

9 The professional clarinettist

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Introduction

Whatever their preferred course at the outset, musicians these days are best equipped if they can apply themselves to several related trades. Playing a wind instrument can offer a most satisfying professional life combining orchestral work, solo playing, chamber music and teaching, but performers often end up diversifying in all sorts of directions. Examiners, lecturers, recording artists and producers, conductors, composers, businessmen, arrangers, authors, consultants, administrators in education or artistic managers – I can think of at least one clarinettist who has become each of these! Competition for rare orchestral vacancies is intense, whilst only one or two professional clarinettists in Britain can honestly say that they earn a living from playing solo and chamber music. There are, however, hundreds of players throughout the country who teach and many who play occasionally, if only in local amateur orchestras, bands or jazz groups. This has not always been the case. Between 1890 and 1900 the number of listed clarinettists in London increased tenfold, suggesting there was a time when the instrument was not as popular as it is today. Nowadays there is a flourishing market of freelance players supplying a large number of the capital's *ad hoc* orchestras and ensembles. Despite the risks of being a musician, it seems that playing the instrument for a living has never been so popular.

The demands and pressures of orchestral life

Life in an orchestral wind section has its fair share of pros and cons. Actually securing a job can take many years studying and patiently gaining experience, and during this time the individual should be prepared to do any number of different jobs, or at least to endure long periods of under-employment, before breaking into the profession. Clearly it is not a profession for the impatient. With such difficulties

getting on the first rung of the ladder, it is hardly surprising that once they are in, most players are determined to stay, whatever they may have to put up with. The remuneration may be small, the hours anti-social and many conductors poor, but life as an orchestral musician, particularly as a member of a fine wind section, does have moments of enormous satisfaction and sheer joy in music-making – when getting paid for enjoying one's work does seem too good to be true. As in any other profession there may be moments of exasperation, boredom, exhaustion and disappointment, but most orchestral musicians count themselves fortunate just to play music for a living.

In an orchestra the pressures are very much those associated with being part of a team. Like goal scorers, the soloists (wind and string principals) are more noticeable, but the rank-and-file string players or third clarinettists are also important team players. At times various members of a section will be called upon to be a soloist, whether it be playing bass or E♭ clarinet or filling in for the regular principal; for the second clarinettist, blending with the tonal character of different players is a great art.

Playing up to five concerts a week with a considerable amount of travel involved can feel like hard work, particularly if the programme is a tricky one. Musicians have various ways of coping, but it is most important to have an understanding family and supportive colleagues. Jack Brymer's comments apply as much today as they did in 1979:

The only real privilege of musical success in Britain just now is overwork – quite serious overwork, the sort only possible with people who are sufficiently interested in their work to carry on long after the fatigue of sheer depression would have stopped others perhaps less fortunately identified with their profession. It may involve ten hours playing and three of rush-hour travel per day, a seven-day week and even a 350-day year. (*From Where I Sit*, (London, 1979) p. 6)

Some form of regular exercise is useful for remaining fit and alert as a performer. Some players resort to Alexander Technique, yoga or some other form of relaxation. Others find they deal with the pressure more by immersing themselves in interests outside music. Not surprisingly, alcohol and drug dependence can all too easily become for some the only way of dealing with the stress of performance.

Orchestral parts are normally available well in advance, so there is no excuse for being unprepared. For wind players, overdoing the practice on concert days is more of a problem than lack of preparation. This involves pacing your lip so that it is not worn out when it really matters. My own particular *bête noire* is poorly copied or notated music. If the eye begins to question what the brain thinks it has already learnt, the result can be total confusion. Short of recopying a part, the only way round this is assiduously to mark up the parts. If the

publisher is letting you down, pairs of spectacles, breath marks, fingerings and marking the beats of the bar can all be helpful.

The musician's lot will certainly not be a happy one if he encounters problems with his instruments (breaking springs or leaky pads) or if the atmosphere ruins his best reeds. Should a pad drop out, the player must be able to effect a repair and regain his composure in seconds. Sometimes, however, there is no opportunity to replace a dying reed, and the player just has to continue as best he can. Avoiding such situations involves a dependable supply of good cane and a reliable system of seasoning (blowing in), adjusting and selecting reeds. Each player has his own method. Some make their own reeds from blanks, with a reed profiler. Others make do with the one or two playable reeds from a box of 'supermarket' reeds but never stop complaining. Happily there are now more types of reliable reed on the market. My own solution is to pay more for fewer reeds made to my specification. Reeds well fashioned from quality cane seem to last longer and give a higher percentage success rate.

Niggling health problems can increase the stress of playing. Almost all clarinetists and most wind players I have ever met suffer from some form of back or neck problem, normally the result of actually holding the instruments. Coping with this repetitive stress leads some to use slings and others to carry their own seats. Fortunately some orchestras and halls are now recognising the value of providing ergonomically designed seating. Since so much of what we do is affected by the position of teeth and the shape of the mouth, dental problems are also a potential hazard for wind and brass players. Losing teeth has finished many a career, and finding a dentist who understands the problems likely to be faced by players is essential. Most musicians will experience some deterioration in their hearing. Subjecting the ears to a prolonged battering by a loud brass or percussion section has been shown to damage hearing. Acoustic screens are partially effective at dealing with this, but the use of ear-plugs is indicated for Shostakovich's 'Leningrad' Symphony, although they significantly interfere with the player's perception of dynamics and tone-quality. Wearing headphones for clicktracks during recording sessions is another aural annoyance necessary in synchronising music to film.

Working in a wind section

Although playing an instrument might seem a comparatively simple process, orchestral musicians have to develop several complex skills which can only be learnt *in situ*. What sounds loud close to, may not project beyond the front of the stalls, and a sound which seems small may in fact sound louder than you think in the auditorium. Finding the

right answer to this issue leads some players into experimentation with different 'set-ups' (instruments, mouthpieces and reeds). Others seem to hit on one set-up and stay with it for the rest of their lives. Some achieve this with a resistant set-up, others with a more free-blowing one. The best players aim for a set-up where the instrument sounds homogeneous and focused throughout its range and dynamic, without losing the vital elements of colour. Modern players may be less influenced by national schools than they used to be, but the music of different nationalities still demands to be played stylistically and with different sounds. A rich, warm legato Germanic sound may be fine for Brahms sonatas, but might possibly lack the brightness and incisiveness necessary for Bernstein's *Preludes, Fugues and Riffs*, or the lightness of articulation required in French repertoire.

In any discussion of balance, projection and acoustics, the importance of listening while you play is crucial. In his book *In the Orchestra* (London, 1987) Jack Brymer points out that this is now no longer a question of instinct for young players, but reliably taught in youth orchestras, such that 'by the time they start to study at our universities and colleges many of them have already absorbed these all-important skills' (p. 21). Projection is always relative to the acoustic of the hall, which naturally influences a player's interpretation of dynamics. In one hall a solo marked *piano* may have to be played closer to *mezzo forte* to be heard; in a better acoustic, it may be possible to play closer to *pianissimo*. In addition to projection, the player must be sympathetic to the relative balance between the instruments of the wind section. A clarinettist may discreetly have to adapt his *pianissimo c'* to allow for the problems an oboist may have just making this note sound soft rather than *forte*. Generally, both the style of music and the smaller string section in a chamber orchestra will enable the clarinettist to use a more intimate sound. Within the wind section, balance is a tightrope walked by at least eight players of different instruments. Often the biggest problem is starting together. This can depend as much on the distance from the conductor as his beat. Good conductors have a knack of conducting slightly ahead of the music without pushing the music forward, making it easier for those furthest away to play in time. For some conductors the music starts at the bottom of their down beat. With others the music could splutter into life anything up to half a second later, in which case the beginnings of chords will be led by the player with the most prominent part – often the first oboe or flute or, failing that, the leader.

To complicate matters, different instruments within a wind section 'speak' in entirely different ways, both in the amount of air necessary to start notes and the way in which the air is used. On the two double-reed instruments, the player has to generate a large amount of air pressure to get the reed vibrating and the note sounding. On the flute,

the absence of resistance means that a large volume of air will be necessary to sustain phrases. The clarinet seems to be a combination of these two, with a larger single reed to vibrate and a larger aperture into the mouthpiece. Since it is easier to get the reed to sound on the clarinet, starting notes and breathing have been insufficiently emphasised in learning the instrument. This I find curious, because preparing for a note on the clarinet is essential for a good sound.

One needs only to mention tuning within the wind section, and at least someone's hackles are likely to rise. As pitch is relative to the temperature and wind instruments are the first to be affected by heat, playing with instruments of fixed pitches can be fraught with difficulties. In a fine orchestra, the winds and strings will normally be versatile enough to accommodate a piano on a warm summer's evening; however, really disciplined tuning can only be achieved by a joint effort between sections, not by the unilateral action of one. Whatever the pitch of the orchestra, the orchestral clarinettist must occasionally be prepared to transpose a passage on his warmer instrument to avoid sounding flat. Within any wind section, the second flute and second bassoon seem to be strangely crucial determinants of the general pitch. If they have the discipline to remain at a fixed pitch, the rest seem to follow suit. Chords in the wind section are easier to tune if only the upper voice uses vibrato. It is, however, a general problem with melody instruments that they become sharper towards the top and flatter towards the bottom, particularly as the ear naturally hears pitches further apart at both ends of the range.

Preparing for the profession

Most important here is a realistic evaluation of one's talent and chances of making it into the profession. Some of the most promising pupils rule themselves out of the chance of taking up music seriously, often for seemingly trivial reasons. Some possess the sound, the technical capability and the musical understanding, but lack a good enough rhythmic sense or the necessary discipline. Others seem to have everything, but their attitude lets them down – what Jack Brymer calls the bandroom approach (*Clarinet*, p. 190). All the essential characteristics have to come together in the same person at the same time.

Choosing where to study music will often depend on what you eventually want to do. Whether you are intent on becoming a teacher or a performer, an academic course and qualification could ultimately be more useful. Since only a minority of students will end up earning a living purely from performance, it would appear to make sense to equip yourself early on for some of the diversifications I mentioned earlier. The question of where to study is inevitably complicated by the

diversity of courses and approaches to studying music in various countries. In Germany there is a marked difference between studying music as an academic subject at a university and training at a *Musikhochschule* to be a teacher or performer. These differences are now less obvious at British institutions. In general, conservatoires have had to become more academic in their courses, while university music departments have incorporated more performance options into their courses. In the USA, most universities consider study of the main instrument as important as any purely academic discipline. The most important decision is surely not 'where to study' or even 'what sort of course?', so much as 'with whom shall I have contact hours?' 'Is it someone from whom I can really learn something, whose playing and ideas I respect?' (Do they have a gift for teaching?) – in other words, 'are they relatively articulate?' and, increasingly, 'am I ever going to see them when I get there?'

To ensure that you make the right decision, it is quite usual to visit potential teachers in advance. The two gifts of performing and teaching are not often mutually inclusive. Those most naturally gifted as performers are often least able to communicate how they do it. Music is after all an abstract language of suggestion – for instrumentalists, literally a song without words. Explaining how this non-semantic art form is translated into performance – the medium through which music lives – presupposes a certain amount of articulateness and maturity on the part of the teacher. In addition to good communication skills, a good teacher should have the capacity to light the student's path towards music's power to evoke and suggest, and the ability to know when to allow the student to go his own way. In short the teacher-pupil relationship should be one of mutual respect and trust.

Examinations have for too long dictated the direction of traditional instrumental learning and teaching. The system has served teachers and the music profession well for many years, even if some teachers have relied too heavily on the syllabuses for their pupils' repertoire, but how well has it served the pupils? For some, the emphasis on competing and passing examinations has only succeeded in stifling creativity, and is partly responsible for perpetuating a stylistic rift which has tainted serious music with elitism. Music should strive to be seen as accessible, not merely the preserve of specialists or those who can do well in competitions and examinations, even if these remain essential challenges for the gifted, and a yardstick for evaluating progress.

Given a well-organised event, a fair jury and most of all a philosophical attitude, competitions can be fun and challenging. Learning from the melting pot of international styles and ideas at such events is the next best thing to actually studying abroad, and has much to recommend it.¹ Like sportsmen, musicians can learn to raise their game during competitions and they can then aspire to even greater

heights of technical excellence, tonal beauty and musical understanding. Ultimately, music should not be about competition but communication.

The ability to audition is crucial for success in the orchestral world. Thankfully, there are now fewer players who can boast that they have never had to audition or that they were no good at them. Orchestras are also beginning to adopt a more helpful attitude to the conduct and outcome of these necessary, if daunting events. If the panel is prepared to make its comments available, candidates can even come away in some cases feeling that the experience was a positive one rather than a complete waste of time. So how should you best prepare for an audition? First of all, prepare well and allow sufficient time for practice. There is really no point in attending for an audition if you have not had the time to learn the set works or orchestral passages. Listen to recordings, look at the scores and find out about the composer's style. It is infuriating and disappointing for an audition panel which has just read how gifted you are from your résumé to hear that you haven't a clue about the speed or style of the passages. Secondly, don't produce a wickedly difficult piano part or anything too modern as your chosen piece, unless you are taking your own accompanist. The audition is not a recital, it is simply a chance for you to demonstrate that you have a good sound and intonation, a well-honed technique and articulation, an acute rhythmic sense, musical understanding, and depending on the job you are applying for, some personality and flair. If you can remain composed and poised under audition conditions, you will be at an enormous advantage. Deep breaths, taking your time (within reason) and a good reed will also be a help!

Sight reading is a technique which can be improved with practice. Most people feel intimidated by the sight of black rows of semiquavers, rhythmic complexity or worse. The notation of music can be its own worst enemy, frustrating its performance and communication. Learn to look carefully along the ends of staves for changes of key, speed, dynamics or clef. Look out for finger changes or tricky combinations of fingerings. When you are ready, choose a speed you can keep up for the whole passage. Try not to stop even for wrong notes, and above all treat it not as an exercise but as music. Finally, if the audition is not successful, learn to forgive yourself and accept the outcome. In most countries successful auditions can lead directly to jobs. In Britain, however, frequently lengthy trials ensure that both orchestra and trialist get to know each other better.²

The challenges of the orchestral repertoire

This section is designed for clarinettists who are studying the orchestral repertoire, probably by means of one of the volumes of

excerpts listed in the Appendix. It is not designed as an exhaustive list; the passages are intended rather to highlight particular difficulties.

Projecting the sound

- Weber, *Freischütz* Overture: here the clarinet soars over the horns' declamatory E♭ major chords – a most dramatic moment that marks the clarinet's arrival as a fully fledged romantic instrument. Make sure the top *a*'' is sharp enough for the volume of sound and use as much resonance on the throat notes as possible. When you join the strings' tune, listen and watch the conductor!
- Schumann, Piano Concerto, 1st movement: your solo is accompanied by the piano. Don't be too soft or you'll never be heard. Save your soft intimate sound for the central section on the B♭ clarinet. Try using the angle of the instrument to project.
- Tchaikovsky, Piano Concerto No. 1: solos at bar 186 and bar 494 of the first movement. Only the first of these is really a solo. During the second, watch the pianist's fingers closely.

Legato passages: using the clarinet's softness

- Tchaikovsky, Symphony No. 6: in the 1st movement's solos, putting the fingers down slowly on open holes can help the legato. Try to equalise the throat notes with sufficient resonance. Take the *ppp* and *pp* with a pinch of salt. Certainly, 5–7 bars after rehearsal letter T keep the tone up. Thereafter if you get too soft you will make life impossible for the bassoons!
- Schubert, 'Unfinished Symphony', 2nd movement: a larger breath after four bars and one before *g*''–*e*''–*b*'' (on the down beat of bar 79) will assist this most difficult of solos for breathing. Try to stay in tune on *b*'' whilst getting softer. Keep the air flowing and shade the *g*'' hole slightly.
- Brahms, Symphony No. 4, Andante Moderato: try to focus the *piano b*'s, keeping the sound up below the break. Despite the marked diminuendo in the final solo, don't disappear!
- Prokofiev, Piano Concerto No. 3: a famous opening for two clarinets in thirds. Try to blend well together and avoid sharpness at the end.
- Rachmaninov, Symphony No. 2, slow movement: as this can be an exhausting solo, there is a good case to be made out for using a bumper (your second clarinettist) to cover where you take breaths.

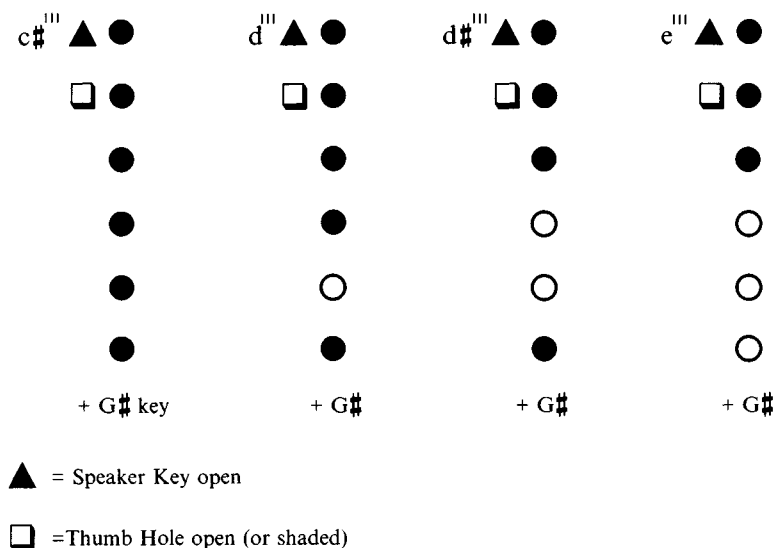


Figure 9.1 An alternative fingering system for $c\#'''$ to e'''

Alternative fingerings

It is always curious how many pupils have never been taught the correct use of the alternative fingerings for $f\#'$ (side), $b/f\#''$ fork fingerings. Apart from the more usual alternatives, there are many less well known for the altissimo. In fact one book on the subject lists twenty-five different fingerings for top g''' ! For most students, having so many to choose from is more of a hindrance than a help, but there are several other fingerings which work well but do not appear in many text books. Among these is a system for $c\#'''$ to e''' which works well on most Boehm clarinets (Fig. 9.1). It produces a softer, slightly flatter sound, closer in tone-colour to the clarino register, and can be used to great effect in high, soft passages, such as those in Berg's *Vier Stücke*. This is based on the equivalent German fingering system for these notes. In theory, the second speaker L1 used to obtain the notes from $c\#'''$ upwards is in the wrong place on the Boehm instrument. Keeping the Lth open or shaded with the speaker key open and closing L1 hole produces a flutey and disembodied sound. Arising out of this idea, try sliding the L1 finger to one side rather than lifting it suddenly when attempting a legato to the altissimo register (e.g. $a'' - d'''$).

Fingers flying

Often the player faced with seemingly insuperable technical passages is prone to panic. Try passages slowly when you are learning them.

Imaginative practice using alternative fingerings, different rhythmic groupings and variable accents is always useful. In technically awkward passages try overdoing the finger movement, then when the passage is more familiar, use as little movement as possible. Try to move as smoothly as possible. Grabbing and jerky movements will make legato more difficult. Particularly in the break area, an ergonomic combination of wrist, forearm and finger movement is essential for a rounded technique. Above all, remember that evenness of finger technique and evenness of sound are one and the same thing.

- Shostakovich, Symphonies Nos. 1, 9 and 10.
- Bartók, *Miraculous Mandarin* and *Concerto for Orchestra*: all parts (first, second/E \flat and bass) are worth learning.
- Barber, Violin Concerto, finale: think of fingering here in a rhythmic way.
- Ravel, *Daphnis et Chloé*, 1st and 2nd suites: first clarinet opening: keep L4 d \flat key down for the whole of the opening bar. Keep sound very soft and legato. Alternative fingerings come in very handy in the final 5/4 section!
- Ravel, *Tombeau de Couperin* and Piano Concertos: bear in mind side c \sharp and open d \sharp (rather flat but acceptable at speed).
- Tchaikovsky, Symphonies (e.g. finale of No. 4): the *tutti* passages are often worth looking at as well.
- Tippett, *Ritual Dances for Midsummer Marriage* and Symphony No. 4: the dances contain one of the repertoire's hardest passages for two clarinets in rhythmic unison.
- Schoenberg, *Chamber Symphony No. 1*: very tricky for E \flat , B \flat and bass clarinets.
- Stravinsky, *Firebird*, *Petrouchka* (*tutti*s not in the passage books are more tricky than the solos), *Symphony in Three Movements*, *Symphony in C*, *Jeu des cartes* and *The Rake's Progress* have rhythmic intricacies and technical challenges.
- Dukas, *Sorcerer's Apprentice*, and Roussel, *Bacchus et Ariane*, are two particularly difficult examples from the French repertoire.
- Prokofiev, Piano Concertos Nos. 2 and 3.
- Balakirev, *Islamey*: if this crops up, have a good look at it!
- Richard Strauss, *Der Rosenkavalier*, *Ein Heldenleben*, *Till Eulenspiegel*, *Le Bourgeois Gentilhomme*, second Horn Concerto, *Don Juan*, *Die Frau ohne Schatten*, *Elektra*, *Salome* and *Ariadne auf Naxos*. Most Strauss is worth learning. Bits of *Rosenkavalier* and *Die Frau ohne Schatten* are terrifying!
- Borodin, *Polotsvian Dances*: Most performances seem to omit the opening movement, which contains some tricks.

- Rimsky-Korsakov, *Scheherazade* (timing the runs with the flute in the 3rd movement is often hard, and the 4th movement has a good finger twister!) and *Le Coq d'or* solo.
- Josef Suk, *Asrael Symphony* has a tricky scherzo with two clarinets playing in unison and *The Ripening* is demanding for all three players.

Tuning

It is generally useful to have a working knowledge of fingerings you can use to flatten sharp notes on the clarinet. This will include using R1–3 and L3 for sharper throat notes and using the RH rings (not R1) to flatten *c#'* and *d'*. Bear in mind certain characteristics of the different members of the wind section when examining tuning:

- Sharpness of oboe and flute: to enhance audibility, certain instruments prefer to be heard than to blend.
- Sharpness at the lower end of the bassoon's range: the entire woodwind section depends on the second bassoonist's bass notes.
- Flatness at the lower end of the flute's range.
- Flatness at the bottom end of the clarinet's range; difficult to correct!
- Sharpness on clarinet's throat notes and above *g''* (e.g. Schubert 'Unfinished' Symphony: end of 2nd movement, or Beethoven Ninth Symphony, slow movement). Brahms's Piano Concerto No. 2 has a very tricky passage for both clarinets for breathing and tuning of the clarino register.

Changing clarinets

There are several instances where greasing the joints of the mouthpiece is rather essential in order to change quickly from B \flat to A or vice versa. Walton's *Façade* contains awkward quick changes from B \flat to A and to bass, especially if the movements segue into each other.

Staccato

Articulation is often hugely simplified by viewing it as an extension of legato, so that it becomes a passive rather than an attacking action. Progressing through a series of legato soft-tonguing exercises within one breath, starting with no gaps between the notes and gradually introducing more, keeps the emphasis on the proper formation of the notes, whatever their length. The tongue can then concentrate on clearing out of the reed's way and allowing it to vibrate.³

- Beethoven, Symphony No. 4, finale: fortunately, the tricky clarinet solo is in unison with the strings, unlike the earlier bassoon solo; articulating quickly over the break: try slurring to the grace note.
- Smetana, *Bartered Bride Overture*.
- Mendelssohn, *Midsummer Night's Dream* scherzo.
- Raff, Symphony No. 3, scherzo: here is a surprise for the connoisseur! The ability to double tongue would be very useful here!
- Tchaikovsky, *Overture Miniature* and *Marche* from *The Nutcracker*.
- Kodály, *Galánta Dances*: the *tutti* passages – many in unison with the flute and full orchestra – are hard.
- Beethoven, Symphony No. 7, slow movement; Prokofiev, Violin Concerto No. 2, slow movement: these have very taxing passages of slow tonguing.
- Benjamin Britten, *Building of the House Overture*: this is embarrassingly difficult for most mortal tongues!

Transposition

However strong one's advocacy of the C clarinet, it is necessary to be prepared to transpose its music, which ranges over a very wide repertoire from Beethoven and Rossini through Mendelssohn, Berlioz, Smetana, Tchaikovsky and Verdi to Suk and Schoenberg. For Mahler and Richard Strauss the C clarinet is generally indispensable.

Transposing by a semitone either way – from B \flat to A clarinet and vice versa – can overcome awkward passages (cf. remarks on page 37):

- Henry Wood, *Fantasy on Sea Songs*: the Hornpipe is in B major on the B \flat instrument!
- Brahms, Symphony No. 1, slow movement: changing for the solo avoids an awkward slur to top c \sharp ''.
- Tchaikovsky, Piano Concerto No. 1, slow movement: middle section g \sharp '' – c \sharp '' – d \sharp '' slurred is easier on the A clarinet.
- Dvořák, Symphony No. 7: in preparation for a passage that would otherwise be on a cold instrument, or at the opening of Brahms Symphony No. 3, where there is insufficient time to change instruments.
- Strauss, Oboe Concerto: in practice, this is often transposed for A clarinet, averting the need for extreme sharp keys.

Solo work

If the opportunity presents itself, recitals and chamber music make a more intimate alternative to orchestral playing. Personally I have

always found the latter more difficult, partly because the range of responsibilities is so much wider. As a recitalist, you can let only yourself, your pianist and your audience down. In the orchestra, there are your colleagues and a conductor to think of as well! Playing recitals does provide the hidebound orchestral musician with opportunities for expressive freedom and a chamber music style, but despite an ever-growing repertoire of worthwhile pieces, merely playing recitals can be a very limiting existence for a clarinettist. Life as a soloist may seem more glamorous than as a member of a larger team, but the orchestral repertoire has many good tunes and regular opportunities for intimate playing within the orchestral context. In a recital or in chamber music, balance is an entirely different issue. It is often necessary to tone down the orchestral projection significantly. It may also be necessary to make allowances for the fixed pitch of a piano. A collection of slightly longer barrels and tuning rings will normally suffice.

Playing under the scrutiny of modern microphones is a discipline worth examining. As well as the ambience and resonance of the hall, microphone positioning and distance from the instrument are crucial if the recording is to sound natural. Listening back to broadcasts, it has always struck me that one needs to exaggerate elements such as tonal colour, vibrato and of course dynamic levels if they are to be heard at all over the air. On the other hand, most microphones are now so responsive that they will pick up less musical sounds like key noise, breaths and air leaking from the side of the mouth. On some recordings even the player's movements are audible. As a result clarinettists try to eliminate these intrusions as much as possible. Repairs to the instrument will normally deal with the problem of key noise, but leaking air – an inaudible habit of orchestral clarinettists – is more of a problem. Getting rid of this can involve changing the set-up in some way, though I have usually coped with it by painstaking long note practice prior to the recording. If the sound is still intrusive in the studio, some companies resort to noise reduction methods, which make the clarinet sound altogether duller.