treble clef the transposition is a fifth lower, in the bass clef the notes are written to sound a fourth higher. The main purpose of this is to avoid ledger lines below the staff. Unfortunately, some composers still do not understand this, and continue to write the part to sound a fifth lower, producing real mental difficulties for the player who has become accustomed to the traditional notation. Usually the bass clef is not used exclusively within a part. It appears most often in writing for the second or third instrument in a group or section, but is also commonly found whenever there are notes for the lower extension. It is not always possible to know in advance whether a part has been written entirely in the treble clef (often referred to as the French system), or in both treble and bass clefs (the German system). In the case of orchestral material in particular, this can depend on where the parts have been copied, or recopied (perhaps by a previous player). Even a study of the full score may not in the end be very helpful. The only advice is to be prepared, for example by practising bassoon parts such as arrangements of the J. S. Bach cello suites, whose expressive scope provides a real musical and technical challenge.

Basset notes

On the basset horn it is usual to find the key for e♭ (often suitable also for b♭′ as an alternative to the throat-note fingerings) beside the lower

Ex. 3.12 from Karel Janovický, Sonata for basset horn and piano (1991)



of one or other of the R4 keys, but there is no guarantee as to where the other basset notes, with their various duplicate fingerings, will be positioned. The different models opt for using L4, R4 or Rth, and the designs of additional coupling systems to stabilise the keywork are equally variable. All these coupling systems are very delicately balanced, and a lot of trouble can be caused for the player if they are not functioning efficiently; they should be checked regularly, or pad leakage may occur.

No fingering system will be found that is ideal, so it will be necessary to spend quite a lot of time practising various scales and intervals covering this lowest part of the instrument; a good deal of dexterity may be needed, especially in contemporary repertoire such as Example 3.12. Quick sliding or jumping of the fingers, as well as the use of two joints of the finger R4, will sooner or later be unavoidable; since what is practicable on one make of instrument may not be possible on another, even changing the composer's original articulation may sometimes have to be considered. Furthermore, with Rth probably no longer able fully to stabilise the movement of the instrument, the argument for using a spike rather than a sling becomes unassailable except where (as in some works written by Stockhausen for Suzanne Stephens) it is necessary to act a role while playing the instrument.

The extended downward range of the basset horn was at one time unique, but in recent years not only has the basset clarinet reappeared on the scene, but the bass clarinet is now almost universally built with the same additional range and consequent extra keywork. This unfortunately compounds a very real problem, and any player wishing to become proficient on both basset horn and bass clarinet should aim to purchase instruments whose fingerings are compatible.

The fourth octave

The basset horn speaks surprisingly easily in the top register $c\sharp'''$ to c'''', especially the narrow-bore instruments. However, these notes can be difficult to pitch successfully, and choosing the best fingerings from what can be a bewildering number of possibilities may become a

considerable task. Naturally, all the fingerings commonly available on B♭ and A clarinets may be used, but due to the extra length of the bore, it may be necessary to modify the choice of additional keys for fine tuning. For instance, instead of the *g♯/d♯″* key it may be advisable to use the *f/c″*. It may be better not to half-hole L1 for the extreme high notes, though as a result more breath support will be required to replace the usual additional venting. It is important to experiment, but also to remember the context. To pass smoothly from one note to the next may sometimes have to take precedence over intonation, and in this part of the range there are many register changes relating to the position of each note in the harmonic series – a problem all clarinettists have to contend with, but one which is especially critical to the basset horn player.

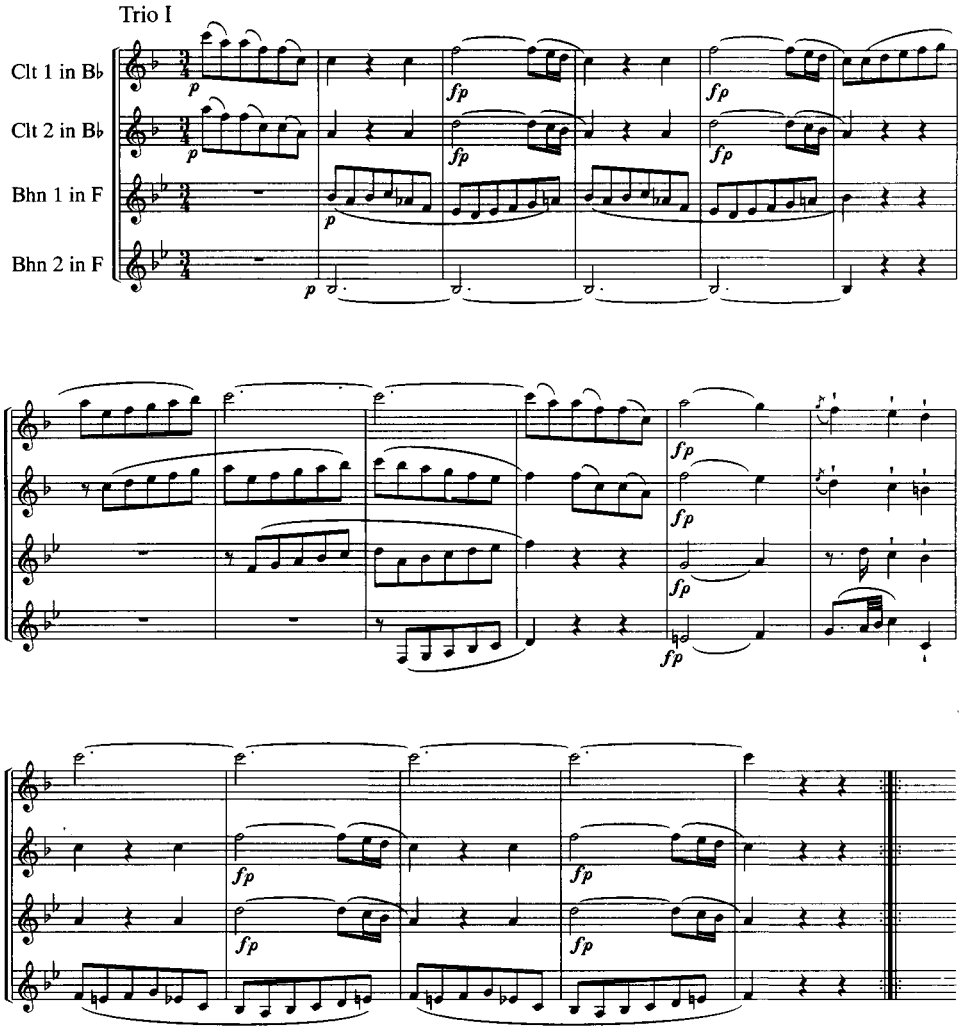
Repertoire

A cornerstone of the basset horn repertoire is the *Requiem* by Mozart, where his woodwind colours are confined to pairs of basset horns and bassoons. In subsequent completions of Mozart's manuscript (nowadays only the Introitus is recognised as entirely his own), this has offered scope for orchestrators to blend the unique tone of the basset horn with vocal resources. Mozart had previously combined basset horns with voices in his six Notturni for three solo voices and three instruments; K437 and K438 employ two clarinets and one basset horn, whilst K346, K436, K439 and K549 have three basset horns. Exceptionally, K437 is scored for basset horn in G, with two clarinets in A. Mozart's Concerto for clarinet K622 was originally begun in G for a basset horn pitched in that tonality, and the basset horn in G was not unknown to other composers of that time.[2] We may note in passing that the Czech composer Jiří Družecký wrote works scored for three basset horns in D, whilst there is documentation of at least one instrument in the key of E.[3]

The more usual basset horns in F are also to be found in three of Mozart's operas, most spectacularly in the obbligato to Vitellia's aria 'Non più di fiori' in *La clemenza di Tito*; there is also an aria for *Le nozze di Figaro*, 'Al desio di chi ch'adora' K577, believed to be the work about which Brahms wrote in a letter of 1855 to Clara Schumann 'to my great joy she [the singer Frau Guhrau] was accompanied by two basset horns which had been obtained with great difficulty. I do not think any instrument blends more perfectly with the human voice.'[4]

Mozart's instrumental works with basset horn are mostly found amongst his chamber music. One exception is the *Maurerische Trauermusik* K477, which originally included only one basset horn. Mozart later added a further two, thereby preserving the balance within the three wind groups: two oboes and clarinet; three basset horns; two

Ex. 3.13 from W. A. Mozart, Serenade K361, second movement



horns and contrabassoon. Amongst some recently completed fragments is the Quintet exposition K580b with basset horn already mentioned on page 39. It is now accepted that the Divertimenti K439b were originally written for three basset horns,[5] though for many years they achieved wide currency in the transcription for two clarinets and bassoon. Closely related to these are the two Adagios K410 and K411, again involving basset horns in ensemble. The celebrated Serenade K361 for thirteen instruments is of course one of the most glorious works of the entire repertoire, whose date of composition has been the subject of recent research.[6] The two basset horns play a pivotal role and are often paired with the two clarinets, nowhere more effectively than in Trio 1 of the second movement (Ex. 3.13).

The basset horn was not an instrument that every composer used as

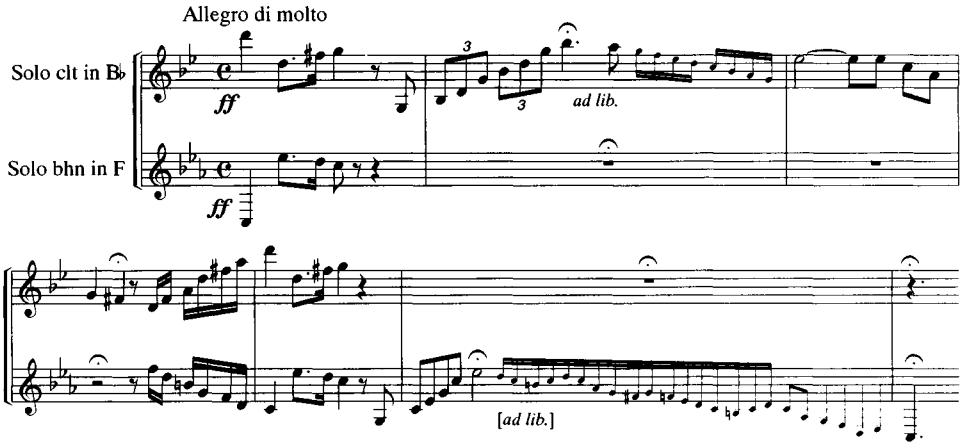
extensively as did Mozart. Beethoven included it only once, in his ballet music *Die Geschöpfe des Prometheus* Op. 43, which contains a delightful duet with oboe, lightly scored so as to expose its special qualities. It would appear from his sonata that Franz Danzi (1763–1826) had far less confidence in the instrument than either Mozart or Beethoven, since the title page of the early André edition announced a *Grande Sonate pour Piano-forte & Cor de Bassette* (*ou Violoncelle*), and in the outer movements it is indeed the piano writing which is virtuosic, leaving the basset horn little to contribute. However, the slow movement is a touching Larghetto, well worth playing on its own.

While the clarinet player of today is likely to have been attracted to the basset horn through the music of Mozart, to have been invited to take part in a performance of the single number from Beethoven's *Prometheus* (there is even a printed arrangement for the two wind instruments with piano), or to have been tempted by the familiar name of Franz Danzi, he will soon realise that this is only the beginning. For the basset horn became a favourite instrument of the travelling clarinet virtuosi of the nineteenth century, and many of these players were themselves composers. Anton Stadler, to whom we owe so many of Mozart's works for both clarinet and basset horn, composed eighteen attractive single-movement terzetti for three basset horns. Other players who added to the repertoire were Heinrich Backofen (1768–1839), who wrote at least one concerto and a quintet with strings; Alois Beerhalter (1798–1858); Josef Küffner (1777–1856); Christian Rummel (1787–1849); and many more.

Curiously enough, Carl Baermann (1810–85) does not seem to have composed anything himself for the instrument for which he was most famous, but he can claim our profound gratitude for furnishing Mendelssohn with the inspirational scoring for the *Konzertstücke* Opp. 113 and 114, which he wrote for clarinet (father Heinrich) and basset horn (Carl himself), initially with piano. The subsequent orchestrations were by Mendelssohn (Op. 113) and Carl Baermann (Op. 114).[7] The opening flourishes by the two solo instruments in the Mendelssohn orchestration of Op. 113 illustrate just how well they complement each other (Ex. 3.14).

After Mozart the next most significant composer to write extensively for the basset horn was Richard Strauss. He used it first in his *Zwei Gesänge* Op. 51, where in No. 1, 'Das Thal' (1902), his scoring for the clarinet section alone fully illustrates his immense skill as an orchestrator: two clarinets in B♭/A, two basset horns and one bass clarinet in B♭/A. From then onwards, beginning with *Elektra* (including two basset horn parts) first performed in 1909, he was to include one or two basset horns in five further operas. *Der Rosenkavalier* has the basset horn doubling bass clarinet, and it is worth noting that the configuration of the mechanism on some basset horns makes certain of

Ex 3.14 from Felix Mendelssohn, Konzertstück No. 1 in F minor Op. 113 *(Die Schlacht bei Prag)*, solo parts at opening of the orchestrated version

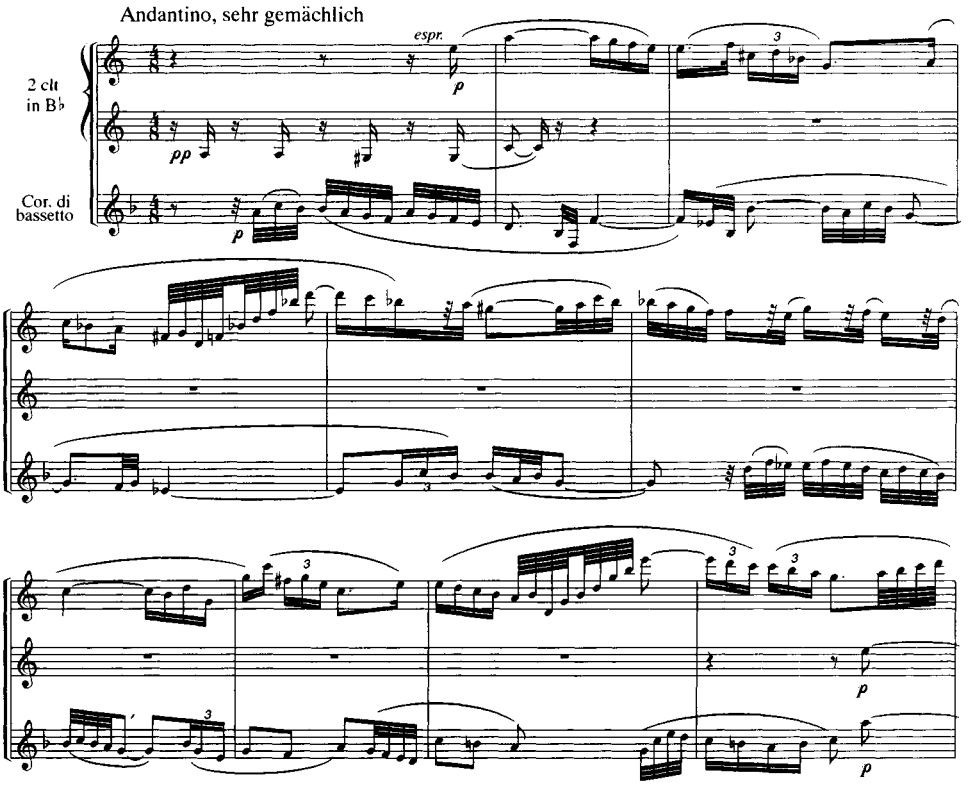


its passages unplayable! As remarked upon on page 42, *Die Frau ohne Schatten* has the basset horn doubling C clarinet, another unkind – if not impossible – task for the player, since these two instruments are in reality totally incompatible. The large clarinet sections of *Daphne, Die Liebe der Danae* and *Capriccio* also include the basset horn. The late sonatinas for wind, already mentioned in relation to the C clarinet, contain virtuoso basset horn parts, in which the instrument is often entrusted with important solos. For example, the second movement of the Sonatina in E♭ contains a substantial duet for clarinet and basset horn, accompanied almost throughout by only the four horns (Ex. 3.15).

Essentially the basset horn is a chamber-music instrument. Although some players may prefer the more penetrating tone provided by a larger bore, especially in an operatic context, it is in more intimate surroundings that the basset horn excels. When treated with respect, it is incredibly flexible and can produce a wide spectrum of tonal colour and expression throughout its four-octave range.

The basset horn has not so far established itself firmly enough outside Europe to enjoy a reputation worldwide. Some of its music appears with alternative instrumentation, but there is nevertheless a considerable repertoire by composers such as Elisabeth Lutyens, David Gow and Richard Rodney Bennett in Britain, and Miroslav Krejčí, Jaroslav Maštalíř, Oldřich Flosman, Frank Martin, Petr Pokorny and Juraj Beneš in Central and Eastern Europe, besides a handful of American writers. We cannot list here all the works in which the basset horn appears, but John Newhill's excellent book *The Basset-Horn & Its Music* (Sale, 1983, revised 1986) is an invaluable source of information. His references range from anonymous eighteenth-century

Ex. 3.15 from Richard Strauss, Sonatina in E flat, second movement



trios for three basset horns to solos by Stockhausen, whilst calling attention to an important part for the instrument (perhaps unexpectedly) in the slow movement of the Violin Concerto by Roger Sessions. It is unfortunate that all too little of this repertoire is published or readily available, but its rediscovery and reinstatement is not an impossible task and can bring its own very special rewards.

The bass clarinet

MICHAEL HARRIS

Introduction

Like the basset horn, the bass clarinet was still regarded as rather a peripheral instrument even a generation ago; many musicians were genuinely surprised when a clarinettist appeared who could really play it well. However, the past thirty years or so have changed the situation so dramatically that professional players must really specialise in the instrument; it is no longer sufficient to pick it up casually for the occasional concert. To a certain extent, the amount of playing undertaken by an orchestral bass clarinettist during a given period depends on current repertoire. If an orchestra's principal conductor has a special interest in Mahler, Berg and Webern, the player may be on almost permanent duty, whereas if the German classics of Beethoven and Brahms form the staple diet he will be regularly excluded.

Playing the bass clarinet in a modern symphony orchestra provides a wonderfully varied musical lifestyle. On the one hand, you may be engaged merely to play the celebrated four notes following the clarinet solo in the first movement of Tchaikovsky's 'Pathétique' Symphony (originally intended by the composer for bassoon, but now almost always played by the bass clarinet). On the other hand, you may be required to play semi-jazz style in Bernstein's *West Side Story* suite, or to take responsibility for some of the most telling moments in Wagner's *Tristan und Isolde.* Whilst forming part of the teamwork of a clarinet section, one is also at times a soloist – ideal for someone who prefers to avoid the limelight all the time, but who can none the less make a significant musical contribution on this vitally important and expressive instrument.

Playing technique, instruments and equipment

Until the early 1960s, most manufacturers were building B♭ bass clarinets which descended only to written E♭, such as those illustrated

Figure 3.3 Henri and Alexandre Selmer testing clarinets at the Selmer (Paris) factory, *c.* 1932. From A. Selmer, *Instructive Talks to Clarinettists* (Elkhart, Indiana, 1932)

in Figure 3.3. This enabled the player to cope with a great deal of the standard repertoire, but made many significant works impossible to play, such as Stravinsky's *Petrushka* and Prokofiev's *Romeo and Juliet*, which require a range to low *c*. The shorter instruments were more portable and therefore ideal for use in military bands, and these were often furnished with an extension to provide the necessary three extra semitones. However, by around 1970 all the principal makers were building instruments to low *c*, and this type of bass clarinet has since become indispensable. Contemporary composers in all fields – including light music, film and television – now assume that this is the normal range available to them.

How then does one choose a bass clarinet? Due to the complexity of keywork and the acoustics of such a large instrument, one is faced with differing sets of compromises within each model. Mechanically superior instruments are not necessarily well in tune, whereas those with improved intonation may not necessarily have such a good basic sound. Among points to assess are the degree of clarity and stability in

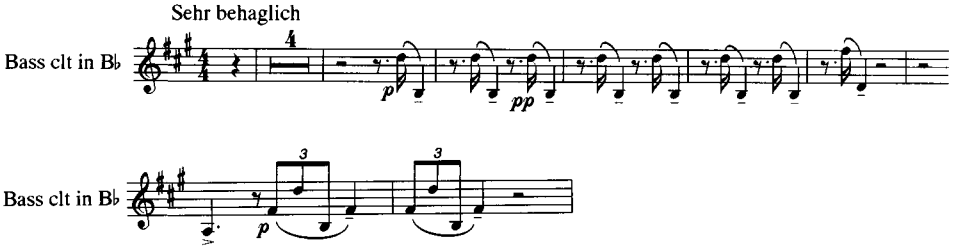
the very low register from *g* downwards, since some instruments are increasingly resistant in this area. The twelfth *b*/*f*♯″ can be very stuffy in sound and a rather too narrow interval, which on some instruments is nicely corrected via an extra side venting hole. The throat *b*♭′ should be clear and not too flat, the latter problem sometimes occurring if the speaker tube has been altered to correct the tuning of notes immediately over the break. These notes – *b*′, *c*″ and *c*♯″ – are very often quite sharp, a shortcoming difficult to correct and therefore one to be avoided in a prospective purchase! Of course, the main desirable quality is a fine sound, especially since so many bass clarinet solos are slow, expressive melodies, where the player must find his full individual expression in the sound being produced.

As any serious devotee of the clarinet will realise, choice of mouthpiece and reed is at least as important as the instrument itself. The characteristics of a good bass clarinet mouthpiece differ from its B♭ counterpart in several respects. Many inexperienced players find that the instrument squeaks very easily, especially in loud passages. This is often caused by the player, but can also be due to a fault in the lay of the mouthpiece. This should be the first area to be checked, if this most common of problems occurs. Whilst the usual qualities of fine sound, clarity and good intonation are essential, a bass clarinet mouthpiece needs to be even more flexible between registers than on the B♭ clarinet. Slurring over certain large downward intervals is a particularly difficult exercise on the bass clarinet, which a flexible mouthpiece can facilitate. Examples 3.16*a* and 3.16*b* from the opening of the finale of Mahler's Fourth Symphony are cases in point.

Curiously, the very high register (*c*‴– *c*⁗ and above) poses less of a problem than on the B♭ clarinet, (see fig. 10.8 on page 183) and therefore this is less of a factor in the choice of mouthpiece. However, it is also important to find a mouthpiece which allows freedom of articulation in all registers. Even when the lower register feels very free, the middle one – especially towards g″- *c*‴ – can feel highly resistant. Great patience is required to discover the technique of keeping the embouchure relaxed enough to articulate these notes, whilst at the same time controlling the sound and intonation. It remains common to choose one of the many fine commercially available mouthpieces and to have it finished by an expert, who will rectify any tiny imbalances in manufacture.

Playing in a modern symphony orchestra requires a huge range of dynamics to be produced, and this can often mislead the player into choosing reeds which are too hard. This may well produce a seemingly bigger sound, but it will probably be at the expense of flexibility and also intonation. Furthermore, the notes just over the break (*b*′, *c*″, *c*♯″) may become uncontrollable and even sharper in pitch. Many players find that each of the registers of the bass clarinet responds so

Ex. 3.16*a*, 3.16*b* from Gustav Mahler, Symphony No. 4, fourth movement



distinctively that it is expedient to reserve different sorts of reed for different pieces. For instance, in Mahler's *Das Lied von der Erde* all the solo passages lie beautifully in the lower register and so a softer reed is more appropriate than in Strauss's *Don Quixote*, where most of the tricky solos lie within the range *c*″ – *c*‴. Ultimately, fine bass clarinet playing demands a mouthpiece that favours soft enough reeds to provide the necessary flexibility, whilst allowing a sufficiently wide dynamic range to be produced.

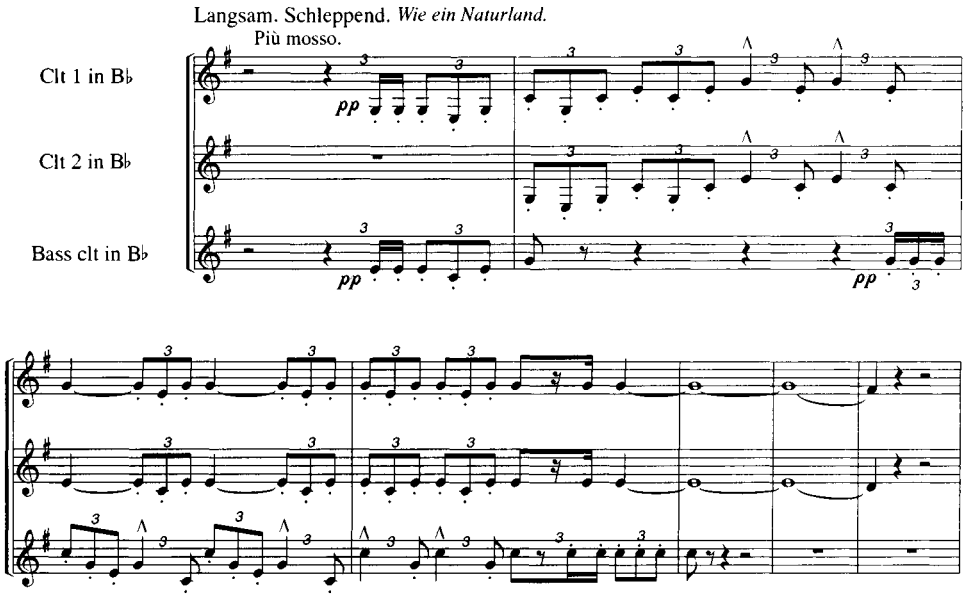
In terms of the sheer dexterity now required, bass clarinet and B♭ clarinet technique have become virtually indistinguishable. Composers write difficult passages in all registers, so that any study for the soprano clarinet may be usefully practised. The Bach solo cello suites (already mentioned in relation to the basset horn) also provide invaluable material for the bass clarinet, with an ideal range to low *c* and a largely melodic character. They are also a perfect introduction to the bass clef, which many new students find something of an obstacle. All studies must also be transposed as if originally written for A clarinet, as this situation is commonly encountered within the standard repertoire, and is an essential skill to acquire.

Repertoire

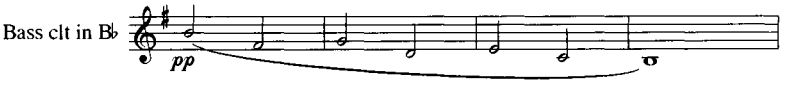
The list of late romantic composers who took the bass clarinet to heart is a long one. The works of just three of these – Wagner, Mahler and Richard Strauss – provide an irresistible incentive to take up the instrument. There were of course many important nineteenth-century solos (for example by Meyerbeer, Tchaikovsky and Verdi) but it was Wagner who really established it as an integral element within the orchestra.[1]

In many ways the symphonies of Gustav Mahler provide an excellent introduction to the sort of challenges and contexts that an orchestral bass clarinettist is likely to encounter, which are unlikely to be revealed within a book of orchestral excerpts. In Mahler's first five symphonies the player is variously required to double on A, B♭ and C clarinets, as well as to handle parts for bass clarinet in A. In the First and Fifth, E♭ and D parts are also included, prompting many clarinet

Ex. 3.17 from Gustav Mahler, Symphony No. 1, first movement



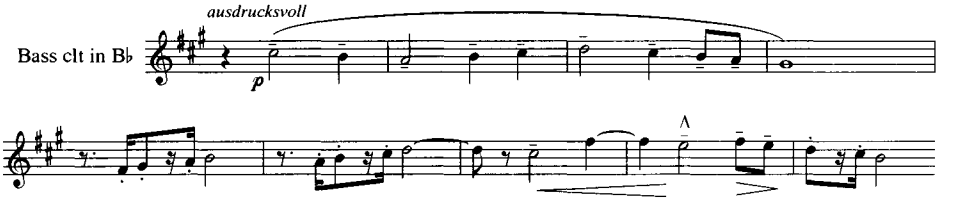
Ex. 3.18 from Gustav Mahler, Symphony No. 1, first movement



sections to reschedule the parts so that E♭ and bass players remain with their own specialist instruments. The First Symphony contains only fleeting moments for the bass, the majority of the part being for soprano clarinets; but the Introduction immediately establishes the instrument as an important colour within the piece. The little fanfare (bars 9–15) for two B♭ clarinets and bass (Ex. 3.17) is an admirable example of Mahler's instinctive writing, making use of the instruments' idiomatic *pianissimo*. The minim phrase at Example 3.18 looks easy, but it is a test of any woodwind section (and the bass clarinettist in particular) to play it in tune. The scoring is an unusual combination in octaves of piccolo, oboe, cor anglais and bass clarinet against a background of string harmonics, which usually sound flat. For the bass clarinettist this illustrates the flexibility required in a situation which on paper looks extremely straightforward.

The Second Symphony, 'The Resurrection', again contains very little for the bass, though its role is both telling and challenging. A short way into the long funeral march which is the first movement, Mahler writes an eerie chorale for the bass clarinet in unison with the cor anglais (Ex. 3.19). This is another exotic combination which creates problems of intonation and ensemble, especially since the two players sit at

Ex. 3.19 from Gustav Mahler, Symphony No. 2, first movement

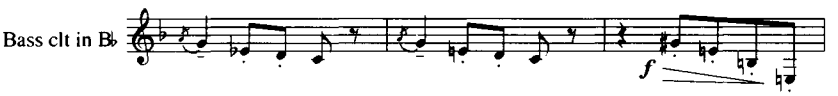


opposite ends of the woodwind section! But it produces a wonderfully dark sound, with the strings providing a jumpy skeletal dotted-rhythm accompaniment. The Fourth Symphony is a piece where execution to the letter of Mahler's bass clarinet part demands a total of five instruments, including bass in B♭ and A. Furthermore, as with Bartók later on, many of the changes of instrument occur during very few bars' rest, which means that in practice the music is played on just three clarinets, in B♭, A and bass in B♭. The very end of the entire symphony is the most important moment, since Mahler again chooses two of his favourite woodwinds – bass clarinet and cor anglais – to wind down this beautiful and poignant music, to the accompaniment of a harp. It requires a calm nerve successfully to end this fifty-minute masterpiece. One may wonder why, if Mahler actually had at his disposal a bass clarinet in A, he opted here for the B♭, notated in F♯ major rather than G.

This seems an appropriate moment to discuss the question of parts for bass clarinet in A, written around the turn of the twentieth century. There seems no doubt that many major European symphony orchestras and opera houses must have possessed bass clarinets in both B♭ and A. So composers obviously expected to find the A instrument and wrote extensively for it, especially in Germany and Austria. The extent to which composers wrote for the sound of the A rather than for the convenience of key remains something of a mystery; perhaps the situation is variable, as with the soprano clarinets. The bass clarinet in A is now commercially available, although transposition of its parts for B♭ will always prove a popular option. The luxury of owning two separate instruments in effect creates more problems than it solves, given the sheer physical inconvenience of maintenance and transport.

Mahler's Sixth Symphony includes an important part for bass clarinet in B♭ and A, without doubling soprano clarinets. Here the sheer quantity of writing in A makes a transposed part advisable. During a peaceful, pastoral moment in the second subject of the first movement – a stormy and often brutal march – he writes a particularly evocative and haunting bass clarinet solo. This is an exciting but slightly anxious moment, since it needs to be played in a single breath and is often taken very slowly by the conductor! The scherzo similarly demands the ability to sustain a solo line, whilst in contrast it also

Ex. 3.20 from Gustav Mahler, Symphony No. 9



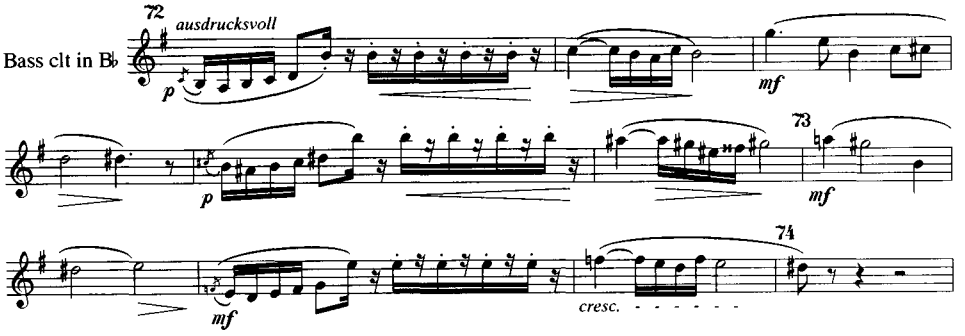
requires some very loud, confident playing in the low register. This symphony is unusual for the quantity of *tutti* bass clarinet writing, but it also features textures more characteristic of chamber music, which are a particular feature of the two *Nachtmusik* movements of the Seventh Symphony. Here the bass clarinet almost assumes the role of the cello in a string quartet. Sandwiched between these delicate and sensitive idioms are some really *fortissimo* effects in the scherzo.

The Ninth Symphony has a prominent solo role, which lies mostly in the rich low register, and is thus especially gratifying to play. The dark colour of the evocative first movement is emphasised by doubling of bassoon and cellos. In the Ländler which follows, Mahler reverts to chamber music, and towards the end writes a strange little solo (Ex. 3.20), whose *forte* in the third bar needs a great deal of confidence, since if this overblows, the result is catastrophic! In the final Adagio, the bass clarinet comes into its own as the *pianissimo* bass instrument of the wind section. This is a quality which Wagner and Puccini cultivated extensively, realising that in certain registers the bass clarinet is able to play much more quietly and with greater ease than the bassoon.

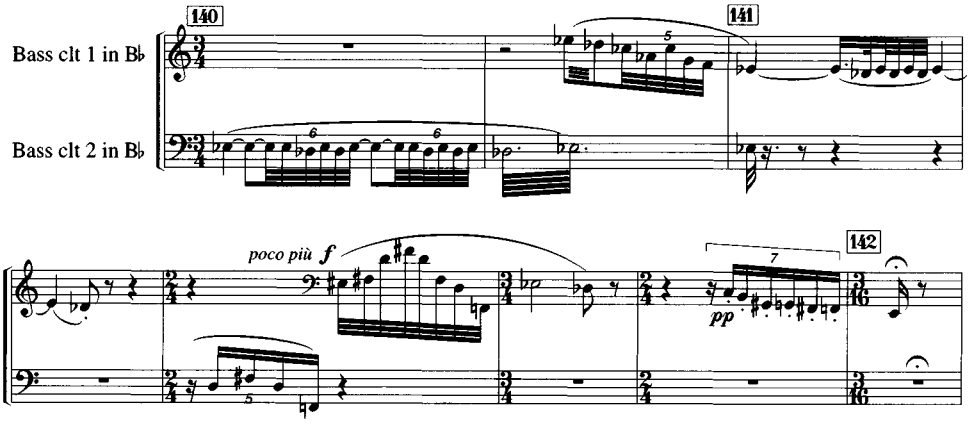
If Mahler's use of the bass clarinet is truly kaleidoscopic, a number of other composers wrote extensively and imaginatively for the instrument. Richard Strauss was an important devotee, nowhere more so than in his tone-poem *Don Quixote*, where the bass clarinet plays a characterful and major role in the drama, taking the part of Sancho Panza, Don Quixote's ridiculous side-kick, often in the company of solo viola or tenor tuba. The many unison passages with the tuba demand great care and attention, whilst amongst the solos is the especially awkward passage of Example 3.21, whose range nicely illustrates the necessity for keeping the embouchure relaxed and open, so that the sound is not choked out and the intonation remains stable. This is an area where the instrument can seem to want to retaliate and can feel reluctant to speak. The repeated staccato notes must be allowed to speak, but the embouchure must not be so slack that the pitch becomes flat.

The bass clarinet has held a particular attraction for operatic composers, its ability to play extremely quietly in the very low register being an obvious asset in creating dramatic effects in the theatre. Wagner wrote some of his most poignant instrumental music for the bass clarinet, and many of his operas contain beautiful, lyrical solos –

Ex. 3.21 from Richard Strauss, *Don Quixote*



Ex. 3.22 from Igor Stravinsky, *The Rite of Spring*



many of them in A – often with very little or absolutely no accompaniment. They illustrate the necessity for confidence in reading the bass clarinet (at pitch), whereas French composers have preferred to write the parts an octave higher in the treble clef, enabling one to read the music as if playing a standard soprano clarinet.

Of the great twentieth-century orchestrators, Ravel used the bass clarinet to particularly great effect. *La Valse* may be notated in the treble clef, but it is mainly for the A instrument, and is one of a handful of pieces for which most players will have a jealously guarded transposed part. Ravel's bass clarinet writing here is a *tour de force*, and illustrates the fact that by the 1920s the technical facility expected by some composers was virtually indistinguishable from that of the B♭ clarinet. Occasionally composers have used two bass clarinets to extend the tonal range at the bass end of the orchestra; Stravinsky did this in *The Rite of Spring*, using a rather confusing mixture of treble and bass clefs (Ex. 3.22). Russian composers have always been attracted by the dark, oily sounds of the very low register of the bass clarinet, and were among the first to incorporate the extended downward range to *c* and *d*. Shostakovich, for example, expected considerable dexterity in this register, as the scherzo of his Violin Concerto well illustrates.

The tradition and style of bass clarinet writing established in Vienna was continued and developed by the Second Viennese School of composers. Schoenberg in particular wrote not only some very difficult orchestral parts, but also included the bass clarinet in two of his major chamber pieces. His Serenade Op. 24 and especially the Suite Op. 29 find the instrument integrated in a real chamber setting. Exactly contemporary with the latter work is Janáček's wind sextet *Mládi*, with a prominent role for bass clarinet. During the first half of the twentieth century the combination of bass clarinet and piano found little favour with composers, although the Sonata by Othmar Schoeck Op. 41 is a serious attempt in this direction. This situation has since changed radically and (as Roger Heaton observes in Chapter 10) the bass clarinet has more recently become established as an important and prominent voice on the contemporary scene.

The contrabass

The bass clarinet's larger relative, the contrabass, is another fascinating option for the enterprising clarinettist. There is a small but interesting choice of instruments for the potential player. Whereas experiments to build the higher clarinets in metal have in general not been successful, the contrabass works pretty well and is available commercially. However, in the absence of financial constraints one might ideally opt for the rosewood model, shaped like a large bass clarinet, rather than bent double like the bassoon. The contrabass is built in B♭ descending to low *c*, and is especially popular in the USA, where large wind bands make use of it regularly. However, its most frequent use is in film scores, where its sinister low register has been heard to great effect in many horror movies. Its use orchestrally has been very limited, though there are parts in d'Indy's *Fervaal,* Strauss's *Josephs-legende*, Schoenberg's *Five Orchestral Pieces* and Ligeti's *Lontano.* In recent times more and more contemporary composers have been realising its true potential as a genuine colour rather than merely an effect, and it retains an important role in clarinet ensembles, especially the sextets still popular in France. Its roundness and softness of tone, especially in the low register, is unrivalled by its double-reed counterpart the contrabassoon. Wind bands sometimes include parts for the less common smaller E♭ contrabass, which also finds a very occasional place in film scores.