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Title: The evolution of orchestral brass in the last
hundred years: organology, trends in performance
practice and their effects.

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Degree for which thesis is submitted: Ph.D. by research

Date: January 1996

To my mother and father, with love.

ACKNOWLEDGEMENTS

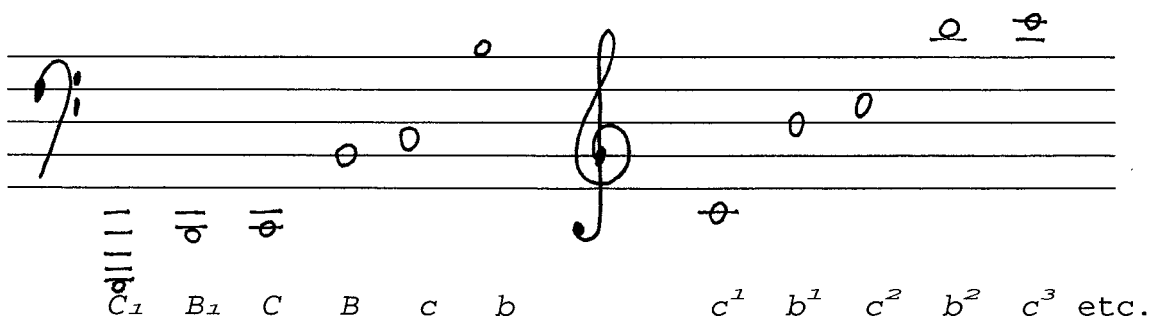
Thanks are due to my supervisor, Dr. Alastair Williams, for his guidance and patience.

I also wish to take this opportunity to acknowledge with gratitude the contribution, in a variety of ways, of the following in the research and presentation of this thesis:

Bob Ashworth, Julian Baker, Ian Balmain, Clifford Bevan, Kay Broom, David Cairns, Tony Catterick, Farquharson Cousins, Max Dinning, Frank Downes, Sidney Ellison, Richard Evans, Philip Farkas, Rod Franks, David Gibson, Livia Gollancz, Nigel Gomme, Malcolm Hall, Jo Hirschowitz, Roland Horvarth, Elgar Howarth, John Humphries, Philip Jones, Keele University Electronics Dept., Keele University Music Dept., Les Lake, Bill Lang, Andrew Martin, Jeremy Montagu, Chris Mowat, Maurice Murphy, Tony Parsons, Bob Paxman, Jon Peacock, Tracy Phipps, Nancy Poon, Steve Saunders, William Scharnberg, Matthew Shearlock, Crispian Steele-Perkins, Robert Vanryne, John Wallace, Alison Weston and Arthur Wilson.

Above all, my thanks go to mum and dad for their unfailing support.

References to musical pitch are indicated in the following way:



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CHAPTER ONE

Introduction

In order to examine the evolutionary processes of the last hundred years, it is necessary to have a grasp of the situation immediately prior to this period. Consequently this study starts with a potted survey of nineteenth-century practices, especially those of the transitional period following the invention of the valve. The complexity of interpreting composers' intentions regarding instrumentation and the great variety of scoring practices used during this period has given rise to many different approaches and schools. It is largely this nineteenth-century foundation of unbridled plurality which has validated a continued diversity in the twentieth century, even after the constitution of orchestral brass had become fundamentally stable.

It is readily apparent, and generally accepted, that the orchestra of 150 years ago was quite different:

...it must be remembered that no orchestral instrument exists in a vacuum. Trombones are twice the bore they were in Berlioz's Paris, trumpets and horns are different instruments and so to a lesser extent are the woodwind.¹

In 1989, in recognition of this and the 'normal' happy state of period instrument performance for music of the baroque and classical eras, Robert Donnington looked forward to a 'normal romantic orchestra' - one furnished with the appropriate types of instrument played in an appropriate manner - 'it

¹Bevan, C., *The Tuba Family*, London, 1978, p.65-66.

will make a notable difference'.² A consideration of orchestral brass in this context provides a starting point for this thesis: extant literature offers some historical and organological coverage, even if other aspects of performance practice are rather poorly provided for.

What is not so widely admitted is that, particularly where the brass instruments of the orchestra are concerned, significant variations on modern convention persisted well into the middle of the present century; here the coverage fades, or at least is rarely presented in any detailed and coherent form. The more recent moguls of orchestration acknowledge this difficulty:

Even though most of the instruments in the brass section of our modern symphony orchestra have been in use for several hundred years, the standardisation of these instruments is a rather recent development and, in some cases, is still in flux.³

The student of orchestration is faced with a difficult situation in attempting to form a mental image of the sound of music written for brass instruments. The absence of standardisation in the types of brass instruments leaves him on far more insecure ground than in the case of the woodwinds. Not only do the types themselves show important differences in different countries, but instruments other than those designated in the score may be regularly used by custom... Finally, it is of great importance that he keep abreast of his own time by seeking all available information about contemporary practices in orchestral brass playing.⁴

Thus one of the primary purposes of this research is to draw

²Donnington, R., *The Interpretation of Early Music*, London, 1989, p.552.

³Adler, S., *The Study of Orchestration*, New York, 1982, p.266.

⁴Piston, W., *Orchestration*, New York, 1955, p.206.

together what information exists on twentieth-century orchestral brass performance practice and organise it in a manner which lends itself to further analysis. As it transpires, much hinges on organological development and thus, for the earlier work, there is a pool of source material to build on. As the century progresses recourse must be made to more diverse sources and oral history. Where useful information has appeared in print, it has often been second-hand oral history devoid of context or argument.⁵

There is a more polemical agenda accompanying this historical investigation. The evolution of horns, trumpets, trombones and tubas has had a significant and far-reaching effect on the balance, sound and character of the symphony orchestra.⁶ Four issues present themselves as central to an examination of changes and trends in orchestral brass: namely **expansionism** (increasing volume and instrument bore sizes), **security** (increasing accuracy), **homogeneity** (instruments evolving to sound more like each other) and **uniformity** (across national, regional and stylistic boundaries). This thesis attempts to evaluate the verity

⁵One hopes that in trying to interpret the most recent trends the words of Sir Walter Raleigh prove ill-founded: 'He who follows history too close at heel shall have his teeth smartly knocked out'.

⁶The present writer does not wish to incur the wrath of fellow horn players who may feel a twinge of resentment at being pigeon-holed with the brass. However, the horn is a lip-voiced aerophone made in brass and has been subject to the same trends and evolutionary processes as the rest of the brass in the twentieth century. This is not to deny the horn's unique contribution in the orchestra.

and extent of these tendencies.

The notion that brass instruments, indeed perhaps all instruments, have gradually become louder over the course of the twentieth century has been expressed widely:

If you listen to the last 20 years of orchestral playing, everything has got louder and louder. No one plays softly anymore.⁷

As with many parameters in music, quantitative discussion (of phons, decibels etc.) is meaningless without context and qualification; the human element, active (performers' physical endowment, training and intent) and passive (listeners' frame of reference, state of mind, acoustic environment), lends significant subjectivity to such assessments. Yet, in art generally, subjective analysis would seem the most important: there is no point in proving that a Hockney yellow is brighter than Rembrandt's - it depends upon so much more than absolute physical characteristics. To continue the crude analogy, colour (timbre) and brightness (volume) only have relative value.⁸ Thus it is not surprising to find pre-twentieth-century accounts of brass being too loud, or of their effect

⁷Welser-Möst, F., *Gramophone*, March 1993, p.29.

⁸Recent colour theory research suggests that we only recognise different colours as a product of their juxtaposition with other adjacent colours. Similarly it can be demonstrated that the ear can be fooled into hearing a pitch rise when it is in fact falling by manipulating harmonic content (the relative strengths of upper partials in the sound's frequency spectrum). It may not be fanciful to suggest that our perception of timbre and loudness are similarly conditioned.

being extreme. Of 'forced' brassy horn playing, Berlioz comments thus:

A magnificent example of this means is to be found in the final crash of the duet in Mehul's *Euphrosyne et Coradin*: - 'Gardez vous de la jalousie'. Under the influence of this fearful yell of the horns, Grétry one day answered somebody who asked him his opinion of the tempestuous piece: - 'It is enough to split the roof of the theatre with the skulls of the audience!'⁹

However, notwithstanding this caveat, the evolution of brass instruments and playing technique this century does seem to have been optimized towards greater volume. The evidence for this trend can be found by exposing its organological basis - namely the increase in instruments' bore size - and this is a thread which runs through the present thesis. The motivation for and tolerance of such change is also examined.

It was in considering the following passage that a concern for the extent and consequences of expansionism in orchestral brass playing became a central theme in this research:

But a more important concern over the last hundred years has been the dynamic range of the standard instruments. The sound of any musical instrument becomes brighter or rougher when played loudly through increasing predominance of overtones, and as more volume has come to be demanded of brass instruments in large orchestras in vast halls, bores have generally been widened so that an instrument, while losing some of the 'edge' of traditional small-bore tone, can be sounded very powerfully without undue loss of musical quality through the tone scattering in a flurry of over-strong high overtones...They can be so predominant that in the words of one acoustician a trombone on *ffz* becomes almost a percussion instrument.

⁹Berlioz, H., *Treatise upon Modern Instrumentation and Orchestration* (1844), trans. Mary Cowden Clarke, London, 1882, p.141.

The reference is here to a modern trombone with wide bore and bell-section; on older models with narrower dimensions the shattering sound appears at a much lower dynamic level, and one remembers how careful players once had to be not to overblow above a moderate *forte* if the harmonies of the music were to be distinct and pleasing. On the other hand, with too vacant a tonal spectrum an instrument can lack life and colour, especially when sounded loudly, and one reason for retaining the F side of the double horn is to preserve the means to give the old brassy sound in a strong *tutti*, dependent upon the proportionately narrower dimensions of the instrument while played in F.¹⁰

The advance of technical facility and accuracy in orchestral brass, particularly the horns, is perhaps the first thing any living musician with more than forty years listening experience will comment upon. This has, indeed, been significant. The almost over-riding late twentieth-century concern for security of execution has largely banished the accidents of the 'bad old days': most conspicuously split notes, uncertain intonation, and fluffed entries. Although several factors are important in this progress, again the most significant can be revealed to be organological. In particular the history of the introduction of shorter tube lengths in the interest of safety needs to be examined.

It would not be surprising to find a change in brass instruments' character concomitant with alterations to their physical dimensions. Furthermore, since similar modifications and alignments have been applied to the different instruments one might also suspect that they have grown more alike, less differentiable. This is considered

¹⁰Baines, A., *Brass Instruments*, London, 1976, p.24-25.

under the general heading of homogeneity. George Bernard Shaw could be said to have initiated this theme with his assessment of Mahler's Hamburg Opera orchestra playing in London:

In that vast mass of brass, it seemed to me that instead of three distinct and finely contrasted families of thoroughbred trombones, horns and tubas, we had a huge tribe of mongrels, differing chiefly in size. I felt that some ancestor of the trombones had been guilty of a *mésalliance* with a bombardon; that each cornet, though itself already an admittedly half-bred trumpet, was further disgracing itself by leaning towards the flügel horn; and that the mother of the horns must have run away with a whole military band.^{104, 111}

Bernard Shaw considered himself to have taken into account the nature of Wagner's orchestration and matters of national style, but still found Mahler's orchestra 'rough' and lacking in 'purity and individuality of tone' even though the standard of execution was good.¹²

In mentioning national style, the fourth issue to be considered is neatly raised. Of all the parameters that may vary in the performance characteristics of a symphony orchestra, many will be due to national or regional style. The most polarized of national schools in brass playing this century have been quite conspicuous to the critical listener. Norman Del Mar expounds on national variations in horn tone:

¹¹Bernard Shaw, G., 'Siegfried at Covent Garden', *The World*, 15 June 1892, *Shaw's Music: The Complete Musical Criticism of Bernard Shaw*, ed. Dan H. Laurence, London, 1981, vol.iii, p.646.

¹²Ibid.

The accepted tone quality of the horn varies enormously from country to country, possibly more so than that of any other orchestral instrument, ranging for example, from the tremulous vibrato (not unlike the saxophone at times) of many French, Russian and eastern European players, to the thick mellifluous horns of the Vienna Philharmonic.¹³

The idea that the variety encountered now, at the end of the twentieth century, was surpassed by more marked differences in previous decades might be expressed as a trend towards uniformity. This supposition is certainly based on a general concept that affects every aspect of our modern world - that of ever-improving communications and hence much greater interaction and cross-fertilization, from nation to nation and culture to culture. The charge that today's orchestras, with a few notable exceptions, are largely anonymous is not uncommon.

Under Chailly, who succeeded Haitink as chief conductor in 1988, the Concertgebouw has lost character, has become another international orchestra, hard, loud, bright, and anonymous.¹⁴

Professional orchestras are becoming indistinguishable from one another. I don't think I can tell English orchestras apart.¹⁵

The trend of international harmonization has been catalysed in the brass world by the steady evolution of the instruments themselves. Naturally much has changed in the string and woodwind families too, particularly in respect of the manner

¹³ Del Mar, N., *Anatomy of the Orchestra*, London, 1983, p.260.

¹⁴ 'Seventh heaven - and hell', *Observer Review*, Sunday 1 May, 1994.

¹⁵ Civil, A., interviewed by Michael Foss in *Orchestra*, ed., Previn, A., London, 1979, p.175.

of execution. The extent to which national and regional styles have been eroded must be considered.

Finally, taking these four themes into account, a more general assessment must be made. The title of this thesis describes an evolutionary process, and certainly instruments and practices have evolved in that they have changed according to gradual, linear trends. However, the claim of degeneration has been aired on several occasions over the centuries as instruments' characteristics have changed (from hand horn to valve horn, for example) and this accusation must be addressed in the twentieth century too. It is important to question absolute aesthetic values - quality of tone and expression - to consider if there has been any loss of beauty. Inevitably, such discussion will rely in part on subjective judgement, but it is hoped that sound reasoning will be seen to accompany any conclusions.

This research was initiated out of a conviction that such a study would serve to inform conductors, players, composers and other musicians. While interest in twentieth-century performance practice is gathering momentum, orchestral brass playing seems unduly neglected. Robert Philip's pioneering work on early recordings and musical style covers string, woodwind and piano playing since the introduction of recording technology and yet he only hints at the great

changes which have taken place in the brass family.¹⁶ Similarly, other studies on orchestral style have simply fought shy of a detailed discussion of brass: Michael Hall's excellent series of Radio Three programmes entitled 'The Changing Orchestra' concentrated on string and woodwind playing.¹⁷ Perhaps the topic seems too large and complicated to be addressed easily, perhaps the brass are considered of lesser musical importance. If the former be true, then it is hoped that this research will provide and clarify. While it is not within its scope to analyse recordings in great detail, perhaps it might serve as a companion to Robert Philip's book and to this end some reference is made to recorded materials.

A further desire to induce debate about movement towards a more sensitive and varied aesthetic for orchestral brass - one which is less orientated around the crudest of evaluations, namely accuracy, volume and range - is, perhaps, ill-concealed. If this constitutes a kind of prejudice, then so be it - in the interests of provoking reaction. Nonetheless, the intention at all times has been to present a balanced account so that readers can draw their own conclusions. To this end sources have been referenced rigorously.

¹⁶ Philip, R., *Early Recordings and Musical Style*, Cambridge, 1992.

¹⁷ Hall, M., 'The Changing Orchestra', *BBC Radio Three*, 26-30 December 1994.

Instrumental delimitations are straightforward. Discussion will concentrate on those instruments used to perform horn, trumpet, trombone and tuba parts in the symphony orchestra repertoire. Exotica (contrabass trombones and the *cimbasso*, for example) are not of central importance. However, brass band instruments and practice occasionally provide an interesting peripheral comparison.

The relationship between the score and performance

The score provides the text for performance in the conventional symphony orchestra: herein lie the composer's intentions and specifications, although there are nearly always implied conventions which may not be explicit on the page. The performers' interpretation of this source material depends very much on training, experience and context. In many situations, some would say ideally, these last three parameters have developed organically, in symbiosis with compositional traditions. Thus much of the generative impulse for developments in instruments and performance practice ought to come from the music itself. Motivation and influence do come from other sources, and these become more significant if the performing canon approaches stasis.

Over the centuries, the relative status of the composer and the performer has varied. Sometimes both have acted in faith that they were serving God. At other times either one has had the upper hand: at the one extreme the performer-practitioner being thought of as a more or less inert conduit for the composer's creation, at the other the performer-artist giving life and expression to a quiescent script. Nevertheless, at the very least, the score always provides the starting point; it makes technical demands and presents subject matter. Here too, in considering trends in performance practice, the score should be the starting point. A brief examination of some general trends sets a framework

for the following chapters.

In the last one hundred years or so new horizons have been set for the orchestral brass player. In the music of the romantics the scale of orchestral expression advanced significantly and greater stamina and range was required of performers. Although, for example, baroque trumpeters were required to play just as high as the modern symphony orchestra player (indeed baroque music still presents some of the greatest challenges for a trumpeter), their endeavours constituted a special effect and, accordingly, the players were specialists. They did not attempt the huge variety of styles and requirements facing the late twentieth-century player day-in, day-out. It is this undeniable re-definition of technical limits which precipitated many of this century's developments in organology and performance practice. Detailed examples demonstrating this phenomenon have been presented widely.¹ A couple of hours spent in a library perusing scores is sufficient to confirm this.

Furthermore, the frequency with which the most demanding works have been performed has increased steadily. New demands may have been set in the late nineteenth and early twentieth centuries, but their full effect took some time to filter through worldwide. In Britain, Karl Richter, Artur

¹See, for example, the relevant sections of:
Del Mar, N., *Anatomy of the Orchestra*, London, 1983.
Gregory, R., *The Horn*, London, 1969.
Gregory, R., *The Trombone*, London, 1973.
Bevan, C., *The Tuba Family*, London, 1978.

Nikisch, Henry Wood and Sir Thomas Beecham were among those responsible for introducing much new repertoire but their staple diet was Mozart, Beethoven, Schubert and Brahms. In the second half of this century large orchestras have taken the likes of Strauss tone poems and Mahler symphonies as central repertoire: Richard Watkins, the Philharmonia Orchestra's present principal horn, reckons to have played Mahler's First Symphony more than seventy times in the last five years, once seven times in eight days.²

National traditions of scoring practice have accompanied indigenous compositional styles. This is very much bound up with regional organological preferences. For example, French composers - particularly since Berlioz - have orchestrated with great regard for colour. Their scores often exhibit uncommon transparency and variety of texture. Different instruments seem to be deployed primarily for their timbral qualities rather than for added weight; it is not uncommon to find two wind instruments playing at the unison in order to create a novel joint sound - just as an organist might mix colours by combining stops (this analogy is particularly pertinent with regard to those who spent time in the organ loft: Franck, Widor and Messiaen, for example).³ Certain characteristic leanings can be discerned in French composers'

² Stoneman, J., 'Keep Music Live (And Mahler Dead?)', *The Horn Magazine*, Winter 1995, vol.3 no.1, p.11.

³ A typical example of this can be found at the beginning of the first movement of Debussy's *La Mer*, where, from figure 1, 1st trumpet and cor anglais play in unison. The same effect occurs at figure 12 (Durand edition, 1905).

writing for orchestral brass, many of them a result of Berlioz's influence. Horn writing is frequently woodwind-like: the instrument is used soloistically and often, in melodic material, with a more delicate touch than in teutonic hands. Many subtleties of inflection, relating to a particularly strong hand-horn heritage, are inferred even in scores written long after the invention of the valve.⁴ Trombone parts, especially the first, tend to lie quite high. As will be seen, the bass trombone was not found in France for a considerable time and although the pedal notes of the Bb tenor were used to great effect, this left the range between Eb and B₁ unobtainable.⁵ Thus in France, composers wrote for three Bb trombones in a slightly higher general tessitura. It was Berlioz again who cemented the use of the cornet into the typical French score, often using two cornets alongside two natural or valve trumpets. These cornets habitually received much more florid writing than the trumpets (which were either necessarily restricted in natural form or retained much of this character when valves were

⁴Ravel's *Pavane pour une Infante défunte* was actually written for 'Cor simple' (i.e. hand horn) in G, as will be explained in chapter three. The horn solo at the beginning of the finale of Stravinsky's *Firebird* suite evokes aural images of the hand horn, even though it was clearly written for a chromatic valved instrument. Stravinsky, writing in Paris, would have known French horn performance practices well.

⁵The Bb₁ to A₁ pedals for two trombones in the 'Marche au supplice' movement of *Symphonie Fantastique* are well known. Berlioz's crowning example comes in his *Requiem* where eight Bb trombones descend to G#₁ at figure 94 of the 'Agnus Dei' (Kalmus edition, n.d.).

added).⁶ This has sometimes led to the notion that Berlioz's trumpet parts are boring, and yet they are essential in providing a much different colour to the smooth, facile cornets. This is lost in most modern performances: even when cornets are used (and frequently they are not), the instruments and the way they are played make them virtually indistinguishable from the modern trumpet. Nevertheless, French composers clung to the potential variety offered by the cornet long after Berlioz. Messiaen scores one seemingly vestigial cornet amongst the trumpet section in his *Turangalila* Symphony and although little of the earlier disparity in character between the instruments (military and fanfare-like versus lyrical and sweet) is hard to discern, the contrast in colour is important.⁷ The trumpet itself, when written for in its later chromatic form in French scores has subsumed some of this cornet character and can be seen to masquerade with the woodwind in the most delicate of solos (the example from *La Mer* given above illustrates this). French tuba writing calls for an unusually large range (as will be seen, this is so much so that in modern orchestras two different instruments are sometimes used to cover it). However, the transparent nature of French scoring does not call for great weight.

⁶For example, Berlioz added virtuosic parts for cornets throughout 'Un bal' in *Symphonie Fantastique*.

⁷Joseph Hirschovitz played horn in many first performances conducted by Messiaen and attested to his unusually sensitive ear for colour (in conversation at the 24th International Horn Society Workshop, Royal Northern College of Music, 1992).

It was German and Austrian composers, in particular Wagner, Richard Strauss and Mahler, who played the largest part in stretching players' limits of endurance and range. Reginald Morley-Pegge rightly states that Strauss's horn parts 'make such heavy technical as well as physical demands on the player that something had to be done about it'.⁸

Furthermore, central European compositional and orchestrational style tended to rely on rather thicker and heavier textures than in France. Theodor Adorno, commenting on Wagner's own conviction that 'colour itself becomes action', considers Wagner to have learnt 'the emancipation of colour from line from Berlioz'.⁹ Yet Wagner's way of signifying by the use of particular colours relies on contrasting whole families of instruments. His palette is that much more grandiose. Strauss and Mahler share Wagner's penchant for the heroic and their scoring promotes the development of this kind of playing.

In Britain, Elgar and Holst wrote for, and knew well, brass instruments which were, at the time, largely similar to those in use in France. However, their compositional style owes more to German tradition. Perhaps Delius's orchestration (or Fenby's in the case of his later music) could be said to exhibit more of the French transparency. Another kind of synthesis occurred in Russia where very direct French stylistic influence was superimposed on a more full-blooded

⁸Morley-Pegge, R., *The French Horn*, London, 1973, p.71.

⁹Adorno, T., 'Colour', *In Search of Wagner*, tr. Rodney Livingstone, London, 1981, p.71.

emotional make-up (there can be few composers who have specified such extremes of dynamic as Tchaikovsky, from the regular use of *fff* to *pppp*). Rimsky-Korsakov and Stravinsky did much to advance the art of orchestration; they were also among the first to expect truly virtuoso playing throughout the orchestra, brass included.

Over the course of the twentieth century, the orchestra has had time to come to terms with its central repertoire. This repertoire is, in the majority of cases, at least a few decades old. While more contemporary music is played by symphony orchestras it is the predominant performance of older pieces which has had the greatest influence on the development of brass instruments and performance practice.

CHAPTER TWO

CHAPTER TWO

NINETEENTH-CENTURY PRE-HISTORY AND ANCESTRY

Ostensibly this thesis deals with the last one hundred years, and it is only in this period that the orchestral brass finds a real collective identity. The preceding decades present an epoch of great transition, indecision and non-uniformity. Examining this earlier period serves as a useful introduction to the developments of the twentieth century, for there are no clear starting points: it might seem reasonable to assume that the invention of the valve in the first quarter of the nineteenth century provided a definite watershed, yet this technological leap manifested itself in erratic progress. Certainly there were exceptions, music and players ahead of their time, but the road from the classically-based roles of the horn and trumpet to a chromatically emancipated family of valved instruments, customarily joined by trombones, was not an even one. It is because of this fitful and often reflexive process of change that a background 'pre-history' to the main period in question is necessary. Significantly it is also pre-twentieth-century history and the instruments' classical and early romantic ancestry which become important benchmarks in the argument about their quintessential nature or sound.

The piston trumpet and cornet

By the beginning of the nineteenth century the standard pitch of the orchestral trumpet had risen from the customary D of the baroque to F. Various combinations of crooks rendered all harmonic series down to Bb or A possible, but the shortest tube a trumpeter was likely to play on was the 'six foot' F.¹ Before Mozart and Haydn such a short instrument was only of exceptional use to the *clarino* players (the second Brandenburg Concerto being atypical) but as trumpet technique descended to inhabit the old *principale* register shorter lengths became more useful. References to trumpets higher than F are rare; it was generally thought that above this the trumpet lost its characteristic qualities.

This exposition deliberately approaches the question of tube length from the opposite direction to that of today. The F trumpet of the 1800s is now most often termed an old 'long' trumpet (as are its crooked versions in E, Eb, D, C, Bb and A). This is because the family of modern trumpets familiar to the late-twentieth-century musician are half as long, with fundamentals sounding an octave higher. Clearly some consistent nomenclature is needed to avoid confusion. The following definitions are found in much literature and

¹Tube lengths given thus are merely intended to give an approximate idea of actual length and, perhaps most importantly in this context, the octave. Brass instruments have been made to a wide variety of church, military and concert pitches through the ages often making a quotation of exact length of no universal relevance.

although there is occasional variety of description in borderline cases (in particular, the term *piccolo* is sometimes used to describe any trumpet shorter than *mezzo-soprano*) they eradicate ambiguities.

<i>Tenor trumpets</i>	Bb,C,D ('eight foot', the longest being the same fundamental length as the Bb trombone).
<i>Alto trumpets</i>	Eb,E,F,G
<i>Mezzo-soprano trumpets</i>	A,Bb,C ('four foot', the modern standard).
<i>Soprano trumpets</i>	D,Eb,F,G
<i>Piccolo or Sopranino trumpets</i>	A,Bb (exceptionally up to C or D).

The desire, expressed by Altenburg in 1795, to find some means of filling in the missing notes of the trumpet's middle and lower registers must have been widespread, especially after the demise of the clarinists. Anthony Baines suggests that the 'stereotyped, out-of-date, thematic scope' of the old clarino music was 'wearing thin' and that the 'perpetually evocative *principale*' of the classical natural trumpet became more useful to the orchestra.² Such a shift in role and domain exercised the inventiveness of musicians and manufacturers; a surprising number of alternative solutions appearing prior to and concurrent with the invention of the valve.

²Baines, A., *Brass Instruments*, London, 1978, p.184.

Keyed instruments existed before the 1800s, indeed the principle of opening and closing holes along the length of the tube to alter pitch had been used for centuries (of the lip-voiced aerophones, the *Cornett* or *Zink* is one of the oldest examples). The concertos of Haydn and Hummel bear witness to some success for the keyed trumpet as a melodic solo instrument. An Austrian named Weidinger is generally accepted to have been one of the foremost of its proponents around the turn of the century. Baines writes of the Italian Gambati brothers touring Europe in the 1820s:

Playing for a time in the orchestra of the King's Theatre, London, they were a 'perpetual source of destruction and head-ache.... their execution is wonderful but their tone is rough and raw in comparison with that of Harper', the latter of course on the slide trumpet. In England the keyed trumpet never took root.³

So, not surprisingly, it seems clear that the effect of key mechanisms and holes was detrimental to the sound of the trumpet. The keyed bugle, a fore-runner of the cornet and closer to that instrument in conicity, was used in military bands and being of the bugle-horn family was less likely to suffer comparison with various species of trumpet.

As is intimated above, the mainstay of English trumpet playing around this time was the *English Slide Trumpet*.⁴ This was basically a natural trumpet with a sprung, right hand finger operated, U-slide which usually lowered a note by

³Baines, A., op. cit., p.194.

⁴So named to avoid confusion with the *Tromba-da-tirarsi* or *Zugtrompete* of Bach's time.

a semitone but could extend further depending on pitch and design. It stood in alto F and had crooks down to Bb. The slide was certainly used to correct faulty intonation, but there is also evidence that it was used to render some of the missing notes in the harmonic series. This was most effective for the D crook and above and studies from Thomas Harper senior's *Instructions for the Trumpet* (1836) illustrate how sophisticated this practice must have become.⁵ In the hands of several generations of players - from Hyde, Norton and the Harpers through to Walter Morrow and John Solomon, the last of whom saw in the twentieth century, it enjoyed widespread favour and Berlioz, for one, commented on the range and ability of English slide trumpeters.⁶ The longevity of support for this instrument in England is astonishing; as will be seen, it survived here throughout most of the nineteenth century and, coincident with other prevailing practices, contrived to keep the valve trumpet out of British orchestras almost into the present century.

The invention of the valve is widely attributed to Heinrich Stölzel and Friedrich Blühmel around 1814, a patent being taken out in Berlin in 1818. However, the early history of the valve and other devices designed to bring extra lengths of tubing into play cannot be stated simply. Admirably thorough descriptions can be found in Morley-Pegge, Bate and

⁵See Baines, A., op. cit., p.183.

⁶Berlioz, *Treatise Upon Modern Instrumentation and Orchestration*, [1844], trans. Mary Cowden Clarke, p.142.

Baines.⁷ For the purposes of the present study it is sufficient to note that the valve appeared in a comparatively crude form during the first quarter of the nineteenth century and was gradually refined. Of the three types which subsequently became popular, Riedl's rotary valve was patented in 1835, Périnet's piston valve developed in 1839 and Uhlmann's 'Vienna' valve in 1830.⁸

Germany seems to have the oldest of valve-trumpet traditions, the influence of the Prussian military and manufacture of large numbers of instruments in the 1820s and 1830s indicating a particularly early and widespread adoption of the valve. Wieprecht's cavalry bands were particularly progressive in using mezzo-soprano Bb valve trumpets from the outset (as well as the longer Eb variety). German instruments soon reached France; Spontini sent instruments to Paris where Dauverné put them to some use in the opera and the makers Labbaye imported them before starting to manufacture their own designs.⁹ Valve trumpets were being made in most of Europe by the 1830s and 1840s. The reputation of German trumpeters was equal to that of the English in the execution of natural trumpet technique and it is only in France that lower standards on the then traditional instrument are generally accepted to have coincided with the

⁷Morley-Pegge, R., *The French Horn*, London, 1973, p.25-54.
Bate, P., *The Trumpet and Trombone*, London, 1978, p.152-196.
Baines, A., op. cit., p.206-219.

⁸Tarr, E., 'Trumpet', *The New Grove*, p.648. These dates are based on recent research by René Dahlquist.

⁹Gasparo Spontini was an Italian composer and chief Kapellmeister to the King of Prussia.

introduction of new technology. Bandsmen may have brought valve instruments to orchestras they also played in, only leaving the most dyed-in-the-wool orchestras with the old trumpet (there is evidence that the natural trumpet survived longer in Leipzig and Berlin and in Austria the Vienna Philharmonic only took up the shorter valved instrument in the 1880s).¹⁰ Whatever the reasons, Baines deduces that the valve trumpet in Bb with a bore of 10.3 to 10.7 mm soon found its way into German orchestras:

...and though an orchestral valve trumpet was held to be properly in F with crooks, it seems fairly certain that by the 1850s the higher instrument had largely found its way in and become (with crooks down to G) as Mandel wrote in his Kneller Hall treatise, the 'ordinary trumpet' in Germany.

Tonalities specified in orchestral scores are small evidence of what instruments players actually used or use. Behind the glorious scoring in *Parsifal* where Wagner writes F trumpet *sehr zart* up to h12 [the twelfth harmonic] there is the belief in Germany that the instrument used was the Bb (or C), said at the time to give a better sound than the F (Eichborn, 1881, p.104). In fact, from those years round 1880, it was the military band which continued to find a place for the deeper pitch, allotting the F or Eb trumpets rather dull inner parts plus an occasional fanfare passage while the orchestras adopted the smaller instrument which stood further from classical tradition.¹¹

The nature of the reception of the mezzo-soprano Bb trumpet in Germany at this time is surprising considering its trials elsewhere. Julius Kosleck, a Prussian who had toured

¹⁰Buckner, J., *Substitution of Trumpets in Orchestral Music: Origins...*, D.M., Northwestern Univ., 1989, p.29.

¹¹Baines, op. cit., p.232, citing Mandel, C., *Treatise on the Instrumentation of Military Bands*, 1859 and Eichborn, Herman Ludwig, *Die Trompete in alter und neuer Zeit*, Wiesbaden, 1968. (Originally Leipzig, 1881).

internationally as a cornet soloist, thought that the 'new high Bb trumpet' was 'more accurate in the high register, but above all that it had a finer and more radiant tone'; the instrument was auditioned by the Royal Prussian Minister for Culture in 1855 and permission was granted for its use in the Royal Opera.¹² Tarr cites Albert Kühnert of Dresden and Adolf Scholtz of Breslau as among the first to exploit the Bb trumpet around the middle of the century.¹³ The former also played the F trumpet through the 1850s and 1860s. The early success of the valve trumpet in Germany was not matched with any consistency elsewhere. In Paris Dauverné reported some dissatisfaction with the tone and intonation of the Stöltzel equipped trumpets (probably standing in the alto pitch range) but his *Méthode pour la Trompette* of 1857 shows that he quickly realised the potential of a valve instrument and had started to think about solutions to its problems. However, this is notwithstanding the fact that soon after the valve trumpet was introduced to France he became its staunch opponent: as Professor of Trumpet at the Paris Conservatoire he discouraged its use and promoted a French version of the English slide trumpet.¹⁴ From around 1839 to its re-introduction about forty years later the valve trumpet was

¹²Burum, Heinz, 'Meine Erlebnisse und Erfahrungen, mit Kollegen und Schülern in 50 Jahren als Trompeter und Trompetenlehrer', *Brass Bulletin*, 37 (1982), p.58-67.

¹³Tarr, E., *The Trumpet*, London, 1986, p.167-170.

¹⁴Birkemeier, R., *The Orchestral Trumpet of the Nineteenth Century: An Historical and Acoustical Survey*, D.Mus dissertation, Northwestern Univ., 1984, p.32. The French instrument's slide extended forwards of the player (unlike the English design), was not sprung and could offer a pitch descent of up to a minor third.

hardly heard at all in France, much to Berlioz's chagrin:

Opposition has been confined to the argument that the tone of the trumpet loses much of its brilliance with the rotary-valve mechanism. This is not true, to my ear at least. Even if a more sensitive ear than mine can perceive a difference between the two instruments, it will surely be admitted that the disadvantage resulting from such a difference is not to be compared with the advantage of being able to play up and down the chromatic scale easily and without the smallest unevenness of tone over a range of two and a half octaves. For this reason I can only rejoice that the natural trumpet has been almost completely superseded in Germany today. In France we still have practically no chromatic or rotary-valve instruments.¹⁵

Meanwhile the *Cornet à Piston* gained popularity quickly. With hindsight it is easy to see the irony of the situation: Dauverné expounding a purist's counsel while the upstart cornet (later to be termed 'vulgar' and by common agreement of inferior tone to the valve trumpet) steals the show. It would not have appeared so at the time though; the cornet was, in the first instance, a kind of high horn played by young horn players with a fairly funnel-shaped mouthpiece. Its conical bore was a significant factor in producing a tone different to that of the trumpet. Characteristically it stood at mezzo-soprano pitch (C to A) with crooks taking it right down to the tenor range. Baines quotes Caussin's method in describing the sound of the cornet's crooks as 'hard and bright' in the mezzo-soprano range, 'resonant and pleasant' in the alto and 'mediocre and muffled' towards the tenor.¹⁶ These different timbres must have provided the

¹⁵Berlioz, H., *Memoirs*, trans. David Cairns, London, 1970, p.389.

¹⁶Baines, A., 'Cornet', *New Grove*.

primary reason for the existence of a wide range of crooks on an instrument that was fully chromatic. In the hands of the first generation of horn-trained cornet players including Dufrène, Forestier, Maury and Schlottman, the 'round-velvety tone' and impressive agility of the instrument endeared it to the French public. Along with this popularity went a characterization which has stuck; Berlioz, in particular, saw it as low-brow.

The cornet à pistons is very much the fashion in France at present, particularly in a certain musical world where elevation and purity of style are not considered essential qualities; and it has thus become the indispensable instrument for quadrilles, galops, airs with variations, and other second rate compositions. The frequency with which we now hear melodies devoid of all originality and distinction executed on this instrument in the ballroom, together with the character of its *timbre*, which has neither the nobleness of the horn, nor the loftiness of the trumpet, renders the use of the cornet à pistons in exalted melodies a matter of great difficulty.¹⁷

Buckner argues that the meaning of the word 'vulgar' has changed, that Berlioz intended 'plebeian', 'vernacular' or 'common' rather than our modern interpretation of 'crude', 'indecent' or 'unrefined'.¹⁸ However, it is clear from the above that, in purely aesthetic terms, Berlioz preferred the sound of the trumpet and horn, even if the use of the cornet could be appropriate in 'Un Bal' from his *Symphonie Fantastique*, for example. Further than that it is only reasonable to comment that the cornet has suffered some

¹⁷Berlioz, H., *Treatise Upon Modern Instrumentation*, [1844], trans., Mary Cowden Clarke, London, 1882, p.149-50.

¹⁸Buckner, J., op. cit., p.56.

degree of musical snobbery.

It was not long before this nascent instrument was adopted by trumpeters and shallower more cup-shaped mouthpieces became standard. Furthermore the lower crooks fell into disuse (they had presented some tuning difficulties). Jean-Baptiste Arban, whose tutor has become a standard method for all brass players to the present day, was a pupil of Dauverné and 'by his brilliant qualities of virtuosity together with his daring made the cornet popular in its new character of cornet-trumpet'.¹⁹

Arban went on to favour the use of a cornet in C on the grounds that it sounded more brilliant, had an easier upper register and made the transposition of trumpet parts easier; it has been suggested that this may have helped establish the C trumpet in French orchestras when valve trumpets finally found acceptance.²⁰ The extent to which cornets were used to play trumpet parts in French orchestras at this time is not clear, but the admonitions of Berlioz, Fétis and Pares and the emerging practice of scoring for two trumpets and two cornets indicates that, in the most established orchestras at least, the sound of the long trumpet in natural, slide or

¹⁹Franquin, Merri, 'La Trompette et le cornet', *Lavignac Encyclopedie de la Musique*, Paris, 1927, vol.ii, part iii, p.1626.

²⁰Buckner, J., op. cit., p.48.

latterly valved configuration, was heard.²¹ Halévy (*La Juive* 1835) and Meyerbeer (*Les Huguenots* 1836) were the first to write for this two-plus-two combination. Berlioz sanctioned the use of the valve trumpet - and here it is worth remembering that at this point the tone of the valve trumpet was considered somewhat inferior as well - to replace cornets where they were not available, citing German orchestras as a case in point.²² Berlioz does not openly advocate the reverse substitution of cornets for trumpets. If a digression into the details of orchestration may be pardoned, it is interesting to consider the *raison d'être* of the two-plus-two configuration. Buckner, interpreting Bate in rather bland terms, inclines to the view that Berlioz primarily wrote cornet parts to fill in harmony notes in what was basically trumpet writing.²³ Bate guesses that, when this device was used to convey a single melodic line, it was not wholly satisfactory:

...but perhaps the brilliance of the trumpets may have masked the smoothness of the cornet tone and given an impression of homogeneity to the mixture. Rather later, other French composers exploited the contrast between trumpet and cornet by writing quite independent parts for each.²⁴

²¹Fétis and Pares wrote methods on orchestration (as well as other matters) in 1837 and 1898 respectively. Both judged the trumpeters' cornet a mongrel of poorer tone, especially when in C.

²²Berlioz, H., op. cit., p.149. It is interesting to note that Wagner's *Rienzi* was originally written for the Paris Opéra and hence two natural trumpets and two cornets. In Germany, and in the score, this became two natural trumpets and two valved trumpets.

²³Buckner, J., op. cit., p.52.

²⁴Bate, P., op. cit., p.228.

It is the present writer's opinion, furnished by what has been said in chapter one and by Davis's work, that the contrast in tone colour was always a conscious concern, even from the earliest incidence of such scoring.²⁵ Joseph Hirschovitz took pains to corroborate that acute sensitivity to timbral variety is a long standing French tradition, as evinced by their persistence in writing for both instruments after the trumpet had become established as fully chromatic.²⁶ It may be that in a multitude of different situations, the mixture of trumpet and cornet tone created an apparent homogeneity but this resultant sound was crucially different to either instrument in isolation. To conclude that Berlioz did not intend to exploit this effect is as misguided as assuming that Mozart wrote notes not of the harmonic series for the horn without a care for the timbral consequences of hand stopping.

Notwithstanding the above it is generally believed that French trumpet playing ran into a 'weak phase' and this is attributed to the success of the cornet.²⁷ Arban's letter to the director of the Paris Conservatoire lobbying for the introduction of a cornet class gives some indication of the extent of the imbalance, though his value as an impartial

²⁵Davis, Joyce, *Cornet à Pistons in French and French influenced orchestration 1830-1936*, D.M.A. dissertation, Ohio State Univ., 1990.

²⁶In conversation at the 24th International Horn Workshop, Manchester, July 1992. Hirschovitz was a pupil of Thévet and has performed and taught for many years in France playing horn in most of Messiaen's premieres.

²⁷Baines, A., *op. cit.*, p.233.

observer may not be unimpeachable in this context:

Hardly anybody plays the natural trumpet anymore... Almost everywhere the natural trumpet has been replaced by the cornet à pistons... It is generally known that one can be an excellent trumpeter and yet starve to death, whilst everybody can live comfortably by playing the cornet à pistons.²⁸

The Paris Conservatoire started teaching the cornet in 1869. It is not surprising that such an institution was slow in accrediting an instrument of arriviste popularity but had the inertia of orthodoxy been overcome earlier, the cornet may have been upheld in its purer and more inimitable form leaving the trumpet to pursue a highly differentiated role. There is evidence that in the last third of the nineteenth century the cornet was used to play high natural trumpet parts because it made their execution easier.²⁹ The alto F instrument did not enjoy a long stay in French orchestras before the advent its mezzo-soprano sibling, which was to find acceptance in C in France.

It remains a remarkable peculiarity, even a sadness, that in the country where such great play is made of the scoring for contrasted trumpets and cornets, those instruments only survived in their most distinct incarnations until the 1840s. Later performances of works by the likes of Berlioz, Tchaikovsky, Franck, Bizet, Verdi and Chabrier can rarely,

²⁸Mathez, J.-P., 'Arban (1825-1889)', *Brass Bulletin*, No. 11 (1975), p.22.

²⁹Buckner, J., op. cit., p.65, citing Pierre, Constant, *La Facture instrumentale à l'Exposition Universelle de 1889*, Paris, Librairie de l'Art Indépendant, 1890, p.110.

in practice, have exhibited this contrast with maximum effect; in some cases all four parts may have been played by cornets. Dukas, Debussy, Prokofiev and Stravinsky certainly appreciated the subtle difference available to them in the twentieth century but may have delighted at the diversity of the earlier instruments.

The cornet played a similar role in England except that it existed alongside the slide trumpet until the very end of the century. Popular concerts promoted by Jullien, in a similar vein to Musard's Promenade concerts, provided a platform for cornet soloists like George MacFarlane (formerly a keyed bugler) and Herman Koenig (who had left Paris to join Jullien). Famous slide trumpeters like Thomas Harper, Walter Morrow and John Solomon also played the cornet. By the last quarter of the century the cornet was often being used instead of the slide trumpet where parts were particularly high or taxing. In England the use of cornets was delayed in comparison to France, mainly because of the strength of the trumpet playing tradition. However when the slide trumpet did begin to die out, the cornet monopolized the orchestra to a greater extent than had happened anywhere else (as will be discussed in the next chapter).

The trombone and tuba

Beethoven is generally credited with the introduction of a trombone section to the symphony orchestra in the last movement of his Fifth Symphony. This is certainly a milestone in the validation of the instrument as part of the standard orchestral palate, but from the late eighteenth century there was a general revival in interest in the trombone which was driven largely by the increasing dramatic needs of opera and also by the expanding world of military music. Church music, or that with sacred connotations, had been the pre-eminent domain of the trombone since the time of the *sackbut* and while this quasi-masonic connection always remained significant, the trombone did not really find favour as a concert instrument in the eighteenth century. Trevor Herbert highlights this fallow period by making a case for the extinction of native-born trombonists in England at a time when the conventions of parish church music making ignored it.³⁰ When the need for trombonists arose in England expertise was imported from Germany.³¹

With the growth of romanticism and its more extreme emotional range and intensity, the orchestral effects of the opera

³⁰Herbert, T., 'The sackbut in England in the seventeenth and eighteenth centuries', *Early Music*, November 1990, p.609.

³¹Burney commented on the difficulty of finding trombonists for the Handel Celebrations of 1784: 'so many years had elapsed since it had been used in this kingdom' (cited in Bate, *The Trumpet and Trombone*, London, 1978, p.146).

found their way into concert music. To twentieth-century sensibilities it seems natural that the trombone should have brought heightened dramatic colour, brilliance and dynamism to the symphony orchestra, but as will be seen, as far as the heritage of the instrument was concerned, its new role amounted to an iconoclasm: a significant change in the characteristic sound of the trombone occurred coincident with the introduction of valves and the adoption of the trumpet as the soprano of a brass family. Gregory expressed the development thus:

...a change in the ideal trombone tone colour occurred, from the former smooth mellow vocal sound to a brassier type with a sharper edge - the sound described by Berlioz as 'menacing and formidable' - and one which was perhaps better matched to that of the trumpet now so frequently associated with the trombone.³²

The organological basis for this evolution in musical role is found in the use of mouthpieces of differing internal profile and to a lesser extent in a slight increase in bell size. The old conical sackbut mouthpiece, which was similar to a horn mouthpiece but with a more definite throat, was replaced by a more cup-shaped design:

During the 19th century, however, with the entry of the trombone into the military band and then the opera house where a more penetrating sound was desired, a more cup-like shape developed and what was virtually a new orchestral colour appeared, firm and brilliant when well produced, yet without the 'clash' of the military trumpet. That did not necessarily mean that discerning musicians could not still produce the old warmth, and in 1844 Berlioz was able to write that the trombones might 'chant like a choir of priests', but could also 'take

³²Gregory, R., *The Trombone*, London, 1973, p.107.

part in the wild clamour of the orgy'.³³

In addition to the change in character of the instrument's sound, the constitution of the typical section was altered. Formerly a family trio of alto, tenor and bass each pitched in different keys, probably Eb, Bb and F or Eb, had obtained. In France the idea of using a common tube length across the section became conventional; three identical tenors were the norm. These were, in the first half of the century, narrow bore (of approximately the same dimensions as the old Nuremberg instruments but with slightly wider bells). A little later, by 1860, Courtois had perfected this type of instrument and it became the standard in England as well as France. Anthony Baines, citing Dieppo's method, gives a bore of 10mm and a bell of 12cm diameter (Antoine Dieppo was professor at the Paris Conservatoire from 1836-71 and was greatly admired by Berlioz).³⁴ The standard Courtois model was slightly larger at 11.4mm and 15cm, but the same writer has found 'very narrow bores indeed' in surviving French trombones by Courtois and others.³⁵ Berlioz described the tenor Bb as 'the best of them all'; 'It has a full and powerful sonority'.³⁶

³³Bate, P., op. cit., p.78 (a diagram showing the different mouthpiece profiles is presented but the labelling appears to be the wrong way round in the second edition. In addition, the Fig.22A referred to on p.77 must be Fig.24A).

³⁴Baines, A., op. cit., p.245.

³⁵Baines, A., 'Trombone', *The New Grove*, p.636 (see also *Grove* fifth edition).

³⁶Berlioz, H., *Treatise on Modern Instrumentation and orchestration*, trans. Mary Cowden Clarke, London, 1882, p.152.

In mid-nineteenth-century Paris, the alto and bass instruments were very rarely heard:

...it is to be regretted that the alto trombone is at present almost banished from our French orchestras. The sound of the bass trombone is majestic, formidable and terrible; and to it belongs, by right, the lowest part in all masses of brass instruments. Nevertheless, we have the misfortune, in Paris, of being utterly deprived of it; it is not taught at the Conservatoire, and no trombone player has yet been willing to acquire its familiar practice. Whence it follows that the majority of German scores, and even ancient French and Italian scores, written for orchestras which possess, or did possess, this instrument, must be more or less deranged when performed in Paris.³⁷

Practice differed slightly in Germany. The Eb alto trombone was sometimes specified by Mendelssohn, Schumann and Bruckner (it continued to be by the likes of Mahler, Schoenberg and Berg wherever its particular tone colour and easeful execution of the high register were required) and never really fell into total disuse. The Bb instrument was the most usual; conventionally the German pattern has a wider radius to the bell section, bringing a wider bell clear of the slide, and a slightly greater proportion of the tubing is in the slide section. Bores were generally only a little larger in the slide than the French instrument but expanded much more throughout the bell section with the result that they sounded somewhat darker and heavier:

The sound of the German instrument alone is rather morose, but trombones are usually heard together in harmony or unison, and these massive instruments produce

³⁷Ibid., p.152.

as well as any the inimitable glow of a soft trombone entry in harmony. The chief danger is when Bruckner's unison *ff* is taken too literally and the suave tone overforced to sound brassy, as Berliners have been apt to do, with rough and overbearing effect.³⁸

Anthony Baines states that these are the sort of trombones Wagner, Brahms and Bruckner would have known. An example of mid-nineteenth-century tenor trombone bore is given as '11.5mm, later reaching 12mm or more'.³⁹ Post-1850 German tenor trombones were often built with a bell section virtually as big as that of an F bass.⁴⁰

The Viennese player and bandmaster Nemetz published a tutor around 1830 in which he spoke of Bb alto, tenor and bass trombones, the only distinction being in the matter of mouthpiece size and perhaps in the case of the bass, of bell and bore dimensions.⁴¹ However, he does also acknowledge the F bass trombone (or *Quartposaune* as he calls it - a term which relates to seventeenth- and eighteenth-century Nuremberg nomenclature), an instrument which continued to be manufactured into this century and was mainly used in bands, although a Moritz instrument of this sort was used orchestrally in Berlin. The length of the slide section was such that a swivelling extension arm was necessary to reach the furthest positions, though some examples (notably the Moritz) do not have this device making 7th and sometimes 6th

³⁸Baines, A., op. cit., p.245.

³⁹Ibid.

⁴⁰Baines, A., 'Trombone', Grove fifth edition, p.559.

⁴¹Nemetz's survey is in agreement with accounts from Germany by Frohlich and Gottfried Weber, as described by Baines, *Brass Instruments*, London, 1976, p.242.

position unusable. The unwieldy nature of this contraption must have contributed to its rarity in orchestras but it had certain qualities: it could bridge the gap in the tenor trombone's low register and had a 'magnificent tone quality'.⁴² Had it been played more widely it would have assuaged Baines's fear that some notes in the standard repertoire could not have been played in German-speaking countries:

...the low Cs and Ds of Haydn and Mozart were lost for a time, and, which particularly disappointed German critics, the low Eb-D in the *Freischütz* Overture.⁴³

In Germany, the lowest trombone part was increasingly carried by a *Bassposaune* in Bb, in effect a wide-bore tenor to which a thumb valve was soon added allowing the introduction of an extra length of tubing putting the instrument in F; C.F. Sattler of Leipzig built the first of these instruments in 1839 and the design was approved by Karl Queisser, a virtuoso of the time.⁴⁴ That this arrangement renders a bass trombone which speaks with greater immediacy and is more agile is indisputable. Standing ordinarily in Bb it is also more universally playable by any trombonist. The one loss is, potentially, that magnificent sound: players will use the Bb side of a Bb/F trombone predominantly (the slide positions are closer together and more familiar if they have come from a Bb tenor instrument. Adjacent slide positions are

⁴²Gregory, R., *The Trombone*, 1973, p.85.

⁴³Baines, A., op. cit., p.242.

⁴⁴Baines, A., op. cit., p.245. Bores could reach 14.5mm in the slide, with a 22.5cm bell.

further apart on a longer trombone) and the F extension for those notes which are not possible or are in remote or awkward positions. The wide-bore Bb instrument, with a tone a little dissimilar to that of the old F bass, becomes the standard sound to which the F extension is matched. The exact position and size of the valve and the bore and profile of the extra tubing has a significant effect on this sound too. Furthermore, it became common in the latter half of the nineteenth century for second trombonists to use a medium-bore Bb/F *tenor-bass* instrument.⁴⁵

Bate judges this *duplex* trombone to have 'really taken root and flourished' in the first part of the twentieth century (somewhat later than other writers) and also, rather curiously, gives a French design using a piston valve as his first example of the type circa 1850 (nowhere does he mention Sattler, but he does acknowledge that it was in Germany that the idea was best received): yet again evidence that it is sometimes difficult to pin down developments to any specific time or place - many obvious developments facilitated by the widespread manufacture of valves evolved over a period of time throughout Europe.⁴⁶

⁴⁵Ibid. A detailed discussion of the merits and demerits of the Bb/F instrument and its sound appears in Wick, D., *Trombone Technique*, 1971, p. 70-75 and 89. A comprehensive summary and comparison of slide position problems is given in Gregory, R., op. cit., p.86-89.

⁴⁶Bate, P., op. cit., p.60. See also Horwood, W., *Adolphe Sax 1814-1894 - His Life and Legacy*, 1983, p.78 and p.151 for illustrations from Sax's catalogues.

The use of three instruments of a basic uniform Bb tube length was thus becoming more widespread in Europe as the nineteenth century progressed, but only in France did this customarily result in a section made up of identical instruments. Elsewhere differences in bore, bell and mouthpiece size were distinguishing features. The tenor Bb trombone even enjoyed a brief period of popularity as a solo instrument in the hands of Karl Queisser and F.A.Belcke in Germany and A.G.Dieppo in France.

A significant exception to this last observation persisted for a surprising length of time in England: the Courtois-type French model proved popular as the standard tenor but from the mid-nineteenth century a G bass started to gain popularity as the third member of the trio.⁴⁷ This was a bass in the Quintposaune range and it boasted the same slide-handle aid. It is usually distinguishable from the true F bass of the second half of the nineteenth century, typically by Moritz, by virtue of the fact that the tubing is coiled in the bell section of the latter.

Bate states that on the rare occasions a bass appeared in France it was in G, and this may be the origin of the instrument English players took up.⁴⁸ F (and Eb) bass trombones may have been played in England too: an F bass

⁴⁷The instrument was still to be seen in British orchestras in the 1950s and even 1960s, as will be discussed below. It survived longer in brass bands.

⁴⁸Bate, P., op. cit., p.149.

designed by George Case and built by Boosey and Co. appeared at the Royal Military Exhibition in London in 1890. It is described as being useful for the execution of German scores.⁴⁹

The epithet 'peashooter', used to describe trombones and horns of narrow bore, neatly illustrates a fundamental difference of the G bass to the modern bass trombone, or indeed the late nineteenth-century German F, Bb or Bb/F: the English instrument's bore is noticeably smaller. Thus its response and sound is somewhat different; it has attracted some adverse comment on these grounds but, almost without exception, critics have been quick to add that in the hands of a fine player it is capable of 'a really beautiful sonorous, ringing sound'.⁵⁰

Contrabass trombones existed in the sixteenth and seventeenth centuries.⁵¹ However it was Wagner who was the first to demand one in the nineteenth-century orchestra in *The Ring*. They were made in BBb, to his specification, by Moritz. Nineteenth-century trombone parts in the contrabass range also exist in the music of Puccini and Verdi.

Gregory reports that Berlioz saw and heard such an instrument in Berlin in 1843, which would pre-date its employment by

⁴⁹Day, C., *Musical Instruments in the Royal Military Exhibition, 1890*, London, 1891, p.178-180.

⁵⁰Wick, D., *Trombone Technique*, London, 1980, p.90.

⁵¹Baines, A., op. cit., p.117 and Gregory, R., op. cit., plate iv.

Wagner.⁵² The account appears thus in David Cairns's complete translation of his memoirs:

Berlin is the only German city I visited where you find the true bass trombone, in B flat. We have not yet got any; Parisian musicians refuse to play an instrument that is so tiring to the chest. Prussian lungs are evidently more robust than ours. The Berlin Opera has two bass trombones. Their combined volume of tone is so great as to obliterate the alto and tenor trombones playing the two upper parts.... There is no ophicleide at the Berlin Opera, and in works of French origin, which nearly all contain a part for it, they replace it not with a bass tuba but with a second bass trombone. The effect...is disastrous.... When I came to give my concerts...I had to ask the player to sit so that the bell of the instrument was laid against the surface of the desk, which acted as a kind of mute, while the alto and tenor trombonists stood up to play.⁵³

The translation 'true bass trombone, in B flat' is problematic: in the treatise Berlioz refers to the 'true bass trombone' as being in Eb; he also calls it the 'great bass trombone' but in both instances it is clearly distinct from the F bass trombone which was found in Germany regularly (thus it makes sense that Berlin should be the 'only German city' where Berlioz found a bass trombone not in F).⁵⁴ Nowhere in the treatise does any account of a contrabass BBb trombone appear. The R. and E. Holmes translation of the memoirs gives 'deep bass trombone (in B flat)'; this may give the impression that a contrabass instrument is being spoken of, and this is clearly the translation Gregory refers to

⁵²Gregory, R., op. cit., p.97.

⁵³Berlioz, H., *Memoirs*, trans. David Cairns, London, 1970, p.390.

⁵⁴Berlioz, H., *A Treatise on Modern Instrumentation and Orchestration*, trans. Mary Cowden Clarke, London, 1882, p.152-3.

(the page number matches up).⁵⁵ However, it is possible that Cairns's words come the closest and that there is a confusion about the pitch of the instrument: in Berlioz's original French 'le grand trombone basse' is used - which could easily be translated as 'great bass trombone' - but there is then, in the Lévy edition at least, some poor printing which leaves the pitch defined as '(en i bémol)'.⁵⁶ One might have considered it possible that all the above mentioned translators of the memoirs have used this source, or one in which the pitch is similarly unclear, and have come to the possibly incorrect conclusion that 'Si bémol' rather than 'Mi bémol' is intended but when the present writer put this matter to David Cairns he was able to confirm that there is a mistake in his translation.⁵⁷ If the pitch were Eb, the nomenclature 'great' or 'true' (for 'grand') would tie in with the treatise perfectly, and this is, indeed, the correct pitch. It is hard enough to imagine why two bass trombones of any description should double on one part, let alone two contrabass trombones. Reference to the original French also reveals that the two instruments in Berlin were identical ('...possède deux de ces instruments') which is not clear in the Cairns translation.

⁵⁵ Berlioz, H., *Memoirs of Hector Berlioz*, trans. R. Holmes and E. Holmes, annotated and revised by E. Newman, New York 1935, p.308.

⁵⁶ Berlioz, H., *Mémoires de Hector Berlioz*, Paris, Lévy, 1878, Volume 2, p.96.

⁵⁷ Cairns, D., correspondence with SGB. The error will be corrected in the 1995 New Everyman revised edition.

Various types of valve trombone have found a favour of convenience in situations where a slide is a liability (in crowded theatre pits or mounted bands, for example, or as part of a family of valved fanfare instruments). They were only exceptionally found in nineteenth-century orchestras but for a short time Rossini and Verdi wrote highly agile trombone parts for them which were probably beyond the slide technique of the time - hence Italian opera houses were among the few places valve trombones could be heard. In the 1850s Sax invented and manufactured a valve trombone with six independent valves which went some way towards achieving an accuracy of intonation similar to the slide instrument's. This design was later to be used in the Brussels Opera.

In his authoritative work on the instrument, Clifford Bevan states that the tuba is the only regular member of the orchestra for which we have a precise date of birth. He refers to a patent of 1835 for *Die Chromatische Bass-Tuba* issued under W. Wieprecht's name.⁵⁸ The design of the instrument was a collaboration between Wieprecht and Moritz, a Prussian instrument maker. The patent documentation claimed that the tuba superceded and surpassed the 'English bass horn' (a copper serpent), serpent and bass trombone in usefulness as the foundation of wind, brass and orchestral ensembles, although Wieprecht was undoubtedly most motivated by its potential in his Prussian military bands.⁵⁹ It was

⁵⁸Bevan, C., *The Tuba Family*, London, 1978, p.201.

⁵⁹Ibid.

built in the pitch of F and had five valves (three for the right hand, two for the left - these last providing extended range and some facility in tuning correction). No doubt there were many different 'upright valved bombardons' built for military band use across Europe, often only of similar dimensions to the *ophicleide* (and sometimes in the *ophicleide* pitch of Bb), but the Wieprecht-Moritz model became significant.⁶⁰ The bore was 14.8mm to the valves and 33.4mm at the beginning of the bell.⁶¹ Later in 1835 Wieprecht introduced a *bombardon* in F which was wider bored than the bass-tuba.⁶² This example, and others by different makers, was of similar dimensions to some twentieth-century F tubas.⁶³ There was very little distinction between these instruments and the larger saxhorns, except that Sax built in the keys of Eb and Bb.⁶⁴

In France and Britain the *ophicleide* had established itself before the tuba became a regular visitor to the orchestra and thus it was not until the 1860s that the tuba was seen in concert halls.⁶⁵ Berlioz's sanctioning of the use of tubas on his *ophicleide* parts was significant. Nevertheless, the virtuosity of keyed brass players meant that the *ophicleide*

⁶⁰Baines, A., *Brass Instruments*, London, 1976, p.249-250.

⁶¹Bevan, C., op. cit., p.84-5. Anthony Baines (op. cit., p.250) adds that the bore was 15.5mm through the valves and it had a 'wide conical bell section with next to no flare' - much more gradual and subtle dimensions than any modern tuba.

⁶²Ibid., p.86.

⁶³Ibid., p.133.

⁶⁴See Horwood, W., *Adolphe Sax - His Life and Legacy*, Baldock, Herts., 1980 for further details.

⁶⁵Bate, P., *The Trumpet and Trombone*, London, 1978, p.233.

was often heard right up to the turn of the century, as were even older instruments:

Costa's array of noisy wind instruments I cannot forget. Here let me say that for some reason, primary and elemental, the performances of the Sacred Harmonic Society were regarded by me as impressive, on account of their noise... The trombones were well supported by an ophicleide, long in the hands of Phasey, most stalwart and large-lunged of Costa's men, and there were always, high up among the men-singers, two "serpents", which led the attack in that exalted region.⁶⁶

The English were the last to take leave of the ophicleide, whereas in Germany ophicleide parts were played by tubas from the middle of the nineteenth century.⁶⁷

⁶⁶Bennett, J., *Forty Years of Music 1865-1905*, London, 1905, p.335.

⁶⁷Bevan, C., op. cit., p.134.

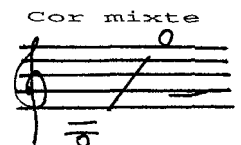
The horn

At the beginning of the nineteenth century hand-horn technique had been established for nearly fifty years and was approaching its heyday. The highest notes of the clarinists were required less and less and the horn established itself as a more civilised member of the orchestra at court: use of the hand enabled melodic playing in the medium as well as upper register - 'with results infinitely preferable to the eldritch screech of the stratosphere'.⁶⁸ This development in playing technique brought with it physical changes: the orchestral hand-horn's bore was wider throughout with a bell-throat large enough to accomodate an active right hand. Hence the birth of the orchestral horn proper, sounding larger, darker and smoother than its brash Baroque fore-runner.

In the orchestra players specialized as either high (*Cor alto*) or low (*Cor basse*) players and those whose complete mastery of one or other of these registers enabled a career as a soloist played in the overlapping range known as *Cor mixte* or *Cor milieu*.⁶⁹ Indeed, in this role and in the hands of a few particularly fine artists, the horn became a popular

⁶⁸Morley-Pegge, R., *The French Horn*, London, 1973, p.84. Haydn's symphonies are a useful barometer of this transition: most of the very high horn writing is found in the earlier symphonies (one of the peaks being No. 51 in Bb - the first horn ascends to bb^2 concert) and by the time of the London symphonies Haydn's horn writing has become somewhat more conservative.

⁶⁹ 2nd Horn (*Cor basse*) 1st Horn (*Cor alto*)



solo instrument. The different crooks available were known and valued for their different tone qualities. In particular F, E, Eb and D were favoured by soloists; later the F crook became the most usual.

Naturally, mouthpieces complemented this evolution in technique. In the Baroque, a thick-rimmed, trumpet-like mouthpiece was commonplace. Because the regular tessitura descended it became possible to use less pressure and therefore a mouthpiece with a smaller rim, affording the embouchure more mobility and flexibility and allowing some players, particularly Cor basse specialists, to adopt a set-in (*einsetzen*) embouchure. The internal profile became straighter and longer with a less distinct throat. Coupled with a wider bore this facilitated a smoother legato, softer attack and contributed to the above-mentioned changes in typical sound. French examples from the hand-horn period are the most extreme being almost entirely conical with a very narrow rounded rim (this by virtue of the fact that they were often fabricated from sheet metal rather than being turned from a solid piece).⁷⁰

This last observation neatly raises a point which lends much significance to a fascination with the hand-horn period that

⁷⁰Detailed coverage of mouthpieces and embouchures of the period can be found in Fitzpatrick, H., *The Horn and Horn-playing and the Austro-Bohemian Tradition 1680-1830*, London, 1970, p.159-162 and Morley-Pegge, R., op. cit., p.101-103.

might seem out of place in a study purporting to examine twentieth-century practice. Many of the characteristics of national style that have found favour and/or decline in the last one hundred years have their origin in the world of classical horn playing. This is where the *Ur-klangfarben* is to be found, if such a word may be coined.

Gregory puts the origin of the distinction between German wide-bore and French narrow-bore types 'as early as 1820' and gives the impression that the Austrian tradition developed as a hybrid.⁷¹ Fitzpatrick's more specific work on the period reverses this relationship and asserts the international importance of the eighteenth-century Austro-Bohemian tradition. He identifies a continuity of Viennese horn-making and playing, through the hand and early valved eras, working towards a darker, smoother tone with the emphasis on fluid legato and slurring. Performers and manufacturers from Prague were important in this too and if anything the Bohemian school exaggerated the pursuit of the above characteristics. Fitzpatrick again relates tone ideals to musical style by observing that in nineteenth-century Bohemia this coincided with the wellsprings of romanticism.

In many ways, French instruments of the late eighteenth and early nineteenth century persisted in epitomising the opposite extreme: the characteristically conical mouthpiece

⁷¹Gregory, R., *The Horn, a Comprehensive Guide to the Modern Instrument and its Music*, London, 1961.

was mated to a particularly narrow mouthpipe (5.5-6mm compared to 7.5-8mm typical in Austrian horns). The type was originally developed by Raoux to the specification of Carl Turrschmidt, a soloist playing in Paris in the 1770s and 1780s, as an improvement on certain German and Austrian designs.⁷²

The conformation of the French mouthpiece exerts a compressing influence upon the tone which both refines and brightens. In playing, its response is noticeably more immediate, and its general characteristics marry with those of the French instrument to produce that peculiar 'bursting' quality which both accounts for the intensity of the French sound and contributes to its unique beauty.⁷³

North German makers were, in turn, influenced by Parisian designs and by the turn of the century this synthesis of French and Austrian styles manifested itself as a distinct German sound:

...more compact than that of a Viennese horn of this period, yet rather softer than that of the contemporary French instruments - noticeably so when compared with the products of the Raoux family at Paris, which may be taken as the French norm. There is a noticeable edge in the forte, and it is this feature of the German horn tone which Gerber notes in his article of 1789.⁷⁴

In addition, the Germans had adopted the *Inventionshorn* (the generic term for horns in which crooks are introduced in the

⁷²Blandford, W.F.H., 'Studies on the horn, No.1 - The French horn in England', *Musical Times*, August 1922, p.546.

⁷³Fitzpatrick, H., op. cit., p.162.

⁷⁴Fitzpatrick, H., op. cit., p.131. Ernst Gerber likens the brilliance of the German horn in full tutti passages to the sound of trombones, a significantly prophetic comparison considering the protestations of George Bernard Shaw et al. around the turn of the present century (ibid., p.224).

middle of the instrument leaving a fixed mouthpipe for all keys) in preference to the traditional terminal crook system which is favoured to this day by Viennese players on account of the advantage having a mouthpipe tailored to the specific length of tubing in use bestows.

Interestingly, Fitzpatrick is of the opinion that vibrato was a usual component of hand-horn technique, mainly on the strength of a particularly close comparison with vocal practice. However, he finds but one contemporary account:

So far as the actual number of its notes is concerned this instrument is poor; but it is all the richer in its effect because of the roundness and fullness of its tone, and because of its vibrato...The vibrato, which is of such great effect in music, can be produced on no other instrument with such expressiveness and vigour as on the horn.⁷⁵

Soloists of the first half of the nineteenth century tended to use the Eb and then the F crook, eventually hand technique reaching such a level of sophistication that players like Duvernoy would use this crook even when the piece was in a different key.⁷⁶ This is significant in that it indicates a growing preference for the bright sound of the F tube (compared to E, Eb or D) and also because it marks the point

⁷⁵ *Jahrbuch der Tonkunst von Wien und Prag* for 1796, cited in Fitzpatrick, H., op. cit., p.180.

⁷⁶ Morley-Pegge, R., op. cit., p.96. Horn folk-lore has it that at the first performance of Schumann's *Konzertstück* for four horns and orchestra (written in celebration of the new possibilities afforded by valves) the soloists reverted to their familiar hand horns, having tried the new-fangled valves but found them awkward.

in history when horn players began to read with reference to one length of horn - in other words parts would no longer necessarily appear to be 'in C' and transposition on the part of the player, rather than the score. It is curious that this should occur as an adjunct to hand-horn technique at a time when the dawn of the fully chromatic valved horn was so very close.

The very first valve horns had just two valves and these were intended to be used as a complement to hand technique, Berlioz delighting equally in the prospect of producing a chromatic scale either stopped or open.⁷⁷ The F tube further presented itself as a standard tonality for the horn, for with one semitone and one tone valve the instrument could be 'crooked' into E, Eb or D - the favourite solo keys. Nevertheless, crooks were still available and were used on valve horns. Instruments with valves started to appear in most European countries in the second quarter of the nineteenth century concomitant with local variants of the new invention. Significantly the Prussian King's Kapellmeister, Spontini, sent valve horns and trumpets to Paris in 1826 whereupon P.-J. Meifred implemented his own improvements.

The hand-horn virtuosi had evolved such an art that the idea of playing a line with all notes open represented a crude regression. The skillful use of the right hand imparted to

⁷⁷Berlioz, H., *Treatise Upon Modern Instrumentation and Orchestration*, [1844], trans., Mary Cowden Clarke, London, 1882, p.141.

a phrase a very special manner of articulation. It is not fanciful to draw an analogy with the way a singer may colour a basic sound with the mouth and head cavities. The study books of the time (those of Joseph-Rudolph Lewy in Germany and Meifred in France are notable) took pains to indicate when use of the valves might be appropriate.⁷⁸ They were usually advocated as a means of facilitating hand technique, sometimes allowing a note to be played stopped where it would otherwise be open in order that a line could be phrased appropriately.

Obviously, the combination of hand technique and valves with, in some cases, an aptly chosen crook was a matter requiring great strategy and no little mental agility and ingenuity. The fullest, most artful implementation of this interim technique can only have been the province of the greatest soloists. As Wagner's detailed qualification of the use of the horn in *Tristan und Isolde* (1869) illustrates, the orchestral horn player's lot was massively complicated. In a work of length, the successful assimilation and juggling of hand, valve and crook would be a prodigious task. Yet to yield to the then immature sound of the chromatic valve horn would result in some artistic loss:

⁷⁸Meifred's objectives detailed in his *Méthode pour le Cor Chromatique ou à Pistons* (given in Baines, A., op. cit., p.109) include obviating the necessity to completely stop notes, but he advocates the retention of semi-stopped notes 'the tone of which is so agreeable'. He also implies that the valves and the hand should be used to phrase leading notes, presumably by contriving to make them semi-stopped.

The composer desires to draw special attention to the treatment of the horns. This instrument has undoubtedly gained so greatly by the introduction of valves as to render it difficult to disregard this extension of its scope, although the horn has indisputably thereby lost some of its beauty of tone and power of producing a smooth *legato*. On account of these grave defects, the composer (who attaches importance to the retention of the horn's true characteristics) would have felt himself compelled to renounce the use of the valve-horn, if experience had not taught him that capable artists can, by specially careful management, render them almost unnoticeable, so that little difference can be detected either in tone or in smoothness. Pending the inevitable improvement in the valve-horn that is to be desired, the horn-players are strongly recommended most carefully to study their respective parts in this score, in order to ascertain the crooks and valves appropriate to all the requirements of its execution. The composer relies implicitly on the use of the E (as well as the F) crook; whether the other changes which frequently occur in the score, for the easier notation of low notes, or obtaining the requisite tone of high notes, are effected by means of the appropriate crooks or not, is left to the decision of the players themselves; the composer accepts the principle that the low notes, at all events, will usually be obtained by transposition.

Single notes marked + indicate stopped sounds; if they have to be produced in a key in which they are naturally open, the pitch of the horn must be altered by the valves, so that the sound may be heard as a stopped note.⁷⁹

Blandford considers Wagner's aspirations for the performance of horn parts in his later operas to be born of schizophrenic confusion:

In his treatment of the horns, Wagner halted between two opinions, and, like that other great man, Tartarin of Tarascon, exhibited a dual personality. While Wagner-Quixote called out for valve-horns, tubas and all sorts of new and formidable brass, Wagner-Sancho exclaimed, 'Oh, les bons cors simples à main! Oh, les douces notes liées, les beaux sons bouchés!' In the early operas each had his own way and wrote for his favourite instrument. In *Lohengrin*, after a vain attempt to proceed on the old lines, the

⁷⁹Translated by W.H.F.Blandford in 'Studies on the horn: II - Wagner and the horn parts of *Lohengrin*', *Musical Times*, October 1922, p.694.

conflict became more acute and a compromise had to be arrived at whereby Wagner-Quixote provided the instruments and Wagner-Sancho controlled their employment, much hampered by the former's continual interference. By the time of the later operas the contest had ended, as such contests always do, in favour of the more forceful personality, and Wagner-Sancho was reduced to making an appeal *ad misericordiam* in the forward to *Tristan*, in the pious hope that the players would not forget the principles for which he stood, when performing Wagner-Quixote's parts.⁸⁰

The earliest valves certainly were imperfect, by all accounts, and it is not surprising that many considered them to have a detrimental effect on tone. This was especially so where they were simply being used as a fast method of changing crooks, under which circumstance they could not hope to compare favourably with the undisturbed airway of a non-valve instrument. Despite this, and no doubt due in some part to a pragmatic approach to the rigours of orchestral work, the use of valves to play all chromatic notes 'open', as they are today, gradually became more common:

Yet inevitably the bias among orchestral players changed in favour of the valves, despite protests like that of Gleich (1853) that to use these in Beethoven or Weber was a 'Vandalismus'. Many had begun to speak like Fahrbach, the professor in Vienna, against the uneven sound of 'the old stifling of harmonics with the hand'.⁸¹

The Germans were the first to adopt the modern technique, in effect skipping the brief life of the *omnitonic horn* with

⁸⁰Blandford, W.F.H., 'Studies on the horn, II. - Wagner and the horn parts of *Lohengrin*', *Musical Times*, October 1922, p.696/7. Further examples of Wagner's anomalous and muddled brass writing provided by Richter were related to Blandford by Adolph Borsdorf.

⁸¹Baines, A., op. cit., p.220.

which French players in particular used valves to swiftly re-crook their instruments. Horace Fitzpatrick is, no doubt, correct when he suggests that the highly mechanized and well-resourced Prussian army, requiring the new valve instruments, became an important musical institution when the power of the churches and courts declined (previously they had been important musical sponsors).⁸² Berlioz found a prevalence of valve horns on his visits to German cities and he also comments on the way they should be used. The following is an account of his experiences in Berlin in 1843:

The horns are splendid, and all of the rotary-valve variety - much to the regret of Meyerbeer, who thinks as I did until recently about the new mechanism. A number of composers object to the rotary-valve horn because, they maintain, its timbre is inferior to that of the natural horn. I have several times experimented by listening to the open notes of the natural horn and of the chromatic or rotary-valve horn one after the other, and I must confess I do not detect the slightest difference in timbre or volume. There is at first sight more substance in another objection that has been raised against the new horns, but it can be easily disposed of. Since this instrument (now perfected, in my opinion) was introduced to orchestras, certain cornists who play natural-horn parts on the rotary-valve horns find it less trouble to produce the stopped notes indicated by the composer, as open notes. This is certainly a serious abuse, but the fault lies in the player and not the instrument...

The conclusion is simply that horn players should know the technique of hand-stopping as if the rotary-valve mechanism did not exist, and that composers should henceforth indicate by some special sign the notes that are to be played stopped, the player producing as open sounds only those notes which carry no such indication.⁸³

The French remained ensconced in hand-horn playing; tutors by

⁸²Fitzpatrick, H., op. cit., p.194.

⁸³Berlioz, H., *Memoirs*, trans. Cairns, D., London, 1970, p.388.

Dauprat (1824) and Gallay (1842) dealt solely with that technique and were highly influential. Meifred's method was the only one of the period to make any concession to valves and having managed to persuade the Paris Conservatoire to open a valve-horn class in 1833, they duly dropped it again on his retirement in 1864; it was finally re-instated in 1897.⁸⁴ Such was the strength of the natural-horn tradition in France.

The French never actually took up the three valve horn known to the rest of Europe: in 1847 Jules Halary, one of Meifred's pupils, devised an ingenious system whereby the third valve was a whole tone *ascending valve*. Such instruments were crooked in G and with the third valve up the extra tubing was brought into play to give a horn in F. With the valve depressed the horn stood in G which gave useful alternative fingerings for some of the most difficult notes on the F horn. Meifred's fingering charts for this instrument do not indicate any use of the right hand; it is presumed that at this he had acknowledged the fully chromatic valve-horn.

The general bore and profile of the French horn with valves of this period continued along the lines of the natural-horn that preceded it, in other words with a comparatively slender mouthpipe opening and bell-throat. In Austria

⁸⁴Morley-Pegge, R., op. cit., p.160. Blandford, W.H.F., op. cit., p.693.

national characteristics of sound and bore were similarly upheld but, a unique design of valve was utilized - it was based on Uhlmann's 'Vienna' double valve.

The success of the hand horn as a solo instrument undoubtedly meant that travelling virtuosi were able to exert an international influence; because of their high repute there exists some information about their playing and whereabouts in the form of contemporary commentaries. Many of these individuals must have played a significant part in the initiation of a rich tapestry of national styles. In England the role of visiting artists was particularly important as there seem to have been few indigenous players of quality. Spandau was reputedly the first to bring hand-stopping to London audiences in 1773 and his artistry was sufficient to draw favourable comment from Burney.⁸⁵ The great Giovanni Punto was to follow a few years later on the first of two tours to Britain. In 1817 G. Puzzi came to London and stayed for the rest of his life and he and the two Bohemian Petrides brothers, who played at the Italian Opera in London for the first quarter of the nineteenth century, were to exert a great influence on English playing:

No doubt the success of the great soloists with Raoux horns led to the general adoption, at least in this country and in France, of instruments of this type.⁸⁶

⁸⁵Fitzpatrick, H., op. cit., p.167.

⁸⁶Morley-Pegge, R., 'The degenerate horn', correspondence in *Music and Letters*, January 1951, vol.xxxii no.1, p.95.

By adopting the French instrument of the Raoux model which Puzzi had made popular here, the Petrides appear to have been the first to establish the tone quality for which the best British players have since been noted: a marriage, in effect, between the breadth of the Germanic tone and the clarity of the French.⁸⁷

The first English players of note were Edward Platt (1793-1861) and Charles Harper (1819-1893).⁸⁸

In the latter half of the nineteenth century and in the hands of the romantic composers, the horn grew in importance as an orchestral instrument. The subtleties of hand-technique, it became increasingly obvious, were out of place in the orchestral *tuttis*.

⁸⁷Fitzpatrick, H., *op. cit.*, p.191.

⁸⁸Blandford, W.F.H., 'Studies on the horn, No.1 - The French Horn in England', *Musical Times*, August, 1922, p.546.

CHAPTER THREE

CHAPTER 3**1890 TO 1920****I. Anglo-French variants II. German variants**

From the above chapter it is evident that at a time of significant advance in instrument design and manufacture there grew a great and, in some respects, bewildering diversity of options for composers and orchestral players. Eventually, and naturally enough, the fecundity of the inventors and the enthusiasm of composers like Berlioz and Wagner gave way to a greater stability of practice. The years either side of the turn of the century served as a 'settling in' period during which the new technologies became conventional and the symphony orchestra adjusted.

The German-speaking nations were much more progressive in their adoption of chromatic trumpets and horns (usually with rotary valves) and with this went a more robust attitude towards sound and colour than was apparently acceptable elsewhere. In France and England narrower bore piston-valve instruments were preferred along with a more classical sort of sensibility for the difference in tone between trumpets, horns and trombones. While in some other countries precedents from both schools were followed, these two strands are seminal to a discussion of twentieth-century practice - hence the organization of this chapter.

I. ANGLO-FRENCH VARIANTS

The piston trumpet and cornet

Whereas in German speaking nations the valve and attendant developments in instrument design had, by the last quarter of the nineteenth century, become fully integrated such acceptance occurred a little later in France and, with characteristic conservatism, in England. The trumpet was last to acquiesce, for a time losing ground in the orchestra to the cornet which had lesser pretensions of heritage.

In late nineteenth-century Paris, on occasions where the cornet had not been substituted, the F (or G) valve trumpet with crooks to other keys was used. Berlioz was among those who commented that French trumpet playing was not as strong as it was in Germany and England; this must have been partly due to the popularity of the cornet, as was discussed in the previous chapter. Tarr gives an illustration of a French double case dating from the 1860s which has compartments for a natural trumpet in G, a valved trumpet (in G or F) and a set of crooks.¹ It was probably older players trained in the natural trumpet school who made use of such outfits rather than the cornet. This natural trumpet tradition is believed to have died out by the early 1890s.²

¹Tarr, E., *The Trumpet*, London, 1986, p.162.

²Ibid.

However, French makers were quick to take to the mezzo-soprano trumpet and their modifications to the usual German patterns were far reaching, setting the mould for the design of piston-valve trumpets which were to gain wide acceptance in most non-German speaking countries:

Millereau, successor to Labbaye and Raoux, advertised their new B flat trumpet in 1874. Then Besson's B flat and C trumpets of the 1880s placed the valves on the return branch following the tuning slide in the front bow, to create the modern Franco-American format... which has now become so widely familiar. This model introduced the long straight mouthpipe instead of a short tube leading directly down to the valves, and though there was no mention of an integral mouthpipe taper at this period, it made this development possible in America later.³

Teste, who was principal trumpet at the Paris Opera and the Société des Concerts du Conservatoire, had introduced the C trumpet (actually a D with slides to C) in 1874, and by 1890 the C pitch had been promoted widely. Merri Franquin's 'Le trompette et le cornet' presents a comprehensive picture of the situation in France during this period.⁴ Franquin, who was a professor at the Paris Conservatoire cites a 1900 survey of French musicians which finds that just over half of the composers and conductors questioned preferred the C trumpet to the longer F instruments. That the great majority of players preferred the mezzo-soprano trumpet is obvious from the speed with which it was taken up, following Teste's example. It was an instrument that the many cornet

³Baines, A., *Brass Instruments*, London, 1976, p.233.

⁴Franquin, M., 'La trompette et le cornet', *Lavignac Encyclopedie de la Musique*, Paris, 1927, vol.ii, part iii, p.1596-1657.

players in France could adapt to relatively easily. This was important; the cult of the cornet in France continued to be strong throughout the first two decades of this century. There was even the first recorded manufacture, soon after 1900, of the 'long model' cornet in which the tubing was folded in a straighter arrangement to ape the shape of the trumpet - no doubt designed to satisfy the testing glances of conductors and audiences.⁵

As was described in the last chapter, there was a modicum of resistance to the replacement of the longer classical trumpet.⁶ However, the French predilection for the light agile sound of the cornet enamoured them to the similarly light (by comparison with the older trumpet) character of the C trumpet. In 1884 Victor Mahillon of the Brussels Conservatoire designed the French Besson trumpet which was to prove very popular.⁷ By 1916 the four (or sometimes five) valve Thibouville-Lamy C trumpet had been introduced by Franquin. The ascending fourth valve put the instrument into D.⁸

⁵Baines, A., 'Cornet', *New Oxford Companion to Music*, ed. D. Arnold, 1983, vol.i, p.496.

⁶Buckner, J., *Substitution of Trumpets in Orchestral Music: Origins, Developments and Contemporary Practices*, D.M.Diss., Northwestern University, 1989, p.100. Buckner finds isolated evidence of alto G trumpets with crooks still being for sale after 1900 and of the alto F trumpet being used to a limited extent as late as the 1920s. At an audition for the Paris opera in 1926 candidates performed solos on the F trumpet; when the director of the opera house complained of their 'rasping' sounds, the conductor reassured him that they would disappear in the orchestra where the C trumpet was used.

⁷Fladmoe, G., *The Contributions to Brass Instrument Manufacturing of Vincent Bach, Carl Geyer, and Renold Schilke*, Ed.D. diss., University of Illinois, 1975, p.93.

⁸Bate, P., *The Trumpet and Trombone*, London, 1978, p.181.

The strength of the slide trumpet tradition in England undoubtedly hindered early acceptance of valve trumpets; the sound of the F trumpet (and longer with appropriate crooks) was heard at its most persuasive in the hands of artists like the Harpers (Thomas senior and junior) and Walter Morrow. Sybil Marcuse writes that the slide trumpet was being used at Covent Garden in 1882 and that it was even occasionally to be found into the first decade of the twentieth century.⁹ Cecil Forsyth's authoritative orchestration manual maintains the lore of the nineteenth-century instrument as late as 1914: he acknowledges that valves have replaced the old natural or slide configuration but makes clear the considerable transformation in the character of the instrument too.

In our orchestras a few players use the F-trumpet, while the majority use a Trumpet crooked either in C, Bb or A....the student may be reminded that the ancient Natural trumpet with its apparatus of crooks is really a totally different instrument from the tiny modern Trumpet in C, Bb or A.... the continual desire for a bright and at the same time less obtrusive tone-colour, and the call for greater flexibility and ease of execution, especially in the top octave, have caused a complete change in the length and bore of the tube itself. It is not merely that the instrument has become chromatic. It has also become, except in name, a different instrument.¹⁰

There are two developments at issue here; the introduction of valves and the adoption of instruments of smaller dimensions (in length and, comensurately, bore). Although the mechanism of the slide trumpet typically enabled the flattening of each

⁹Marcuse, S., *A Survey of Musical Instruments*, London, 1975, p.807.

¹⁰Forsyth, C., *Orchestration*, London, 1935, p.90.

note in the harmonic series by up to a tone (depending on the individual instrument and what key it was crooked in) there was little argument that the valve represented the only means to full chromaticism. There were respects in which the new invention was considered inferior, much as there were early criticisms of the valve horn decades before. Harper senior disparaged the 'new-fangled' valves found on the continent and Morrow criticized the 'many unavoidable acute angles in the valve trumpet which cause the tone to deteriorate'.¹¹ However, this could not be an issue where composers wrote chromatic trumpet parts - then the mechanism was necessary. What also became increasingly necessary was greater facility in the highest octave. The inveteracy of the old trumpet tradition was such that the rather ironic practice of using cornets to play the valve trumpet parts of modern scores (particularly those emanating from Germany, where the mezzo-soprano trumpet had gained its earliest acceptance!) became standard. This preserved the iconic sound-image of the F slide trumpet undiluted even though it was often the very same players (Morrow, Ellis, Jaeger etc.) who doubled on cornet. Indeed they had probably trained on both instruments. This seems rather perverse to the late-twentieth-century mind but to those of the old school much of the taxing high register and extended melodic work in Mahler, Strauss et al. was not what they understood as proper trumpet

¹¹Bate, P., op. cit., p.137, note 43.
Morrow, Walter, 'The Trumpet as an Orchestral Instrument',
Proceedings of the Royal Musical Association, June 1895,
vol.xxi, p.138.

writing and the cornet provided a practical solution to its execution. Perhaps more importantly for them, the orchestral trumpet remained unsullied as the most appropriate vehicle for older music. Were the Bb valve trumpet to have been adopted it would probably have gained immediate currency as the trumpet for all repertoire. This is why Forsyth felt the need to distinguish between what was in 1914 the new and the old trumpet. He eulogises the latter in its correct place;

The F-Trumpet has been alternately praised for its noble and powerful tone and reviled as a "razor-edged antique"... One must acknowledge that in actual breadth of tone-colour, especially in its lower notes and in the *p*, it is without rival. No one who has heard two of these instruments enter *pp* at the 346th bar of Beethoven's *Violin Concerto* can have any doubt on this point.... where the music has been specially designed for this instrument - as it was by the classical masters - it should undoubtedly be called on to perform the parts written.... Played on the puny modern Trumpet in C they sound stupid, undignified, and trivial.¹²

In discussing the trumpet Forsyth reveals some interesting views on the nature of orchestral sound appropriate to particular repertoire; he recognises the old, longer instrument as a 'survival from the days when it was not thought necessary to assimilate the various tone-qualities of the orchestra' and endorses the shorter mezzo-soprano type thus;

...in modern music, where the Trumpet part is woven more cunningly into the tissue of the music, and where a certain flexibility and power of blending are essential, the older instrument might well be dispensed with.¹³

¹²Forsyth, C., op. cit., p.93.

¹³Forsyth, C., op. cit., p.93/94.

His non-assimilated vision of the classical/early romantic orchestra is an uncanny evocation of what we can hear today in a performance on historic instruments - this is important evidence of a continuity of experience which bears a greater ring of truth than that which we look back on from the end of the twentieth century. However, that the current vogue in orchestration of Forsyth's time might be taken as more homogeneous and 'blending' from the above may not square with what we hear in many late twentieth-century performances of his 'moderns'. Frederick Corder corroborates the contemporary taste for a cohesive sound by praising the sort of balance achieved with cornets and criticizing the 'vaunted brilliancy' of the slide trumpet which 'screams out unimportant notes over the head of everyone' and 'kills all the other instruments'.¹⁴

It is into this turn-of-the-century 'woven' tapestry of orchestral sound (epitomized by that practice, beloved of Elgar and Strauss, which reinforces so much inner part writing with horns) that the cornet slipped inconspicuously. For years few baulked at the noise it made, they were primarily thankful that it got the notes, and what were they to compare it with - the new chromatic writing hardly seemed characteristically trumpet-like? The mezzo-soprano trumpet would have endangered the character of the species; rather a

¹⁴Corder, F., *The Orchestra and How to Write For It*, London, 1923, p.57.

newcomer than a proselyte. Unfortunately, for the purists, the newcomer almost took over completely.

Indeed, one is left with the impression that by the very end of the nineteenth century many orchestral players used the cornet habitually and had either forsaken the difficulties of the slide trumpet or had little or no experience of it:

The tone of the trumpet is the most powerful and brilliant of any in the orchestra... it is greatly to be regretted that in modern orchestras it is so frequently replaced by the much more vulgar cornet.¹⁵

Some years back, when the slide trumpet fell into disuse, the cornet was adopted in most orchestras, and at one time seemed to have irrevocably taken the place of the classic and nobler-toned trumpet.¹⁶

George Bernard Shaw's commentary on a pamphlet published subsequent to a Military Exhibition of 1890 makes clear the difference between the traditional theory of text books and actual practice;

...and there is a slight survival of the regulation treatises in the old-fashioned passage about the "growing tendency to replace the trumpet in the orchestra by the cornet." This way of putting it is absurdly out of date, the fact being that the cornet has completely superseded the trumpet, and that what is now happening is an attempt to reintroduce the trumpet in the shape of the new straight clarino with two valves on which Kosleck played in Bach's B minor Mass so brilliantly and successfully at the bicentenary performance in the Albert Hall in 1885, and which has since been taken up by Mr. Morrow.¹⁷

¹⁵Prout, E., *The Orchestra*, London, 1897, vol.i, p.202.

¹⁶Daubeney, U., *Orchestral Wind Instruments, Ancient and Modern*, London, 1920, p.89.

¹⁷Bernard Shaw, G., 'Advice for Mr. De Lara', *The World*, 29 July 1891, *Shaw's Music: The Complete Musical Criticism of Bernard Shaw, Volume II 1890-1893*, London, 1981, p.410.

By way of example, Antony Baines records that W. Ellis, principal trumpet at Richter's concerts only used the cornet.¹⁸ That there was a time when some players only knew the cornet is supported by Daubeney's further observation given below. Such players may well have received all their training in military or brass bands.

Some cornet players, too, find a difficulty in adopting the shallow cup-shaped mouthpiece necessary on the trumpet, without which the correct tone is unobtainable, and in all cases the trumpet form of mouthpiece demands much better conditioning of the lips in order to produce a good tone free from "buzzing" than does the deeper-cupped cornet mouthpiece.¹⁹

Relatively few can have benefitted from the traditional education that the London colleges provided. Buckner writes that Morrow knew of only two other professional slide trumpeters in 1895.²⁰ The cornet was a virtual certainty for all music in the provinces and where there was a slightly lighter agenda: a picture of Dan Godfrey's orchestra at Bournemouth in 1890 clearly shows the stubby profile of two cornets in their players' hands with no trumpets to be seen.²¹

Bernard Shaw remained a forthright lobbyist. Here he discusses two Mendelssohn performances of 1892 and an

¹⁸Baines, A., 'Trumpet', Grove fifth edition, 1954.

¹⁹Daubeney, U., op. cit., p.105. The difference between cornet and trumpet mouthpieces was greater then than it is now.

²⁰Buckner, J., op. cit., p.78.

²¹Street, S. and Carpenter, R., *Bournemouth Symphony Orchestra Centenary Celebration*, Wimborne, 1993, p.17.

impending concert of Wagner's *Ring* music in 1894;

At the Crystal Palace the other day, and at the Philharmonic on Thursday, they played Mendelssohn's Trumpet Overture *without trumpets*, using cornets instead. But who can wonder at the conductors allowing this, in spite of all the protests of the treatise writers, when the choice lies between the cornet of which the player has complete command and a dull hard slide trumpet to which he is so unused that when he has to *filer* a note, as in the beginning of the Rienzi overture, he must either fly to his cornet or conspicuously bungle his work? In the hands of a man who can really play it, the slide trumpet is undoubtedly better than the cornet for fanfares, penetrating held notes, and certain florid passages which are meant to ring metallically. But such players, since their skill does not repay the cost of cultivation, are scarce; and even in their hands one never gets a suggestion of the silvery, carillon-like clangor of the top notes of the clarion. All that is ever required of the slide trumpeter is occasionally to get through the *obbligato* to Let the bright seraphim or The trumpet shall sound, in an amateurish fashion at a festival.

On all other occasions trumpet parts are played on the cornet; and the scores of Wagner, Gounod, and Verdi abound in cornet effects which would come out villainously on slide trumpets.²²

Doubtless the bass trumpet will be a great joy to us; but oh, if we could only get some decent instrument to play the ordinary trumpet parts on! I declare, in all sincerity, to Messrs Ellis, Morrow, and Jaeger that all their skill leaves the cornet as objectionable as ever. I know very well that the slide trumpet of the textbooks is an impracticable nuisance; but cannot something be done with more modern inventions?²³

His objection to the cornet was based on the unsuitability of its tone.

The fact is, we want some genuine artist to take up the work of producing fine instruments... The instrument makers will never do it, because all their efforts are

²² Bernard Shaw, G., 'The Bach Choir's worst effort', *The World*, 30th March 1892 (op. cit., vol.iii, p.589).

²³ Bernard Shaw, G., 'Wanted: A flute that is a flute', *The World*, 7th March, 1894, *Shaw's Music; The Complete Musical Criticism of Bernard Shaw, Volume III*, ed. Dan H. Laurence, London, 1981, p.149/150.

aimed at better intonation, greater facility of execution, and perfect smoothness of tone. Now smoothness of tone is all very well in its way; but the question remains, what sort of tone? The instrument makers care only for that one variety, dear to Kneller Hall, which is the true characteristic tone of the saxhorn or euphonium, but which robs the trumpet, the trombone, and the horn of their individuality.²⁴

However, this eminent critic was not totally enamoured with the the sound of newer technology as used in German orchestras; he branded their horns, trumpets and trombones 'mongrels' (as was noted in chapter one).

This period of dalliance with the cornet is one of the features of the Anglo-French tradition (the Germans hardly ever used the cornet in the orchestra, even when it was specified). Other countries followed the same practice to a greater or lesser extent.

In America most orchestras had cornets from the time of their foundation until the very end of the nineteenth century. The New York Philharmonic used them up to 1897, the Boston Symphony Orchestra until 1888 when one Pierre Mueller (who had toured France and Germany as a trumpeter) joined and the Chicago Symphony Orchestra started with four cornets

²⁴Ibid., p.150-151. The Kneller Hall tone referred to here is evidently closely related to that which can be heard in today's brass bands - a truly saxhorn based sound. The variety of fanfare trumpets commonly attributed to Kneller Hall and used for ceremonial occasions in more recent years are by no means of the same stock: these are capable of the most violent 'un-smoothness' imaginable and equally are not to be confused with orchestral instruments! They are useful for 'smashing out fanfares' (as Philip Jones put it to this writer).

in 1891, substituted two for trumpets the following year and switched over completely to trumpets in 1898; the Metropolitan Opera persisted with cornets until 1899 by which time the Bb trumpet had gained widespread acceptance.²⁵ Even so, both the trumpet and cornet could be found in some American orchestras as late as the 1920s.²⁶ Despite the fact that the cornet and piston trumpet were used, they were typically played by German emigrants.

In Russia, despite the earliest forms of valve trumpet being played in St. Petersburg, the cornet was used regularly in orchestras for several decades. Tchaikovsky and Rimsky-Korsakov wrote parts specifically for it. The strength of cultural interchange with France is significant here; artists like Arban visited Russia and Berlioz had been to St. Petersburg to hear his music performed. The Bb trumpet was adopted in the 1880s - Tarr cites Arban and gives an impression of the relationship thus;

'hitherto the German artists and their music were praised in St. Petersburg, [now] our virtuosos...have surpassed them'. Russian composers from this time wrote for full-toned and strong brass, as did the Germans, yet also required flexibility and virtuosity, as did the French. Rimsky-Korsakov...characterized the sound of the B-flat/a trumpet in the low range as 'troubled, as though threatening danger'. At the same time he wrote some of the most virtuosic passages in the entire orchestral literature.²⁷

²⁵Buckner, J., op. cit., p.85-86. The principal in Chicago was Karl Rodenkirchen (Tarr, E., op. cit., p.185).

²⁶Tarr, E., op. cit., p.171

²⁷Tarr, E., op. cit., p.173. The A tuning was at its most popular in Russia.

This fusion of German and French styles is at the heart of one of the most interesting schools of trumpet playing of the twentieth century.

The abovementioned valve trumpet that the German virtuoso Julius Kosleck played at the Bach bicentenary was indeed important in finally introducing valve trumpets to English orchestras, but the process was not as immediate or straightforward as it had been in other countries.

Kosleck's 'Bach' trumpet, as it became known, was the source of much confusion, various excited members of the musical press claiming it to be an instrument authentic to Bach's time (complete with two valves!). The truth of the matter was finally exposed in detail by W.H.F. Blandford in 1935 and a comprehensive account of his explanation appears in Bate.²⁸

Here it is sufficient to observe that Kosleck's instrument was in fact a two-valved A trumpet (alterable to Bb) conformed without any bends in the tubing to the pattern of a medieval *buisine* which the player had, some years earlier,

²⁸Blandford, W.F.H., 'The "Bach Trumpet"', *Monthly Musical Record*, London, March-April, May and June 1935. Bate, Philip, op. cit., p.187-193. Even the *Musical Times* was taken in; when Blandford offered a letter correcting the popular misconception for publication in 1892, the editor sent it to Morrow to inquire whether it should be ignored or printed with a crushing reply. Morrow confirmed its substance and it was published. In March 1893 the *Musical Times* reported Morrow, Ellis and Blackwell as having played 'trumpets of the pattern of Bach's day' for a recent concert!

extended from Bb to the correct pitch for baroque repertoire (by the addition of four feet of tubing) and used to demonstrate his cultivation of a creditable facility in the clarino octave, which was unheard of at the time.

Kosleck was a genuine advocate of the old *Clarín* and took much trouble rehearsing old-style *Aufzüge* on the natural trumpets of the Hussars in Berlin.²⁹

Why Kosleck did not persist with this more authentic natural trumpet technique and furthermore try one of the folded Nuremberg trumpets which were known to date from Bach's time is a mystery. Had he done so, the history of the performance of high baroque trumpet parts in the twentieth century might have been very different.³⁰ As it was, his sensational two-valve A/Bb instrument contributed significantly to the use of valve trumpets shorter than the correct baroque D length and congruently to the pragmatic convention of using 'octave' trumpets - those in D, F, G soprano (and even Bb piccolo) which are half the length of (and hence have a fundamental one octave higher than) the original instruments of the seventeenth to nineteenth centuries.

Kosleck's 1885 B minor Mass was such a success that Walter Morrow and John Solomon (who had played second and third respectively at the performance) had similar instruments

²⁹Baines, A., op. cit., p.239/40.

³⁰Buckner (op. cit., p.107) points out that Kosleck was sixty at the time of the Bach bicentenary - perhaps too old to be persisting with the baroque D trumpet.

made by G. Silvani of London.³¹ Morrow first played his 'Bach trumpet' at the Leeds Festival the following year and went on to achieve some success with it. Birkemeier declares Morrow's first performances on this instrument significant as the 'first orchestral performer in London to play on a valved trumpet'.³² However, Bate writes that for the Bach Bicentenary performance Morrow and Solomon were 'both using orchestral valve trumpets' - a puzzling remark, yet his authoritative source was, no doubt, Blandford who was at the performance.³³ These were probably F valve trumpets, an instrument which Morrow is credited with championing later in the 1890s, and this is a surprisingly casual reference to such an early use of any species of valve trumpet in England. They were certainly not A(/Bb) mezzo-soprano trumpets as

³¹Bate, P., op. cit., p.190. Morrow and Solomon used conventional trumpet mouthpieces whereas Kosleck, who guarded his mouthpiece from observation, is reported to have used a more funnel-shaped one.

³²Birkemeier, R., 'The F trumpet and its last virtuoso, Walter Morrow', *Brass Bulletin*, No.88, p.34-45. In passing, it may be mentioned that Birkemeier cites from the following passage of Bernard Shaw as a review of a B minor Mass performance held on February 10th, 1891. According to the Second revised edition, edited by Dan H. Laurence (Vol.2, p.267) the work performed was the cantate *O, Ewiges Feuer* ;

'Mr. Morrow attacked the original first part with the greatest gallantry; but it was too high for him. The strain was obvious, and the tone forced and hard. Still, it would be a pity to give up the highest register of the trumpet as a bad job again. Julius Kosleck's performances have shown us the great orchestral value of those silvery ringing notes which seem to come from the sky; and he is living proof that a XIX-century trumpeter able to touch high D, and to hold out through a performance of a long work like the Mass in B minor, is not an impossibility... Mr. Morrow, though he falls short of Kosleck, is able at least to improve on the effects produced by re-scoring the trumpet parts for clarinets, or transposing them.'

³³Bate, P., op. cit., p.189.

there would then have been little point in Morrow and Solomon having their 'Bach trumpets' made subsequently (save for the fact that the latter were straight rather than folded).³⁴ Birkemeier is not wrong in the spirit of what he says; certainly Morrow's adoption of the 'Bach' trumpet marked one of the first acknowledged successes for valve trumpets in England. Furthermore it is quite possible that he was the first player regularly to use a valve trumpet in London, but it is unlikely that it was the 'Bach' instrument. However, he (Birkemeier) seems to have put a pony in between the horse and the cart by suggesting that the 'Bach' trumpet effected Morrow's transition to the orchestral valve trumpet.

Walter Morrow's influence on the London musical scene became so strong in the 1890s that, when he made the obvious step from the two-valved Bach Trumpet to the three-valved F trumpet for regular orchestral performance, most of the important trumpeters in London followed suit.³⁵

A move from the slide trumpet (standing in F without crooks) to a valved F trumpet would have been the obvious progression for a player convinced of the inherent 'trumpetness' of that length of tube, as Morrow was:

³⁴ Kosleck's 'Bach trumpet' had been of a more conical 'post-horn bore and bell' as it had been based on the buisine but the G.Silvani instruments Morrow and Solomon had made were of a more conventional trumpet profile and hence very similar to mezzo-soprano Bb/A trumpets used on the continent at the time.

Buckner (op. cit., p.107/8) states that the instruments Morrow and Solomon used were 'valve trumpets in alto F'.

Unusually, he doesn't say where this information comes from.

³⁵ Birkemeier, R., op. cit., p.38.

He insistently advocated the use of the valve trumpet [in preference to the cornet], then hardly known in England. His preference was for Mahillon's F valved trumpet on the grounds that an F trumpet had the proper length of tubing to reproduce the classical effect.³⁶

Morrow declared his intention to use the valved F trumpet orchestrally in a paper given for the RMA in 1895.³⁷

According to Anthony Baines, 'he set a fashion for it among London players which lasted roughly from 1898 to 1905'.³⁸

1898 was probably an important date for the instrument because Morrow commissioned a solo work for it which was performed at Crystal Palace.³⁹ John Solomon is reckoned to have adopted the F trumpet in 1900 but his short-lived use of the instrument is significant: by 1905 he had reverted to the Bb mezzo-soprano pitch, but this time in the shape of the trumpet rather than the cornet.⁴⁰ Solomon was quicker to make the most of the advantages of the shorter tube. Morrow had objected to it all along and, skillful though he was, his F trumpet sounded precarious by comparison with Solomon's precision on the Bb. Largely as a result of this, Solomon had become the premier trumpeter in London and went on to play for many more years as a founder member of the London Symphony Orchestra. Morrow, just six years Solomon's senior, retreated into lower profile theatre work (surprisingly, on

³⁶Baines, A., 'Morrow, Walter', *Grove* fifth edition, vol. v, p.901.

³⁷Morrow, W., 'The trumpet as an orchestral instrument', *Proceedings of the Royal Musical Association*, June 1895, vol.xxi, p.138.

³⁸Baines, A., *op. cit.*, p.901.

³⁹C. Herbert Coulderey's *Fantasia* for F trumpet, organ and orchestra.

⁴⁰Baines, A., 'Solomon, John', *Grove* fifth edition, vol.vii, p.882.

the cornet) and teaching. The distinction between the latter half of the two players' careers neatly illustrates the disencumbrance the Bb trumpet offered. Solomon persuaded Morrow to use the Bb but he was never convinced; with the support of Stanford he taught the F trumpet at the Royal College of Music from 1910 to 1914.

If, as seems likely, Morrow had used a valved F trumpet as early as the Bach bicentenary one wonders why he didn't introduce it to the orchestra earlier than he did. There may have been several factors at work, not least that it took the player time to grow accustomed to the instrument. Harper junior had taught Morrow slide trumpet and cornet at the Royal Academy of Music, recommending the use of the first where feasible and the last otherwise. Harper only retired in 1885 and his influence remained after this. Also, the new valved trumpets presented problems of balance with the slide trumpet and cornet. When Morrow played the B minor Mass on the two-valve A trumpet in 1892, Bernard Shaw commented of his second and third Backwell and Ellis:

These gentlemen used the old slide trumpets, which they blew sedately into their desks whilst Mr Morrow's uplifted clarion was ringing through the hall, the effect being that of a solo *obligato* instead of three trumpets *concertante*.⁴¹

Furthermore, the F valve trumpet was not of the closest kin to the slide trumpet.

⁴¹Bernard Shaw, G., 'The Bach Choir's Worst Effort', 30 March, 1892, op. cit., p.588.

There seems no doubt that the modern Valve-trumpet in F is heavier and more cumbersome than the old Natural Trumpet. This is said to be due not to the valve mechanism, but to the altered proportions of its tube and mouthpiece.⁴²

Nevertheless, due to Solomon's success and the enthusiasm of a new generation of players, the Bb trumpet gradually managed to achieve what Morrow and the F instrument had not - 'the supression of the cornet as a substitute for the trumpet in symphony orchestras'.⁴³

Among the traditionalists a certain conservatism had persisted, which made the adoption of the mezzo-soprano instrument more difficult. In 1897 Prout writes that the slide trumpet is the 'best [means of getting non-harmonic notes], as regards purity of intonation and quality of tone'.⁴⁴ He adds that the valve trumpet is used much more regularly but seems resistant to any mention of the Bb trumpet which was, of course, well known on the continent by this time. Indeed Prout specifies the Bb cornet as being 'only half the length of that trumpet in the same key' which indicates that he still thinks of the Bb trumpet as being the 'eight foot' instrument.

The spread of the new instrument took time and the cornet continued to be used into the second decade of this

⁴²Forsyth, C., op. cit., p.93, footnote 2.

⁴³Baines, A., op. cit., p.882.

⁴⁴Prout, E., op. cit., p.203

century.⁴⁵ Even by the early 1920s it was only the professional symphony orchestra trumpeters that used the Bb trumpet rather than the cornet.⁴⁶

At first it was diminutively referred to as the 'trumpetina'.⁴⁷ Forsyth seems to regret that such a label did not stick:

The modern instrument which has taken or is taking the place of the old big-bore instrument is still called a Trumpet. It still remains the highest pitched instrument of the Brass ensemble. But beyond that there is not much musical likeness between the two instruments. It seems a pity that a little of the enormous expenditure of energy in nineteenth century Brass-nomenclature was not devoted to coining a name which should clearly differentiate the new from the old instrument. For they are really not the same instrument at all.⁴⁸

One of the new generation of players which helped to seal the approval of the Bb trumpet was Ernest Hall - Tarr calls his exclusive use of the instrument 'definitive'.⁴⁹ Hall was one of Morrow's pupils and for a while, at the R.C.M., Morrow tried to insist that Hall study the F trumpet but Hall was already a seasoned performer on the Bb trumpet and cornet and

⁴⁵The writer's own copy of Prout's treatise is annotated in copperplate pencil throughout and initialled '30.III.11 T.U.J.'. On page 13 the note by 'Cornet-a-Piston' in the table of instruments of the orchestra reads 'Used instead of trumpets. Easier to play.' This knowledge was evidently commonplace, even if the textbooks sometimes brushed over it or preferred to portray theory rather than practice.

⁴⁶Carse, A., 'Trumpets', *Musical Opinion*, No.43, 1920, p.293.

⁴⁷Tarr, E., op. cit., p.171.

⁴⁸Forsyth, C., op. cit., p.95. The 'old big-bore instrument' here referred to is the F valved trumpet which was of course longer as well as wider in bore. In later texts the same instrument has also been referred to as 'slender' - it all depends what the point of reference is.

⁴⁹Tarr, E., op. cit., p.171.

did not practise the older instrument seriously.⁵⁰ Hall is generally acknowledged to have confirmed the Bb trumpet as the instrument for symphonic work by 1912.

In 1920 Ulric Daubeney writes that the Bb instrument has 'almost entirely superseded the F', that the trumpet is 'now equally chromatic with the flute or clarinet' and that 'the need for crooks no longer exists'.⁵¹ He adds that a 'quick-change', or *barillet*, to A is sometimes used to facilitate fingering in sharp keys. His further observation that American trumpets were available with an adjustable, sprung third valve slide indicates that the practice of using one instrument (without a 'quick-change') and transposing, regardless of the tonality of the music, was becoming more prevalent. This device enables players to compensate for the sharpness resulting from the use of valves in combination and is particularly necessary for low register work in the sharp keys, where the third valve is used more. According to Bate, the C trumpet was introduced to Britain in 1905 but Daubeney calls its use 'exceptional'.⁵²

⁵⁰Birkemeier, R., op. cit., p.43.

⁵¹Daubeney, U., op. cit., p.86.

⁵²Bate, P., op. cit., p.44.

Daubeney, U., op. cit., p.88.

The French horn

As was noted in the previous chapter, the strength of hand-horn tradition in France was sufficient to prevent the valve horn from being taught at the Paris Conservatoire until Françoise Brémont re-introduced it in 1897 (it had been taken up and then suppressed earlier in the century). Indeed it failed to oust the natural instrument and become the only species of horn taught at the institution until 1903.¹ It is thus fair to assume that most French horn players around the turn of the century would have been well acquainted with hand-horn technique; even when playing a valve horn as a fully chromatic instrument the better players would, to an extent, assimilate the subtleties of inflection and phrasing characteristic of the older discipline.

In 1897 Prout devotes nearly fourteen pages of his treatise to a discussion of the natural horn before moving on to the valved instrument, impressing the importance of absorbing the technique of writing for the older instrument.

[The natural horn] is now almost entirely superseded by the valve-horn, though occasionally a player may be found who still uses the older instrument.²

Though it must be admitted that the quality of tone of the valve-horn is slightly inferior to that of the natural instrument, the difference, in the hands of a good player, is so small that it is compensated for in other ways.³

¹Morley-Pegge, R., *The French Horn*, London, 1973 (first published 1960), p.57.

²Prout, E., *The Orchestra*, London, 1897, vol.1, p.192.

³Prout, E., op. cit., p.195.

However, British players' memory of the older technique was not as fresh as Prout may have wished:

When valves came in the art of hand-stopping declined, and for forty years it has been abandoned more completely here than in any country except Italy. The hand-horn was an imperfect and very difficult instrument, and also suffered from the defect of not being readily transportable on account of the arsenal of crooks that accompanied it. Yet it had qualities that might have saved it, as on the Continent, for special occasions. Thirty years ago a great authority on instrumentation wrote in correspondence:

I know that our orchestral players set their faces like flint against the hand-horn, and I think it is a great loss to the orchestra for our older music.

So advanced a musician as Ravel has, in his *Pavane pour une Infante défunte*, written an important part for it, but whether his intention of thus obtaining a particular tone-colour has ever been realised in any English performance of the work is doubtful.⁴

In both England and France horns continued to be played and manufactured in the same scale and bore - that which had been developed by Joseph and Lucien-Joseph Raoux in the late eighteenth and early nineteenth century and made popular by the hand-horn virtuosi. Initially, the Raoux horns were superior - 'Their popularity defeated any attempt at competition by English makers' - but by the 1890s good examples were made in England too.^{01, 5} Bells were around ten or eleven inches in diameter with a narrow throat, the cross-section of the cylindrical portion of the tubing was between 10.8mm and 11mm, and mouthpipes were comparatively narrow.⁶

⁴Blandford, W.H.F., 'Studies on the horn, No.1 - The French horn in England', *Musical Times*, August 1922, p.546.

⁵Ibid.

⁶Baines, A., *Brass Instruments*, London, 1976, p.221.

Mouthpieces were typically small in diameter and deeply funnel-shaped. Many hand horns had valves built on to them, or a third added where there had formerly only been two. Alfred Brain, Dennis Brain's uncle, used one such instrument: by chance he happened upon a two-valve Courtois horn in a junk shop and had a third valve added.⁷

The English and the French tended to prefer the terminal crook to the fixed mouthpipe *Inventionshorn* arrangement the Germans favoured. This had the advantage that the mouthpipe, important to the sound and response of a horn, was always matched to the overall length of tube. In theory, when presented with, for example, a horn part written in E, the player could simply connect an E crook (the valve slides would have to be pulled out slightly to give the correct additional lengths) and save any transposition. However, the F crook became the favourite. Prout opined that, from the composer's point of view, it is preferable to write in the keys of E and Eb where this will result in the score being simpler to read (fewer accidentals) and does not recommend the then recently emergent system of always writing horn parts in F:

The best key is that of F, and most players at the present day use no other crook. Some composers also write for the F horn, whatever the key of the music, with the result of making their scores more difficult to read...if the players choose to transpose the parts, that is their affair'.⁸

⁷Pettitt, S., *Dennis Brain, a biography*, London, 1989, p.25.

⁸Prout, E., op. cit., p.195/6.

This advice seems to neglect any consideration for the player, though if one considers that many musicians of this time were fluent in *solfège* it is conceivable that players found it a reasonable system. However, it does indicate that this writer (and presumably he was fairly representative of the contemporary view) attaches no significant merit to the use of different crooks for variety of tone colour as earlier composers had. Thomas Dunhill records the same practice as habitual but is not quite so *laissez faire*.

For good or ill it is extremely seldom that a horn player of the present day uses any other crook to his instrument than that which gives the key of F... though in studying horn music one must make oneself well accustomed to the transpositions demanded when other crooks are attached, especially those in E, and E flat, which are sometimes written for even nowadays, though when they are, the players, with calm wilfulness, disregard the composer's instructions and play everything on their favourite horn in F.⁹

Writing in 1914, Forsyth inclines to a more progressive view and suggests that all horn parts should be written in F, with a key signature where necessary. He discredits 'atavistic crook-notation' and with it the practice of Wagner and Strauss;

...composers still keep up the fiction that other crooks are used. It is a useless, even harmful, fiction, in which - as is quite plain - even the composers themselves do not believe.¹⁰

⁹Dunhill, T., *Chamber Music*, London, 1913, p.263.

¹⁰Forsyth, C., *Orchestration*, London, 1935, p.114. An example is found - and it is not difficult to find numerous such cases in the scores of Wagner and Strauss - where the key of the horn part is changed too quickly for crook swapping to be feasible.

On which evidence, Dunhill's admirable regard for the 'composer's intention' can only be held to apply to music which was written for natural horn. In this matter Forsyth concurs, expressing regret that he would most likely hear Beethoven's *Eroica* and Weber's *Oberon Overture* played on the F horn rather than one in Eb or D respectively ('the pile of the velvet is scraped off', as Stanford is quoted as having said).¹¹ Forsyth does add that crooks in Bb alto and A were sometimes used for exceptionally high parts (like Bach's First Brandenburg Concerto and certain passages of Beethoven).¹² The top professional players often had several instruments and an armful of crooks (in one case as many as fifty), so perhaps they were a little more adventurous than the above comments would lead us to believe.¹³ Reginald Morley-Pegge recounts the following instance.

The writer remembers an occasion, some fifty-five years ago, when he took part in a performance of the *Eroica* Symphony where this was done. In the Scherzo the first horn, M.Reine, then solo horn of the Paris Opéra, crooked his instrument in B-flat alto; the writer, who was playing second, used an E-flat crook and played the passage 'hand-horn'; the third horn, whose part is less colourful, used the customary F crook. The brilliance of the B-flat crook against the velvet of the E-flat and the discretion of the F produced a result that earned very favourable comment both from the conductor and from the members of the orchestra.¹⁴

¹¹Ibid., p.118.

¹²Ibid., p.123-125.

¹³Cousins, F., *On Playing The Horn*, Chapel-en-le-Frith, 1983, p.63. Cousins used his fifty crooks with ingenuity to alleviate problems thrown up by certain passages and instruments: it is worth mentioning here that French horns of this period sometimes suffered from acoustical defects known as 'wolf-notes' - particular troublesome notes of uncertain response which made a clean attack treacherous.

¹⁴Morley-Pegge, R., op. cit., p.104.

No doubt players found that the use of the shorter crooks made high passages a little more secure, even if it meant playing on a much shorter tube than the composer intended.

There is also the hoary old myth that all players used only the F crook. This is not the case - the G and A crooks were used extensively and many others kept a Bb alto crook in their top pocket. Only Aubrey [Brain] stuck to the F, but even he saw sense and changed very occasionally.¹⁵

The minimum length to which the valve slides could be adjusted varied according to the model of instrument (although this is irrelevant, of course, if hand-horn technique is used). Most British types were only suitable for crooks up to A.¹⁶ The typical French pattern was to build the horn in Bb alto and then extend the slides for crooks down as far as E.

In France the instrument is often built in Bb-Alto. This is much less satisfactory than the medium-pitched key of F. Crooks have to be continually used and, even when the tuning slides are pulled out, the piston-notes on the lower crooks are all far too sharp.¹⁷

In France the third valve differed from the type used elsewhere. Around 1847 Jules Halary constructed a horn with a third valve loop of a tone which constituted part of the main tube. When the third valve is depressed this tone's worth of tubing is bypassed and the horn is put into G rather

¹⁵Catterick, A., correspondence with SGB. Aubrey Brain used a Bb crook in the first Brandenburg Concerto.

¹⁶Baines, A., op. cit., p.221 and Baker, J., interview with SGB.

¹⁷Forsyth, C., op. cit., p.109.

than F. This ingenious system offers useful alternative fingerings for some of the most awkward notes in the horn's top octave although there are a few unobtainable notes in the low register which are possible with the normal third valve layout. Halary's *Cor Ascendant* was supported by Brémond whose thirty-one year tenure at the Paris Conservatoire ensured that it gained universal acceptance in France. Anthony Baines considers this type of instrument responsible for the 'extraordinary confidence of French playing'.¹⁸ Significantly, Brémond also had an extra set of longer valve slides made for his 1823 L.-J. Raoux so that he could use the lower crooks.¹⁹ For completeness it is also worth mentioning that a Frenchman named Henri Chaussier designed an instrument which could effectively be crooked into any key from Bb-basso to Bb-alto by the appropriate use of four valves, those four valves also giving a complete chromatic compass. Despite being a neat solution to the problem of providing an instantly crookable hand-horn and chromatic valve horn in one, Chaussier's invention was never taken up - largely because the fingering was unorthodox.²⁰

Since the wide-bore double horn was to have all but usurped the single French horn by the second half of the twentieth

¹⁸Baines, A., op. cit., p.223.

¹⁹Morley-Pegge, R., op. cit., p.166. Morley-Pegge studied with Brémond for the two years preceding World War One.

²⁰It evidently worked very well in Chaussier's hands: in 1891 he set himself a trial against a standard three valve horn and a hand horn and emerged victorious. The matter is dealt with in detail by Morley-Pegge (op. cit., p.63-66).

century, it is reasonable to enquire whether the concept of the double horn occurred to the French and English at this time. In fact a French design of 1864 by Gautrot and Marquet was one of the first implementations of a compensating system using valves with dual windways which had been invented in Paris in 1858.²¹ Again, the aim of this was to allow the longer crooks to be used by bringing supplementary lengths of valve loop into play under the control of a thumb lever.

French horns, as everybody knows, are built in *B-flat* and the valve slides, being tuned for this pitch, have to be reset for every downward change of crook: by the time the *E* crook is reached the slides have been pulled out as far as they will go. With the double-acting piston [viz.] the slides are now pushed home again and a rotary valve is operated, which makes the air pass through a secondary set of valve slides placed at the back of the pistons: the combined length of the two sets of slides gives the correct tuning for the *E-flat* crook. The slides are then pulled out to the requisite extent for every crook down to *B-natural* basso.²²

However, the French did not come up with their own double horn until about 1930. In 1912 an Englishman named D.J. Blaikley patented a piston valve *F/Bb* compensating double horn built in the Raoux bore.²³ It did not catch on, perhaps because of imperfections arising out of the compromise of using a single mouthpipe, but more importantly because at that time players were not convinced about the *Bb* tube length. Of course hindsight allows us to observe that stalwarts of the French horn in *F* were destined to be over-

²¹Morley-Pegge, R., op. cit., p.49.

²²de Pontecoulant, Lois-Adolphe, in a translation by Morley-Pegge (op. cit., p.49-50) from a report on the International Exhibition held in London in 1861.

²³Morley-Pegge, R., op. cit., p.51.

run by a decidedly more alien element.

The influence of Puzzi and the Petrides brothers had had a positive effect on British horn playing during the nineteenth century and there were some good native players by the end of the century. However, it was again two foreigners who were to provide the foundations for a twentieth-century school of British horn playing: the Germans Friedrich Adolf Borsdorf and Franz Paersch were the leading players in England from their arrival until their own pupils took over from them. They were both Saxons and had trained on the wider-bore German horns but switched to the narrower Raoux-type instrument used in England and France. It is a synthesis of their German background and the French type of instrument which is claimed to be the seedbed of the English style.

Adolf Borsdorf (1854-1923) settled in England in 1879 having studied with Lorenz and Oscar Franz in Dresden. For most of his career he played an L.-J. Raoux horn dated 1821 (which had belonged to Puzzi) and was famous for his 'breath-control, dynamic command, phrasing and breadth of interpretation'.²⁴ He played for August Manns and Hans Richter at Covent Garden before becoming the first principal horn of Henry Wood's Queen's Hall Orchestra in 1895. He quickly established himself as a great teacher, holding posts at the Royal College of Music and the Royal Academy until his

²⁴Ibid., p.161 and p.167.

death in 1923; 'the combination of the broad German approach and the clarity of the French tone was something [he was] able to instil'.²⁵ The second generation of the Brain family, the brothers Alfred and Aubrey, were among his pupils and became the first English players of outstanding quality. In 1904, when Henry Wood fell foul of the deputy system which so often dogged his rehearsals and performances at the Queen's Hall, Borsdorf was among those who led the exodus to form the London Symphony Orchestra. The three other horn players from Wood's orchestra (Thomas Busby, Henri Van der Meerschen and A.E.Brain - Dennis Brain's grandfather) went too and Borsdorf headed what became known as 'God's own quartet'.

Richter had himself been a horn player in Vienna and he was quick to seize upon the talents of the second remarkable German emigrant. Franz Paersch (1857-1921) arrived in 1882, having formerly studied with Gumbert in Leipzig. He was principal horn of the Hallé Orchestra in Manchester until 1915 as well as playing for Richter in London.

Paersch was renowned for his superb tone, effortless emission, and absolutely safe attack...he never deviated from the composer's nuances or altered the phrasing to suit himself; nor was he ever known to crack a note. At one time he used an old Raoux horn and when that wore out, he played on an instrument made by W. Brown and Sons, of London.^{01, 26}

²⁵Pettitt, S., op cit., p.18. Pettitt also notes that Borsdorf played under Strauss in the British premiere of *Til Eulenspiegel* in 1896, confounding his colleagues by playing the opening solo faultlessly (p.25).

²⁶Morley-Pegge, R., op. cit., p.168.

Alfred Brain, the elder of the two brothers, became principal horn of the Queen's Hall Orchestra in 1907 but emigrated to America in 1922 to escape his wife.²⁷ One of Borsdorf's sons, Oskar, played in Alfred Brain's section and his other sons Emil and Francis (who changed his surname to Bradley when anti-German feeling ran high) also became well known players.

Aubrey Brain, Dennis's father, started playing as a principal horn in 1911, toured America with Nikisch and the L.S.O. when A.E.Brain was unable to relinquish his duties at Covent Garden and played first for Beecham in many Wagner and Strauss opera performances. However, it was not until Alfred had left for America that he got the recognition he deserved and in 1923 he became principal of the BBC Symphony Orchestra.²⁸

²⁷Pettitt, S., op. cit., p.32/33.

²⁸Ibid., p.26 and p.32/33.

The trombone in France and Britain

As has already been established, the Courtois-type trombone with a bore of 11.4mm and a bell of around 15cm was very much the standard orchestral instrument in France for most of the second half of the nineteenth century. Bass trombones were rarely encountered in that country and the usual complement was a section of three tenors in Bb. Bate judges the agency of Halévy, Meyerbeer and Berlioz, particularly in opera, to have been significant in this 'search for even greater brilliance'.¹ In Britain this same model of trombone was certainly found in most orchestras by turn of the century. Its conspicuously slender proportions (surely it can only have been this species of instrument that Beecham famously referred to as an 'overgrown paper-clip') earned it the name 'peashooter' and it is commonly associated with English orchestras of this period. The Italians, like the French, settled on a section of three tenors but in Britain a standard section nearly always comprised two tenors and one bass, and a rather particular bass at that - the G bass trombone.

However, the French type of trombone was not as long established and ubiquitous in England as is frequently thought. During the nineteenth century wider bore trombones had been manufactured and used in England. Possibly they were intended more for military purposes or for the rapidly

¹Bate, P., *The Trumpet and Trombone*, London, 1978, p.232.

burgeoning brass band movement, though this might be said of any trombone made for the greater part of the nineteenth century as it was by no means a regular and indispensable member of the orchestra at this time and few can have been built for the express purpose of symphony orchestra work (when Beethoven sent his Ninth Symphony to the Philharmonic Society in 1824 the trombone parts were included as an appendix to the main score). A photograph of the Besses-o' th-Barn Band taken in 1860 shows a player holding a tenor trombone of noticeably wider bore than the Courtois type.² Arthur Wilson referred to a photograph of his great grandfather, who was a bandsman, taken in about 1850 which shows him holding an instrument which is clearly of German dimensions and design.³ Tantalisingly, Daubeny gives the impression that larger German-inspired instruments were used fairly regularly before the Courtois type became common.

...it is interesting to observe the return to ancient standards that has come about during recent years. Tenor trombones are no longer made with large bores and wide, clumsy bells such as were often met with a few years ago, and which gave a tone quite foreign to the trumpet quality proper to the instrument; we have instead the small-bored narrow-belled sixteenth century prototype up to date, and consequently that pure and refined timbre which makes us realise that the trombone is of the trumpet and not the cornet family.⁴

²Hampson, J.N., *Besses-o' th-Barn Band*, Northampton, 1893 (also in Baines, A., *Brass Instruments*, London, 1976, plate xiv).

³Wilson, A., interview with SGB.

⁴Daubeny, U., *Orchestral Wind Instruments*, London, 1920, p.98. One might observe that today the familial relationship is preserved but that the genus has changed: Daubney would surely feel that the modern trombone and trumpet now share a vestige of cornet profile.

While Prout - indeed writing a 'few years ago' in 1897 - nowhere mentions bore or country of origin, his description of the trombone could easily be construed as referring to the larger-bore variety.⁵ His illustration (an engraving, so it is difficult to vouch for its absolute accuracy; perspective can deceive) looks too substantial in cross-section of tube at all points to be a 'peashooter' and the width of the bell would be uncharacteristic in a French instrument (it is substantially wider than the width of either the slide section or the bow and furthermore a garland around the edge of the bell seems to be depicted - this is typical of German trombones of the period). If this diagram were to be ruled out as too schematic or inaccurate then Prout's text does little to contradict it:

The tube is also wider in proportion to its length than that of the horn and trumpet. This gives a fuller and richer, though less brilliant tone than that of the trumpet, to the instrument, and also makes upper notes of the harmonic series more difficult to obtain...⁶

The Courtois-bore tenor is one reason why the alto trombone was rarely found in France - the narrow bore made the high register easier. There are several notable solos written in the highest register for this instrument, Ravel's *Bolero* containing perhaps the most famous example.

⁵Prout, E., *The Orchestra*, London, 1897, vol.ii, p.220-1.

⁶Ibid.

Anthony Baines confirms that the French type was most regularly found in England after imports had 'stifled native models built by F.Pace and others with somewhat German features'.⁷ However, such instruments cannot have been completely stifled: Bate reports that English makers offered small and medium-bore tenor trombones 'as early as 1892' and presumably continued to do so judging by the following;

...two celebrated British players of the early 20th century, Jesse Stamp and Arthur Falkner. Both these men habitually used the narrow bore, but when playing such works as the Symphonies of Brahms they would change over to wide-bore instruments as being those for which the parts were originally conceived.⁸

Brahms wrote for large-bore instruments; consequently leading English players even into the early 20th century changed to instruments of wider bore for works by Brahms and Richard Strauss and for the later works of Wagner.⁹

This degree of discretion may not have been common, but it validates a more cosmopolitan interpretation of British orchestral tradition: a concern for authenticity is not solely the province of the second half of the twentieth century.

Nevertheless, as the twentieth century got under way, the narrow French instrument became very much the norm in Britain. The link with 'ancient' patterns which Daubeney made is reinforced by Forsyth.

⁷Baines, A., op. cit., p.243. F.Pace was manufacturing brass instruments in London from 1831-65 (Morley-Pegge, *The French Horn*, London, 1973, p.179).

⁸Bate, P., op. cit., p.61.

⁹Baines, A., 'Trombone', *New Grove*, p.635.

Indeed it is quite safe to say that a photograph of a sixteenth century Bass-Sackbutt, if included among the trombones in a modern instrument-maker's catalogue, would scarcely excite the curiosity of even a professional player.^{10, 11}

The G bass also became a fixture. Prout did comment that the F bass was occasionally met with in England before the turn of the century and pointed out that it could continue to prove useful in classical repertoire where the low C was required (this is beyond seventh position on the G bass; transposing up the octave was the usual, if rather unsatisfactory, solution).¹¹ The implication that the F bass was sometimes encountered in nineteenth-century England goes against Anthony Baines's view, discussed in the previous chapter: 'In Britain...the G bass trombone... was used in every orchestra and band from 1815 up to the 1950s'.¹² He also states that the G bass 'survived the French invasion' which is true enough in that it was not replaced by a third tenor.¹³ However, more Germanic types of G bass with a coil in the bell section had been used earlier in the nineteenth century.¹⁴ What is certain is that the British G bass, of commensurate bore to the 'peashooter' tenors, had established itself by the last years of the nineteenth century coincident with the widespread adoption of the Courtois-type tenor.

¹⁰Forsyth, C., *Orchestration*, London, 1935, p.70.

¹¹Prout, E., op. cit., p.224.

¹²Baines, A., op. cit., p.631.

¹³Baines, A., *Brass Instruments*, London, 1976, p.243.

¹⁴The Galpin Society guide to its 21st Anniversary Exhibition of European Musical Instruments at the Edinburgh Festival, 1968 gives a photograph of a G bass by F.Pace (c.1840) with a double slide and a loop in the bell section, a 'wide' bore of 13mms and a bell of 16cms (Exhibit No.400, Plate XXII). It was lent by a G.Oldham.

Mouthpieces were usually about 27mm wide and 23mm deep.¹⁵ The unavailability of certain low notes on the G bass was circumvented by the common-sense addition of extra tubing to put the instrument into D on the control of a thumb switch. In this form the G bass could play all the notes required and was held to be more manageable than the German F bass.¹⁶ It is difficult to ascertain exactly when this duplex G bass first came into being, but it involved no new technology and would have been a fairly obvious solution. The earliest surviving G/D bass, by Courtois and dated 1869, is held in Edinburgh University's Collection of Musical Instruments.¹⁷ The first trombone section of the London Symphony Orchestra (recently defected from the Queen's Hall) pictured in 1904 clearly shows a Mr. W.A. Lettington holding such an instrument.¹⁸ At Forsyth's time of writing (1914), Mr. Gutteridge was also using a G/D bass in Sir Henry Wood's orchestra.¹⁹ The advice to avoid quick changes between the note *G* and *C#*, *D*, *G#*, and *Bb* reveals that the thumb valve was treated with little ingenuity, by treatise writers at least.²⁰ *G* to *D* and *G* to *A* would be possible with a simple switch of the thumb, no slide movement being necessary.

¹⁵Baines, A., op. cit., p.243.

¹⁶Forsyth, C., op. cit., p.140.

¹⁷Reynolds, M., 'Incurable Curator', *The Trombonist*, British Trombone Society, London, Spring 1992, p.24.

¹⁸The picture, taken from the LSO archive, appeared in *BBC Music Magazine*, September 1994, p.27.

¹⁹Forsyth, C., op. cit., p.141.

²⁰Ibid.

One of the most crucial factors in determining the nature of trombone sound is the mouthpiece shape. While the French tended to use an almost funnel-shaped mouthpiece with a distinct throat (which bore some resemblance to the conical varieties found with ancient instruments), elsewhere a cup-shape was common, usually somewhat deeper than the virtually hemi-spherical cup that had been standard early in the nineteenth century.²¹ Forsyth gives an insight into how this manifested itself:

In England the amount of "tang" and "bite" that is put into the *f* and *ff* is quite extraordinary. The player starts the note with a great impetus, and "throws it out into the air." This is well enough in passages that demand the utmost force of delivery. Occasionally, however, the notes themselves seem to disappear and leave nothing but a nerve-splitting edge.... The shape of the cup mouthpiece is also determined principally with the object of securing the utmost brilliance of attack. In France the most esteemed players have not a tithe of this *bravura*, but their smooth *crescendo*, sounding like an irresistible head of water, is something to be remembered.²²

Forsyth provides an admirable example of this by quoting the end of Dvorak's *Carnival* overture where the trombones have a crescendo on a root position triad: 'The Trombones, in close harmony French-fashion, suddenly "come through" with a flaming chord of A major'.²³ Similar examples can also be

²¹Baines, C., *European Musical Instruments: The Galpin Society Guide to the 21st Anniversary Exhibition at the Edinburgh Festival 1968*, p.54.

²²Forsyth, C., op. cit., p.138.

²³Ibid., p.147. Dvorak visited England nine times and wrote his D minor symphony, *The Spectre's Bride* and *St. Ludmilla* specially for English societies. He received a Mus.D. from Cambridge University in 1891, the year of the overture's composition. It is tempting to think that he had English trombone playing in mind - his native Czech trombones would almost certainly have been of German design.

found, for example, in Berlioz, but German trombone scoring tends to be more widely spaced, often with an octave between bass trombone and second.²⁴ Of course, this goes hand-in-hand with the types of instruments used at the time.

Forsyth rightly attributes part of this French character to the funnel-shaped mouthpiece but also states that they use instruments of a 'wider bore'.²⁵ Courtois did make some wider bore tenor trombones in the nineteenth century.²⁶

However, the French generally stayed with the narrow-bore trombone into the second half of the twentieth century and any slight increase in size was marginal by comparison with German instruments.

According to George Bernard Shaw, English audiences in the 1890s were exposed to a certain variety of trombone sounds. August Manns' trombones at the Crystal Palace seem to have been considerably more to Bernard Shaw's taste than Hans Richter's:

The Valkyrie Ride, which came next, excited the audience furiously; but it also made a lady on the orchestra put her fingers into her ears. The lady was quite right. The Valkyrie Ride requires above all things fine trombone playing - such playing, for instance, as Mr. Manns seldom fails to get at the Crystal Palace from Messrs Hadfield, Geard, and Phasey, who generally contrive to stop short of that brain-splitting bark which detaches itself from the rest of the orchestra...No matter how many *fortissimo* marks the composer writes, there is no use in forcing the

²⁴One notable exception is a D major root position triad five bars from the end of Brahms's Second Symphony. For the final chord, however, a wider spaced chord is written for the trombones.

²⁵Ibid., p.138.

²⁶Maxted, G., *Talking about the Trombone*, London, 1970, p.17.

tone of the trombone, unless, indeed, you are to be intentionally hellish, as in Liszt's *Inferno*. But if you want to be majestic, as in the *Valkyrie Ride* and the *Francs-Juges* overture, then it is not to be done by bawling like a mob orator who does not know his business. Why Richter permits forcing, and even encourages it, not only in the *Valkyrie Ride* but in the first movement of the *Tannhäuser* overture, can only be explained as a result of his share in the original sin. It is not that his players cannot do better: they are always dignified in the *Valhalla* motif in the *Nibelungen* music. I once heard Herr Müller, Richter's first trombone, play the "oraison" in Berlioz's *Sinfonie Funèbre et Triomphale* very finely. But on Monday week the only tolerable brazen sound came from the other side of the orchestra, where Mr. Geard was playing the bass trumpet part on an alto trombone. During the few bars in which the theme was left to him the lady did not keep her fingers in her ears...I am not squeamish about the quantity of sound that comes from an orchestra: the more thundering its *fortissimo*, the better I like it...But I am fastidious as to the quality of the tone, however voluminous it might be; and, frankly, the *Valkyrie Ride* might as well be conducted by Buffalo Bill as by Richter, if some regard is not paid to the artistic spirit.²⁷

Richter's pedigree as a Wagnerite could hardly have been better (he spent a significant part of his life working for and with Wagner), what Bernard Shaw is criticizing seems to be a national characteristic. There is no certain way of telling what kind of trombone Herr Müller used but he was obviously German and Richter clearly had a preference for what might be called a 'German *fortissimo*' from his trombones. Referring back to the *Symphonie Funèbre et Triomphale* write-up (June 1885) and that of an earlier performance of the *Tannhäuser* overture (May 1885) reveals a

²⁷Bernard Shaw, G., 'A Legion of Pianists', *The World*, 18th June 1890 (*Shaw's Music: the Complete Musical Criticism of Bernard Shaw*, ed. Dan H. Laurence, London, 1989, vol ii, p.91-3). Mention of an alto trombone is interesting: Forsyth declared it 'practically obsolete' (op. cit., p.139) and Daubeny reckoned it had 'almost entirely dropped out of use' (op. cit., p.97).

description of Richter's trombone section as a 'triad of German sackbuttists' predisposed to 'all possible coarseness' rather than the 'purity of tone and accuracy of pitch' exhibited by English players at the Crystal Palace.²⁸

Richter was not alone in this transgression: George Henschel, a German conductor who trained in Leipzig and Berlin and was the first conductor of the Boston Symphony Orchestra before coming to England in 1884, was described as 'deliberately urging the trombones to blare most horribly' in the *Tannhäuser* overture.²⁹

The applause it gained was correctly estimated by an amateur critic, who informed his companion, as I passed him on the stairs, that "You can always fetch 'em if you make a jolly row." The Good Friday music was better; though even here the trombones, in giving out the Parsifal motive at the beginning, were allowed, and had no doubt been instructed, to force their power to a point of sinister coarseness which turned Parsifal into Klingsor at once.³⁰

It is not hard to find ample evidence of Bernard Shaw's objection to central-European orchestral sound:

When I ran across to Bayreuth the other day I was fully aware that the cost of the trip would have been better spent in bringing a German critic to England...First, as to the wonderful Bayreuth orchestra, to the glories of which we have been taught to look with envious despair. I beg to observe here, in the most uncompromising

²⁸Bernard Shaw, G., 'The Richter Concerts', *The Dramatic Review*, 2 May 1885 (op. cit., vol. i, p.238) and 'Aida Gallicized', *The Dramatic Review*, 13 June 1885 (op. cit., vol.i, p.269).

²⁹Bernard Shaw, G., 'Señor Albéniz', 4th March 1891 (op. cit., vol.i, p.282).

³⁰Ibid., p.283.

manner, that the Bayreuth orchestra, judged by London standards, is not a first-rate orchestra, but a very carefully worked up second-rate one.³¹

He clearly puts the Bayreuth orchestra's deficiencies down to a lack of regard for beauty of tone and quality of instruments.

Of course August Manns was German too and had served as bandmaster to a Prussian regiment under Wieprecht before being appointed at the Crystal Palace. Nevertheless, indeed perhaps because of this, Manns seemed to have a sensitivity to quality of tone which chimed with Bernard Shaw's. His apparent use of non-German trombone players was significant as well: as well as the above-mentioned trio, Bernard Shaw recalled having enjoyed the playing of George Case, Mr Geard and Messrs J. and Antoine Matt in two movements of Beethoven's *Equale* for four trombones and some Schütz for trombones and organ in 1885.³² On another occasion the Crystal Palace trombones played 'without any of the noisy vulgarity which our experience elsewhere has led us to associate with that instrument'.³³ The eminent critic obviously preferred a French-based sound, although he never described it as such. Of course, with addition of an often ferocious attack, it was rapidly becoming adapted as an

³¹Bernard Shaw, G., 'Bayreuth's Indifference to Beauty', *The World*, 1st August 1894 (op. cit., vol.iii, p.301).

³²Bernard Shaw, G., 'Art Corner', *Our Corner*, September 1885 (op. cit., vol.i, p.293) and 'An English Meistersinger?', *The Star*, 2 May 1890 (op. cit., vol.ii, p.56).

³³Bernard Shaw, G., 'Music at Sydenham', 28 February 1877 (op. cit., vol.i, p.93). The music was Alfieri's *Saul* overture.

English sound too. An inclination to credit the French style as progenitive is largely organologically based: the Crystal Palace-type sound was only likely to develop with the narrow-bore instrument. If it is accepted that wider bore instruments were reasonably common in England before c.1890 then it is not unreasonable to assume that a change in trombone aesthetic originates with the French instrument. It is not hard to find an earlier account of an English conductor offending in the Richter mould:

In the *Quis est homo*, the trombones, which have become a nuisance to frequenters of the Albert Hall, exerted themselves with their usual offensiveness. It is true that Rossini marked the semiquaver emphasized by the trombones *fortissimo*, but the *maestro* had studied the instruments in the hands of artists, and not in the circus. The strangest thing is that Mr Barnby, who should know better, apparently approves of the hideous bark - there really is no other equivalent in the language - from which the audience visibly shrink.³⁴

As was seen to be the case with horn playing, the influence of foreign players and styles on English brass playing at this time was considerable.

The Crystal Palace orchestra was evidently a very accomplished ensemble: it was capable of 'combining a vigorous and eloquent interpretation with refinement of execution and beauty of tone in the wind band', the brass in particular were 'noble and splendid'.³⁵ However it was not

³⁴Bernard Shaw, G. 'Rossini's Stabat Mater', 7 February 1877 (op. cit., vol.i, p.89).

³⁵Bernard Shaw, G., 'Too Long', *The World*, 1st March 1893, (op. cit., vol.ii, p.824) and 'Mr Smith reads the paper', *The Star*, 2 December 1889 (op. cit., vol.i, p.858).

perfect: it was considered that in 'forte passages' the Hallé was 'superior to the Crystal Palace orchestra in power and to the Richter in quality' and that it better served 'certain effects in the scores of Berlioz that neither of the others can make much of.'³⁶ E. Balfour Bax, Arnold Bax's uncle and a critic who went by the pseudonym *Musigena*, felt that the Manns brass were kept too quiet.³⁷ Bernard Shaw was willing to sanction the use of additional trombones ('I sometimes want twelve trombones instead of three'!) but not extremes of dynamic - 'the trombone is a tender plant that must not be forced'.³⁸ One is curious to glean his opinion of Richter's later Hallé concerts (he went to that orchestra in 1900) but no account presents itself.

In the broadly accepted scheme of British orchestral playing, the valve trombone is of little moment; the same may be said of its reception in Germany by the end of the nineteenth century - what interest there had been prior to that had waned. Despite this, as every opera trombonist knows, the three valved tenor trombone enjoyed favour in southern Europe. Hence the scores of Rossini, Leoncavallo, Puccini and particularly Verdi can present out-of-the-ordinary demands to the modern slide trombonist in terms of agility.³⁹

³⁶Bernard Shaw, G., 'The Manchester Orchestra', *The World*, 10th December 1890, (op. cit., vol.ii, p.223).

³⁷Bernard Shaw, G., 'Some instruments and how to play them', *The Star*, 8 March 1889 (op. cit., vol.i, p.574).

³⁸Ibid., p.575.

³⁹Wick, D., *Trombone Technique*, London, 1971, p.95. Apparently the valve trombone was still encountered in Italy, Spain and Portugal in the early 1970s.

There are even instances when Verdi's parts are, strictly speaking, not possible on a slide instrument: he writes grace notes in Act One of *Othello*.⁴⁰ The valve trombone is generally taken to be an inferior brother to the traditional instrument in terms of intonation and sound; Prout considered it would be an 'evil day for the orchestra if this instrument should ever supplant the noble slide trombone'.⁴¹ What it was hoped the valve trombone would offer - and indeed was all it could offer - was speed of articulation and the capacity to slur cleanly and smoothly between adjacent notes. The efficiency of modern instruments and more importantly the tremendous advance in slide technique have fairly comprehensively negated these mechanical privileges (save for special circumstances - perhaps in jazz, for example).

Notwithstanding what has been said above, sometime early in the second decade of the twentieth century Sir Henry Wood initiated the introduction of a set of valve trombones in the Queen's Hall Orchestra, apparently having been impressed by their use in the Brussels Opera.⁴² These were basically six-valve instruments, built by the Belgian manufacturers Lebrun from 1910 onwards in the ascending format that Sax

⁴⁰ See Gregory, R., *The Trombone*, London, 1973, p.74/5 and p.121.

⁴¹ Prout, E., op. cit., p.234.

⁴² Bate, P., op. cit., p.184. According to Bate these instruments were still in use in Brussels at the time of writing - 1978 (p.233). This observation is supported by Anthony Baines in 'Trombone', *New Grove*, p.632.

had pioneered in the mid-nineteenth century.⁴³ With no valves depressed the trombone stood as in seventh position and each valve effectively cut out exactly the correct amount of tubing to give a tube corresponding to the six higher positions. This design gave much better tuning than the usual three-valve descending arrangement where the necessary use of valves in combination results in sharpness. The Belgian instruments also had a seventh descending valve which put the trombone into F, but this was of limited value as the other six valve slides would then have to be adjusted to make them in tune for the longer tube. It is unclear whether Wood was attracted to the superior intonation of the Belgian instruments having already tried the more conventional type of valve trombone, as Robin Gregory implies.⁴⁴ Rossini and Wagner were popular with London audiences at the beginning of the century and it was probably hoped that the valve trombone would allow more exacting performance of the difficult trombone writing in such music. It is also likely that Wood was trying to 'invent' a more flexible role for the trombone in the orchestra; to help it break free of its stock-in-trade clichés. In one of his 'Klenovsky' arrangements (Bach's D minor Toccata and Fugue) he scores for a bass valve trombone in F and this may have meant one of the Belgian instruments (with the seventh valve depressed) or it may not. However this makes the concept of the valve trombone appear an

⁴³Horwood, W., *Adolphe Sax 1814-1894 - His Life and Legacy*, Baldock, 1983, p.114. A photograph of the instrument being played is given on p.117.

⁴⁴Gregory, R., op. cit., p.123.

extravagant extra, which is misleading: the Queen's Hall obtained a set of instruments (presumably three) and they were clearly intended as substitutes for slide trombones. Crediting Wood as his primary source of information, Forsyth describes the instrument in some detail (calling it the 'seven-cylinder-trombone').⁴⁵ To the modern way of thinking this coverage is disproportionate. What is made clear is that, at the time, the valve trombone in some guise or other was seen as a possible way forward; a solution to the deficiencies of the slide instrument.

In tone these trombones are massive and sonorous. Less biting and seemingly less brilliant than the modern small-bore Tenor, but much more flexible, much better adapted for chromatic work, for *cantabile*, and for unobtrusive part playing. Their apparent want of brilliance is possibly due to the fact that the players, not yet wholly used to their new technique, prefer the slide-instruments for their *bravura* passages...

It will be interesting to watch whether these instruments establish and maintain their position in our orchestras...A combination instrument, in which the slide is the main mechanism and a valve or valves are used in supplement, may possibly turn out to be the instrument of the future.⁴⁶

However the experiment was shortlived, probably not least because the unfamiliarity of the valve arrangement was unpopular with the players.

Whatever the precise reasons for and success of the venture, the mere fact that Wood (and presumably Forsyth) recognised a need to try these instruments prompts the supposition that

⁴⁵Forsyth, C., op. cit., p.144-6.

⁴⁶Ibid., p.146.

perhaps slide trombone playing of the time was not all that might have been desired. It is in consideration of what might be termed slide articulation that this very briefest of appearances which the valve trombone made in England may lead to interesting conjecture regarding performance practice. For there is a not uncommon perception that during most of the first half of the twentieth century, slide technique on the narrow instrument was somewhat different to that which is expected today. The role dictated for the trombone by orchestral repertoire of this period entailed executing block chordal work, rhythmic interjection and counterpoint and - where thematic material was presented - in a generally detached, *marcato* style. This last facet the players seem to have developed as their principal, almost exclusive, mode of articulation; sustained playing and a more moderate form of attack appear to have been rare extensions to trombonists' vocabulary.

It must not be overlooked that the special drawback of the present-day Trombone is its aversion from a *forte sostenuto*. The note as a rule barks out and then dwindles down to a *mezzo-piano*. The noble manner of holding a note *forte*, but not so *forte* as to be oppressive, seems to be almost a lost art.⁴⁷

Unfortunately, the quiet smooth legato method of using it is almost a lost art; having been nearly discarded for the coarse blare of the military player.⁴⁸

As will be seen, the trombone solo in Ravel's *Bolero* (1927) was to be quite revolutionary in demanding an unfamiliar

⁴⁷Ibid., p.138.

⁴⁸Stone, W.H., 'Trombone', Grove ed. Fuller Maitland, 1910, vol.v, p.164.

style of playing from orchestral trombonists; Mahler's third symphony, with its important solo trombone passages marked *Sentimental* and *espressivo*, simply was not performed in Britain until after the second war. Occasional passages such as those found in Rimsky-Korsakov's *Russian Easter Festival* overture, evoking a plainchant style - slow moving and in step-wise motion, presented an unfamiliar challenge. So much so that Holst (who had been a trombonist himself in the Carl Rosa Opera Company), writing in a similar vein in *The Hymn of Jesus*, indicated particular slide positions and wrote a note on the score telling the player to avoid smearing. Furthermore, among those who have memories of hearing the older players before the 1950s there is the belief that, in *legato*, they tended to 'slew' between notes when a slur fell on the slide.⁴⁹ A *legato* style was perhaps more regularly encountered in the theatre or music hall, where its character was held to be less dignified. In such circumstances a 'slewing' between notes may have been tolerated or even stylistically *de rigueur*. The same may be said of solos in the brass band world where the trombonist tended to ape the sentimentality so effectively elicited by the more usual cornet soloist (that is where a lyrical style was attempted i.e. when not in 'Acrobat' mode). The number of times trombone effects are referred to as 'circusy' by writers of this period almost leads one to believe that there was even a performance practice particular to the big-top!

⁴⁹Wilson, A., interview with SGB. Wick, D., 'Legato - home and abroad', *The Trombonist*, British Trombone Society, London, Autumn 1991, p.5.

It is easy to attribute what today would be regarded as sloppy technique to a spill-over from these 'lower' performance genres, but recent work on early recordings by Robert Philip puts this matter into a thought-provoking context: string players of the first decades of the twentieth century used little or no vibrato but did frequently use *portamento*, often arranging their fingering to allow a slide between positions.⁵⁰ While this was often carefully and tastefully organized by soloists and chamber players, orchestral sections rarely had the time in rehearsal to decide upon unanimous fingerings with the result that individual players would often slide at different times. It seems that to an extent the same applied to bowing.⁵¹ Now admittedly there is much more scope for excursion into the realms of bad taste with trombone *portamento*, but since the effect was an accepted component of orchestral vocabulary it may not have appeared so gruesome if effected with subtlety. Forsyth prefers to assert that there is 'no true *legato* on the Trombone at all' and advocates what can only have emerged as slightly detached playing in order that a 'distressing *portamento*' be avoided; he does add, using an analogy with string playing, that a skilfull player can disguise the

⁵⁰ Philip, R., *Early Recordings and Musical Style*, Cambridge, 1992, p.143-205. By the 1930s the trend had started reversing: more vibrato and less *portamento*.

⁵¹ Ibid., p.180:

In the 1920s, concert-goers in Manchester 'were so startled with the stark discipline of the strings of the Berlin Philharmonic when they visited the City under Furtwangler that they could not hear the music for watching the up-and-down together of the bows'.

'moment-of-silence' between slide positions in the very quietest dynamics.⁵²

Nonetheless, that early twentieth-century England was devoid of the sophisticated slide technique we take for granted today is nowhere better illustrated than in Forsyth's description of the the *Tuba Mirum* from Mozart's Requiem as 'dreadful', 'only the first three bars appear to have been written by one who understood the instrument'.⁵³ Whether the passage in question is un-trombonistic is debatable but it is clear that it was beyond players of the period (another writer of the time finds it a 'fine and characteristic Trombone Solo' but observes that it was often given to the bassoon) whereas it can be managed quite effectively today.⁵⁴

⁵²Forsyth, C., op. cit., p.138. Prout gave a similar opinion (op. cit., p.227).

⁵³ Ibid., p.149.

⁵⁴Stone, W.H., 'Trombone', Grove ed. Fuller Maitland, first edition 1910, vol.v, p.165.

The tuba in France and Britain

By 1897 Prout was able to write that the ophicleide was 'only exceptionally to be met with, being now almost entirely superseded by the tuba', that the keyed brass were 'almost obsolete', and that it was not possible to find serpent players in London any longer.¹

Although a preference for tubas in F dates from the introduction of the instrument to the orchestra in the mid-nineteenth century, and this length of tuba was to be used as much in twentieth-century England as anywhere else, around the turn of the century the popularity of Sax's instruments offered an alternative pitch: the *saxhorn-contrabasse* was only built in Eb and, in smaller volume, in BBb. The British firm of Boosey continued to make tubas along Sax lines after they had bought out H. Distin's firm in 1868 (Distin had popularized Sax's designs on this side of the channel).² The Eb and, to a lesser extent, the BBb instruments became well established in British military and brass bands, from whence came a not insignificant number of orchestral tubists around the turn of the century.

Prout is quite clear about the tuba's affiliation to the saxhorn family and states that it is made in three sizes: the

¹Prout, E., *The Orchestra*, London, 1897, vol.ii, p.214 and p.242.

²Mathez, J.-P., 'Boosey and Hawkes; a spectacular revival', *Brass Bulletin*, No. 85, 1994, p.80.

euphonium (in Bb), the bombardon (in Eb) and the contrabass tuba or bombardon in Bb (BBb in modern nomenclature).³

Nowhere does he mention a tuba in F. Bevan finds that 'on the evidence of orchestral photographs the instrument [Eb tuba] appeared quite often' (one such photograph taken in 1904 and sourced from the London Symphony Orchestra archive turned up in a popular music magazine recently).⁴ The earlier significant distinctions between bass tubas of the original Wieprecht-Moritz pattern and saxhorns and miscellaneous bombardons were more or less eroded by now; even Moritz had designed a bulkier instrument.

There was an advantage to the Eb pitch over the F: brass band players used to reading treble clef parts, imagining an orchestral bass clef part to be in the treble clef (as it would appear in the bandroom) with three accidentals in the key signature sharpened (hence Eb major becomes C major and G major becomes E major) are able to render the part correctly. Such basic matters may have been of some importance in the early days of the tuba's life in British orchestras - as Prout points out, 'the tuba is not a *regular* constituent of the orchestra, in the same way that the trombones are' and it can scarcely have been worth an individual's while to devote himself solely to orchestral tuba playing.

³Prout, E., op. cit., p.235.

⁴Bevan, C., *The Tuba Family*, London, 1978, p.167. The photograph of the trombones and tuba of the newly formed L.S.O. appeared in 'First among equals', *The BBC Music Magazine*, September 1994, p.27. A G bass trombone with a thumb switch to D held by one of the players is also of interest.

Although in modern times excellent practitioners can be found on all instruments in brass bands, in the earlier part of the century the best players would gravitate towards the 'corner' solo positions of cornet, euphonium and trombone. Thus the progression from euphonium to orchestral tubist would, by-and-large, have been more likely and according to Bevan this was born out in practice; furthermore the same writer convincingly argues that the euphonium was often used as a standard orchestral tuba, especially where an ophicleide part was to be played.⁵ A very close imitation of an early orchestral tuba in F was also possible by depressing the fourth valve, which put the instrument into F (D.J. Blaikley's four-valve compensating system had been available since 1874).⁶ The euphonium was evidently quite popular; Holst and Henry Wood wrote for it rather prominently.

It is entirely reasonable that a smaller instrument seemed more appropriate in those countries where the ophicleide had been retained longest and where narrow-bore trombones were commonly found, namely England and France.

However, in France the euphonium was not used. Instead a highly original and distinguished instrument came into being. The *Petit tuba Français en ut* was pitched a tone above the euphonium and, in its ultimate form, had six valves (earlier

⁵Bevan, C., op. cit., p.159 and p.166/7.

⁶Daubeny, U., *Orchestral Wind Instruments Ancient and Modern*, London, 1920, p.112.

versions had four and five valves).⁷ This six-valve instrument of similar stature to the euphonium became characteristic during the period under present discussion and remained so well into the second half of the twentieth century, many examples being made by Besson. Its great agility and remarkable range were put to good use by Debussy, Ravel and, notably, Stravinsky writing for Diaghilev in Paris. Such composers' scores often prompt the erroneous assumption that French tuba players used more than one instrument, or - as is usual modern practice in perhaps the most famous instance, 'Bydlo' from Ravel's *Pictures at an Exhibition* orchestration - that two players were employed: one to play the high solos on a euphonium or baritone and another to plumb Wagnerian depths (not that French composers didn't exploit the lowest part of the compass too).⁸ All the small C tuba lacked was the great weight below the stave necessary to underpin German scoring, but it served the more transparent and colour-sensitive French palette admirably.

Given the broadly similar orchestral environments into which the tuba was introduced in England and France (both countries shared a tenacious affinity with the ophicleide and the rest of the brass tended towards a lighter, brighter sound than was common elsewhere) it is interesting to note the two

⁷Bevan, C., op. cit., p.154. Baines, A., *Brass Instruments*, London, 1976, p.258.

⁸As Bevan points out (op. cit., p.147), it is not unusual to find two tuba parts in French scoring, as in Stravinsky's *Rite of Spring*, but even then both tubas have to cover a wide range. This probably had its origin in Berlioz's use of two ophicleides.

countries' different approaches to the problem: true to the Gallic penchant for progressive technology, the French invented a new and versatile instrument; the conservative English compromised with existing equipment.

Into the second decade of the twentieth century the compromise deepened.

Unfortunately for the playing of ordinary concert-room "Tuba-parts" in this country, composers as a rule have to be satisfied with a makeshift. This is an instrument derived from the Military Eb-Tuba..., but built - mainly for reasons of key-convenience to the player - one whole tone higher in F.⁹

Admittedly tubas pitched in F had been used before this time: in 1895 one J.H. Guilmartin is recorded as having played a five-valve F tuba made in 1887 on the instruction of Hans Richter who preferred it to the ophicleide.¹⁰ However, this was probably something akin to the original Wieprecht-Moritz tuba which Richter would have been used to in Germany.

In a footnote Forsyth qualifies his dissatisfaction with the 'unsatisfactory makeshift' thus;

One of our most artistic Tuba-players, Mr. Barlow, plays on a large-bore five-valved Tuba-in-F. In his very original system the five valves represent additional tube lengths of 1/2, 3/4, 1, 2, and 2 3/4 tones. His results are extraordinarily fine.¹¹

⁹Forsyth, C., *Orchestration*, London, 1935, p.156.

¹⁰Bevan, C., op. cit., p.167.

¹¹Forsyth, C., op. cit., p.157.

Harry Barlow played for the Hallé Orchestra from 1894-1929 but it was not until the 1930s that Besson started making instruments to his design and these have been acknowledged to be the best F tubas ever made in Britain.¹² Up until the Barlow tuba's widespread availability one can only assume that concert-goers might equally have heard the euphonium, the Eb tuba or an imperfect version of the same in F - depending on who the player was and what music was to be played. Ulric Daubeney, writing in 1920, still specifies the tuba as being in Bb (the euphonium), Eb or BBb at the head of his section on the tuba (i.e exactly as Prout did twenty three years earlier).¹³ However, later in the text he adds that saxhorns are 'sometimes found in F', chiming with Forsyth's 'makeshift'.¹⁴ Strictly speaking, an instrument in F cannot properly be a saxhorn as Sax never made one in that key. Nevertheless the description corroborates the existence of some orchestral tubas related to the military Eb instruments, although they seem not to have been common - even by 1920. Use of the BBb tuba must have been rare in the orchestral world, despite Forsyth's recommendation that its employment in conjunction with a euphonium might be the best arrangement of all.¹⁵

Daubeney also finds the tuba unsatisfactory, for in its most usual partnership with the trombone section 'the tone does

¹²Bevan, C., op. cit., p.167. Bevan reports that Barlow was reputed to have advised Elgar on tuba writing.

¹³Daubeney, U., op. cit., p.109.

¹⁴Ibid., p.113.

¹⁵Forsyth, C., op. cit., p.157.

not blend well, and it is besides prone to become too powerful.'¹⁶ This is especially understandable if one considers that the Eb tuba may have sat alongside narrow-bore trombones. The view contradicts Prout's 'It blends admirably with other brass instruments' but doubt has already been expressed above about the type of the trombones he describes, so the comparison may not be valid.¹⁷ The weight of modern opinion tends to side with Daubeney and yet neither Daubeney nor modern opinion seem particularly familiar with Barlow's improved version of the F instrument, which - as some sort of middle ground between the euphonium and the Eb bass - must have been as close as the British tuba tradition has got to the appropriately light-toned versatility and range of the French C tuba. Notably, it fully arrived some decades later than the French instrument.

As a footnote to this section on the tuba, the performance of Wagner's *Tuben* parts is worthy of mention. It seems that, in England at least, Wagner's rather special invention was ignored: Prout lumps Wagner's instruments in with his discussion of the tuba and calls them 'similar in character and tone-quality to the tuba', which is misleading.¹⁸ Daubeney is much more accurate on the nature of the instruments but adds;

¹⁶Daubeney, U., op. cit., p.114. This echoes what is said by Forsyth (op. cit., p.159).

¹⁷Prout, E., op. cit., p.236.

¹⁸Ibid., p.239.

As a matter of fact, the Wagner tubas are seldom, if ever, met with in England, their place usually being taken by tenor horns or euphoniums.¹⁹

Forsyth confirms that the wrong instruments were commonly used and that they were 'in most countries, taken away from the Horn-players and handed over either to military Saxhorn-players or to Trombonists.'²⁰ According to Anthony Baines the practice of giving these parts to trombonists using saxhorns persisted until Sir Thomas Beecham introduced the correct German instruments, to be played by horn players, around 1930.²¹ Bernard Shaw once reported hearing a euphonium substituted for an absent second trombone at one of Richter's concerts, so it seems that matters of instrumentation were sometimes interpreted rather flexibly anyway.²²

One final distinction that British and French tubas and saxhorns shared by this time was of shape: all instruments had top piston valves (i.e. upward facing) played by the right hand with the bell and the bulk of the instrument to the player's right. German derived instruments have always been built the other way round with the right hand operating valves (usually rotary) lower down the instrument and a left facing bell. Furthermore, fourth valves have always been

¹⁹Daubeney, U., op. cit., p.113.

²⁰Forsyth, C., op. cit., p.153.

²¹Baines, A., op. cit., p.265.

²²Bernard Shaw, G., 'Richter Waxes Stout', *Dramatic Review*, 31 October 1885 (*Shaw's Music: the Complete Musical Criticism of Bernard Shaw*, ed. Dan H. Laurence, London, 1989, vol.i, p.380).

positioned for the left hand in France and Britain whereas the right hand little finger is used on German models, the left hand often being used to adjust a tuning slide at the top of the instrument. These differences date back to Moritz and Sax.

II. GERMAN VARIANTS

The German horn (the double horn)

Henri Chaussier, a renowned French hand-horn soloist of the latter half of the nineteenth century, when engaged in a Berlin orchestra found he was required to follow the German practice of playing everything on an F valve horn. He was used to using the appropriate crook (and, no doubt, predominantly hand-horn technique) and was therefore faced with transposition.¹

There were occasional exceptions though. Had Chaussier been playing in the Berlin Opera orchestra some years later he might have felt more at home: according to Forsyth this institution became a rare model of authenticity in a widely mechanized Germany.

In Berlin, where the chief Opera house is "patronized" not only in a social but also in a financial sense by the reigning monarch, this is the practice. A set of Hand-Horns is provided for orchestral purposes, and the rule is, Valve-Horns on a *Tristan* night, Hand-Horns for Glück, Mozart and Beethoven. The players have a fixity of tenure, and a certain necessary amount of leisure, which permit them to nurse their embouchure and adapt it to the varying conditions of performance. In London, where a brilliant artist may be rehearsing a Symphonic Poem of Strauss in the morning, playing a Mozart Symphony in the afternoon, and blaring out pantomime-music in the evening, no such ideal results can be expected.²

¹Morley-Pegge, R., *The French Horn*, London, 1973, p.63. His difficulties led him to design the Chaussier omnitonic horn discussed in the previous chapter.

²Forsyth, C., *Orchestration*, London, 1935, p.118.

That 'ideal results' were not widespread in Germany either is born out by contemporary reports. Henri Kling advocated the continued study of natural horn techniques even though the chromatic valved instrument was the norm. He warned against exclusive use of the valves:

Thus he can achieve total mastery and command of the chromatic horn, an instrument which is so beautiful and unique which, however, so many mediocre horn players in modern times have brought into disfavour because of their trumpet-like or piston-like handling of it, causing them to totally sacrifice its beautifully mellow tone, its nobility and majesty of expression, intimacy of feeling and natural charm and grace.³

Whereas the crudities of the nascent valve-horn made the French recoil into an entrenched favouritism for the hand-horn which persisted to the end of the century, in Germany the new technology had been used widely and by the beginning of the twentieth century was well established. Even Brahms, an arch-traditionalist in this matter who had played in the Vienna Waldhornverein and called valve-horns *Blechbratschen* (tin violas), was accustomed to hearing them.⁴

The most conspicuous characteristic of the German horn, caused by its internal profile, is its sound. The term 'German horn' is here used rather loosely (as indeed is the description 'German', used to denote practices in German-

³Kling, H., *25 Studies* (1881), cited in Bracegirdle, L., 'The New York school; its development and its relationship with the Viennese style', *Horn Call*, April 1984, vol.xiv no.2, p.23.

⁴Tarr, E., *The Trumpet*, London, 1986, p.164.

speaking lands throughout this chapter); there are variations within the central European tradition - but it is a useful term denoting horns of larger bore than the French horn.

The German instruments have very little resemblance to our own. Their tone-quality we should regard as more suitable to the Euphonium. It is somewhat coarse, thick, and "open". In lightness and brilliance they are inferior to the true French horns. The explanation is to be found in the bore and mouthpiece of the German instruments. It must be added that they are much easier to play. Both tonal and executive control seem to be acquired without much difficulty. The Germans appear to be unaware of the instrument's deficiencies both in elegance and lightness. This is perhaps mainly a matter of custom, though it is surprising that in America some of the finest orchestras should deliberately prefer German to French or English players.⁵

German horns have often been described as 'wide bore' in comparison with the French counterpart. This is a useful generic description and is - by-and-large - accurate enough, but the term should be used with care: of the three parts that make up a horn the first and last increase in diameter with their length (approximately exponentially) and the central valve section and connected slide tubing is cylindrical. In many German horns this cylindrical portion is wider than in the classic Raoux model - up to 11.5mm in instruments of this period (compared to 10.8-11mm).⁶ However, what tends to be more important to the sound of the instrument is the profile (rate of expansion) of the two other parts, namely the leadpipe and the bell section. In particular, the bore of the last third of a German horn's

⁵Forsyth, C., op. cit., p.109 (footnote 2).

⁶Baines, A., *Brass Instruments*, London, 1976, p.221. Robin Gregory (*The Horn*, London, 1969, p.40) cites 0.46 inches (11.384mm) as typical.

tubing expands more rapidly to a wider bell throat. The bell itself may also be wider. The fine judgement of the bell's conicity is one of the most crucial aspects of the manufacturer's art and is often based upon mathematical formulae. The matter is complicated by the fact that the central cylindrical section may be placed varying distances from the mouthpiece end. Furthermore the proportion of the horn's length that the bell section constitutes varies as valves are depressed (and hence the total length changes); thus there is no ideal solution and the most satisfactory proportions are, necessarily, a compromise.⁷

The widespread use of mouthpieces somewhat different to the classical French 'conical' pattern also contributed to the characteristic German sound. A distinct throat and backbore combined with a shallower cup (concave internal shape rather than convex) assisted with the high register as well as affecting the timbre and response of the instrument.

The Vienna horn, or *Wiener Pumpenhorn*, has always been quite distinct from the German type by virtue of special bore and conicity characteristics. A long, narrow leadpipe (nearly half the instrument's length, as opposed to under a third in the case of the German horn) typically leads into a central cylindrical section of about 11mm in cross-section

⁷For more detail see Gregory, R., op. cit., p.38-45 under 'The shape of the tubing' and 'The scale of the horn'.

(i.e. of the same order as the French horn).⁸ However, in the bell section, the bore flares abruptly according to traditional Bohemian *Waldhorn* dimensions. Although terminal crooks in different keys were originally available, Vienna hornists, as a matter of pride, used the F crook almost exclusively making only occasional recourse to a Bb tube for exceptionally high work. The valves remained of the same variety that Uhlmann had introduced around 1830 - twin cylinders introducing 90° angles into the tubing together with a slight constriction in the bore.⁹ While these Vienna valves are far from mechanically efficient, the nature of the instrument's bore together with the use of a deep, wide-bored, narrow-rimmed mouthpiece gives a quite remarkable characteristic sound: 'The Vienna horn and style is premised upon an allegiance to the Waldhorn tradition. It has become a sort of benchmark'.¹⁰ Josef Schantl (1841-1902) and Karl Stiegler (1876-1932) established a Viennese school of horn playing exemplified by lyrical articulation and a tone of unsurpassed richness, graduating from a dark and blending *pp* to the most exciting of *fortes* and *fortissimos*. It has been argued that the Vienna horn gives a quintessential sound in the romantics.¹¹

⁸Fitzpatrick, H., 'Notes on the Vienna Horn', *Galpin Society Journal*, London, March 1961, p.49-51.

Mansur, P., 'Thoughts and Observations on Vienna and Vienna Horns', *Horn Call*, April 1984, vol.xiv no.2, p.45.

Merewether, R., 'The Vienna-horn - and some thoughts on its past 50 years', *Horn Call*, October 1984, vol.xv no.1, p.31.

⁹Merewether, R., op. cit., p.31.

¹⁰Mansur, P., op. cit., p.46.

¹¹Suppan, A., 'Das Wiener Horn und der Wiener Klangstil', *Brass Bulletin*, 1993, p.39.

The Vienna horn seems to have encapsulated a compromise of the qualities present in French and German horns. The German-bore horn is undoubtedly more favourably disposed towards a broad sound and as Robin Gregory writes so eloquently:

To the German the horn is, above all, the instrument of romance. It speaks to him of dark forests and mysterious glens; it raises its voice most characteristically in heroic fanfares and massive chorales. To him *der deutschen Waldhornklang* is the dark, rich sound which composers like Weber, Wagner, Bruckner and Strauss understood to perfection. In his general style, then, the German player places a high value on a full tone and large, far carrying sound.¹²

The German F valve horn with a wide-bore bell section served many orchestral situations well and was the basic instrument frequently found in central and eastern Europe and America throughout the early decades of the twentieth century.¹³

However, as the scale of romanticism in nineteenth-century orchestral music moved on from Beethoven, Weber, Mendelssohn and Schumann to Wagner, Strauss, Bruckner and Mahler horn players found themselves coping with newly delineated horizons. The demands of endurance were unheard of hitherto, those of range and agility often extreme and exceptional. Friedrich Gumbert (1841-1906), the renowned first horn of the Leipzig Gewandhaus, was quoted as having attributed his retirement to composers like Wagner, Strauss and Mahler who 'really require a little motor in the horn to play the

¹²Gregory, R., op. cit., p.155.

¹³Baines, A., op. cit., p.220-1.

parts'.¹⁴ It is therefore not surprising that players, in conjunction with manufacturers, felt the need to act in an attempt to restore a near-level playing field. German orchestral players in the first and third chairs (thus encountering the highest tessitura) started resorting to a horn pitched in Bb alto in the last quarter of the nineteenth century. According to Anthony Baines such instruments had been in use in military bands since the first half of the century.¹⁵ In the high register the harmonics of the F horn lie treacherously close together ('almost any note in the highest register can be obtained with almost any fingering on the F horn') and using the shorter Bb tube-length, harmonics in the same pitch range are more widely spaced.¹⁶ However, while aiding the execution of the correct notes, the Bb horn was new and unfamiliar to players trained on the traditional F instrument.

This was ideal for sureness of attack and ease of execution, but these advantages were, in the majority of cases, more than counteracted by poor tone quality and doubtful intonation. Many of the old conductors - among them Reinecke (1824-1910), of the Gewandhaus, and von Bülow (1830-94), of Hamburg, Berlin etc., - would not countenance in orchestras they conducted the use of the B-flat horn, with its comparatively thin, harsh tone, unless the composer demanded it. It was only after such excellent specialists as Preuss in Frankfurt had demonstrated its advantages that it began to win general acceptance.¹⁷

¹⁴Morley-Pegge, R., op. cit., p.113 and p.120 (as remembered by Anton Horner, a pupil of Gumbert's).

¹⁵Baines, A., op. cit., p.224.

¹⁶Gregory, R., op. cit., p.84.

¹⁷Morley-Pegge, R., op. cit., p.115. Anton Horner is cited as the source of information about these German conductors' attitude (p.120, footnote 37).

Franz Strauss is reported to have used a horn crooked in Bb for private performances of his son Richard's first horn concerto.¹⁸

As was discussed in the previous chapter, German instruments had a fixed mouthpipe and were 'crooked' on the tuning slide and hence in the central cylindrical section of the instrument (as with the *Inventionshorn*). The crooks proper used elsewhere (France, England and Vienna à la *cor d'orchestre*) meant that the leadpipe could be tailored to the particular length of tube given by the crook. Perhaps more significantly, having already a fixed mouthpipe, the idea of using valves to bring in extra lengths of cylindrical tubing in the central section may have appeared more obvious and acceptable in Germany; the *Inventionshorn*-based instrument adopted three valves more readily than its terminally-crooked cousins and it is not surprising that the same applied to the introduction of a fourth valve.

A duplex instrument offering F and Bb sides under the control of a thumb valve was an obvious solution, facilitating a judicious mix of the two tube lengths as conditions demanded. Just as the introduction of the valve several decades earlier had presented the possibility of instantaneous crook changes to the hand horn player, a fourth valve gave the chromatic F horn player access to another shorter instrument, more secure

¹⁸Del Mar, N., *Richard Strauss: a Critical Commentary*, London, 1962, vol.i, p.20.

in the high register. Significantly the player could at any time elect to use either length of horn and no conductor or other critical listener at any reasonable distance had a visual cue as to what he was doing. It was a nephew of Friedrich Gumbert, Edmund Gumbert, who collaborated with Fritz Kruspe of Erfurt in the production of the first double horn in F and Bb. These Kruspe double horns, available from around 1898, were built to the compensating system (the thumb lever actually operated two valves whose movement was synchronized by a rod, a somewhat clumsy mechanism).¹⁹ This is the very same principle that was discussed under the heading 'French horn' in the first half of this chapter and the technology for such a development had thus been available since 1858, at the latest. By 1900 Kruspe had improved the mechanism of the thumb switch and the Berlin firm of Schmidt had introduced the idea of using a piston thumb valve mounted behind and transversely across the line of the three rotaries.²⁰

A rotary thumb valve designed by Alexanders of Mainz in 1909 allowed two completely independent sets of valve slides (one set for the F horn, another for the Bb) to be brought into play.²¹ This became known as the *full double* and

¹⁹Baines, A., op. cit., p.224 and Morley-Pegge, R., op. cit., p.51. The precise dates of the innovation are different in Morley-Pegge, R., 'The Evolution of the French Horn from 1750 to the present day', *Proceedings of the Royal Musical Association*, 1943, vol. lxix, p.52 but it is presumed that these dates were corrected in the later text (other sources back this up).

²⁰Morley-Pegge, R., op. cit., p.51.

²¹Archive material, Gebr. Alexander, Mainz and Gregory, R., op. cit., p.30.

facilitated the correct tuning of the slides for both pitches. It also resulted in an F side which was somewhat better than had been available on earlier compensating horns. Although, latterly, quality manufacturers have proved themselves capable of making fine compensating instruments (in short, the manufacture of valves has improved) the system has earned a downmarket reputation due to the large number of compensators made cheaply.²² The Alexander double horn, and similar instruments by other makers, became very popular and found favour wherever the German horn was used. It has been adopted as a benchmark for the type and has made Alexander the most well known horn specialists worldwide. In 1906 Alexanders had been the first to find a way of working seamless tubing.²³

Double and single horns (in both Bb and F, since there would still have been large numbers of these instruments around) must have been mixed fairly freely for the first two decades of the twentieth century. Of course it is most probable that the F length (either as a single horn or by the predominant use of the F side of a double horn) would have been employed by second and fourth players, and the Bb length (similarly, as a single instrument or by predominant use of the shorter side of a double) most likely to be found in the hands of principal or third chair players. Many combinations would have worked, with the one proviso that it is all but

²²Paxman, R., interview with SGB.

²³Duttenhoefer, M., 'Gebr. Alexander, Mainz 1782-1982', *Horn Call*, October 1982, vol.xiii no.1, p.30.

essential that the lower players, especially the fourth should have an F tube available to them.

In essence, the double horn emancipated German horn players: it allowed them to continue to make the sound they held as traditional while offering the necessary leg-up for the new, demanding repertoire. While the initial approach must have been to use the F side as much as possible - for its sound - and switch to Bb for the high register, the added fingering and tuning possibilities afforded throughout the range cannot have gone unnoticed. The temptation to revert to the safer Bb side in a greater number of instances when the pressure was on should not be ignored either. The new dimension to horn technique, which turned on its head the orthodoxy of the previous era, was the endeavour to match the sounds of the two different lengths of horn as closely as possible; formerly the distinct sounds of respective lengths of crook were prized. For these several reasons it is here, with the introduction of the double horn, that the inveterate traditionalist finds the seeds of a case arguing the degradation of horn sound: the keys of F, E, Eb and D had been chosen in the classical era for the beauty of their sound and now it became necessary to match the F horn with increasing amounts of Bb alto horn, a length that Domnich had described as 'shrill'.²⁴

²⁴Gregory, R., op. cit., p.44. Domnich (1767-1844) was a famous teacher and player who had studied with Punto. A native Bavarian, he went to Paris and is best known for his *Méthode de Premier et de Second Cor*.

The double horn was used in other European countries, indeed wherever the French horn (and Vienna horn) had no stronghold. Most notably, as Forsyth's comment above reveals, it gained favour in America. In the early years of the twentieth century many foreign players were imported to the big American symphony orchestras.

The German horn was adopted in American orchestras mainly because in their early stages these orchestras employed German or German-trained players.²⁵

Just before World War One the Boston Symphony Orchestra horn section comprised Bruno Jaenecke, E. Miersch, M. Hess and E. Hübner. Jaenecke used an Alexander double from 1913 and later went to the New York Philharmonic. Willem Valkenier, who played Schmidt and Kruspe doubles, and a Bb single for long Wagner operas, had been principal horn at the Berlin Opera since 1914 under Richard Strauss but moved to Boston in 1923 and continued through the Koussevitzky years until 1953.²⁶

However, a Bohemian-born Philadelphian who studied with Friedrich Gumbert at the Leipzig Conservatory was to prove the most influential of the German horn players in America: Anton Horner joined the Pittsburg Symphony in 1899 before becoming principal in Philadelphia in 1902. He stayed with that orchestra until 1946, playing for Carl Pohlig, Leopold

²⁵Gregory, R., op. cit., p.42.

²⁶Yancich, M., 'Willem Valkenier - a profile', *Horn Call*, October 1983, vol. xiv no.1, p.51-55.

Stokoswki and Eugene Ormandy and taught many of the next generation of American first horns. His direct influence on pedagogical techniques and instrument design was considerable and it is worth quoting him at length as a commentary on many of the developments which took place at this time:

My lifetime spanned the transition from very simple horns to the more sophisticated instruments... Gumpert had me study for several months without valves to teach me the old hand horn playing... with crooks to change from high Bb to low D horn as required in the time of Beethoven, Haydn and Mozart.... A fellow student played a Schmidt horn with slides to change up to Bb. This was a much better horn than mine; it had quiet and smooth-acting valves - something new in those days. After my graduation and return to Philadelphia, I imported a Schmidt horn. I liked it very much, but eventually a friend wrote to me about an F horn made by Eschenbach. He praised it for its fine, large tone quality... I sent for one of these instruments... and laid the Schmidt aside, using it only for special occasions where I needed a high horn. I played my first audition [1899 for the Pittsburg job] on my big Eschenbach, a single F horn...

Meanwhile I read in a German magazine that a nephew of Gumpert had invented a double horn, which was being manufactured by Kruspe. I ordered one and used it for the first time in my fourth Pittsburg concert... For the first concert the 'Im Walde' symphony by Raff was on the program. For this my Eschenbach was fine. The second week featured Beethoven's second symphony. This (true to my Gumpert teaching) I did not risk on my Eschenbach, but used my Schmidt with the A slide for the slow movement... Later that summer I went to the Kruspe factory in Erfurt... Kruspe had heard of Schmidt's new patent and since Kruspe's two-valve affair was rather temperamental in operation, he got busy and invented the valve that, with minor changes, is on his horn today. Then I ordered a new horn, with this new valve, and told him that I preferred a much larger bell with a small rim, and also string valves. I liked this new horn...

The first German silver horn he sent to me was the one I used until my last day in the Philadelphia orchestra... That horn, with a large bell and small rim, and string valves, became the 'Horner' model, which Kruspe himself named, not I.²⁷

²⁷ From Horner's autobiography, quoted in Bracegirdle, L., 'The New York School; its development and its relationship with the Viennese style', *Horn Call*, vol.xiv no.2, p.19-20.

The Kruspe ceased to be made after World War Two, but in 1936 the Conn 8D - destined to become one of the most popular American horns - came onto the market and this was designed as a very close copy of Horner's instrument.²⁸

Horner played and taught a lot of F horn on the double instrument, passing on Gumbert's principles. Lee Bracegirdle, himself a pupil of James Chambers (New York Philharmonic principal horn 1946-69) who was in turn taught by Horner, describes the essence of the man's influence thus:

Anton Horner... brought to America the use of a large bore horn with a large bell and leadpipe, as well as a characteristic Austrian mouthpiece with a very deep cup, a large hole and a thin rim... [He taught] fundamental studies for a long time, establishing a solid low register and breath control... Every aspect of their [Horner and Chambers] teaching is geared towards producing a large, full, dark, rich tone quality with liquid slurs and an extremely large dynamic range. In order to achieve this Horner insisted that his students use the Bb side only in the highest register, remaining with use of the F horn up to the note Eb (concert Ab). Chambers...changes at C#.²⁹

Through his widespread teaching activities, Anton Horner generated what has become perhaps the most characteristic school of American horn playing. He was also the first principal in an American orchestra to ask for an assistant (known as a 'bumper' in England) and this became a permanent position in Philadelphia in 1909. Other major orchestras soon followed suit.³⁰

²⁸Ibid., p.20. Also, Arthur Berv's Kruspe was reportedly dismantled in the process of designing the Conn 8D.

²⁹Ibid., p.17. Gregory, R., op. cit., p.45 corroborates Horner's use of the Bb side for only the highest register.

³⁰Ibid., p.19.

The successful manufacture of double horns with effective valves was a technological milestone; an indication of the extent to which the travail of the nineteenth-century inventors had born fruit and, in combination with pressure from composers (perhaps initially and most notably, Wagner) brought the orchestra into the twentieth century. The valve could truly said to have been conquered. So much so that manufacturers had the confidence to add fourth valves to single horns and even fifth valves to singles and doubles without fear of noticeable degradation to the integrity of the instrument: a semitone extension became available on single horns lowering the pitch to A or E, which often facilitated fingering in sharp keys and could be extended further (by means of slide or a further switch) to act as a stopping valve; alternatively a single Bb horn could be furnished with a long F extension which gave all the open harmonics of the F horn.³¹ Lorenzo Sansone, a New York horn player, had a five valve single Bb horn made by Wunderlich of Chicago in 1914 which had A/stopping and F extensions.³² This design was taken up by Kruspe, Alexander and other

³¹The often misunderstood matter of the effect of full hand stopping on the pitch of a horn is unravelled, definitively in this writer's opinion, by Richard Merewether (*The Horn, the horn...*, Paxmans, London, 1979, p.40-43). In practice, an extension of 23 cms compensates for the pitch change for 'ANY HORN AT ALL', whatever its length. The F extension was primarily intended for the open notes of the F harmonic series but it went some way towards filling in the missing notes at the bottom of the single Bb horn's register, even if valve slides had to be pulled out or alternative fingerings used to achieve acceptable intonation.

³²Morley-Pegge, R., op. cit., Plate VIII No. 2.

makers later, becoming known as the Sansone model.

It is worth saying here that by the first few years of the twentieth century, small horns pitched in F alto were being used in Germany for the very highest Bach and Handel parts.³³ This length of horn will be discussed in chapter five - it has found some favour more recently.

³³Baines, A., op. cit., p.226.

The rotary-valve trumpet

As was established in the previous chapter, the valve trumpet was adopted early in Germany. There was no slide trumpet tradition comparable with that in England and France and the cornet was not taken seriously in orchestras; as Berlioz noted, even French music which was scored for two trumpets and two cornets was played on four trumpets. Richard Strauss thought the cornet 'an abomination'.¹ It is notable that those players of teutonic origin who gained a reputation as cornet soloists (Vincent Bach and Kosleck, for example) did so touring abroad. Furthermore, the fact that the valve trumpet was accepted at mezzo-soprano pitch (i.e. Bb or C) in Germany well before it was elsewhere, negated most of the advantage offered by the cornet. The affirmation of Bb or C instruments as the convention during this period, leaving longer instruments behind, was undeniably the result of new demands, imposed mainly by Mahler and Richard Strauss.

Despite the comparative modernism of the late nineteenth-century German response to these obvious changes in the nature of orchestral trumpet playing, history records a familiar transitional tale where performers and composers seem to have been less than unanimous in their approach. This was by no means resolved by the turn of the century. Many composers continued to write trumpet parts in F (or even in lower keys related to the tonality of the music) with

¹Tarr, E., *The Trumpet*, London, 1986, p.168.

either no concern for what sort of instrument should be used, or a conservative traditionalism unsupported by an ability to discern the difference between the instruments: there are reports of players having Bb trumpets made to look like F trumpets (instruments either made with extra façade tubing or originally in F and then cut down) to satisfy the testing glances of composers and conductors and of such auditors expressing satisfaction, all the while being visually and aurally hoodwinked.² In 1906 Herman Pietzsch wrote

If all composers would carefully study the nature and qualities of the chromatic instruments, it would be all the better for the further development of orchestral technique... The manner in which some parts and scores are written proves only too often that the writer is not always acquainted with the nature of the instrument he is writing for, the result being impossible execution and bad effect.³

In his 1904 emendation of the Berlioz treatise, Strauss stated that second trumpeters still often played the F instrument (with crooks to Eb or D) while firsts used a C or Bb (with crook to A). Meanwhile he continued to score using the the old key/crook notation which was not intended to give any indication of what pitch of trumpet should be used. Mahler only ever wrote trumpet parts in F and Bb, and by his later symphonies only in Bb.

²Montagu, Jeremy, *The World of Romantic and Modern Musical Instruments*, London 1981, p.100.

³Pietzsch, H., *Die Trompete*, 1906, Revised Edition trans. by John Bernhoff-Liepzig, The University Music Press, Ann Arbor, Michigan. Pietzsch was a trumpeter from Dusseldorf whose method included studies and orchestral extracts and was popular in the first half of this century.

Although it seems abundantly clear, even today at some hundred years' distance, that by the turn of the century shorter trumpets had all but superceded the F instrument with crooks in Germany, composers continued to score as if it should still be used.

As late as 1920, Daubeney writes;

Many composers, however, still prefer to write as if for the trumpet in F, which, as has been pointed out above, in practice has almost entirely given way to the modern instrument in B flat... a B flat trumpeter having therefore to transpose at sight a fifth above the written notes.⁴

Tarr adds that it was principal players who went to the Bb first:

By 1870 the B-flat trumpet had apparently been taken over by the first trumpeters of the major orchestras of Germany, although some older trumpeters continued to play second and third parts on the F trumpet. Around 1900 a Dresden trumpeter (P.E. Richter) complained that many trumpeters learned only the B-flat trumpet.⁵

As early as 1881 Eichborn had suggested that the whole trumpet section should play Bb instruments.⁶ At an 1897 trade exhibition at Markneukirchen the Bb and C trumpets were described as *Orchestertrompeten* while only one F tpt was exhibited.⁷

⁴Daubeney, U., *Orchestral Wind Instruments*, London, 1920, p.88.

⁵Tarr, E., op. cit., p.170.

⁶Buckner, J., *Substitution of Trumpets in Orchestral Music: Origins, Development and Contemporary Practices*, D.M., Northwestern Univ., 1989, p.91.

⁷Baines, A., *Brass Instruments*, London, 1976, p.232.

Nevertheless, it is sometimes claimed, in a rather general way, that the F trumpet continued to be common into the twentieth century;

...specimens with a full complement of crooks are known to have been made as late as about 1870. Players, however, preferred to use one basic instrument and to transpose at sight, and the favoured one proved to be that in F. This remained the standard for orchestral use until about 1910, when a persistent tendency among modern composers to place the trumpet in a high *tessitura* brought the present Bb or C instrument into favour, albeit with some change in characteristic tone.⁸

This tends to misrepresent the situation in German-speaking lands and as has been discussed above, the F trumpet's use until about 1910 in the hands of a few English players serves almost as a postscript to its documentation. No doubt older players persisted with the F, most probably playing lower trumpet parts - as Strauss describes - but this was no longer the 'standard' instrument.

Tarr reports the astonishing fact that around the turn of the century, the Vienna Philharmonic trumpeters played French piston valve instruments in C by F. Besson (they had played Bbs before that). Apparently the rotary C trumpets traditionally associated with Vienna were adopted in the thirties.⁹ Thus it is possible that it was a French influence that brought the C trumpet to Austria. Although there seems to have been a movement towards the C pitch in Germany around this time too;

⁸Bate, P., *The Trumpet and Trombone*, London, 1978, p.228.

⁹Tarr, E., op. cit., p.171.

No great changes or improvements have been made in the last 5 years in the construction of brass instruments. The trumpet in high C is coming more and more into general use, as the demands on durability, powerfulness and high notes are constantly increasing. To prove the statement, the dreaded Zarathustra-Motive by Richard Strauss has been excelled by a voluntary trumpet-motive in the *Symphonia Domestica*...¹⁰

However, generally speaking it is the Austrians who have favoured the C trumpet and the Germans who have preferred the sound and weight of the Bb.¹¹

The Germans and Austrians seem to have gravitated towards the rotary valve by the turn of the century, having previously used pistons too. Although 'rotary valve trumpet' is a useful generic label, the valves' position is of more importance to the sound of the instrument than their type. In the standard German layout a short tapered mouthpipe leads straight into the first valve (as opposed to a longer mouthpipe folding back on itself and entering the third valve as described above in the Anglo-French section on the trumpet and cornet). The radii of curves in the tubing are wider than in piston trumpets and this, together with the fact that the way the valves are built lends the instrument to being held in a more horizontal plane, gives the instrument a more squat appearance.

Most sources and organological evidence indicate that the German rotary trumpet was, for most of the early part of this

¹⁰Pietzsch, H., op. cit., p.31. Tarr, E., op. cit., p.172 makes the same point and quotes the two Strauss examples.

¹¹Whitener, S., *A Complete Guide to Brass: Instruments and Pedagogy*, New York, 1990, p.16.

century, of smallish bore. It commonly had a larger bell flare than its piston-valved counterpart and at 10.3 to 10.7mm in the cylindrical section, it may have been slightly larger than the smallest French and English trumpets of the time, but this is still not as large as is conventional today.¹² The 'classic model' of German rotary trumpet, by Heckel of Dresden is described as follows;

The intrinsic tone quality has a golden quality unmatched by any other Bb trumpet... detached playing can be superlatively crisp while the legato is effortless and singing... This most beautiful of orchestral trumpets lacks, however, weight and power beside the massiveness of the other German brass; older musicians recall how a great opera conductor would be satisfied with the balance at the rehearsal knowing that the singers and others were reserving their full strength for the evening and assuming that the trumpets were doing likewise, though in fact they were giving their best and at the show no one could hear them... The weakest register of the old narrow-bore German trumpet is decidedly the low one¹³

Mahler had his own solution to this problem in the performance of classics where the weight of the older long trumpets was missing:

The B-flat trumpet has more projection and better accuracy in the high register than the old F trumpet, but at the same time it has a less full tone in the middle and low registers. Thus, with the transition to the B-flat trumpet, one above all gained the necessary certainty in the high register at the price of greater fullness of tone in the low register. As an important conductor of the day, Mahler, who thought that the multiplication of stringed instruments in the orchestra since Beethoven logically required an increase of the winds, had the trumpet parts in many classical works doubled, as for example in the final movement of

¹²Baines, A., op. cit., p.232 and p.234.

¹³Ibid.

Beethoven's Ninth Symphony. This doubling proved necessary, because the impoverished-sounding B-flat trumpet had already taken over in Mahler's time. In order at least to hint at the full tone of the old natural trumpet, which people at that time still remembered, a doubling of the parts was required.¹⁴

After a few years the German trumpet's bore typically became enlarged up to 11.3mm (still appreciably smaller than today's piston instruments), improving such balance problems without affecting its sound.¹⁵ Bate states that German players 'in general seem to prefer a slightly larger overall bore and a wider flare to the bell' (than piston instruments).¹⁶ While this was broadly true for the first decades of the twentieth century, it is misleading when applied to modern practice, as Bate does. More precisely, the short leadpipe and bell section are larger than in a piston trumpet, but the central cylindrical section is usually smaller.¹⁷

German practices exercised considerable influence abroad, though points of style and teaching methods seem to have travelled better than the rotary valve instruments which were rarely found outside German-speaking lands and Czechoslovakia. Tarr points out that it was two Germans, Wilhelm Wurm and Karl Zimmerman, who were the first trumpet tutors at the foundation of the St. Petersburg and Moscow conservatories; that Oskar Böhme and Wilhelm Brandt settled in Russia and became influential orchestral players, the

¹⁴Tarr, E., op. cit., p.170.

¹⁵Ibid. Tarr, E., op. cit., p.189.

¹⁶Bate, P., op. cit., p.42. A typical bell diameter of 5.5 inches is given on page 45.

¹⁷Whitener, S., op. cit., p.20.

latter being the senior to, but eventually succeeded by Mikhail Tabakov, the 'founder of the modern Russian trumpet school', at the Bolshoi Theatre.¹⁸ However, the cornet was also popular in Russia and was even accepted as a trumpet substitute in the finest orchestras - a most un-German characteristic.¹⁹ It was visits from the likes of Arban and Jules Levy that introduced this rather more French component to the Russian orchestral trumpet style and the close artistic links between St. Petersburg and Paris should not be overlooked in this context. From a late twentieth-century perspective, it seems that the Russian style is founded on an elemental amalgam, taking the excesses of both the German and French schools. Certainly, though, the eastern European preference for the Bb pitch can be seen as having been derived from German influence, and the weight and power so characteristic of Russian playing is not a French trait. By 1950 Vincent Bach was able to observe that it was almost exclusively the Bb trumpet which was played in Russia.²⁰

German trumpeters and playing styles had a similar influence in America, although again this was tempered by some degree of French personality - not least because of the widespread adoption of the Anglo-French style piston instrument once the cornet had lost its place in American orchestras.

¹⁸Tarr, E., op. cit., p.184.

¹⁹Timofei Dokschitser, a student of Tabakov, played the cornet in the Bolshoi Theatre until 1958 (Tarr, E., op. cit., p.185).

²⁰Bach, V., 'Do you know your brasses?', *Instrumentalist*, January-February 1950, vol.iv no.3, p.20.

The German trombone and tuba

As has been discussed in chapter two, during the second half of the nineteenth century German trombones increased in bore. While this trend does not seem to have been confined wholly to German-speaking lands, it was never reversed by the influence of the Courtois-type narrow-bore instrument, as was most notably the case in France and England. Consequently there was little change in the constitution of German and Austrian trombone sections in this period and the 'wider bore with a more sonorous sound' became characteristic.¹

The Bb/F duplex trombone, available almost since the invention of the valve, had become commonplace in German orchestras by the first years of this century and was known as the *Tenor-bass*.² The thumb valve was often built on the tuning-slide section so that the the F extension could be removed and replaced by a plain tuning slide.³ This instrument - particularly in the largest of bores - frequently substituted the traditional bass in F (or sometimes Eb), although this latter was by no means in universal use during the nineteenth century. The second player in a section often used a Bb/F trombone of slightly more modest bore. As Bate explains, the use of a wide bore in the Bb/F instrument improves the lowest pedal notes.⁴

¹Maxted, G., *Talking about the Trombone*, London, 1970, p.16.

²Bate, P., *The Trumpet and Trombone*, London, 1978, p.60.

³Wick, D., *Trombone Technique*, London, 1973, p.70.

⁴Bate, P., *op. cit.*, p.62.

While Berlioz, knowing the limitations of his indigenous trombones, used pedal notes with care (only ever descending to A or Ab), the German expectation that a true bass trombone range should be available to the third of the section meant that a wide bore was essential. Hence a predilection for a heavier, darker tone quality and practical necessity seem to have been complementary.

There are occasional accounts of valved bass trombones having been used in Germany around the turn of the century, although the valved trombone *per se* was apparently discarded there by the second half of the nineteenth century.⁵ The special difficulties (for both manufacturer and player) of the bass and contra-bass trombone registers may have provided justifiable reason for the continued use of certain valved instruments. When, in 1910, Daubeney suggests that 'the three-valved trombone is today more often than not used on the Continent', one can only assume that he was referring to common practice in Italian and Belgian theatres and opera houses - rather isolated exceptions and the only really consistent home for the valved trombone outside military bands (particularly when mounted) and jazz.⁶

⁵Baines, A., 'Trombone', *New Grove*, p.631. Also *Grove* fifth edition (1954) by the same author, on the evidence of one Constant Pierre who published *La Facture Instrumentale a l'Exposition Universelle de 1889* in Paris in 1890. Bate, P., *op. cit.*, p.233. '...by 1855 German players had in general reverted to the classic trombone'.

⁶Daubeney, U., *Orchestral Wind Instruments*, London, 1920, p.96.

Whereas the wider German bore favoured lower notes and a thick, sonorous tone, it made the high register somewhat more difficult. Hence high first trombone parts, particularly those originally written for an alto trombone (as in Brahms's symphonies, for example), continued to be played on the smaller instrument - typically in Eb - somewhat later than in France and England. As a broad generalization, it is accepted that the alto trombone fell into disuse in the orchestra. However, turn of the century performances of, for example, Mendelssohn, Schumann, Brahms and Bruckner - who all wrote for alto trombone - must have pretty well carried the instrument through to its limited twentieth-century renaissance (Schoenberg's *Gurrelieder*, Berg's *Wozzeck* and *Altenberg Lieder*, Stravinsky's *Threni* and Britten's *The Burning Fiery Furnace* all have alto parts); it could be argued that the instrument continued to be used throughout this period in some parts of Germany.⁷

Although today German-pattern trombones only survive in some orchestras in their native lands, the type had a profound effect in America and, indirectly, has proved the archetype for the modern trombone used almost universally worldwide.

In America... German and Bohemian influences had always been the strongest in music and except for a few isolated instances of French and Italian influence, the symphony orchestras used German-type trombones which became the basis of the designs adopted by the American manufacturing companies.⁸

⁷Denis Wick (Wick, D., op. cit., p.93) writes that 'In Germany the alto never completely disappeared'.

⁸Wick, D., op. cit., p.79.

Although trombones of this type [Courtois narrow bore] were the mainstay of American bands and theatre orchestras, players in symphony orchestras of that era used instruments of considerably larger bore and bell dimensions. This was probably a result of the strong German influence in American orchestras during the late 19th and early 20th centuries. Large-bore German trombones served as the prototypes from which the modern symphonic trombone was developed.⁹

At that period German ideas in wind-playing were influential in America, and German-style instruments were in demand.¹⁰

The welter of activity surrounding the design and use of chromatic brass instruments in Europe, particularly among the military, spawned a profusion of tuba-like variants. If there was little standardization of orchestral practice in England, the situation on the continent can hardly have been better.

Hence comes great confusion in the mind of the orchestral student. He knows that when he writes a fiddle part it will be played on a fiddle in Rome, in Dresden, or in London; but he learns with dismay that the instrument which he familiarly calls a "Tuba" is not so called even in the military bands of his own country, and that his "Tuba" part, if it ever travels outside his own study, may possibly be played on a *Pelittone*, a *Bombardon*, a *Flicorno Basso*, or a *Contrabass-Saxhorn*.¹¹

The situation in Germany had stabilized somewhat by the turn of the century. In German opera houses Wagner's scores had dictated a place for the contrabass tuba, usually in CC and of generally large construction (along Cervený lines).

Wagner sometimes specified 'tuba' rather than 'contrabass

⁹Whitener, S., *A Complete Guide to Brass: Instruments and Pedagogy*, New York, 1990, p.51.

¹⁰Bate, P., op. cit., p.60.

¹¹Forsyth, C., *Orchestration*, London, 1935, p.88.

tuba' and these higher parts were played on F tubas (descended from the Wieprecht-Moritz models); according to Bevan some opera houses employed two players, each specializing on one pitch of tuba, although the larger instrument became the more usual in the concert hall.¹² This heavy-sounding, big tuba was clearly appropriate to the constitution of the German orchestra, accompanying large-bored trombones and not infrequently in Wagner and Bruckner four *tuben* (Wagner tubas).

While northern European minds occupied themselves devising various systems to compensate for or eliminate the inherent tuning deficiencies of the valves used in combination, German players relied upon the possibility of continuously adjusting the tuning slide. Since the very earliest Cervený Kaiserbasses this had been conveniently designed to be accessible to the left hand reaching over the top of the instrument (recall that non-Anglo-French tubas used rotary valves to the side of the instrument played by the right hand and had a left facing bell).¹³ To the present day this practice, rather awkward in appearance, can be observed in use by players from Berlin and Vienna. While looking cumbersome, it must nevertheless be effective.

Rather than the familiar story of German instruments and playing affecting practice in the rest of the continent, it

¹²Bevan, C., *The Tuba Family*, London, 1978, p.135.

¹³Ibid., p.80.

is possible that a certain amount of Eastern European influence found its way into German-speaking lands. Certainly, it was the Czech (formerly Bohemian) firm of Václav Frantisek Cervený that became the most recognised manufacturer of the largest CC contrabass tubas which Wagner took up.¹⁴ Cervený instruments were exported to Russia before a factory was set up in Kiev.

During the nineteenth century there was considerable French influence on intellectual and artistic matters in Russia. This seems never to have extended so far as the design of the tuba, which closely followed the Cervený style. Regardless of pitch, a massively-constructed large-bore, rotary-valve type remained general... ..From the second half of the nineteenth century onwards the tuba in eastern Europe was expected to provide a uniquely solid quality of tone.¹⁵

Large-scale rotary-valved tubas in CC or BBb also found favour across the Atlantic. As with the trombone, it was these German-style instruments which, with certain improvements, have formed the basis for highly successful American variants.¹⁶

Despite the large numbers of instruments exported to the U.S.A. by the London firm of Besson and French companies the British/French-shaped tuba found less favour with professional players, although it was (and still is) used extensively in bands.¹⁷

¹⁴Ibid., p.135.

¹⁵Ibid.

¹⁶Cervený set up a factory in New York in the nineteenth century. Twentieth-century American makers like Conn, Holton, Reynolds and York have continued with the left-facing bell, rotary valves and large proportions of the Kaiserbasses. (Ibid., p.143,160-1).

¹⁷Ibid., p.159.

The American wind band (or concert band) tradition, made so prominent by John Philip Sousa, furnished the professional orchestras with skilled tuba players in much the same way that the brass band has done in Britain, although the use of large instruments in the orchestras meant that band tuba players transferred rather than the euphonium players (as was the convention in Britain).

CHAPTER FOUR

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FROM 1920 TO 1950

By the 1920s two lines of development in orchestral brass performance practice were well established: broadly speaking, the Austro-German school, and the Anglo-French school.

However, in the ensuing decades elements of these two traditions began to fuse, creating hybrid models. The adoption of the German horn in Britain, and indeed virtually everywhere, was to prove the cornerstone of future developments. Nevertheless, the most significant synthesis of European styles was to occur on neutral ground, in America. In the space of just three decades American orchestras replaced their largely immigrant brass sections with indigenous talent. By the middle of the century an American tradition had been established which was strong enough to influence the rest of the world.

Meanwhile, almost as if unaware of transatlantic developments, aspects of European style went through a purple patch, some of the century's most notable national characteristics coming to the fore, as if galvanized into swan-song at a premonition of future internationalization.

Moves towards German hegemony and the horn debate

The German horn was in widespread use throughout most of central and eastern Europe, Russia and America. The Bb pitch was becoming more and more ubiquitous: notwithstanding the cool reception the single Bb horn encountered in some German orchestras initially (as outlined in the previous chapter) it did become popular, with principal players in particular. The shorter tube length came to be accepted without question, either as part of an F/Bb double or as a single horn. A combination of two single Bbs and two doubles in a section often worked well. Fine European orchestras like the Berlin Philharmonic accepted the instrument with little reservation using at least two and sometimes four in the section during this period.¹ Where the F pitch was maintained exclusively, for example by certain players in Russia, it was still with the wider bore (the Vienna horn presents a rather special exception). Indeed, the German horn was pre-eminent in virtually all musical centres of the world apart from those in France and Britain. However, over the next thirty years or so, its influence was to prevail even in these last two countries: in the latter unseating fine indigenous tradition to achieve a kind of international hegemony.

¹Scott Whitener states that the Berlin Philharmonic used a mixture of singles and doubles 'well into the 1950s' (Whitener, S., *A Complete Guide to brass: Instruments and Pedagogy*, New York, 1990, p.36). Antony Baines reports that whole sections comprised of single Bbs used in Berlin threatened to 'supersede the double' (Baines, A., *Brass Instruments*, London, 1976, p.226).

In 1920, the consensus in Britain was still one of contentment with the French-style F horn:

The F horn seems to produce the most satisfactory tone, and modern horn parts are always written in that key. Classic and other parts written for horns in keys ranging from Bb alt to Bb basso are transposed at sight and rendered on the "F" horn, except in certain very high parts, when a crook in A is used.²

Although the instrument was notoriously treacherous in the hands of many, English audiences had had the privilege of hearing Borsdorf, Paersch, Van der Meerschen, Busby and A.E. Brain at their height. While English horn playing had gone through a weak period in the late nineteenth century and there were, no doubt, numerous more mundane talents performing in the first decades of the twentieth, it seemed that 'God's Own Quartet' had heralded a golden era. What is more, a new generation of native born players - most notably the brothers Alfred and Aubrey Brain - seemed to be burgeoning. Surely this could not be the beginning of the end for the French horn.

However in 1921 Paersch died, and in 1923 Borsdorf. This left the Brains the opportunity to perpetuate the English tradition, but in 1922 Alfred, as much for personal reasons as anything else, left for New York and took up American citizenship. By 1923 Aubrey Brain, a Borsdorf pupil, had regularly played as principal with the Royal Philharmonic Society, the Queen's Hall Orchestra, the New Symphony, Covent

²Daubeney, U., *Orchestral Wind Instruments*, London, 1920, p.76.

Garden and the London Symphony Orchestra.³ This wasn't exceptional: the highly able few tended to monopolize all the work (compare this with the modern situation where there are dozens of able applicants for every chair in every orchestra). Reginald Morley-Pegge described his playing thus:

He himself played on a horn by Labbaye, the successor of Raoux. His tone was exceptionally pure and classical, albeit somewhat lacking in warmth: his execution was phenomenal, and he seldom, if ever, cracked a note.⁴

All the while more demanding modern music was being written and performed. Horn players were expected to play faster, higher, louder and for longer, more often than not in music that was either German or written in a German style. In the space of just a few years the prospect of German instruments gaining a foothold became much more feasible.

Furthermore there was, by general consensus, a decline in standards in British orchestras during the 1920s: the First World War had affected most areas of life and the London musical scene was no exception. When, in the late twenties, prestigious foreign orchestras made notable visits and performed with a precision, accuracy and success that no native orchestra seemed to have managed for years, the comments of some critics catalyzed an already ongoing process of self-examination. The Philadelphia Symphony Orchestra and

³Pettitt, S., *Dennis Brain, a Biography*, London, 1989, p.42.

⁴Morley-Pegge, R., *The French Horn*, London, 1973, p.169.

the New York Philharmonic under Toscanini had played in London by 1930, but it was the Berlin Philharmonic and Furtwängler who made the greatest impact, their first visit being in December 1927.⁵ While English orchestras by now had a reputation for formidable sight reading skills and individual talent, there was little coherence and ensemble playing was sometimes described as 'casual', and exhibiting a 'general slackness of execution';

The British public, grown accustomed to this easy-going style of performance, was electrified when it heard the disciplined precision of the the Berlin Philharmonic orchestra when it first came over here.⁶

The same author quotes a *Times* critic on a later Berlin Philharmonic concert (November 1928);

It is based on a high standard of finished playing, the essence of which is unanimity in the phrasing... Distinctions between *mezzo-piano* and *piano*, and between *mezzo-forte* and *forte* were a revelation of control, and there was *pianissimo* playing too delicate to be wasted on the first foggy night of November, which set the audience coughing.... Every detail stood out with transparent clearness.⁷

Certainly a high degree of discipline and organization in the string sections accounts for much of this, but the power and precision of the German brass instruments of the time must

⁵Russell, T., *Philharmonic Decade*, London, 1945, p.15.
Pettitt, S., op. cit., p.46 and p.53.

⁶Howes, F., *Full Orchestra*, London, 1942, p.4.

⁷*Ibid.*

have complemented the overall effect.⁸ In particular, one would expect that the horn playing would have been relatively free of the occasional splits and wobbles which audiences would have heard from all but the absolute top rank of English players. It is all the more surprising, therefore, to find in a Berlin Philharmonic concert notice in the *Musical Times* of January 1928 a reference to 'a few uncertain entries at the start of the Weber' [Freischütz] - almost certainly the horns.⁹ The same reviewer is not quite so convinced as 'ninety per cent. of the audience' by the 'gallery' touch, the brass ('bells' up) blazing out the Pilgrim theme' [Tannhäuser] but adds that the general standard could 'hardly have been bettered' and that there were 'comparisons to the detriment of English players'.¹⁰

One highly influential English musician who had had first hand experience of fine orchestras in America and Europe, Sir Thomas Beecham, found his ideas for resuscitating this country's orchestral standards were more urgently received

⁸Robert Philip (*Early Recordings and Musical Style*, London, 1992, p.180) finds the following account:

In the 1920s. concert-goers in Manchester 'were so startled with the stark discipline of the strings of the Berlin Philharmonic when they visited the city under Furtwängler that they could not hear the music for watching the up-and-down-altogether of the bows'.

(Russell, J., 'Hamilton Harty', *Music and Letters*, no.22, 1941, p.218). The same practice was reported of string sections of the Vienna Philharmonic and Toscanini's New York Philharmonic Symphony around the same time.

⁹H.G., 'Berlin Philharmonic Orchestra', *The Musical Times*, January 1, 1928, p.69.

¹⁰Ibid. The reviewer actually holds British orchestral standards in high esteem, but his is the view of the cognoscenti.

after the Berlin orchestra's visit. After discussions with Beecham, the British Broadcasting Corporation formed their own permanent symphony orchestra in 1930, although this was not quite what Beecham was looking for. Neither did overtures to the London Symphony Orchestra result in his ideal partnership (it was the issue of self-government which proved a stumbling-block). Instead Beecham resolved to form his own orchestra; taking some players from the L.S.O. with him, he formed the London Philharmonic Orchestra in October 1932.¹¹ This ensemble was intended to be representative of the best its country had to offer and to compete with the best continental orchestras - a 'super-orchestra', to use late twentieth-century parlance. From the outset (1932), Beecham insisted that German horns should be used by the whole section.¹² The first L.P.O. concert included Strauss *Ein Heldenleben* - here was ample evidence of the demands that orchestras would have to become accustomed to.¹³ Here also was a decisive move towards the German double horn.

Wide-bore horns had, in fact, already made their debut in the British Isles. No doubt there were individuals who had tried them, but the first important incidence of their use occurred in the late 1920s: George Szell, himself a horn player, took some Lehmann rotary-valve doubles to the Scottish Orchestra

¹¹Russell, T., op. cit., p.16-17.

¹²Gregory, R., *The Horn*, London, 1969, p.44. Pettitt, S., op. cit., p.49.

¹³Russell, T., op. cit., p.18.

where he was principal conductor at the time.¹⁴

Of early German-horn players in London, Anthony Baines writes that Alan Hyde was 'its powerful advocate' in 1930.¹⁵ Hyde was the son of a wealthy banker and it is reputed that he brought a section of Alexander instruments over for Beecham.¹⁶ Certainly he was very enthusiastic about the German instrument, but he only played for the London Philharmonic for one season in 1935, going on to become better known as a London Symphony Orchestra player (using a Kröspe) in the 1940s.¹⁷ Francis Bradley and Charles Gregory were the first two principal horns there and they used Alexander horns from very start. At least three of the L.P.O.'s first horn section had played Alexander doubles in the Robert Mayer Children's Concerts at Westminster Central Hall from 1928.¹⁸ Alan Hyde was principal of the Hallé during the 1930s and so his influence would have re-inforced the instrument there. It has been suggested that German horns were used in the Hallé even before this, under Hamilton

¹⁴Catterick, A., correspondence with SGB. The Scottish Orchestra had quite a reputation: Alfred Brain had been principal horn before coming to London and at one stage Francis Bradley (one of Borsdorf's sons) left London to play there.

¹⁵Baines, A., op. cit., p.221. The same writer, in *The New Oxford Dictionary of Musical Instruments*, delivers the throw-away line that German horns were introduced in Britain in the 1920s.

¹⁶Jones, P. interview with SGB. Alan Hyde spoke good German.

¹⁷Gollancz, L., correspondence with SGB.

¹⁸Ibid.

Harty.¹⁹ By 1936 the more serious students at the Royal College of Music had Alexanders (among them was Colin Hinchcliffe).²⁰ Livia Gollancz remembers that by about 1936 the only serious players still using French instruments would have been those in the BBC Symphony Orchestra and pupils of Aubrey Brain at the Royal Academy of Music.²¹

The initial effects of the German horn were moderate. Players, true to their training and sensibilities made quite a narrow-bore sound on the new instruments.

That didn't actually change the trumpets and trombones because they continued to play pea-shooters, but relatively the Alexander wasn't that big, it was a good deal bigger than the French horn but it didn't completely overturn the brass sound for volume and balance.²²

After just one season as principal of the London Philharmonic, Francis Bradley went to play second to Aubrey Brain at the BBC Symphony Orchestra. He returned to the piston French horn on Brain's insistence but would have liked to have played his Alexander.²³

¹⁹Chance, E., interview with SGB. Gregory, R., op. cit., p.44 (apparently Hamilton Harty acquired a set on being impressed by the sound of a foreign orchestra). Purton, M. at 24th International Horn Workshop, Royal Northern College of Music, Manchester, 1992. Paersch and his son Otto played in Manchester, so there was no shortage of German influence even if the elder had a reputation for always playing the piston French horn.

²⁰Gollancz, L., correspondence with SGB. Livia Gollancz went to the Royal College in 1936 playing a Raoux.

²¹Ibid.

²²Jones, P. interview with SGB.

²³Catterick, A., correspondence with SGB. Farquharson Cousins thinks that Brain and Bradley tried mixing French and German as first and second but that they soon abandoned the idea (interview with SGB).

Thus the German horn gained a foothold remarkably quickly.

...it is only within recent years that it [the German horn] has been accepted in England where, before World War I, no orchestra would admit it. Many years ago the writer asked that well-known player of the day, Thomas R. Busby, what he thought of German and Austrian horns: 'Cow's horns, we call 'em' was his answer... conductors today would look with a very jaundiced eye at any player who had the temerity to bring into the orchestra an instrument of the French type.²⁴

While players were trying the German horn, the French horn itself did not remain unaffected. Around the time that the two firms Boosey and Hawkes amalgamated, they started manufacturing piston horns of a slightly wider bore - initially for the military band market.²⁵

There was some degree of compromise in France too: in 1928 Louis Vuillermoz developed a compensating double horn with an ascending third valve (recall that the *cor ascendant* had been in use in France since the late nineteenth century).²⁶ It is hard to better Morley-Pegge's description of its advent - Gallic pride is preserved even though the German horn was being met halfway:

With very few exceptions the French players have refused to allow themselves to be inveigled into the now prevailing fashion for German horns, and have evolved their own particular model of double horn. Though larger in bore than the old Raoux instruments, they are smaller than the German horns, and have a bell diameter midway between the two. They are provided with the usual French ascending third valve which puts the F horn

²⁴Morley Pegge, R., op. cit., p.4-5.

²⁵Baines, A., op. cit., p.221. Baker, J., interview with SGB.

²⁶Morley-Pegge, R., op. cit., p.182.

into G and the B-flat into C alto. Like the Blaikley instrument of 1912, from which its designer, the late Louis Vuillermoz, drew his inspiration, the French double horn is built on the compensating principle and has piston valves. It was first made and marketed about 1930 by the Paris maker Thibouville-Lamy, but was subsequently taken up by other makers, and a rotary thumb valve has been substituted for the piston valve of the original version. Whether it is due to the use of the high B-flat and C tube lengths with a comparatively small bore or to some other factor, it cannot be denied that much of the present-day French tone tends to sound 'saxophoney'.²⁷

This instrument became standard in France throughout this period. The ascending third valve combined with the availability of a Bb/C alto tube gave numerous helpful alternative fingerings for awkward and troublesome notes; Anthony Baines writes of the 'extraordinary confidence of French playing' being in no small part due to this.²⁸

The fact that English players did not develop their own compromise instrument and turn to the Blaikley model described above perhaps indicates that, as well as greater security, the thicker and heavier sound was desired as orchestras and repertoire got bigger. Further to that it seems that, apart from its use in the very highest register, the Bb crook on a narrow-bore French horn yielded a rather unsatisfactory 'bugley' sound.²⁹

Nevertheless the English compromise might be said to have

²⁷Morley-Pegge, R., op. cit., p.51-52 (see also Plate VIII, 5). Selmer, Couesnon and Courtois took up the design after Thibouville-Lamy (Whitener, S., op. cit., p.37). The type was popular in Belgium too.

²⁸Baines, A., op. cit., p.223.

²⁹Morley-Pegge, R., op. cit., p.73.

been one of approach, for - naturally enough - the piston horn tonal ideal remained with many players and they tended to retain aspects of their French horn sound on the German instrument. Alan Civil is often cited as the last player to remain faithful to this sound ideal; although he used an Alexander single Bb instrument for solo work and a double in the orchestra, he practised regularly on an old F piston horn.³⁰

By way of comparison, it is interesting to consider the path Alfred Brain took in America playing with the Los Angeles Philharmonic and Hollywood studio orchestras.

He knew exactly what he wanted - to retain the purity of tone for which he had been renowned in England and yet to have an instrument that would cope with the heavy demands made on it. Al had a five-valve Alexander horn made up for him by Sansone, the New York manufacturers, and used it almost exclusively for the rest of his career. It was basically a Bb single horn with a thumb-valve change to A and a little finger valve change to F for the lowest notes. An unusual feature was the mouthpipe, which could be changed; Al had three mouthpipes, one the Alexander pipe that came with the horn, the second a Conn pipe and the third made to his own specification. Thus with a narrow mouthpipe and a small mouthpiece Al could achieve the compromise he wanted - ease of playing but purity of sound.³¹

Alfred Brain's solution, though acknowledging his French horn-playing past in no small way, is in contrast to his brother Aubrey's defiant adherence to the older instrument. Aubrey would not entertain the German horn in any shape or form; he maintained a section of F piston horns in the BBC

³⁰O'Loughlin, N., 'Civil, Alan', *New Grove*, p.423.

³¹Pettitt, S., *op. cit.*, p.36.

Symphony Orchestra from 1928, when he joined, to 1945 when he retired - by which time all the other London orchestras had long since adopted the German double.³² Towards the end of his playing life, having left the BBC Symphony through ill-health and trying to resume a less strenuous playing life, he bought a Selmer: even then he would not use a German horn.³³

The career of Dennis Brain, Aubrey's son, could be said to be the ultimate barometer of taste and fashion in British horn playing, although his status as a regular soloist as well as an orchestral player must be born in mind. From the most traditional of schoolings (Aubrey's early tuition was as firm an inculcation of F piston-horn playing as could be imagined) he crowned the apogee of the old style while forging new definitions and parameters for horn playing the world over. This intrepid voyage led him to adapt and eventually abandon his French horn in favour of a German one.

Dennis Brain's first horn, which he started playing in 1936, was a Raoux-Millereau and one of a pair Aubrey had bought in 1933 from Covent Garden: in that year the L.P.O. took over as the pit orchestra at the opera house and, by virtue of Beecham's dictate, they had no use for a set of old but undeniably fine French horns.³⁴ This instrument was used for

³²Morley-Pegge, R., op. cit., p.169.

³³Pettitt, S., op. cit., p.99.

³⁴Ibid., p.50 and 57.

solo and orchestral work, but by 1946 Dennis was experimenting with a Bb crook rather than his usual F. That year he recorded the third Mozart concerto using a Bb crook and shortened valve-slides.³⁵ He was also experimenting with an Alexander Bb/A horn he had bought on a post-war trip to Germany.³⁶

Two years later he was prepared to go further:

By the end of 1948 he was sufficiently convinced of the benefits of the Bb horn generally to send his Raoux to Paxmans in London to have it built in that key permanently. They fitted a fixed mouthpipe in place of the crook, shortened the valve-slides accordingly and added a thumb-valve change to A. When the instrument was returned to Dennis he was horrified: much of the fingering for the higher notes was awry and, as he put it, "It had a roll on the middle Bb." It had to go back to Paxmans, but as they also had the Alexander in for alteration Dennis was in somewhat of a predicament - he was due to play the Strauss First Concerto at the Royal Albert Hall a couple of days later. In desperation he tried an 1818 Raoux hand-horn he had bought a year previously from a colleague. It was a collector's piece: it had a set of Brown detachable valves....³⁷

The 1818 Raoux had belonged to Farquharson Cousins.³⁸ With a Bb crook this instrument evidently worked well as Dennis Brain continued to use it for nearly two years.^{01, 39}

In America the French piston horn was looked on as a museum-piece. On a Royal Philharmonic Orchestra tour in 1950 Dennis Brain met some Chicago horn players who had heard him play a

³⁵Ibid., p.86.

³⁶Ibid., p.99.

³⁷Ibid.

³⁸Cousins, F., *On Playing the Horn*, Chapel-en-le-Frith, 1992, p.66.

³⁹Pettitt., S., op. cit., p.98-99.

concerto on the Raoux (he was by now using the Alexander for some orchestral work). Although admiring of his skill and musicianship, they thought his sound peculiarly small by comparison with what they were used to. Philip Farkas tried to interest the R.P.O. section in Conn horns in return for free advertising.⁴⁰ As was discussed in the previous chapter Conn had made a name for itself in America with large-bore horns - larger than the German Alexanders that even now some in Britain found hard to accept. Small wonder then that there was such a gulf between the Chicago players' sound and that of Brain on the Raoux.

Nevertheless he persisted for some time after this with the Raoux horns, having an additional rotary valve added to his original instrument which put it into C alto and thus made some of the more treacherous notes in the top octave safer (in a similar way that the Vuillermoz design did on French instruments).⁴¹

Eventually, as his old Raoux instruments became more and more worn and as he felt the increasing pressure of retaining his legendary accuracy in more and more difficult new repertoire, Dennis Brain adopted the Alexander fulltime. It is reputed that Herbert von Karajan and Walter Legge put pressure on Brain to change to a German horn at the Philharmonia.⁴² This

⁴⁰Ibid., p.107-110.

⁴¹Ibid., p.111.

⁴²Wilson, A., interview with SGB.

happened in 1951 and he made his first recordings with it in 1952.⁴³ Nevertheless, he had had a narrower mouthpipe fitted to the German instrument by Paxmans of London in 1950 and, in conjunction with his traditional small conical mouthpiece, he thus minimized any detriment to his renowned tone quality.⁴⁴ Stephen Pettitt's description of this instrument as 'wide-bore' is, comparatively speaking, accurate enough but the modification to the mouthpipe gave a compromise solution (just as Uncle Alfred had given himself the possibility of a similar compromise with his interchangeable mouthpipes). All the same, Aubrey Brain is reputed to have considered his son to have given up the horn when he changed to the German instrument.

Dennis Brain's adoption of a German horn signified the end of the French horn's days in Britain. If he was not prepared to continue with it then certainly few others would try. His extraordinary talent as a soloist had sustained the English French horn tradition. In addition he ushered in a new age, validating an expectation of reliable, accurate horn playing. Joseph Eger compared Dennis Brain's playing to Roger Bannister's four-minute mile: once it was shown to be possible, others would have to follow.⁴⁵ By the time he

⁴³Pettitt, S., op. cit., p.174.

⁴⁴Ibid., p.116. An additional valve providing an F extension was also incorporated. This was necessary for the lowest notes but, perhaps more significantly for Dennis Brain, allowed the 'Prologue' to Britten's *Serenade for Tenor, Horn and Strings* to be played on the open harmonics of an F tube.

⁴⁵Eger, J., 'Breaking the endurance barrier', *Woodwind World*, No. 2, May 1958, p.5-6.

adopted the Alexander horn, precious few professional players could have hoped to survive playing a French horn. The foundations of a British school of playing were set by his ever-discrete and clean articulation and phrasing; ironically, considering his background, he also established the Bb horn in this country and British players, particularly principals and soloists, have tended to use the Bb side of the double (if not a Bb single horn) much more than some foreign players, particularly those in America.

The Yorkshire Symphony Orchestra horn section of 1949 with Farquharson Cousins as principal was probably the last professional section to use narrow-bore F horns.⁴⁶ In 1963 Denis Stevens (principal, BBC Northern Ireland Orchestra) was still using a single horn in F but 'the use of such an instrument by this time was a real anachronism'.⁴⁷ Certainly the piston horn was still to be found in schools and colleges and occasionally in military bands into the 1960s, but its time as a professional tool had passed.⁴⁸

Thus, by circa 1950, the hegemony of the German horn was complete. Where it had not replaced the French piston horn

⁴⁶Kampen, P., letter to editor, *Horn Call*, April 1991, vol. xxi no.2, p.9. (Also Cousins, F., op. cit., p.54). Cousins was replaced as first horn by Guy Gibbs in 1950 and although F horns may have been used for a short while after that, by 1952 and the appointment of Edwin Lorentsen the section had changed to Alexander doubles.

⁴⁷Ibid. According to David Wise, a pupil of Stevens's, he owned a full double but preferred the sound of the narrower instrument.

⁴⁸Morley-Pegge, R., op. cit., p.71.

it had exerted an influence by forcing a compromise (in France and Belgium the horn kept its pistons but the bore was increased slightly and the Bb tube was used more often than not). Only in Vienna has a single F horn tradition survived, and even there it has at times been in severe danger of extinction.

The above outlines the history of the transition to the German horn in Britain. Its widespread acceptance might lead one to believe that its use was without contention, but there was - and continued for some time - a fierce debate as to the merits and demerits of the wider bore and the Bb tube. In the interests of presenting a complete examination of this matter, which is one of the most important and emblematic issues under consideration in this thesis, a re-enactment of the debate is attempted here. By presenting a collection of information and comments from distinguished sources it is hoped to inform any further debate which may take place from a late twentieth-century perspective. Some of the material referred to has been written outside the date boundaries of this chapter, but the debate itself centres on the period in question.

In 1922 W.H.F. Blandford articulated what he saw as the potential danger of a degeneration in the nature and role of the horn in the orchestra:

It is not generally known that the practice of pushing this overworked instrument to the limit of its capacity is slowly displacing the horn in F for the performance of the more exacting modern parts in favour of the horn in Bb - or, abroad, C alto. Even horns in F alto have been designed and used. If this tendency is not checked the horn will degenerate in tone-quality, as the trumpet has degenerated, until it becomes a shadow of its old self.⁴⁹

Blandford also stresses the importance of hand position in the bell in creating a 'veiled beauty', his fear being that with the invention of the valve and an increase in bell sizes, hand technique will cease to be an exigent component of horn playing.

Forsyth's assessment of the relative qualities of different types of horn has already been noted in chapter three, but in an addenda to the second edition of his orchestration manual (1935) he mentions the use of double horns in Germany and America, and of the single Bb in Germany. Although curiously ill-informed on the matter (how can those German instruments being played in his own country have escaped his notice? Perhaps he chose to ignore them) he allows that the Bb horn 'gives much more ease of production and fingering in the top register' while quickly countering that 'the quality is not a scarlet joy'.⁵⁰

In 1931 Aubrey Brain contributed to the debate a short article entitled 'The German horn: a comparison', beginning

⁴⁹Blandford, W.H.F., 'Studies on the horn: The French horn in England', *Musical Times*, August 1st 1922, p.544-547.

⁵⁰Forsyth, C., *Orchestration*, London, 1935, p.496.

by stating that the 'peculiar euphonium-like quality' of German horn tone should be apparent to the most casual of listeners.⁵¹ Along with this more 'voluminous' tone he attributes greater facility in the high register, in attack and in producing a brassy tone. He also cites the rotary valve as a real advantage. However, against this must be weighed 'for sheer beauty of tone as for penetrating effect, this instrument can never compare with our [French] horn'. The German Bb horn's security at high altitude is judged to sacrifice tone and intonation so as 'utterly to destroy the characteristics of the instrument', the shorter tube length's lower harmonics also giving imperfect tuning in the more regular tessitura. It is character of sound which has been cited in the French horn's defence ever since:

Played by someone who can handle it well, the pea-shooter certainly cannot be surpassed for clarity and purity of sound...The sound played loudly is penetrating and very suitable. But people who can play it accurately are few.⁵²

The French horn in F was also vehemently defended by Farquharson Cousins in a letter to the editor of *Music and Letters* entitled 'The Degenerate Horn' in 1950.⁵³ He argued that the larger bore and Bb tube 'robbed the horn of its all-important characteristic, namely, magical tone', that the

⁵¹Brain, A., 'The German horn: a comparison', *Monthly Musical Record*, July 1st 1931, p.195.

⁵²Kampen, P., Letters to the editor, *Horn Call*, April 1991, vol.xxi no.2, p.9.

⁵³Cousins, F., 'Correspondence: The Degenerate Horn', *Music and Letters*, October 1950, vol. xxxi no.4, p.378-380.

'brightly-coloured horn' had been replaced by a certain 'muddiness': ⁵⁴

The wider the bore the more uniform does the sound become. The tuba or euphonium has a single type of sound, broad and mellow but without bite, and incapable of *pp* or *ff*... And then the use of Bb alto harmonics renders it [the horn] still more colourless; in fact I would put one-third of the loss of colour down to the bore and two-thirds to the Bb harmonics.⁵⁵

Cousins counted this as a major contribution to a general malaise affecting the orchestra, which was not being checked by those in control:

But this line of thought would lead me to remarks on the dearth of genuine conductors. Sufficient to reflect on the drowning of symphony concerts by timpani and brass... The symphony should reach our ears with (i) strings dominating, (ii) woodwind colouring, and (iii) brass and timpani felt rather than heard. What we get is (i) timpani and brass dominating, (ii) woodwind consequently tending to force, (iii) strings, feeling swamped, forcing with toneless, thin result.⁵⁶

Even for the finer conductors, who perhaps had a similar view of orchestral balance, the double horn offered something very tempting - greater security. Although Cousins still feels that those accidents which did occur with the French horn were not catastrophic:

Beecham wanted the notes above all else and the old French horn was a dicey business; it was nothing to hear a wobble. But you see the French horn in F, when you cracked a note, it was very seldom a real crack, it was a tipple.⁵⁷

⁵⁴Ibid., p.378 and p.380.

⁵⁵Ibid., p.379.

⁵⁶Ibid., p.380.

⁵⁷Cousins, F., interview with SGB.

Handel Knott chimed in with solid support:

I deplore the present uncouth noises that have taken the place of the beautiful sounds that were produced by the famous players mentioned. The shortening of the F tube to that of the Bb, coupled with the heavy metal now used and the wide bore, consign this lovely singing instrument to the same limited medium of the saxophone or baritone.⁵⁸

He further admonished 'note-getting' at the expense of beauty of tone, the 'brute-force' practice of doubling up orchestral parts (six horns in the *Eroica* is given as an example) and the demise of the horn's most characteristic tone - 'a beautiful sound that seemed to float around the hall from nowhere in particular'.

The highly respected Reginald Morley-Pegge provided one of the few informed challenges to the old guard. He replied to Cousins's article, requesting that he might 'be allowed to break a gentle lance with this bold knight', and took a broader historical view.⁵⁹ Two earlier revolutions in the life of the horn - the development of hand-technique and the introduction of the valve - had at least as great a moment on the fortunes of the instrument. At each of these previous watersheds the new innovation was suspected to be detrimental to traditional values. In addition Morley-Pegge pointed out that large-bore orchestral horns had existed in the nineteenth century (as discussed in chapter two), but that in

⁵⁸Knott, H., correspondence in *Music and Letters*, April 1951, vol.xxxii no.2, p.200-201.

⁵⁹Morley-pegge, R., correspondence in *Music and Letters*, January 1951, vol.xxxii no.1, p.94-96.

England the success of soloists playing on Raoux horns established the French variety.

Nonetheless, all are in agreement about the role of the right hand. Morley-Pegge expands thus:

Wholesale and indiscriminate use of the valves has caused this technique to fall into abeyance, and I am convinced that ignorance of it, coupled with the widespread use of heavily choked and cupped mouthpieces, is far more responsible for the existing prevalence of poor tone than any difference in bore and bell. A bad position of the hand in the bell lets out all the latent coarseness of the horn more in the case of the German than that of the French model, and this is further accentuated by the use of flugelhorn-like mouthpieces.⁶⁰

As this passage also makes clear, mouthpieces can do much to change the sound of an instrument. Although shallower cup-shaped mouthpieces had been used with German horns for some time, they would have seemed very uncharacteristic to those accustomed to the traditional French deep funnel. It may well have taken those converting from French to German instruments a little time to find an appropriate mouthpiece (most players would understandably be reluctant to change their mouthpiece):

It is quite possible that early opposition to the short wide-bore instrument in this country was partly due to the use of cupped mouthpieces which were too heavily choked at the throat. The open-throated mouthpiece gives a fuller, freer tone and easier low notes, but this too, can be carried to excess, leading to too woolly and dispersed a sound.⁶¹

In fact, according to Forsyth, around the beginning of the

⁶⁰Ibid.

⁶¹Gregory, R., op. cit., p.48.

century high players (first and third) often had slightly shallower mouthpieces to assist the upper register - so there already was some variation in shape.⁶²

Morley-Pegge concludes diplomatically making it clear that the Bb horn brings new difficulties - the new instrument has not been in use long and it will take time to master. This stance is remarkably similar in sentiment to that put forward by Wagner at the head of the score of *Tristan und Isolde*; the composer looks forward to the time when the technical limitations of early valve horns would be overcome and the instrument would boast gifted exponents.

A little earlier (in 1943 while giving a paper at Royal Musical Association conference) the same writer had been openly positive about the future of horn playing with the German instrument. Having discussed the advantages of accuracy the double horn offers he continued:

This advantage is offset in a measure by the difficulty of maintaining a homogeneous tone quality, for although a player may have a beautiful tone either on the F or on the Bb horn, it is extremely difficult to produce on the one a tone indistinguishable from that which he produces on the other.

The best solution, in the writer's opinion, is a horn built in Bb, with a fourth valve to put it in A - most useful to simplify fingering in sharp keys - and a fifth valve that gives a horn in F, this last being used exclusively for the pedal notes. Such an instrument, however, will require special study if a fine and poetical tone is to be produced, but it can be done....

There is little doubt that the large bore German horn is destined to oust the French type in the near future,

⁶²Forsyth, C., op. cit., p.110.

for, although it is not, as is commonly supposed, easier to play, it has a greater dynamic range than the French instrument which, when all is said and done, is simply the old hand horn with a valve attachment. The German horn need not sound like a euphonium, for tone is mostly a matter of school. It is important, however, that the poetic quality of the old horn should not be forgotten, and should be inculcated in the student from the start. Good and bad tone can be, and is, heard with both types of instrument, but admittedly the bad tone on the German horn is even worse than on the French one, and it is for teachers to see that the poetic quality of the horn is not lost because a type hitherto unfamiliar in this country is going to be the instrument of the future. After all, German and Austrian horn players have been using the large bore horn for more than a century, and, to mention only three - Gumbert, Franz Strauss and Stennebruggen - they have not been without their admirers among competent judges.⁶³

Blandford (who Morley-Pegge knew well, dedicated his book to and called *le grande maitre* in its preface) was present when the paper was given and responded thus before going into some detail on another matter:

As regards the question of the German versus the French pattern, I have had no experience of the former and therefore prefer to say nothing about it except that, however good it is in some hands, it can be heavy and coarse in tone, and if one has any regard for the old horn, that is a fault to be avoided.⁶⁴

Some years later, by the time his widely respected *The French Horn* is in print, Morley-Pegge seems to have become slightly more critical of the German horn and in some ways contradicts his earlier favour for the instrument:

The disadvantage of the double horn is that its tone is apt to be coarser than that of the older type, to which must be added the instrument's not inconsiderable

⁶³ Morley-Pegge, R., 'The evolution of the modern French horn from 1750 to the present day', *Proceedings of the Royal Musical Association*, 1943, vol. lxi, p. 51-2.

⁶⁴ *Ibid.*, p. 53.

weight... The single [Bb] horn has the advantage of less weight, but the fingering and the intonation are apt to be rather tricky, while unless in the hands of a sensitive player its tone can be very harsh.⁶⁵

It is only within the last thirty-five years or so that any rotary instruments were seen in England, but fashion - and comparative ease of playing - have dictated a radical change-over from the French to the German horn with its rotary valves.⁶⁶

...the inflexible fashion of the day having decreed that since the large-bore German horn, which has superseded the more distinguished French type, is made in its native country with rotary valves, English-made horns must follow suit.⁶⁷

Today we are inclined to decry the tone of the now ubiquitous German horn as 'wooffy' in F and 'bugley' in B-flat. This criticism is often, though not always, justified, especially to ears old enough to remember the beautiful quality of the true French horn in the hands of such masters as Paersch and the brothers Alfred and Aubrey Brain in England, or Edouard Vuillermoz and Emile Lambert in France, who assuredly cracked no more notes than their peers of today. The German horn is, of course, more powerful, and it is a good deal easier to play. Its general adoption has been of immense benefit to the less gifted performer owing to its near-immunity from the that bugbear of the old instrument, the cracked note. In the greater facility of execution, however, there lurks the danger of allowing technique to become an end rather than a means....

It would be a great pity to let the horn, with all its unique tonal resources, degenerate into something that was little more than a brass-band baritone which, for all its admirable qualities in its own sphere, is no substitute for the French-horn tone in the orchestra. Imagine the famous horn quartet in the overture *Der Freischütz* played on four baritones!⁶⁸

Despite the fact that he hails the adoption of the F/Bb double and the Bb single as the third phase in the whole history of the horn, it is difficult to escape the impression that Morley-Pegge's sanguine attitude as a younger man has

⁶⁵Morley-Pegge, R., op. cit., p.4-5.

⁶⁶Ibid., p.41.

⁶⁷Ibid., p.48.

⁶⁸Ibid., p.73.

been slightly modified by a tinge of disappointment at the way things seem to have developed in his latter years. Having argued against the notion of a 'degenerate horn' in 1951, less than a decade later he feels it necessary to warn of that danger.

The two issues of bore and tube length, which are the essence of the contention, are not totally unrelated and - in practice - cannot be treated independently. Most players found that a Bb crook with a narrow bore gave an unacceptable sound in all but the most extreme circumstances.

It is given to few players to be able to produce a consistently fine tone from the single B-flat instrument, and with the small-bore French horn crooked in B-flat a fine tone is virtually impossible under any circumstances.⁶⁹

A slight widening of the tube was found to be desirable for the higher pitch and with the German bore both the F and Bb lengths seemed to work reasonably well. It is, perhaps, possible that some of the early prejudice against the Bb tube was due to its unsuitability in conjunction with the French type of instrument in all but the highest tessitura.

Anthony Baines is balanced in his assessment of the French

⁶⁹Morley-Pegge, R., op. cit., p.115. To concur wholeheartedly with this statement one would have to accept Dennis Brain as an exceptional phenomenon - not difficult - as he clearly had abundant success with a French horn crooked in Bb playing all sorts of repertoire. However, today some might argue that there are considerably more than 'few' who produce a consistently good tone on a single Bb horn.

horn: 'The musical quality is light and poised but rather harsh in the low register around h3'.⁷⁰ He does not shy from exposing the instrument's foibles:

It could prove a tricky instrument under concert conditions, usually having one or more valved notes just below or above written *g''* which tend to break, whence the horn's old reputation among concert-goers as the most difficult instrument in the orchestra - i.e. that from which one heard the most wrong notes. The *f''* was so apt to be troublesome that the opening of Brahms's second Piano Concerto was a nightmare to many players: London students of the 1920s shared the belief that the infallible Aubrey Brain had cured this bogey (on his Raoux model by Labbaye) by placing a splinter of wood somewhere in the first valve - not necessarily true but it shows the phobia.⁷¹

Robin Gregory is similarly impartial and takes a cosmopolitan view of differing national styles and predilections. He assesses the characteristics of the two types of instrument and tube length thus:

'All German instruments', it has been remarked, 'sound more or less like euphoniums to ears accustomed to the French school' and it is true that that the French horn tone is thinner, brighter and more open than the heavier, broader, thicker tone of the German horn.⁷²

Indeed, Anton Horner, who introduced the double horn to the U.S.A., admitted that he himself used the the Bb section only in the upper register 'because the tone is not so mellow and of as good quality in the middle and lower register, being harsh and hollow', and it is certainly true even now that in the hands of a beginner the Bb horn can sound unsympathetic. If, however, the player has had long experience of the F horn and the sound it produces he instinctively matches his tone on the Bb instrument to that which he is accustomed to produce from the F horn, and with practice consolidates the tone in the middle register until it is

⁷⁰Baines, A., op. cit., p.221.

⁷¹Ibid., p.221-2.

⁷²Gregory, R., op. cit., p.41.

indistinguishable from the sound of a horn in F. When this is accomplished, as it is by good players, the case so frequently argued against the Bb horn falls to the ground.⁷³

Cousins's own chapter entitled 'Horn Sound' offers an admirable presentation of the debate in its own right.⁷⁴ It is, by the writer's own admission, observed from a less than impartial viewpoint: this loyalist had not changed his colours since his 1950 broadside and the passing of the French horn in F is lamented. Cousins has but one criticism of Gregory's otherwise 'peerless' chapter entitled 'Tone quality':

Perhaps on one point only is Mr Gregory over optimistic. In his summing up, he implied that the experienced player in F can reproduce his sound on the Bflat and therefore 'the case against the Bflat horn falls to the ground'. Admittedly he is referring specifically to the middle register; and in this one can almost 'go along'. But what of the top and the bottom? Would it not be justifiable to suggest that, although some eminent Bflat players emulate the richness of the F horn with some success, the vast majority of B flat players produce a Bflat-ish sound? This latter observation has been made by Vaughan Williams, by Bessaraboff in America, and by such giants of the past as Tovey, Harty, and our beloved Henry Wood.⁷⁵

In America where the German horn has virtually always been used (and hence there is little argument about bores), comparisons between F and Bb tubes are a little more easy to assimilate. Traditionally, the double horn has been American players' favourite tool and, by-and-large, they have used the

⁷³Ibid., p.45.

⁷⁴Cousins, F., *On Playing the Horn*, Chapel-en-le-Frith, 1992, p.50-54.

⁷⁵Ibid., p.53-54.

F side more than many European players.⁷⁶ Certainly those of the Anton Horner school - of which there were many in this period - tended to crossover from F to Bb somewhat higher than is now usual in this country (typically at written $c\sharp^2$ rather than $g\sharp^1$, as was discussed in the last chapter).

Almost coincident with the *Music and Letters* debate in Britain a symposium entitled 'Which horn do you prefer - F - or - Bb?' was published in the American periodical *The Instrumentalist*.⁷⁷ Some of this discussion was orientated towards the choice of instruments for high school orchestras and bands but many comments related to professional experience. Philip Farkas defended the traditional approach suggesting that all beginners should gain proficiency on a single F horn. The Bb horn, either as a single instrument or as part of a double should only be used by first and third chair players, the longer tube being an essential option for second and fourth to maintain the richness of the section's sound. He is clear about the advantages of the respective lengths:

Considered strictly from the composer's viewpoint, it should be obvious which of the two horns, F or Bb, is the favourite. The preference goes to the F horn because of its tone. However, we are concerned not only with the composer, who, after all, does not have to play his own horn parts, but with the player, who does.

⁷⁶Humphries, J., interview with SGB. Whitener, S., op. cit., p.37.

⁷⁷'Which horn do you prefer - F - or - Bb? A symposium', *The Instrumentalist*, January-February 1951. Contributors were Philip Farkas, Harold Meek, Wendel Hoss, Muelbe, Richard Moore, Schmidt and Max Pottag.

Unfortunately, the composer sometimes underestimates the difficulties he gives this beautiful F horn... To sum up: the *composer* chooses the F horn for its tonal beauty and characteristic horn qualities, while the *player* who chooses the Bb horn does so because of its surer production of notes and general ease of playing.⁷⁸

Farkas does add that it is possible, with appropriate right-hand technique, a suitable mouthpiece and careful practice, to make a 'beautiful, characteristic horn tone'.⁷⁹ Whether or not the composer actually intends an F horn to be used when he writes an F part is a moot point, particularly for music written in the twentieth century by composers who knew full well that a Bb tube would probably be used. Strauss and Mahler can almost certainly be included in this: the former's father used a Bb crook for the première of his First Horn Concerto and the latter was such an expert conductor and orchestral technician that he must have been aware of the situation (indeed there are occasionally notes in his music that are simply not possible on a single F horn, for example a written E_1 sounding A_1).

Harold Meek accepts that the F horn's tone best suits the German school of playing adopted in America but adds that 'Present orchestral requirements of the horn player practically *prohibit* the use of a single F horn for professional use'.⁸⁰ He warns that the Bb horn can produce a

⁷⁸Ibid., p.75-6. Similar sentiments can be found in *Philip Farkas, the legacy of a master*, ed. Stewart, M. Dee, Illinois, 1990, p.95 (originally published in *The Instrumentalist*, 'Philip Farkas: Master Horn Teacher', Illinois, April 1979).

⁷⁹Ibid.

⁸⁰Ibid., p.76.

tone which is 'hard and blatant':

A high horn player can make the Bb horn sound just as beautiful as the F horn, and will play surer on it. But he must be careful, because except for this one advantage of the Bb horn, the F horn has more to offer than any other instrument yet developed.⁸¹

Wendel Hoss also feels that the F horn tone has been accepted as the 'standard': 'there can be no question that the F is fuller and richer in sound than the Bb'.⁸² Players should try to 'simulate F quality, through proper choice of mouthpiece and manner of blowing' on the Bb.⁸³

Muelbe is somewhat more dogmatic in his allegiance to the single F horn: he considers the double horn a 'monster', the Bb side having a tone 'anything but melancholy, poetic or nostalgic...the Bb horn sounds hollow, harsh and offending'.⁸⁴ He continues his diatribe by pronouncing virtually all aspects of playing technique (including fast articulation and the high register) to be as easy, if not easier, on a good F horn. His one significant proviso is that it should be a single horn - not the F side of a double instrument: because the two sides of the double horn share the same mouthpipe and bell sections there is inevitably a compromise. Furthermore, the double horn always offers the alternative of the Bb side, which under high pressure

⁸¹Ibid.

⁸²Ibid., p.77.

⁸³Ibid.

⁸⁴Ibid.

professional conditions, is resorted to more often than not - 'you are scared to death to try them on the F horn'.⁸⁵

Muelbe reckoned himself to be the last remaining professional single F horn player (presumably he meant in America).

Richard Moore, in this paper concerning himself solely with the issue of school bands, recommends exclusive use of single Bb horns. He too makes the distinction between single horns and the respective sides of a double - '*the Bb side of a double horn is not as good as the single Bb horn*'.⁸⁶ Having tried various combinations over many years he is 'absolutely convinced that they are the *only logical horn for school bands*':

The veiled quality of the tone of the F horn is beautiful for solos with piano. It is also beautiful in the orchestra. However, in a band, it is rare that this type of tone is adaptable. For the most part, the horn tone in the band must speak with authority, clarity, and precision. Here the single Bb horn excels due to its shorter length of tubing.

Another factor which, in my opinion, has much bearing on the tonal effects produced in a band using single Bb horns, is that of the overtones in the brasses. These are uniform in series when BBb tubas, Bb baritones and trombones, Bb horns and Bb cornets are used. The band is brighter and more beautiful in tone colour with this combination of brasses.⁸⁷

Attempting to blend with other brass instruments does lead a horn player to adopt different timbral goals. Instruments of

⁸⁵Ibid.

⁸⁶Ibid., p.79. As was noted above, this is due to the compromise of both tubes sharing mouthpipe and bell sections.

⁸⁷Ibid., p.78-9.

the same tonality (and in the middle of the band, exactly the same length) will play in tune with each other more easily and there may well be more consonant overtones in the overall sound with such a combination. The F horn is most at home in an orchestra mixing with strings and wind - this is where a traditional horn tone can be nurtured. The surprising thing about Moore's approach is that he is openly promoting the use of the Bb tube at a stage in players' learning experience when, in the opinion of the sizeable majority, it is considered essential for the F horn tone and feel to be firmly inculcated. While there is no real need here to argue with the assertion that single Bb horns work well in large wind bands, the implications for future generations of orchestral players is a relevant issue. Unless two distinct breeds of horn player can be considered, each clear about their final destination as players - and this is clearly impossible and undesirable, the widespread use of single Bb horns in American educational institutions would have a significant effect.

Moore's cause finds another advocate in the next contributor. Schmidt re-iterates many of the above arguments and states that by 'all laws of acoustics, the Bb side of a double horn is inferior to the single Bb horn'.⁸⁸ He also considers it desirable that a student should have had experience on a single Bb before moving to a double. He concludes:

⁸⁸Ibid., p.79.

Eventually, the controversy may not be the F versus the Bb, but whether the Bb is superior to the double horn, for school use. Try it and see!⁸⁹

The final expert on this symposium panel, Max Pottag, takes us back to the traditional approach: in the school band the only concession to the Bb horn should be in the case of the first horn - the other three should use F horns.

Only the F horn has the characteristic and beautiful tone quality. While the upper register of the Bb speaks a little easier and surer, this advantage is offset (for the professional) by the hard sounding middle register, and the poor intonation of the lower-middle register. Properly taught, the F horn is as easy to play as the the horn in Bb.⁹⁰

In concluding this debate, the significance of personal taste and subjective judgement must be stressed. However few would disagree that the French horn in F is capable of great beauty of sound and that German horn (predominantly in Bb) offers the greatest security and weight of sound. From what has been discussed above it is apparent that some have played the F horn very accurately and that some have produced sound of great beauty on a German Bb. Indeed this is quite possible, it merely goes against the statistical likelihood and physical optimization. This writer's opinion, for what

⁸⁹Ibid., p.80.

⁹⁰Ibid. At the end of the symposium the results of an experiment designed to test experienced listeners ability to identify different types of horn and rate them good, fair or poor are included. However, insufficient information about the experiment is given and its approach seems a little simplistic. The editor is right in concluding that 'The difference in *abilities of players*, especially in amateur ranks, remain much more significant than the difference in horns'.

it is worth, is that there is almost always a slight degree to which a Bb horn sounds like a trombone - the quality of tone, attack and articulation being the strongest indicators. Players of great skill can disguise this similarity until it is all but imperceptible, but the most characteristic horn sound is best achieved on an F horn.

The birth of an American tradition

The assertion that an American tradition was born in the period 1920 to 1950 requires some clarification: it is not intended to imply that before 1920 American brass playing was weak. Since the nineteenth century there had been a strong wind band and brass band culture which nurtured a virtuosic and bravura style, John Philip Sousa's band being the most famous example. Cornet soloists like Herbert L. Clarke, Edward B. Llewellyn, Ezra Bagley, Jules Levy (who was born in England) and Edwin Franko Goldman enjoyed fame and prestige and a community band movement thrived in a similar way to that in the north of England.¹ To an extent the trumpet was relegated in importance because of the glamorous pre-eminence of the cornet soloists.² In the orchestras, most of which had only been in existence a number of decades, a mixture of European practices prevailed; indeed, as one might expect in America, many of the players were Europeans or had European origins.

What distinguishes the nascence of an important American tradition is the distillation of European models, in a highly cosmopolitan environment, with those traits of high technical facility already in place. Coupled with unique initiatives

¹See Bridges, G., *Pioneers in Brass*, Detroit, 1965.

²Fladmoe, G., *The Contributions to Brass Instrument Manufacturing of Vincent Bach, Carl Geyer, and Renold Schilke*, Ed.D. thesis, University of Illinois, 1975, p.89 and p.92.

in instrument design, manufacturing and pedagogy this period becomes very important in the foundation of distinctive, native American schools of playing which were to have profound influence the world over in the second half of the twentieth century.

As will be apparent from what has been said in preceeding sections, much of the basis for American orchestral playing was German (for example, see the end of the German trombone section of chapter three). Even into the 1930s, if an American orchestra needed a brass player they would expect to have to send to Germany for one.³

Certainly among horn players everybody played the German-type instrument and were most likely to have had a German training. As was noted in the previous chapter, just before World War One the Boston Symphony Orchestra had an all German horn section (Bruno Jaenecke, E. Miersch, Max Hess and E. Hübner).⁴ In 1923 Willem Valkenier moved from the Berlin Opera (under Strauss between 1914 and 1923) and the Vienna State Opera to Boston as principal under Koussevitzky.⁵

³ Philip Farkas, *the legacy of a master*, ed. Stewart, M. Dee, Illinois, 1990, p.93.

⁴ Yeo, D., 'Horn players of the Boston Symphony Orchestra 1881-1988', *Horn Call*, Vol. xviii, No.1, April 1988, p.47. Jaenecke later moved to the New York Philharmonic where he was principal for 25 years and played under Mengelberg, Furtwangler and Toscanini. His name appears as either -icke or -ecke depending on the source.

⁵ Yancich, M., 'Willem Valkenier - a profile', *Horn Call*, October 1983, vol.xiv no.1, p.51. Valkenier played double horns by C.F. Schmidt and Kruspe (with occasional use of a Bb single for Wagner operas).

Players like these typically used instruments by Alexander, C.F. Schmidt, Knopf or Kruspe, indeed there was very little option - until Carl Geyer arrived in Chicago in 1904 there were no makers of quality horns in the whole of America.⁶ Bruno Jaenecke and Max Hess are reputed to have been among the first to bring Alexander doubles to America in 1913/14.⁷ By comparison with some other makes, the Alexander and Knopf horns were of more moderate bore. Certainly the Kruspe horns could be regarded as at least large-bore by today's standards.⁸ For the next generation of American horn players, many of them native born, Jaenecke, Horner and other immigrants were idols.⁹

Although a German stylistic influence was strongest in America, perhaps most notably propagated by the Anton Horner school, the country was peppered with other European styles.

All of the many schools of horn playing in America are the fruits of seeds planted there by various European horn players and teachers who emigrated from their countries to take up positions in America.¹⁰

As has already been noted, Alfred Brain took up citizenship in Los Angeles and, although using a German horn, maintained his more slender English sound and style in the Los Angeles

⁶Fladmoe, G., op. cit., p.67.

⁷Schweikert, N., 'A history of the organised horn ensemble in the U.S.', *Horn Call*, October 1985, vol.xvi no.1, p.31.

⁸Paxman, R., interview with SGB.

⁹Stewart, M. Dee, op. cit., p.97.

¹⁰Bracegirdle, L., 'The New York School; its development and its relationship with the Viennese style', *Horn Call*, April 1984, vol.xiv no.2, p.16.

Philharmonic and Hollywood orchestras from 1923 (he also followed Rodzinski to Cleveland for two seasons).¹¹ Apparently, for a period, there developed on the west coast a sort of mini-tradition of Brain-like playing.¹² One Vincent de Rubertin played in the section with him. Albert Stagliano was principal horn in Detroit in this period and a characteristically Italianate lyricism was passed on to his nephew, James Stagliano - principal in the Boston Symphony Orchestra from 1947.¹³ Another Italian, Pellegrino Lecce, was principal in the Chicago Symphony Orchestra until 1936.¹⁴ Perhaps the most influential non-German horn player in America was Louis Dufrasne who had studied in Brussels and 'had the warmth of tone without the wide vibrato of that schooling'.¹⁵ Apart from being a well known principal horn player in his own right, Dufrasne taught Philip Farkas, the most significant player of the next generation and arguably the first entirely 'home-grown' great American horn player.

Gunther Schuller, himself a professional horn player for many years and an Anton Horner pupil (as well as being a composer and authority on jazz), describes the essence of what became accepted as a typical American horn sound thus:

¹¹Pettitt, S., op. cit., p.35-36 and p.38.

¹²Baker, J., interview with SGB.

¹³Shapiro, H., 'James Stagliano (1912-1987)', *Horn Call*, October 1987, vol.xxviii no.1, p.57. Stagliano used an Alexander double throughout his career.

¹⁴Stewart, M. Dee, op. cit., p.5.

¹⁵Scharnberg, W., 'Upon the retirement of Clyde Miller', *Horn Call*, April 1984, vol.xiv no.2, p.98. It is possible that when Dufrasne was studying, the French and Belgian practice of using vibrato had not developed.

In the United States horn players tend to find a darker tone more useful, while in England a more open quality seems to be common practice. The English players no doubt find the American horn quality (especially some of the more extreme examples) muffled and too close to a tuba sound; while the Americans think of their English colleagues as lacking in the characteristic horn mellowness and too close in tone conception to the trombone...

...The position in which the horn is held reflects the above attitudes. The Americans, by and large, rest the bell of the horn on their lap, and in varying degrees turn the bell slightly *in* towards the body. The English players tend to hold the horn free of the body in a higher more horizontal position.... My personal preference... is for a hand position which helps to produce a velvety mellow sound, free and projecting in lower dynamics, which at the same time prevents excessive brassiness at high dynamic levels.... The hand, thus cupped, can give the proper support for holding the bell side of the horn, and at the same time - and this is what concerns us at the moment - direct the tone, the air column to be accurate, partially into the player's body near the waist. Naturally, if this is overdone, a stuffy tone will result.¹⁶

William Scharnberg feels that the Viennese F horn sound has been very influential in America and that, for many American players, the north Germans (in Berlin, for example, where the Bb tube-length has been used extensively) have moved too far from this tradition.¹⁷

The position which the instrument is held in does have a significant effect on the type of sound produced and in conjunction with the fairly widespread use of large-bore horns (larger in the bell section than the standard Alexander instrument) and abundant use of the F side, many American players produced a particularly dark, smooth sound.

¹⁶Schuller, G., *Horn Technique*, London, 1962, p.14-16.

¹⁷Scharnberg, W., interviewed by Max Dinning.

Perhaps the most well known and extreme example of this tone ideal was perpetuated in the Philadelphia Orchestra where Anton Horner was principal from 1902 to 1930 under Stokowski and Ormandy, continuing to play in the section until 1946. His pupils, James Chambers and Mason Jones held the first chair from 1944-46 and 1946-49 respectively.

Philip Farkas tended to rest the bell of his instrument on his knee too (as born out by photographs of him playing).¹⁸ However his Dufrasne schooling must have inculcated a slightly less dark and 'trouserred' sound than that of the Horner school, or at least gave him the ability and desire to vary his sound according to the circumstance. It was Farkas who did much to consolidate a medium-bore sort of sound in Chicago. In his own teaching Farkas stresses the importance of the embouchure, the hand in the bell, the direction of the bell and the position of the tongue in controlling tone quality. He describes a continuum from the brightest sound (open hand, smiling embouchure and bell towards audience) to the darkest (covered hand, puckered embouchure, horn pointing backwards, tongue dropped).¹⁹ During the course of his playing career conductors admired Farkas's ability to provide

¹⁸For example, a 1949 photograph of the Chicago Symphony horn section and a 1955 photograph of the Chicago Woodwind Quintet, *Philip Farkas, legacy of a master*, Stewart, M. Dee, op. cit., pages 77 and 60 respectively. Farkas notes that most American horn players do not like playing standing up, presumably because they can no longer rest the bell on their knee (Ibid., p.95).

¹⁹Farkas, P., 'Thoughts on tone colouring, practising, teaching and rapport with colleagues - even conductors', lecture given at the 24th International Horn Workshop, Royal Northern College of Music, Sunday 26 July 1992.

the sound they required. While playing the Hamilton-Harty *Water Music* arrangement, Karl Munch asked for a French hunting-horn style and commented that Farkas's section were the 'only non-baritone horn section in America'.²⁰ Having played the solo from Tchaikovsky's Fifth Symphony for Eugene Ormandy, the conductor complimented Farkas and commented that it 'sounded just like Philadelphia'.²¹

As was noted above, the first horn maker of repute in America was Carl Geyer. Geyer provided the connection that brought Dufrasne and Farkas together and, furthermore, his friendship and association with Farkas was typical of the kind of player-craftsman interaction which helped forge a future for American brass manufacturing and playing destined to influence the rest of the world.

Carl Geyer was born in Saxony and served a brass manufacturer's apprenticeship in Markneukirchen, centre of much of Germany's musical instrument making.²² Following this he worked for Kruspe and Schmidt where he surreptitiously measured and recorded, using knotted pieces of string, what he considered to be the best horns (such measurements were kept secret). When Geyer secured a job making horns for Wunderlich in Chicago, his first designs were copies of Schmidt instruments.²³ It was Geyer who, in

²⁰Ibid.

²¹Ibid.

²²Fladmoe, G., op. cit., p.63-67.

²³Ibid., p.69.

1914, built a five valve Bb horn for Lorenzo Sansone which became known as the Sansone model. By the 1920s Geyer had set up his own business and had developed a reputation for making fine instruments tailored to individual players' needs and character. He paid particular attention to the taper of the leadpipe and bell sections, which are so important in matters of intonation and sound, and maintained an old-fashioned kind of bespoke craftsmanship, passing up opportunities to enter large-scale mass production when there could have been an enormous demand for his instruments. In the cylindrical section of his horns he always used a bore of .465" (11.8mm), which was quite standard, but didn't release details of his taper measurements.²⁴ During the mid-1920s Geyer moved the thumb valve on his double horns to beyond the valve section (it had formerly always been placed before the valves), an innovation which was almost simultaneously brought out by the German maker Knopf: according to Geyer, Wunderlich had leaked his idea on a trip to Germany.²⁵

Geyer particularly admired Dufrasne's playing and was influenced by his tone ideals. During the 1930s, following a meeting in Geyer's shop, Farkas studied with Dufrasne and also visited Geyer on an almost daily basis after school in order to observe him at work.²⁶ As Farkas's reputation grew

²⁴Ibid., p.148.

²⁵Ibid., p.75-76.

²⁶Ibid., p.78-79. It was at Dufrasne's request that Geyer made a horn with a detachable bell - for practical reasons.

quickly in his early twenties (he became principal horn of the Chicago Symphony Orchestra in 1936 aged 21 and before returning to Chicago in 1947 had played as principal in Cleveland and Boston under Rodzinski and Koussevitsky) his regular use of a Geyer double horn made the make very popular - reputedly the most widely used in America.²⁷ Broadly speaking, there are in effect two strands to American horn style: firstly that derived from Anton Horner typically employing large-bore Kruspe and Conn instruments and secondly the more medium-bore orientated Dufrasne/Farkas school (notable in Chicago and Boston) using models based on Geyer, Schmidt or Knopf originals.²⁸ Robert Paxman expresses the situation from a European perspective thus:

Different pockets have developed using different instruments but, in the main, American instruments are large-bore. In the Chicago area they've basically got medium-bore instruments - Schmidt and Geyer became more important to them. Most of the east coast uses medium-bore except in New York where they use extra large.²⁹

James Chambers went to the New York Philharmonic on leaving the Philadelphia orchestra and, true to his Horner background and a desire to bring a Vienna F horn style to America, helped establish the Conn 8D (which design was based on a

²⁷ Ibid., p.80. Farkas bought his first Geyer in 1930, another in 1933 when he became principal horn of the Kansas City Philharmonic and continued to perform virtually exclusively on Geyer horns until he became involved with the Holton Corporation in 1955 (Ibid., p.187). Fladmoe cites Farkas and Lyndesay Langwill's *An Index of Musical Wind-Instrument Makers* as sources of the claim that Geyers were the most widely used horns in America.

²⁸ Scharnberg, W., interviewed by Max Dinning.

²⁹ Paxman, R., interviewed by SGB.

Kruspe instrument, as discussed in chapter three).

Ironically, this type of instrument sports a short leadpipe and a generally large bore; a longer leadpipe and a smaller bore (as found in many Knopf instruments) might have yielded a closer imitation of the Viennese sound.³⁰

Since 1875 the firm of C.G.Conn had been established in Elkhart, Indiana and this region became the brass instrument making centre of America.³¹ However, during the first half of the twentieth century it would seem there was ample opportunity for gifted craftsmen to improve upon and develop instruments specifically for American players just as Geyer did.

Probably the most widely known of these new makers was Vincent Bach. Born Vincent Schrottenbach in Baden bei Wien in 1890, this Austrian emigrant built up a considerable reputation for himself as a cornet soloist and trumpeter.³² By 1916 he had played a season with the Boston Symphony Orchestra and had been principal trumpet for the American premières of Stravinsky's *Petrushka* and *The Firebird* by Diaghilev's Ballet in New York.³³ Up until the 1920s American players had had to order mouthpieces, like a lot of

³⁰Scharnberg, W., interviewed by Max Dinning.

³¹Tarr, E., *The Trumpet*, London, 1986, p.174.

³²Fladmoe, G., op. cit., p.22. Following an engineering training and a spell in the Navy, Bach toured successfully as a performer. He even played a season in Scarborough! (Ibid., p.32).

³³Ibid., p.36-37.

their instruments, from Germany and many played on unsatisfactory examples.³⁴ Vincent Bach resolved to try and machine better mouthpieces, at first for his own use. Renting time in a workshop owned by the maker Selmer he produced a small number which he found dramatically improved his range (up by about a fourth to f^3 and g^3).³⁵ His mouthpieces were so popular that they sold for large sums of money and soon trumpeters at the Metropolitan Opera, the New York Philharmonic and Boston Symphony Orchestra were using them. Vincent Bach was the first to develop a numbering system related to the size and shape of mouthpiece - procuring an appropriate type had been a rather hit-and-miss affair hitherto. He soon had his own premises, which were rapidly expanded, and set his mind to designing trumpets, cornets and trombones. High quality trumpets in Bb, C and D were developed (players commented of his early models that they were 'Stradivarius' trumpets - hence the name was adopted for his top line instruments) in various bore sizes to achieve the different tone qualities.³⁶ He was also successful in promoting a standardized mouthpiece-socket taper to enable a good mouthpiece fit.³⁷

During the mid-1920s the American school band movement started to grow dramatically. The mid-west manufacturers (Conn had been joined by the likes of F.Q.Buesher, J.W.York

³⁴Ibid., p.38. Most mouthpieces were made by Schmidt.

³⁵Ibid., p.40-42.

³⁶Ibid., p.47-49 and p.188.

³⁷Ibid., p.213. It is called the Number One Morse Taper - five hundredths of an inch per inch (Ibid., p.167).

and Frank Holton) developed modern factories geared to mass production and other makers like Vincent Bach had to expand to survive.³⁸ In addition to 'Stradivarius' models, 'Mercedes' and 'Mercury' ranges were developed for the educational market.³⁹

In common with other important American manufacturers including Benge and Schilke, Vincent Bach copied the format of French Besson trumpets which had been designed by the Belgian, Victor Mahillon. The main advantage to these American makers was the long uninterrupted leadpipe of the French trumpet layout which allowed a long taper to be introduced (recall that German rotary trumpets had a short mouthpipe leading straight into the valve block). Hence was born what has been called the Franco-American format. The Périnet piston valve seems to have been very well received in America and, by 1900, had replaced rotary types almost completely; this may have contributed to a preference for the piston trumpet.⁴⁰

³⁸ Ibid., p.1 and p.14. Fladmoe suggests that it was partially due to the manufacturing industry's marketing drives that many school orchestras were replaced by bands in the 1920s and 1930s. The matter is covered in more detail by Krivin, M., *A Century of Wind Instrument Manufacturing in the United States: 1860-1960*, unpublished PhD diss., State University of Iowa, 1961.

³⁹ Ibid., p.53.

⁴⁰ Ibid., p.19. Even those few horns made in America in the first years of the twentieth century often seem to have had piston valves, even though they were of German bore. Carl Geyer found an example he particularly liked by Conn. Geyer preferred pistons and could not understand why nearly all horn players wanted rotaries.

The development of a unique American trumpet tradition, in which Vincent Bach played a large part, is an interesting synthesis of Austro-German and French influences. Edward Tarr calls the modern American trumpet school a 'mixture of the French and the German schools', but considers it closer to the German because it is orientated towards orchestral playing rather than solo work.⁴¹

An early significant event in the creation of this amalgam occurred when Georges Mager was appointed principal trumpet of the Boston Symphony Orchestra in 1920.

The other large American orchestras, such as the Boston Symphony Orchestra and the New York Philharmonic, oriented themselves to the German school, though in the wave of anti-German sentiment following the First World War, many German musicians in Boston, among them the orchestra's director Dr. Karl Muck, were dismissed and Frenchmen engaged in their places.⁴²

Mager had been a first prize winner at the Paris Conservatoire and 'one of this century's greatest players'; true to his background, he used a C trumpet and had the rest of his section do the same throughout his 30 years in Boston.⁴³ This was an uncommon practice then - Vincent Bach and others commented that they only found the Bb instrument when they first arrived in America. René Voisin and Marcel LaFosse took up positions in the same orchestra in 1927/8, completing a section whose members had all trained in Paris

⁴¹Tarr, E., op. cit., p.185.

⁴²Ibid.

⁴³Whitener, S., *A Complete Guide to Brass: Instruments and Pedagogy*, New York, 1990, p.16.

and played in French orchestras.⁴⁴ Roger Voisin, René's son, became the orchestra's youngest member aged 16 in 1936 and 'moulded the sound of the wind section as first trumpet between 1949 and 1967' playing a four-valve Thibouville-Lamy C trumpet.⁴⁵ It was during this period that the Boston Symphony Orchestra became known as 'the best French orchestra in the world'.

Those who advocate the C trumpet for orchestral use find that it gives a 'greater feeling of security and control', especially when coming in cold; it is well suited to extreme dynamic contrast and, by virtue of its timbre, 'projects with slightly less effort than that required by the Bb'.⁴⁶ When the English trumpeter Philip Jones studied with Marinus Komst of the Amsterdam Concertgebouw, Komst said to him 'Philip, why do you play the Bb? It is so difficult'.⁴⁷ Dutch trumpeters had predominantly used C instruments after about 1925.⁴⁸ Checking through extracts from the repertoire, Philip Jones realised that there are a lot of important g^2 s which are safer on the C trumpet than as a^2 on the Bb instrument.⁴⁹

⁴⁴Buckner, J., *Substitution of Trumpets in Orchestral Music: Origins, Development and Contemporary Practices*, D.M. thesis, Northwestern University, 1989, p.132.

⁴⁵Tarr, E., op. cit., p.185/6.

⁴⁶Whitener, S., op. cit., p.17.

⁴⁷Jones, P., interview with SGB.

⁴⁸Buckner, J., op. cit., p.129.

⁴⁹Philip Jones went on to use American C trumpets while maintaining a very traditional English approach, as will be discussed in the next chapter.

By the 1930s the use of C trumpets, often as an occasional alternative to the Bb, was starting to spread in America, as Walter Piston noted in his orchestration manual.⁵⁰ This was in no small part due to the influx of French players in Boston. New York Philharmonic and NBC Symphony Orchestra trumpeters (including William Vacchiano and Harry Glantz) were among the first outside Boston who took to it.⁵¹

Vincent Bach, as well as offering different pitches of trumpet, had experimented with various bores and bells. In a letter to Gerard Schwarz, a New York trumpeter, Vincent Bach was anxious to point out that it was not easy to define the bore of a trumpet:

The word bore may also mean the bell bore. What would you call a trumpet with a large bore valve (.462") and a small bore bell? Or vice versa: a small bore valve with a large bore bell - German rotary trumpets are built like that.

A trumpet should emit a sufficiently large volume of tone but also have a certain amount of resistance. If you use a large bore valve (.468") and a large bore bell you will have a cannon of a trumpet with no resistance which will exhaust a player, will soak his lips into the mouthpiece cup....

We made B-flat trumpets in five bores: small bore .440", .448"; medium .453"; med. large .459"; large bore .462".... My trumpets made during the first six years were all of the .462" with a variety of bells. Later I made numerous valve bores and we had about fifty different B-flat bell mandrils.⁵²

⁵⁰Piston, Walter, *Orchestration*, New York, 1955, p.253.

⁵¹Buckner, J., op. cit., p.132. Glantz had a trumpet built in C using Bb leadpipe and bell sections - a sort of custom large-bore C instrument.

Whitener, S., op. cit., p.16.

⁵²Fladmoe, G., op. cit., p.149.

Players were thus able to put together a trumpet tailored to their own requirements, choosing from a selection of leadpipes, bores and bells (not to mention mouthpieces). Notwithstanding the fact that to talk of a specific bore size (be it medium, large or whatever) is an over-simplification, the availability of quality instruments of predominantly larger bore than those offered by previous makers, like Besson and Mahillon, proved to be important.

The most significant trumpet-playing talent among the new generation of indigenous brass players was Adolph Herseth, who was born in Minnesota of Norwegian parents.⁵³ Herseth was influenced by the sound of American trumpeters such as Louis Davidson (Cleveland), Saul Caston (Philadelphia) and Harry Glantz on record, but it was the Boston players that had the most profound effect.⁵⁴ After serving in a navy band during the war he studied with LaFosse and Mager at the New England Conservatory between 1946 and 1948; LaFosse commented that Herseth's articulation sounded 'just like what we they teach us at the Paris Conservatory'.⁵⁵ In 1948 Mager sent Herseth to the Vincent Bach factory to find himself a good large-bore C trumpet: in lessons he had tried and liked Mager's, as well as the smaller French models that

⁵³Woolworth, W., *A Biography of Adolph S. Herseth: his Performance and Pedagogical Contributions*, D.M.A. thesis, Arizona State University, 1993, p.14.

⁵⁴Ibid., p.16.

⁵⁵Ibid., p.22-25.

LaFosse used.⁵⁶ When Herseth started playing first trumpet with the Chicago Symphony Orchestra in the same year, a lot of American trumpeters were still using smaller Bbs or Cs, (by Besson, for example) which sounded lighter and brighter.⁵⁷ His fame spread rapidly and the Vincent Bach large-bore C trumpet with 229 bell became well respected. In Herseth, Mager's perhaps already slightly oversize French style had become Americanized. Herseth described his teacher's playing thus:

He showed me some of the French elegance when he played certain things... but he did go a step beyond that....You give him a big piece of some sort and he was like a dog with a bone. He really grabbed it.⁵⁸

Herseth is regarded as having grafted German strength onto French articulation and lyricism - these last two facets being adopted as part of the American style; 'Herseth is a strong player, but he can scale it down - often his imitators can't'.⁵⁹

In the years leading up to the war, some other important brass musicians had assembled in the Chicago area. Renold Schilke was a performer and instrument designer in the same mould as Vincent Bach who played as a regular member of the Chicago Symphony Orchestra trumpet section from 1936 to 1951

⁵⁶Ibid., p.24. LaFosse used Couesnon trumpets. Scott Whitener (op. cit., p.103) estimates that the use of larger bore C trumpets had started around 1929. This was most probably in Mager's hands.

⁵⁷Ibid., p.26 and p.39.

⁵⁸Ibid., p.25.

⁵⁹Steele-Perkins, C., interview with SGB.

(as principal for some of those years). As a boy he had played as soloist with the Frank Holton factory band and had spent time in the workshops learning and developing instrument making skills.⁶⁰ When he travelled to the Brussels Conservatory to study with Eugène Fouveau in 1927, he took the opportunity to absorb Mahillon's writings on trumpet design.⁶¹ He was particularly interested in the careful analysis and manipulation of leadpipe tapers to achieve better intonation. In addition to the Belgian schooling Schilke gained with Fouveau, he had also studied with Max Schlossberg in 1933 and Georges Mager in 1935.⁶² Schlossberg had emigrated from Russia around the turn of the century to become a renowned teacher and player in the New York area.⁶³

While playing in the Chicago Civic Orchestra, Schilke met the ubiquitous Farkas and the two became friends. In the late 1940s they invested jointly in a mouthpiece manufacturing venture using a highly accurate duplicating lathe which was unique in the industry at the time.⁶⁴

Another fortuitous Chicago association came about when Schilke met Elden Benge who had joined the Chicago Symphony

⁶⁰Fladmoe, G., op. cit., p.89. He later worked informally for Holton while he took courses in tool and die work alongside his music studies.

⁶¹Ibid., p.93. Fladmoe gives 'Eugene Fouveau', but this is the same Fouveau who was later Professor of Trumpet at the Paris Conservatoire (1943-57). (Tarr, E., op. cit., p.177).

⁶²Ibid., p.97.

⁶³Tarr, E., op. cit., p.186.

⁶⁴Fladmoe, G., op. cit., p.104.

Orchestra trumpet section in 1932.⁶⁵ Benge was interested in designing trumpets too and they worked on ideas together. When Benge set up his own manufacturing enterprise Schilke did all the tooling for him.⁶⁶

Many orchestras - the New York Philharmonic, the Philadelphia Orchestra, the Boston Symphony, the Los Angeles Philharmonic and the Cleveland Orchestra - contributed to the cosmopolitan tapestry that constituted an American brass playing identity. In particular, the Chicago Symphony Orchestra became the crucible in which many components of a distinctive orchestral style were forged. Since the 1930s under Frederick Stock, the orchestra had taken on a particularly wide repertoire including the biggest romantic pieces. A series of guest conductors including Karl Böhm, Pierre Monteux, Eugene Ormandy, Arthur Rodzinski, Fritz Reiner, George Szell and Rafael Kubelik reinforced this reputation. When Reiner took over as principal conductor in 1953 the Chicago Symphony Orchestra became famous for its sound and accuracy - some might say one of the first 'modern' sounding orchestras. This was co-incident with a lot of touring activity and the beginnings of successful stereo recordings.

Having enquired whether Herseth used a Besson Bb trumpet and

⁶⁵Ibid., p.98.

⁶⁶Ibid., p.98-9. Schilke also collaborated with Arnold Jacobs, the Chicago Symphony Orchestra's tubist from 1944, on mouthpiece design.

learnt of the Vincent Bach large-bore C, Reiner had four identical instruments ordered for the orchestra.⁶⁷ This helped improve blend and intonation, which was sometimes a problem in orchestras where a first trumpet used a C instrument and the rest of the section Bbs. Under Reiner the Chicago Symphony Orchestra became known as a loud, brassy orchestra:

When Reiner wanted it loud he'd look back at us over his half-moon glasses (everybody was blowing their brains out) and say "It sounds anemic". So everybody would try to crank it up a notch.⁶⁸

Edward Tarr describes the orchestra's brass as 'the most forceful, but also the most balanced and virtuosic'.⁶⁹ According to Farkas, Jacobs and Dale Clevenger (the present principal horn), Herseth 'spear-heads' the Chicago Symphony's brass concept.⁷⁰ He has further been described as 'pioneering' the American style of orchestral trumpet playing.⁷¹

Trombone design and playing in America followed a similar path to that of the trumpet. Narrow-bore trombones were played in bands and by soloists, most notably in the case of Arthur Pryor.⁷² In the orchestra the French format (i.e. a

⁶⁷Woolworth, W., op. cit., p.37.

⁶⁸Ibid. (Herseth is quoted).

⁶⁹Tarr, E., op. cit., p.186.

⁷⁰Woolworth, W., op. cit., p.1 and p.12.

⁷¹Ibid., p.68.

⁷²Whitener, S., op. cit., p.51. Holton tried to persuade Pryor to use one of their larger bored trombones but he refused (*The Trombonist*, British Trombone Society, Summer 1991, p.45).

narrower fold and broadening into the bell section later than in German types) was adopted but usually with a wider bore and a larger bell (German characteristics), hence what Bate calls the 'modern German-American' school.⁷³ Anthony Baines explains that the bell branch was often tilted a little to accomodate a wider diameter and that by the 1920s bores of 'around 12.4mm ('medium') or 13.4mm ('medium-large')' were common (approximately .488" and .527").⁷⁴ However it was not long after this that Vincent Bach offered .522", .525" and .547" slide bores for tenor trombones, with bass trombones at .547" and .562". Players in American orchestras tended to use the larger dimensions.

It is often thought that modern large-bore trombones originated in American dance and jazz bands in the 1940s and 1950s:

I have already mentioned the trombone as an instrument which has moved so far from the narrow-bore (or thin-looking) instrument of my youth into becoming virtually a new instrument. This new trombone was not designed for symphonic music but for American dance bands of the Forties and Fifties. Unfortunately, the beast broke free of its chains and escaped to establish itself in the symphony orchestra.⁷⁵

While it is true that the popularity of dance band music increased the profile of the instrument and encouraged a more

⁷³Baines, A., op. cit., p.246.

⁷⁴Bate, P., *The Trumpet and Trombone*, London, 1978, p.62.

⁷⁵Ibid.

⁷⁵Boyden, J., *'The Reasons Why'*, London, n.d., written on the re-formation of the New Queen's Hall Orchestra by Boyden c.1992/3.

versatile attitude to playing style, it is by no means conclusive that symphony orchestra trombone design was influenced by the genre. As with the horn and the trumpet, the predominant influence on American trombone playing in the first decades of the twentieth century was German. German trombones were already larger than French and English types at this time, particularly in the bell section, and although American makers used aspects of the French layout for the instrument (as they did with the trumpet) the sound concept was determined by the rather dark, thick German tradition, to which was added some French brightness.⁷⁶ Many jazz and dance band trombonists to this day use relatively modestly sized instruments: a glance through most makers' catalogues will reveal that those instruments designated for non-orchestral use are of 'medium' or 'small' bore. Large-bore models made by Conn, King, Holton, Reynolds, Olds and other American makers since before World War Two were often described as 'symphony' models.⁷⁷ Perhaps the most widely used of these American instruments has been and is the Conn 88H which was introduced in the 1940s. The 'medium' bore trombones that were introduced in the late 1940s in British orchestras had been used in dance bands, but these were very soon to be superceded by larger American symphony orchestra instruments.⁷⁸

⁷⁶Wick, D., *Trombone Technique*, Oxford, 1971, p.79.

⁷⁷See Wick, D., op. cit., p.1.

⁷⁸Ibid., p.79.

However, it is true that certain non-orchestral trombonists of great skill and musicianship began to exert a stylistic influence on both composers and players. It is not hard to think of music by Gershwin, Copland, Stravinsky, Milhaud and Ravel - to name but some - in which trombone writing has been influenced by jazz and dance band music. Michel Laplace convincingly argues that there were ways in which symphony orchestra trombonists' technique lagged behind that of their dance band colleagues:

...to point out the technical gulf which had opened up in these years, between 1924 and 1937, between the Moles, Dorseys, Vauchants and Paquinets on one hand and, on the other, the many 'straight' players all too determined to stick to detached playing.⁷⁹

It is not surprising that dance band players developed a more legato and smooth style since the trombone featured as a melody instrument much more than it ever could do in symphonic music. Ravel had heard Léo Arnaud-Vauchant play and invited him to his house where he was the first to try out the trombone solos from *Bolero* and *L'enfant et les sortilèges*.⁸⁰ Using slightly unorthodox slide positions, Vauchant played the *Bolero* solo without any glissandos; in his opinion it was probably the Paris Conservatoire trombone professor who added glissandos in the belief that it made it sound more jazzy.⁸¹ Arturo Toscanini is recalled as having said 'I want Tommy Dorsey to play the trombone solo' whenever

⁷⁹Laplace, M., 'Ravel et le "nouveau" trombone', *Brass Bulletin*, No.47, p.36.

⁸⁰Ibid., p.34.

⁸¹Ibid. Laplace gives an indication of Vauchant's slide positions below an extract from the solo.

Bolero came up with the NBC Symphony.⁸² The conductor's respect for jazz and dance band trombonists is reputed to have originated in an incident when Miff Mole (of the Original Memphis Five) sat in on an early *Bolero* rehearsal because none of the NBC Symphony section could play it.⁸³ Guy Paquinet was a fine French trombonist who played with dance bands like the Ray Ventura Band.⁸⁴

In general, though, symphony orchestra style playing - even in America - has remained remarkably isolated from influences of other genres. Those players on the west coast who played for orchestras like the Los Angeles Philharmonic as well as doing a lot of film work for Hollywood (for example, the Twentieth Century Fox Orchestra) were very adept at turning their hand to whatever style was required, but this rarely surfaced as an influence on their concert hall work.

The largest CC and BBb tubas seem to have been standard American equipment throughout this period, with symphony orchestra players using the CC. Many players also had an F tuba, although this was likely to have been of a larger bore than the English F tuba, for music with high or light tuba parts. Arnold Jacobs (of the C.S.O.) has always played on

⁸²Ibid., p.36. Laplace quotes an NBC player, Paul Lavelle.

⁸³Ibid. Laplace points out that there are some inaccuracies in this story, but it may have been true in essence.

⁸⁴Ibid. Ray Ventura had his own arrangement of *Bolero* and Paquinet recorded the piece with him as well as with the Conservatoire Concert Society.

especially large-bore York CC tubas and even uses such an instrument for some notoriously high solos.⁸⁵ As Edward Tarr pointed out when discussing the increase in instruments' bore sizes, the trumpet's in particular, 'These instruments require more air; therefore the study of breathing technique appears to be more important than ever'.⁸⁶ Faced with the very largest of the brass instruments, it is not surprising that it is a tubist who has become an acknowledged expert on breathing: Arnold Jacobs has been called the 'world's greatest brass teacher' and has done much to revolutionize the way American brass players think about breath control.⁸⁷ Since one of the strongest characteristics of American brass playing is a highly developed and athletic use of air support, this is a considerable contribution. He has a complete grasp of breathing physiology and uses medical equipment to measure respiratory capacities and rates. Despite this he manages to impart advice in disarmingly musical language, his pupils often citing the words 'wind and song' as being the epitome of his approach. Jacobs has published few of his thoughts on teaching and it is a great testament to his commitment to the individual one-to-one lesson that his influence has been so great.

⁸⁵ *Arnold Jacobs, the legacy of a master*, ed. Stewart M. Dee, Illinois, 1987, p.56.

⁸⁶ Tarr, E., op. cit., p.189.

⁸⁷ *Arnold Jacobs, the legacy of a master*, ed. Stewart, M. Dee, p.28. No less an authority than Philip Farkas bestowed this accolade. Dee Stewart's book on Jacobs is basically a collection of tributes from over thirty professional players who have benefitted from Jacobs's teaching.

Farkas has displayed a similar devotion to pedagogy and his ideas have reached many thousands of brass players worldwide through his publications, of which *The Art of French Horn Playing* and *The Art of Brass Playing* are the best known.⁸⁸

If Jacobs is the expert on breathing, Farkas has concentrated on the embouchure and in his researches he has photographed and analysed the embouchures of many famous players. Among the great American pedagogues Emory Remington (trombone) and Fred Fox (horn) must also be mentioned. Those of a younger generation, like William Scharnberg, are now assuming the mantle.

If this history of the birth of an American orchestral brass playing tradition reads like an inter-related collection of makers', players' and teachers' biographies then the writer makes no apology! It was largely through the agency of these highly influential individuals that a synthesis of pre-existent German and French schools was further developed - perhaps an appropriately transatlantic phrase might be 'super-developed' - yielding an American sense of identity.

Immigrants like Mager, Horner, Schlossberg, Lafosse and others played their part by teaching highly effectively. Their pupils and successors - native Americans - might easily have just had successful playing careers. Instead people like Vincent Bach, Bengel, Geyer, Schilke, Farkas, Herseth

⁸⁸Farkas, P., *The Art of French Horn Playing*, Indiana, 1956.
Farkas, P., *The Art of Brass Playing*, Indiana, 1962.

and Jacobs contributed massively in matters of design and teaching too. Their close interaction and motivation to develop, improve, and innovate lifted the American brass-playing tradition to a level where it was set to influence the rest of the world. In not much more than 30 years America had gone from being almost entirely dependent on European players to being world leaders. The reputation for virtuosity that American brass players enjoy today has its foundation in the sound pedagogical programs of the first half of the century.

The crystallization of national styles

In treating the virtually worldwide adoption of the German horn and the development of the American tradition in some detail, the two most significant issues concerning national style and its manipulation in this period have been covered. However there remain aspects of orchestral brass performance practice - particular traits, local idiosyncracies and comparative distinctions - which deserve discussion here. In the history of European politics, the inter-war years proved to be ripe ground for the development of nationalist feelings and it is, perhaps, not surprising to find a kind of parochial chauvinism flourishing through some performance styles. That it was in America that disparate European characters fused, while those same characters crystallized and in some cases polarized on their own continent, may also be of interest in wider historical and cultural contexts.

To begin on home soil, the progress of the British trumpet tradition provides an interesting discourse. Before the 1920s the cornet had been a not uncommon visitor to the orchestra, indeed at one point its use threatened to depose the trumpet altogether (as was discussed in chapter three). Even the best players like Morrow and Solomon had performed on the cornet in the orchestra. To an extent this must have created a dual personality in the orchestral style of the time, but since it was often the same player who used either instrument it is reasonable to assume that there was some

unity of purpose. By the 1920s the Bb trumpet had been vested in its rightful place and serious orchestral trumpeters were not likely to consider using the cornet. Although it is difficult to find many examples of British trumpeters who have never played the cornet, at least while at school, many of the next generation of trumpeters trained 'classically', probably at one of the London colleges, and were orientated towards orchestral trumpet playing; these might be termed 'establishment' trumpeters.

Notwithstanding this, a vital and highly developed brass band tradition flourished which produced a number of talented and gifted cornet soloists. These soloists often had quite outstanding natural abilities and musicianship; enjoying star-footballer-like status, the most famous became household names in the midlands and north of England.¹ It was only natural that these players, having sometimes 'done it all' in the band world while still young, might be seduced into professional orchestras. They probably had some experience

¹In the pre-first-war period, names like John Paley, Willie Wood, Ceres Jackson and Mark Hemingway - the first three of these having occupied the coveted solo cornet chair at Black Dyke Mills. Before television and radio, brass bands regularly played to large audiences. The analogy with football is a good one: when Besses o'th' Barn toured in the early years of the century they played to 50,000 in the Tuileries Gardens, Paris; when they were in Melbourne thousands of people lined the streets stopping traffic. Even the smallest villages frequently had their own band and the players in top bands became folk heroes. The industrial sponsors of the works bands allowed men time off their nominal trades to rehearse and perform with the band. See Taylor, A.R., *Labour and Love: an Oral History of the Brass Band Movement*, London, 1983 and *Bands: the Brass Band Movement in the 19th and 20th Centuries*, ed. Trevor Herbert, Oxford, 1991.

on the fringe of orchestral life, playing on the lucrative *Messiah* circuits and for other choral society ventures, but were largely inexperienced in the genre.² Skills like transposition and making important entries after long rests had to be learnt quickly.

Thus there arose two strands in the British trumpet tradition. The one vernacular and, by-and-large, provincial; the other, again as a generalization, London-based and schooled as the profession's progeny. Although the players have always prided themselves on their ability to blend or adopt diverse styles, this distinction manifested itself in discernibly different schools. Certainly there have been many hybrids and composites between the poles, but it is the matter of background which has created a rather unique heterogeneity.

²Players like John Paley (who had spent a year in America with Gilmore's band) and Ceres Jackson picked up provincial work at a time when cornets were accepted in orchestras. The top cornet players continued to benefit from the choral society repertoire long after this though. Willie Lang tells the following story:

There's a tale about Beecham, when he started conducting and he went up to Leeds where they were doing the Bach B Minor Mass....Jackson turned up for the rehearsal in a red flowery waistcoat - he could be very eccentric when he felt like it. Of course the orchestra were in evening dress. Beecham said to him, more in disdain than anything else: 'Do you think you can play this, my man?' Jackson said, 'Can you conduct it?' 'Yes' said Beecham, 'I think so.' 'Good' said Jackson, 'because I can play any bloody thing that you can conduct... In those days, before the First World War...a lot of the orchestras played cornets instead of trumpets' (Ibid., p.17).

Many of the 'establishment' trumpeters, like successive generations of orchestral players, came from families of professional musicians. Philip Jones was a third generation orchestral musician, as was Bob Walton.³ These grew up with a strong impression of what orchestral trumpets sounded like, indeed with an insider's grasp of the whole business. The formative influence on this line of the tradition was undoubtedly Ernest Hall, principal with the BBC Symphony Orchestra from 1929 to 1953 (formerly London Symphony Orchestra 1912 to 1929) and Professor of Trumpet at the Royal College of Music. Although Hall had played the cornet in theatres when young, he went through the Royal College himself studying with Morrow, who made him practise the F trumpet.⁴ In the orchestra, Hall played a Bb trumpet by Mahillon which was of even smaller bore than the narrow Hawkes trumpets which were common at the time.⁵ In the BBC Symphony Orchestra, alongside French horns (with Aubrey Brain as principal) and narrow trombones, his tone shone. The effect has been described as 'wonderful' and Hall is credited with creating the 'typical English style of trumpet playing'.⁶ The quality and warmth of his sound was legendary:

³Jones, P., interview with SGB. Bob (Richard) Walton played trumpet in Beecham's L.P.O. from its formation and was principal from 1935 to 1941. He later played in the Royal Philharmonic and the Philharmonia. Of course, the Brains were probably the most famous of many other families of orchestral musicians.

⁴Ibid. Morrow reinstated study of F trumpet at the Royal College of Music in 1910 and it was taught for a few years.

⁵Lang, W., interview with SGB. Tarr, E., 'Hall, Ernest', New Grove. Hall changed to a Besson Bb around 1945.

⁶Ellison, S., correspondence with SGB.

He sounded like, I don't know how to describe it, it sounds silly, you knew it was a trumpet and yet he played like a bloody lovely flute... It was a warm sound.⁷

Philip Jones studied with Hall from 1940, four years before he won a scholarship to continue with the same teacher at the Royal College.

It was a seminal contact, for Philip's own style of playing and for the sound which he was to create in his brass ensemble. When Philip had his first lesson... Hall instructed him to make a sound like the big round plaque which hung over his mantelpiece... Hall's sound was contained but nonetheless powerful and he produced such warm tones that it was not always apparent that he played without vibrato.⁸

The desire to create as beautiful a sound as possible without using vibrato - an unforced, straight sound - with neat and inconspicuous articulation, became the hallmark (an accurate word despite punning) of this English style. More recently, from a late twentieth-century perspective, it has also been described as a little reserved and 'over-modest'.⁹

Virtually everybody played Besson or Hawkes Bb trumpets: Philip Jones played 'as everybody played, a Besson small-bore trumpet, that was all there was'.¹⁰ It is ironic that Jones, too, found resistance from his Royal College tutor when trying a shorter trumpet - 'the C trumpet was *verboten* to

⁷Lang, W., interview with SGB.

⁸McDonald, D., *The Odyssey of the Philip Jones Brass Ensemble*, Bulle, Switzerland, 1986, p.13-14.

⁹Howarth, E., interview with SGB.

¹⁰Jones, P. interview with SGB.

anybody who came from Ernest Hall'.¹¹

As a student I played the C trumpet as well as the Bb because I was intrigued by the sound. It is very different and I was playing some pieces at college which were written for the C trumpet, so why not the C trumpet. In fact my professor gave me a very hard time about it and threatened to throw me out of the college for being so arrogant. Too bad, I continued to do it but didn't tell them.¹²

Official opinion seemed set against the C trumpet in this country: 'The C trumpet, though brilliant and flexible, lacks nobility of tone and its use is therefore not to be encouraged'.¹³ Nevertheless, around the same time it was commented that 'now finally a trumpet in C is becoming the standard instrument in England'.¹⁴ While this exaggerates the state of affairs considerably, there was one notable trumpeter who did play the C trumpet in the orchestra before the Second World War and this stirred interest in the instrument: George Eskdale had been a 'very very fine soprano cornet - Eb cornet player in the brass band - hence he had a wonderful ability to play Bach, much better than anybody else of his time'.¹⁵ The soprano cornet player in a band is a high register specialist, a very exposed part, and it was from this position (rather than from principal cornet)

¹¹Howarth, E., interview with SGB. Sidney Ellison adds that Hall 'condemned the C trumpet and refused to play one'; at one stage the only C trumpet available was a small-bore French make - 'a thin sounding instrument and very out of tune' (correspondence with SGB).

¹²Jones, P., interview with SGB. The Besson 'Symphony' model, available at this time, was in fact a C/Bb instrument but virtually all British players used it with the Bb slides.

¹³Jacob, G., *Orchestral Technique*, London, 1940, p.59.

¹⁴Howes, F., *Full Orchestra*, London, 1942, p.54.

¹⁵Jones, P., interview with SGB.

that Eskdale progressed, via a successful freelance career including spells with a jazz band in France just after World War One and at the London Coliseum, to being principal trumpet of the London Symphony Orchestra.¹⁶ He played in a 'lyrical, cornet-influenced' style.¹⁷

It was a fantastic sound. Very fine bell-like sound. Totally the opposite to Ernest. So you had two camps actually: his pupils and Ernest's pupils and they never mixed, never played in the same orchestras.¹⁸

Eskdale had a special instrument made for him by Boosey and Hawkes; it was a Bb trumpet with C slides, thus - in effect - a medium-bore C trumpet.¹⁹ His ability to play the Bb, C, D and piccolo F trumpets (he had this last type built for him by Besson for performances of the Second Brandenburg Concerto) presaged modern practice.²⁰

There were others who had switched straight from banding to the orchestras, without any formal trumpet training. Perhaps the most famous bandsman of all time, Harry Mortimer, joined the Hallé in 1927; Jack Mackintosh was invited to the BBC

¹⁶Ellison, S., correspondence with SGB.

¹⁷Tarr, E., 'Eskdale, George', *New Grove*, p.247.

¹⁸Jones, P., interview with SGB. Sidney Ellison, an Eskdale pupil, was a notable exception to this schismatism. Eskdale was, at the time, somewhat of a one-off playing the C trumpet: many of his pupils used the Bb.

¹⁹Ellison, S., correspondence with SGB.

²⁰Ibid. Eskdale 'caused a sensation with a recording of Bach's Second Brandenburg Concerto under Adolf Busch in the year 1936 (on a small F trumpet)' (Tarr, E., op. cit., p.183). Sidney Ellison recalls a performance of the Brandenburg Concerto at the Queen's Hall just before World War Two as being particularly important in securing his reputation.

Symphony Orchestra on its formation in 1930.²¹ Mortimer was renowned for an unforced, smooth style, the effect of his habitual vibrato being mollified by an unerring musicianship and sense of phrase. Mackintosh relied more on virtuosity and showmanship. Harold Jackson, who had replaced Mackintosh at Harton Colliery Band aged 13, later went to London and the Philharmonia.²²

The career of Willie Lang is a quintessential example of this transition from brass band stardom to professional trumpet playing. Willie Lang joined Black Dyke in 1936, aged 16, as assistant to Harold Jackson who was by that time principal, but soon became principal himself.²³ He combined the big, strong tone of a Paley with the artistry of a Jackson or Wood; his sound led a band whereas Mortimer tended to concentrate on his solo passages. Having served as a tank commander during the Second World War, Lang returned to Black Dyke for a number of years.²⁴ Playing solo trumpet parts for choral concerts he got to know singers like Kathleen Ferrier, Norman Walker and Ena Mitchell: it was through these musicians that Sir John Barbirolli became interested in him.²⁵ Ernest Hall had played a part too: Jacky Pinches, an ex-Black Dyke Mills trombonist who played in the BBC Symphony Orchestra with Hall, passed on the trumpeter's

²¹Taylor, A., op. cit., p.32-3 and p.60.

²²Ibid., p.16.

²³Ibid., p.77.

²⁴Taylor, A., op. cit., p.103 and p.124.

²⁵Lang, W., interview with SGB. By this time Willie Lang had a long D trumpet which he used for baroque parts.

admiration for Lang's playing. Hall went to listen to Black Dyke when they happened to be playing near the BBC Symphony and talked to Lang about trumpet playing.²⁶ This was meagre preparation for the career which was to follow:

When I got to the Hallé in '53 everything was new, repertoire, everything. It was peculiar. Barbirolli was very nice to me, an extremely nice man to play with, and he offered me a job - 3rd trumpet, 1st cornet, and assistant 1st. I took it, and I was terribly disappointed in the beginning. In the brass band you play more or less all the time, but in the orchestra you rest and come in, but it has to be spot on. A different business altogether. Just a few notes, but important. I found myself hanging around the band-room a lot, and I was getting awful depressed.... Then first trumpet had trouble with his teeth and they decided to push me up to first. I told Barbirolli that I hadn't enough experience. 'I'm the one to judge that', he said, getting on his high horse. 'Yes', I replied, 'but you're not playing the bloody trumpet. You'll have to keep off my back for a while'. He did that, and I settled down and enjoyed playing for him. Then in 1961 I came down to London to join the L.S.O. as principal trumpet.²⁷

I found it difficult to make the transition to orchestral playing. I had a big sound, but what I didn't like was that you don't get as much playing. Before I went out on a job with Black Dyke I used to have to blow by myself for quarter of an hour, to get my lip in shape. I was reminded of it when I played for Khachaturian - he was over here, recording all his own work. Like all the Russians, he wanted a lot of noise, so I was blowing my guts out six hours a day. It took me back to the old days with Dyke.²⁸

I had to learn myself, that if a tune required vibrato then you played it, I mean if you were playing Gilbert and Sullivan and you had to play 'Take a pair of sparkling eyes', then you'd look bloody well playing it like Beethoven. You played it like you would in a brass band because people would like it, and I must say this about Barbirolli, he was marvellous for that, wasn't a stickler... no, he'd like it. But, I mean in Beethoven you wouldn't. A lot of people gave me wrong advice, because I never paid for a lesson really. Harry Mortimer said, to keep the vibrato out, keep the lips back here [a stretched embouchure], well

²⁶Lang, W., interview with SGB.

²⁷Lang, W., interviewed by Michael Foss in *Orchestra*, ed. Previn, A., London, 1979, p.55-6.

²⁸Taylor, A., op. cit., p.129-30.

when you think about it that's the worst bloody thing.²⁹

I didn't realise when I was in brass bands, because I'd never had lessons, but I was using vibrato that was unnecessary. I don't know why. But I did control that as time went on, but you still want warmth.³⁰

Nonetheless, the ex-cornet players tended to retain that part of their personality and, repertoire permitting, it showed through in their orchestral playing. To an extent, this style of playing had been validated by George Eskdale. The degree of success Lang and others like Jackson enjoyed would tend to indicate that they came to terms with their new challenges rather rapidly. Lang considers himself to have been a different sort of trumpeter to those in the Ernest Hall/Philip Jones mould, of which the total absence of vibrato was a tell-tale trait.³¹ In Jones's own words:

I tried to imitate my Professor who had a very compact sound and he didn't use vibrato, but there was a warmth within the sound... I think if I were a young man now I would want to be able to use vibrato when I wished to. It was taboo when I was a young man, unheard of. George Eskdale used vibrato, coming from a brass band, and his world with the L.S.O. was absolutely contrary to the BBC - Ernest Hall and George Eskdale were the two grand players then. The one that came then was Harold Jackson, who of course had come from the brass bands very much, and used it when he chose to, not all the time.³²

²⁹Lang, W., interview with SGB.

³⁰Ibid. The origin of bandsmen's vibrato is probably connected with vocal style: arrangements of operatic numbers were staple fare for soloists.

³¹Ibid.

³²Jones., P., interview with SGB. The extent of the British non-vibrato dogma is revealed by Forsyth's completely erroneous assertion that 'On the unmuted Brass there is no way of making a vibrato' (Forsyth, C., *Orchestration*, London, 1935, p.494).

Some cornet players metamorphosed with a spell at music college in between the bands and the orchestras - these tended to become a little more 'straightened out'. Arthur Butterworth, for example, left the army to rejoin Besses o'th' Barn in 1947, but shortly afterwards, on entrance to the Royal Manchester College, he was required to give this up; a little later Howard Snell went to the Royal Academy of Music aged 17 and, within six months, had given up his Salvation Army cornet playing.³³

It is interesting that in France, where there was a cornet tradition in the late nineteenth century, the use of vibrato became quite pronounced in orchestral trumpet playing. By far the strongest influence on vibrato - even on a worldwide scale - was the woodwind teaching at the Paris Conservatoire from around the turn of the century. Robert Philip's extended work on early recordings and performance practice shows that the tendency for woodwind players to use vibrato spread from France, to America and to Britain by the 1930s and 1940s.³⁴ This development occurred later, after the Second World War, in Germany and Austria (some wind soloists

³³Taylor, A., op. cit., p.144.

³⁴Philip, R., *Early Recordings and Musical Style*, Cambridge, 1992. In the context of pointing out how little was written about vibrato in the first decades of this century, Philip cites Grove I, II, III and IV from 'vibrato' entries: 'The vibrato is obtained to a limited extent on wind instruments, notably the flute and cornet' (Ibid., p.110. The original article in Grove I was by H.C. Deacon, Vol. IV, p.260). Even by string players, vibrato was used only as an occasional ornament through the late nineteenth and early twentieth centuries until Kreisler developed the modern style which was widely copied in the 1920s and 1930s.

of the Vienna Philharmonic still using very little vibrato to this day). The seeds of the French woodwind school were sown by the flautist Paul Taffanel (1844-1908) and his contemporary, the oboist Georges Gillet. The issue is rather complicated and reference should be made to Philip's work for further details, but it was through these two professors' influence on players like Georges Barrère, Marcel Moyse, William Kincaid, Geoffrey Gilbert, Henri de Busscher, Leon Goossens and Evelyn Rothwell that woodwind vibrato grew gradually stronger during the first half of the twentieth century.³⁵

This is only of direct significance here because of French trumpeters' rather special attitude to solo repertoire:

...the French trumpeters always competed with the oboe players and they thought that if it was OK for oboe players. it was OK for trumpets and that was quite right, but we didn't. We had this idea that unless you were a brass bander an orchestral player played straight, grand, a bit heavy-duty.³⁶

The French system does seem to... part of it is psychological I'm sure. If you are taught that that is what you do, it's like me when I was a kid and played the cornet, my father said 'those are the cornet solos and you play those', so I learnt to double tongue and triple tongue in all those Polkas and Airs and Variations with millions of semiquavers without even thinking about it, or thinking it was hard... I think that is what the French thing must be, that you are taught that the range of the trumpet isn't to top C, it is to top F, so you learn that. I think they must have pretty good basic training about breath support.³⁷

³⁵Reginald Kell, who played with Goossens in the 1930s L.P.O., was somewhat of a one-off with his slow clarinet vibrato.

³⁶Jones, P., interview with SGB.

³⁷Howarth, E., interview with SGB.

Thus, training in exactly the same environment as the Paris Conservatoire woodwind players, indeed sometimes using their repertoire, French trumpeters were expected to acquire the same mastery of technique, phrasing and expression. The English trumpeters' analogy with cornet technique illustrates the broader technical and stylistic horizons that brass band playing engendered, but it should not be inferred that British cornet vibrato and French trumpet vibrato are particularly related other than by the very fact that it exists rather than not. The speed and incisiveness of the French type gives away the more direct association with the Paris woodwind school. After Merri Franquin, Eugène Fouveau (1886-1957, Conservatoire professor 1943-57) and Raymond Sabarich (1909-1966, Conservatoire professor 1948-1966) were the most influential French trumpeters. The former, a Franquin pupil, played a Couesnon instrument and was 'commonly regarded as the greatest French orchestral trumpeter of his time'; the latter taught Maurice André in whom a preference for Selmer trumpets was perpetuated.³⁸ Perhaps the most telling late twentieth-century testament to this approach is to be found in the numerous recordings of baroque flute and oboe concertos by Maurice André, stylistically a direct descendant of the Paris Conservatoire teachers of the period in question.

I remember hearing Sabarich come over and play *Pictures at an Exhibition* and I was a very young man, a student still, and I thought 'what an extraordinary way of

³⁸Tarr, E., op. cit., p.177.

playing' because he cut up the opening into just chopped bits of phrase and he used a heavy, heavy vibrato... everybody said 'that was great'. When I say everybody I mean the French thought it was great. We, the English, thought it was a bit odd. Fouveau, of course, had a very quick vibrato but very controlled. Sabarich was a very wild vibrato and then Maurice André has a very controlled vibrato which is very sweet and changed the whole scene - of course plus his piccolo trumpet whereby he could play, using his fine technique and ability, all sorts of pieces nobody had thought of, like oboe concertos from the baroque times, much to the annoyance of oboe players. Furious, they were.³⁹

Russian trumpet playing usually exhibited a similarly pronounced vibrato, in fact it has often been even more conspicuous. Philip Jones describes it as 'a very heavy, overpowering vibrato which is, I suppose you might say, part of the Russian character'.⁴⁰ As was noted in the previous chapter, this character shares nothing of the French's delicacy and lightness: the Russian school developed unparalleled stridency and weight:

I do recognise that there is a Russian school which starts at *forte* and goes up to six *fs*... When you hear them play Mozart or Haydn it's absolutely laughable... But there is nobody better for Shostakovich and Prokofiev, which is not surprising.⁴¹

...what was wonderful about that Russian stuff, it was terribly rough, and it was very crude, but in certain kinds of music - Scriabin *Poem of ecstasy* - it was wonderful actually. And when we played it it was pretty pallid. It didn't have any paprika or anything, whereas that dreadful, tinny, overblown, vibrato-y noise, which is terribly vulgar, did work well, I thought. It lacked nobility but it didn't half tell.⁴²

³⁹ Jones, P. interview with SGB.

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² Howarth, E., interview with SGB. The use of smaller mouthpieces than is common elsewhere contributes to the Russian sound.

Tarr considers Mikhail Tabakov (1877-1956, Bolshoi Theatre orchestra 1897-1938) to have been the founder of the modern Russian style and his pupil, Timofei Dokschitser (b.1921, Bolshoi Theatre since 1945 and notable for his 'impassioned expression'), its heir.⁴³

The use of vibrato by French and eastern European horn players is probably the most contentious issue relating to national style. Again, the influence of Paris Conservatoire woodwind style is hard to ignore in this context but French horn vibrato actually started a little later than if there had been some direct correlation. For most of the first three decades of the twentieth century players in France used no more discernible vibrato than those in Britain.⁴⁴

Recorded evidence supports this: much French playing was of a style not dissimilar, in sound at least, to that of the first two generations of Brains; Francis Brémont, Edouard Vuillermoz and Emile Lambert were among the notable players of this early twentieth-century period.⁴⁵

Vibrato started to creep into the French sound at the very end of the 1920s and through the 1930s.⁴⁶ This change is widely connected with the arrival of Jean Devémy (1898-1969),

⁴³Tarr, E., op. cit., p.184-5.

⁴⁴Humphries, J., interview with SGB. Hirschovitz, J., in conversation at the 24th IHS conference, RNCM, 1992.

⁴⁵Hirschovitz, J., 'The transition in France between the Natural and Valved Horn', lecture given at the 24th International Horn Society Workshop, Royal Northern College of Music, Manchester, July 28 1992. Morley-Pegge, R., op. cit., p.73.

⁴⁶Hirschovitz, J., op. cit.

one of very few outsiders who came to the Conservatoire having not been a pupil of a previous professor.⁴⁷

Hirschovitz inclines to the view that it came about in an effort to compensate for the lack of tonal variety in French playing after the decline of hand technique (recall that the French pursued the study of effective hand-horn technique long after the introduction of valves).⁴⁸ He also considers contemporary French vocal style to have been influential and even the fact that, at the time Selmer were producing the first French double horns and their studios were used for teaching and practising by horn players and other wind instrumentalists, the famous saxophonist, Marcel Mule, was often to be heard there.⁴⁹ French vibrato became stronger as the century went on and became pronounced in the playing of Lucien Thèvet (Hirschovitz's teacher), Louis Bernard, Gilbert Coursier and Barboteu. Stories sometimes recounted that an old Paris Conservatoire professor was unable to sustain a steady sound in the twilight years of his career and made all his students wobble too, appear to be apochryphal; Hirschovitz does not recall anybody ever insisting that a pupil should use vibrato, or for that matter should not. The idea that horn vibrato might be 'authentic' for certain repertoire is thus dubious where the music considered, as is most often the case, was written before the

⁴⁷Humphries, J., interview with SGB. Zarzo, V., 'Passion for the horn', *Brass Bulletin*, No.86, November 1994, letters, p.97.

⁴⁸Hirschovitz, J., op. cit.

⁴⁹Ibid.

advent of the French vibrato: Debussy died in 1918; Fauré in 1924; Dukas and Ravel may have heard embryonic oscillations in their last years, dying in 1935 and 1937 respectively; and Stravinsky was living in America by 1939, *The Firebird*, *Petrushka* and *The Rite of Spring* having been written and premiered in 1910, 1911 and 1913.

Nevertheless, it cannot be denied that horn vibrato never seemed out of place in French orchestras where there was a kind of corporate sound concept embracing vibrato. The *Daily Mail* music critic admired the 'finely teamed trombones and horns with almost the femininity and vibrato of that much abused instrument, the saxophone' in a 1949 Edinburgh Festival performance by l'Orchestre du Conservatoire de Paris.⁵⁰

Writers on the horn tend to have disapproved of vibrato. Schuller warns that vibrato should be used, if at all, with discretion 'or else the sound will become quite unpleasantly overbearing':

The situation in France is a complete enigma to me, not explicable in any logical *musical* way. There is no possible justification for the incessant superimposing of a vibrato, regardless of style or musical content. It is unmusical and insensitive, but worse than that, utterly boring in its lack of variety. Even third rate string players do not use the same vibrato *all* the time.⁵¹

⁵⁰Bruce, G., *Festival in the North: the Story of the Edinburgh Festival*, London, 1975, p.55.

⁵¹Schuller, G., *Horn Technique*, London, 1962, p.70.

To quote three more writers:

French players, who in general favour the brighter tone of the small-bore instrument, often play with a marked vibrato which assaults the ears of those accustomed to the steady tone of German, British and American players. This national predilection, though it may in occasional cases be justified, more frequently proves to be an error of style, for it devitalizes what is strong, and sentimentalizes what is beautiful.⁵²

...the horn should never be played with vibrato, since it adds nothing to the expressiveness of the timbre and robs the horn of its purity and natural beauty.⁵³

Musicians have tended to prefer the pure sounds of brass instruments and to suspect vibrato as being used *au fond* to make cantabile playing easier (which it does). Wherever vibrato has been regularly employed, on the cornet in British Brass bands, or on the horn in France and Russia, it has aroused some criticism from outside.⁵⁴

Morley-Pegge, despite having trained as a horn player in France, nowhere mentions vibrato (lest, in describing French tone as 'saxophoney' and attributing this to 'high B-flat and C tube lengths with a comparatively small bore or to some other factor' he is making an oblique reference).⁵⁵ His reticence regarding the matter is all the more perplexing since there is at least one account of him having played with vibrato himself.⁵⁶

⁵²Gregory, R., *The Horn*, London, 1969, p.117.

⁵³Whitener, S., *A Complete Guide to Brass: Instruments and Pedagogy*, New York, 1990, p.117.

⁵⁴Baines, A., *op. cit.*, p.36. It is interesting that Anthony Baines presents these three examples of the use of vibrato - further confirmation that its use by orchestral trumpeters was taboo for people of his generation.

⁵⁵Morley-Pegge, R., *op. cit.*, p.52.

⁵⁶Bevan, C., interview with SGB. While a student in 1956, Bevan played in the Kensington Symphony Orchestra, an amateur repertoire orchestra, where a rather aged Morley-Pegge was first horn. He played a piston horn with vibrato, much to the amusement of some members of the orchestra.

Russian and Czech players' use of vibrato, though often slower, is usually accepted as being related to the French style. In describing the characteristics of the Czech national school it has been commented 'we like to play powerfully but with techniques developed in the French style'.⁵⁷

Horace Fitzpatrick is one notable dissenter in that he considers horn vibrato to originate with the Bohemian hand-horn virtuosi. He finds just one contemporary reference to the matter.

...but it is all the richer in its effect because of the broadness and fullness of its vibrato.... vibrato can be produced on no other instrument with such expressiveness and vigour as on the horn.⁵⁸

Fitzpatrick continues:

Further confirmation that the Bohemian virtuosi used vibrato may be seen in the fact that Russian horn-players, initially taught by eighteenth- and early nineteenth-century Bohemians, use vibrato to the present day. So do the French, another derivative school, although the vibrato was less rampant there before the Second World War than at present. In Austria and Germany the vibrato is not encountered amongst horn-players today as a general rule, and has returned to the other winds, notably the oboe and bassoon, only in recent years. Richter and Hanslick were largely responsible for stamping out vibrato in the winds in the late nineteenth century in Austria, Wagner and von Bülow in Germany proper. But it has survived in the countries already noted, and in certain schools of American horn-playing, particularly that headed by John Barrows, who is a pupil of the late Arkady Yegudkin, principal horn with the Czar's private orchestra from 1911 until 1917. A

⁵⁷Mathez, J.-P., 'Jan Hasenhörl: La Trompette en liberte', *Brass Bulletin*, No.78, November 1992.

⁵⁸Fitzpatrick, H., *The Horn and Horn-playing and the Austro-Bohemian tradition 1680-1830*, London, 1970, p.180.

revealing commentary on the appropriateness of the natural vibrato as an expressive embellishment may be seen in the fact that the late Gottfried von Freiberg, solo horn of the Vienna Philharmonic until his death in 1962, vehemently denounced the vibrato: yet there were moments, notably in the slow movement of Richard Strauss's Second Concerto, where his own playing was enhanced by the most eloquent, though utterly unconscious, vibrato. Nor did he ever discourage the present writer, his pupil, from its use.⁵⁹

The idea that there might be a continuity of tradition in the use of vibrato amongst eastern European horn players since the height of the Bohemian hand-horn school is fascinating but lacks support. Certainly there was no such continuity in France, neither for the horn nor, according to Robert Philip, any of the woodwind. Fitzpatrick gives no indication of source or origin for his Richter/Hanslick/Wagner/von Bülow theory, which is a shame because - were it true - the inference that vibrato was used before these four heavies ironed it out might be of immense interest to the period instrument fraternity (or it might not!).

A slight vibrato is sometimes met with in American horn playing, but this is not at all a dominant facet of the national style. Philip Farkas was once asked to use vibrato for a Mendelssohn *Midsummer Night's Dream* 'Nocturne' in 1941 by Artur Rodzinski; the player was relieved that his first attempt at producing this effect was not particularly noticeable on the recording.⁶⁰

⁵⁹Ibid., p.180-1.

⁶⁰Philip Farkas, *the legacy of a master*, ed. Stewart, M. Dee, Illinois, 1990, p.10.

Further mention of Gottfried von Freiburg and the Vienna Philharmonic is warranted in this discussion of national styles. The pre-war period represented a golden era which was intimately connected to the heritage of the orchestra. The Wiener Waldhornverein was formed in 1883 by Joseph Schantl with the intention of celebrating and perpetuating the Viennese style of horn playing. Karl Stiegler, first horn under Mahler and Strauss, perpetuated this tradition with help from Freiburg. Played by such masters the Vienna horn exhibits the 'pure, deep tone of the F horn and, as the volume increases, it condenses to a bright heroic quality at a lower dynamic level than the Bb or double horn'.⁶¹ Freiburg, in particular, was noted for 'the most captivating use of *portamento*, which with some others could become a travesty'.⁶² Furthermore, in the Vienna orchestra, as in Berlin and Dresden, the rotary-valve trumpet (on which a hard-tongued attack is almost impossible, thus defining a rounder, more soft-edged style) and traditional German pattern of trombone continued to be played, portraying the same kind of variety of timbre dependent on volume level as with the Vienna horn. The German trombone tended to incorporate a dual-bore slide, thus increasing the overall conicity of the instrument.

The British orchestral trombone school does not seem to have

⁶¹Whitener, S., op. cit., p.37.

⁶²Merewether, R., 'The Vienna-horn - and some thoughts on its past 50 years', *Horn Call*, October 1984, vol.xv no.1, p.33.

been affected by the brass band movement in the same way that some aspects of trumpet style were, even if there were players, like Jacky Pinches, who had come from the bands. Conventionally, the tone remained 'straight' and unwavering (in contrast to the vibrato which some French trombonists exhibited in solos). Furthermore it seems that British orchestral trombonists remained uncomfortable with solos *per se*. There are no significant accounts of the detached, angular style discussed in the previous chapter having yielded. Thus, a generation after Forsyth's damning judgement on the efficacy of the Mozart 'Tuba mirum' solo, there had been little improvement: 'as may be ascertained by any performance...[it] sounds like a bad cornet player outside a public house round the corner'.⁶³

In terms of bore, the bands stayed with the most modest 'peashooter' dimensions throughout the first half of the century, while in the orchestras there was some slight enlargement. There has been much confusion over this matter, not least over the nomenclature of bore sizes in this period. Anthony Baines writes that equivalents of American trombones with 'slide bores around 12.4mm ("medium") or 13.4mm ("medium large")' began to be used in England during the 1930s.⁶⁴ Philip Bate has it that 'by 1923 it could be safely said that all the notable British symphony players had adopted the "medium" or the "large" bore', an assertion which

⁶³Howes, F., op. cit., p.56.

⁶⁴Baines, A., op. cit., p.246. Converted to Imperial these measurements are .488" and .528".

- if interpreted by today's terminology - is, in the latter case at least, wildly inaccurate.⁶⁵ Notwithstanding the opinions of these two highly respected authorities, it is the widely held view of players themselves that it was not until the 1940s that some players acquired 'medium' bore instruments; before that 'narrow' bore trombones were played. In addition, the term 'peashooter', which should properly only apply to the smallest bores, frequently becomes common parlance for any trombone used before the introduction of modern large bores.

Up to this time [Second World War], the instruments that had been in use for at least half a century generally had a very small bore (.450in.) with bell sizes of about 6 1/2 in. for the 1st and 2nd trombones, and were supplemented, of course, by the traditional G bass trombone....

The first stage in the revolution in British trombone playing was the acceptance of medium-bore instruments. These had already been used for several decades in dance bands, and although many of them did not have a particularly attractive tone quality they were generally much better instruments than the old small bore ones, with superior slide action, much smoother legato, and a better range of dynamics. Various medium-bore models by both British and U.S. makers were used, while the G bass was retained as third trombone.⁶⁶

Much of the confusion can be accounted for by the rather nebulous and arbitrary nature of the terms 'narrow', 'medium' and 'large'. At least, to his credit, Bate illustrates the extent of the problem:

Tenor Trombone in Bb... Built in *small*, *medium*, or *large* bore averaging 0.45 inches, 0.49 inches, and 0.52 inches respectively. At the time of writing there seems to be a tendency for bores to increase again, the latest sizes quoted by a leading British maker being 0.485

⁶⁵Bate, P., op. cit., p.60.

⁶⁶Wick, D., op. cit., p.79.

inches, 0.523 inches, and 0.555 inches.⁶⁷

As a point of reference, Scott Whitener's very up-to-date study presents what may be taken as the definitive, modern interpretation of a small-bore tenor at 'up to .500" (12.7mm)' with a 7-8" bell, medium-bore tenor at '.510-.525" (12.9mm-13.3mm)' with an 8" bell, and large-bore tenor at '.547" (13.8mm)' with an 8.5" bell.⁶⁸

Thus it is possible that trombones, a little larger than the 'peashooters' and used by players from the 1930s, could be variously decribed as 'small' or 'medium', depending on context and the writer's perspective. Furthermore, some trombonists may well have acquired instruments of around .52" bore which might be described, according to Bate's old definitions, as large: Sidney Ellison recalls that when George Eskdale played with the London Symphony Orchestra (1932 to 1960) the brass section 'were all playing large-bore instruments. German double horns and American trombones'.⁶⁹ These 'American trombones' were not as large as modern American trombones, but were large by comparison with the 'peashooter' types. What can be said without fear of inaccuracy is that no trombones approaching the modern concept of 'large' were in use in Britain before the 1950s.

⁶⁷Bate, P., op. cit., p.66. However, neither set of dimensions fits the relationship 1:1.07:1.11 which Bate quotes (from a 'leading firm of makers') earlier (Ibid., p.60). 0.555 inches (14.1mm) is very large indeed and no other source quotes a bore this big for a tenor trombone.

⁶⁸Whitener, S., op. cit., p.51.

⁶⁹Ellison, S., correspondence with SGB.

The first steps in the widening process arose as increasing amounts of repertoire written for the German-type instrument were programmed: although the British trombone style served well composers who knew and understood it (Holst, Elgar and French composers for example) it did not suit all circumstances well, in particular the changing tastes that foreign conductors often brought. George Maxted explains the problems he faced:

My first sense of frustration occurred on my first season in a symphony orchestra. We were giving a Festival of Sibelius with Schneevoigt, the Finnish conductor. All went well until we reached the '7th Symphony' and Schneevoigt asked for a very big sound. At that time we were using small bore instruments, commonly known as 'peashooters' and the harder I worked the thinner the sound became; it was quite inadequate. From that moment the search started for an instrument on which it was possible to produce the right sound for the majority of works in the repertoire. The snag is that the trombone is not a solo instrument and to make any change possible one's colleagues need to be convinced that a change is desirable and of course a great deal of opposition has to be overcome.⁷⁰

Around 1945 Maxted was among those who pioneered the use of 'medium' bore trombones in British orchestras:

I remember on one occasion playing for Furtwängler on his first concert after the war - 'Tannhäuser Overture' opened the programme followed by Schumann's '4th Symphony' and Brahms' 'III'. We were using medium bore instruments larger than those in general use in Britain at the time but still not large enough for Furtwängler. We gave all we had in the way of sound which was quite considerable. Furtwängler looked up and said 'You will give me a little more on the concert, won't you?' Well, I did what I could but I fancy neither of us was very satisfied with the result.⁷¹

⁷⁰Maxted, G., op. cit., p.38.

⁷¹Ibid., p.37-38.

As was mentioned above, the G bass was used at this time and indeed into the second half of the century. The instrument has latterly received much adverse criticism and it is likely that it too was being pushed beyond its limits and overblown. Adkins's bass trombone tutor of 1926 states the objective of 'arriving at purity and evenness of tone in various degrees from "pp" to "ff" avoiding in the latter any semblance of blatancy'.⁷² Forsyth comments that the tone of the instrument 'when not overplayed' is 'powerful and majestic in the extreme'.⁷³ Perhaps the G bass trombone's most vociferous advocate was Godfrey Kneller:

One of the distinguishing factors that differentiates a British orchestra from others is its bass trombone... just as there is no other rose to compare with an English rose, so there is no other trombone in the world to compare with the warmth, depth, majesty and sonority of sound that our bass trombone produces.⁷⁴

In 1954 Kneller regretted the threat of the American Bb/F and found several conductors who preferred the G/D bass. Victor de Sabata said of it 'it is rich and powerful, a very good bass instrument'; Van Beinum had it used in the Amsterdam Concertgebouw Orchestra; and Eugene Goossens introduced it in the Sydney Symphony Orchestra, having failed to interest American players in it (they did not wish to 're-learn' the bass trombone even though, at the time, the G/D bass offered

⁷²Adkins, H., *Boosey and Co.'s Complete Modern Tutor for the Bass Trombone*, London, 1926., p.20.

⁷³Forsyth, C., op. cit., p.142.

⁷⁴Kneller, G., 'Trombones to the Fore', *The Musician*, July 1954, reproduced as 'The English Rose', *The Trombonist*, British Trombone Society, Summer 1993, p.26-27.

notes unobtainable on the Bb/F instrument, but since then the more widespread use of two valves on bass trombones has filled in the missing range).⁷⁵ It was always a difficult instrument to control but in the hands of fine players like William Coleman of the BBC Symphony Orchestra and Gerry McElhone of the London Philharmonic Orchestra it made a unique sound. A thumb valve pitching the instrument in D was often used to yield a complete chromatic range in the low register.⁷⁶

In France the third of three identical tenors, which had been the normal section constitution since Berlioz's time, was often replaced by a wider bore Bb instrument.⁷⁷ George Maxted, having observed a French section of three Bb instruments in 1945, asked the players how they played the bass trombone notes not available on a Bb and was told 'We put them up an octave'.⁷⁸

The history behind the adoption of large-bore trombones in Britain is covered in chapter five, as it relates to the introduction of modern American instruments in the second half of the century. As will be seen, the British players who were most influential in this were Evan Watkin, George Maxted, Arthur Wilson and Denis Wick.

⁷⁵Ibid.

⁷⁶Baines, A., op. cit., p.245.

⁷⁷Gatty, N.C., Stone, W.H. and Blaikley, D.J., 'Trombone', Grove fourth edition [ed. Colles, H.C.], vol.v, p.390.

⁷⁸Maxted, G., op. cit., p.17.

Although, as was described in the previous chapter, the euphonium and Eb tuba were sometimes to be found in the orchestra previously, by the 1930s the F tuba was well established. Besson's models made to Harry Barlow's specification gave this instrument better tuning and flexibility; it was of 'relatively large bore' and served players well alongside the usual pre-1950 British trombones.⁷⁹ However, it ceased to be produced after the Second World War and players turned to the Eb instrument being made in large numbers for the brass bands.⁸⁰ This was, by now, being built with 'extra-wide bore and bell' and was thus designated 'EEb'.⁸¹

⁷⁹Bevan, C., *The Tuba Family*, London, 1978, p.83 and p.167.

⁸⁰Ibid.

⁸¹Baines, A., op. cit., p.258.

CHAPTER FIVE

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1950 TO THE PRESENT DAY

In the second half of the twentieth century the influence of the American tradition spread through Europe. Its authority was felt most immediately and keenly in Britain, where transatlantic fashion seemed to effect a sea-change in majority opinion. In truth, change had been in the wind for a decade - or maybe longer - but the extent and manner of the change has, at times, validated what some have called a 'mid-Atlantic' style. Paradoxically, at the end of the century, aspects of the British tradition appear to have been more tenacious than their equivalents in mainland Europe, their survival probably being assisted by the variety and scope of London's cosmopolitan musical tapestry and the rather special conditions it imposes. More generally, there now seems to be a late back-lash against some of the century's trends.

Nevertheless, the progression from the synthesis of European styles in the pre-war period to the spread of unified and globalized concepts has reinforced the importance of universal values: namely technique, accuracy and flexibility. To some extent, national idiosyncracies have been marginalized.

American hegemony and expansionism

The most important American exports have been trombones and trumpets and, in congruence with these instruments' strengths, a raising of expectations regarding what were considered the attainable extremes of virtually every parameter of playing technique. The process by which the cult of the superlative came to exercise sway in an island renowned for compromise and reserve warrants detailed examination. The over-riding symptom of this trend has been expansionism - in instrument bores and, correspondingly, volume.

As was noted in the previous chapter, British trombonists felt a growing sense of frustration with the equipment available to them; George Maxted was 'bursting at the seams'.¹ They were unable to render the more out-size portions of the Germanic repertoire to the satisfaction of visiting conductors who had often had recent experiences with German and American orchestras. Formerly the problem had been less acute because, in the first decades of the century, big romantic music was programmed less frequently, the general level (volume) of orchestral sound in this country was less developed and methods of travel were not advanced enough for foreign conductors to be quite so influential. George Maxted and Evan Watkin, the long-time principal

¹Wilson, A., 'Mix 'n' Match', *The Trombonist*, British Trombone Society, London, Autumn 1994, p.14-15.

trombone of the Royal Philharmonic Orchestra, had experimented with larger bell sections specially made for them by Besson and Booseys.² Evan Watkin was a naturally large-sounding player and his tone became a model which British players aspired to throughout the 1940s and 1950s.³

'Mongrel' instruments were not unusual: Arthur Wilson commenced study at the Royal Academy of Music in 1946 with an instrument 'half Besson and half something unidentifiable'.⁴ The dire lack of decent instruments which met players' needs resulted from a combination of British makers' backwardness and a rather peculiar post-war trade embargo intended to safeguard home manufacturers.⁵

A very small number of American instruments found their way into British players' hands; Sid Langston and Evan Watkin were among the lucky few who had managed to acquire instruments like the Conn 6H and 'Conqueror'.⁶ These were of medium bore, but were much better than the Boosey and Hawkes's attempt at a medium bore, the 'Imperial'.

²Wilson, A., interview with SGB.

³Parsons, A., interview with SGB.

⁴Wilson, A., 'Mix 'n' Match', *The Trombonist*, British Trombone Society, London, Autumn 1994, p.14. Arthur Wilson's instrument was half English and half French (interview with SGB).

⁵It has been suggested that William Hawkes actually sat on a committee which advised the Board of Trade (Bevan, C., interview with SGB).

⁶Parsons, A., interview with SGB. Langston played with BBC SO (1930-1947).

In the midst of this period of dissatisfaction the New York Philharmonic became timely ambassadors of American trombone sound. Gordon Pulis, Lewis Van Haney and Alan Ostrander have been credited with being responsible for the modern American trombone style:

They introduced lyricism into the trombone section, and from them other trombonists learned not to break up phrases and punch out notes.⁷

In a series of visits to the Edinburgh Festival in the early 1950s under Toscanini, the orchestra was heard by many British trombonists.⁸

British trombone players met these guys and heard them play and just went 'Wow! We can't possibly emulate that on the sort of equipment we've got.'⁹

Then, in about 1951, the marvellous trombone section of the New York Philharmonic came for the Edinburgh Festival, playing on large-bore instruments, and English musicians began to play these trombones, for a rounder, more flexible sound.¹⁰

Unfortunately, procuring American instruments was virtually impossible - the trade ban was still in force. Some instruments, usually Conn 88Hs, were successfully smuggled into the country, others did not quite make it. When the Philharmonia Orchestra visited America in 1955 the trombone

⁷Alessi, J., 'of Slides, Sinatra and Trombone Technique', *The Trombonist*, British Trombone Society, Spring 1995, p.26. Joseph Alessi is the present principal trombone of the New York Philharmonic.

⁸Bruce, G., *Festival in the North: the Story of the Edinburgh Festival*, London, 1975, p.44. The Festival secured a special subsidy to bring this orchestra to their first British appearance after the war (Ibid., p.217).

⁹Parsons, A., interview with SGB.

¹⁰Premru, R., interviewed by Michael Foss in *Orchestra*, ed. Previn, A., London, 1979, p.125.

section bought Conn instruments and played them throughout their tour. On their return they found Customs and Excise officials waiting to confiscate the American trombones.¹¹ Boosey and Hawkes were, by now, producing a large-bore model but players found it unsatisfactory and expensive - it 'blew as if it had been made of left over lengths of G trombone tubing'.¹²

Around the same time Guido Cantelli had come to London to conduct the Philharmonia. He was used to the sound of orchestras like the NBC Symphony and sought to help the British players acquire American trombones; 'he was aware, wanted the change. So it did seem that we were lagging behind'.¹³ Cantelli had had instruments sent to La Scala, Milan already but, tragically, he was killed in an air crash in 1956 before he could arrange this for the Philharmonia players.¹⁴

Gradually, American instruments trickled into Britain; Arthur Wilson obtained one from an American serviceman.¹⁵ The change in sound occurred gradually too; as players grew acclimatized to larger instruments and the larger mouthpieces which suited them, the older sound was replaced.

¹¹Wilson, A., op. cit., p.15.

¹²Ibid. Members of the Philharmonia had been sponsored to play these instruments and it is alleged that Boosey and Hawkes representatives had noticed Conns were being used instead.

¹³Wilson, A., interview with SGB.

¹⁴Ibid.

¹⁵Ibid.

That was probably the biggest leap of all, having to cope with that [a big mouthpiece] in a large-bore instrument. This, again, toned the... softened the sound. It wasn't so bright. 'Bright' used to be the dirty word, you know, 'he's got a bright sound' - there was a fever about the bigger instrument: to say somebody had a bright sound was derogatory... Crazy really. 'Bit bright', they'd say. It really had gone full tilt in the opposite direction.¹⁶

...my own career started at about the time that whatever was the English style of trombone playing was so heavily influenced by America that the two were almost indistinguishable. In fact I think that the British sound is even bigger and browner, if I can put it like that. Darker, really. You see British players play with pretty big mouthpieces on the whole. The tenor trombonists, generally speaking, play bigger mouthpieces than foreign trombonists... a 4G or 5G whereas a foreign player might play a 6 1/2 or something like that.¹⁷

It has been said that British players make German sounds on American instruments. While this is not wholly true, they do tend to make a darker sound than their American counterparts, mainly through using larger mouthpieces.¹⁸

This was a huge turn around - from the light, bright sound of the small instruments to darker than the Americans. It was as if post-war British players wished to dissociate themselves totally from the previous trombone style, if indeed there was any conception of that school at all:

...in those days people came from everywhere - service bands, brass bands, it was a total mixture. There was no school. So everyone latched on to the new thing... It hasn't been a direct copy of the American style of playing; simply that their sound sparked it off. People have experimented with German instruments, but it just wasn't the same, and it didn't work for British players. So although we eventually acquired American instruments,

¹⁶Ibid.

¹⁷Parsons, A., interview with SGB.

¹⁸Wick, D., *Trombone Technique*, Oxford, 1971, p.80. The German trombone remains dark at lower dynamics but becomes very bright and brassy in *forte* and *fortissimo*.

we fitted them to a British way of playing.¹⁹

After George Maxted and Evan Watkin, Denis Wick (principal trombone of the London Symphony Orchestra) became highly influential; his opinion of the old narrow-bore instruments, namely that 'At loud levels, the sound deteriorated and, save in the hands of the very best players... simulated tearing canvas' illustrates the change in taste that the American instruments brought about.²⁰ However, to be impartial, it should be added that quite apart from matters of tone quality, American instruments were considered to be superior (the slide action was much better, for example).²¹

Most players buying new American instruments at this time obtained Bb/F trombones (the thumb valve is often referred to as the 'plug' or 'trigger') initially and then possibly added a straight Bb as a 'luxury'.²² Although the duplex variety had been available before the introduction of American instruments, it was during this period that the use of the 'plug' became a more important facet of technique.

Some were pretty clever with it and some were not, not too clever with it myself.... There is no doubt that there are many passages I could quote to you where, with the trigger, it's chalk and cheese: for the opening of *Firebird* it would mean moving from first to second as opposed to moving first to seventh. So there is no contest there, is there? There are many examples of where that has helped enormously... it makes it more musical at times. It avoids glissandos, makes things

¹⁹Wilson, A, op. cit., p.15.

²⁰Wick, D., op. cit., p.79.

²¹Ibid.

²²Wilson, A., interview with SGB.

more clean.²³

The extra tubing, putting the trombone into F, changes the tone and feel of the instrument slightly but the player learns to disguise this as much as possible. It is most useful in the low register and in reducing recourse to the furthest slide positions.

It is surprising that, in some quarters, the G bass trombone held out for a few years after the adoption of large-bore tenors. It was still found in some orchestras in the 1960s, William Coleman of the BBC Symphony Orchestra being its last exponent in London, George Cottam of the BBC Northern Orchestra (now BBC Philharmonic) playing it until 1968 and, rather anachronistically, Dave Russell of the BBC Welsh up to 1973.²⁴ Nevertheless its days were numbered and it was not long before American extra large-bore (usually .562" with a 9/10" bell) bass trombones in Bb/F and often with a second valve to E or Eb (in the so called 'dependent' system the second valve acts in conjunction with the first) were taken up. Most sections had made the change by the early 1960s. The transition between the two types is described thus:

²³Wilson, A., interview with SGB. The convenience offered by the valve to F is indisputable, but one might consider that Stravinsky knew precisely the practical implication of what he was writing and intended some theatrical effect.

²⁴Mowat, C. and Parsons, A., BBC SO trombone section interview with SGB. Morgan, G., 'BBC Welsh Symphony Orchestra Trombones', *The Trombonist*, British Trombone Society, London, Summer 1992, p.14. The BBC connection appears to be totally co-incidental.

When the Bb/F came in to replace the G bass, a lot of people were against it because they thought it wasn't a real bass sound, and I think it is true to say that perhaps the players who were around and had swapped weren't making a very good bass sound on it, but there is no doubt they do now, you wouldn't wish for bigger. There was a case, when I was with the Philharmonia, the bass trombone.. had gone from the G to the Bb/F but he still produced a G-like sound. Strangely enough he got the sack, or left, and was replaced by the one that stayed there for years, who was a terrific player, but he was playing a Bb/F instrument and Karajan said he didn't like it. He missed the definition of this bloke who sounded as though he was still on the G trombone. Which surprised me a bit. It was resolved in that there were auditions behind a screen and the one who had been appointed stayed and Karajan eventually got used to the idea.²⁵

The player in question was an American, Ray Premru, who had previously always been a tenor trombonist and probably took a little time to grow into the bass trombone, which may have accounted for Karajan's initial concern.²⁶ His moving to the lower instrument highlights the fact that this becomes much easier when the pitches of tenor and bass instruments are the same - the slide positions and pitching are identical. Denis Wick does specify that a very large mouthpiece is necessary to produce a 'true bass trombone sound' on a Bb/F instrument.²⁷ Wick's bass trombonist in the London Symphony Orchestra, Frank Mathison, feels that when he changed over he retained some of the G bass sound in his head, but that this was probably eroded over the years.²⁸

²⁵Wilson, A., interview with SGB.

²⁶Premru, R., interviewed by Michael Foss in *Orchestra*, ed. Previn, A., London, 1979, p.70.

²⁷Wick, D., op. cit., p.88.

²⁸Gane, P., 'Face of the LSO', *The Trombonist*, British Trombone Society, London, Summer 1993, p.19.

The adoption of American instruments, particularly the American-type bass trombone, occurred later in France than in Britain.²⁹ According to some sources, the narrow-bore instrument was still used until the 1970s.³⁰

If the vast majority of trombonists felt that large-bore American trombones constituted a huge improvement, not all trumpeters were so convinced. The occasional voice dissented against the grail of the biggest and darkest:

...when he [Denis Wick] played with the Birmingham [C.B.S.O.] he had a far better sound than when he played with the L.S.O.. He changed onto a bigger mouthpiece. He thought big was better. I used to argue with him about this.³¹

A few trumpeters started to say 'Oh my God, we're playing with the euphonium section now are we?'... we were getting further away from their smaller sound... So not all of them were very keen.³²

The situation immediately post-war for British trumpeters was remarkably similar to that for trombonists. Instruments of fairly narrow bore by Besson, Boosey and Hawkes, King, Olds and others were in regular use. Some players, like Harry Dilley at Covent Garden at the time, experimented with different leadpipes.³³ However, there was not the same urgency for better, bigger, American or whatever sort of instruments until the revolution in trombone equipment

²⁹Whitener, S., *A Complete Guide to Brass: Instruments and Pedagogy*, New York, 1990, p.51.

³⁰Baines, C., *Guide to the Galpin Society 21st Anniversary Exhibition of European Musical Instruments at the Edinburgh Festival*, 1968. Wick, D., op. cit., p.7.

³¹Lang, W., interview with SGB.

³²Wilson, A., interview with SGB.

³³Howarth, E., interview with SGB.

occurred. When it did, it became clear to the trumpeters that they would need to respond to maintain balance within the brass. Some players feel that the gradual adoption of larger bore American trumpets was in direct response to the trombones - 'It had to happen, the trombones went big first as I remember'.³⁴

Harold Jackson of the Philharmonia was one of the first to adopt a larger bore Bb trumpet in the 1950s (a medium-large Bach).³⁵ Again, the agency of the New York Philharmonic was important and certainly the early adoption of large-bore trombones by Arthur Wilson and Alfred Flaszynski in that orchestra, but there were intermediate stages leading up to the use of this sort of instrument which pre-date this.

Philip Jones recounts his own story:

I had had the experience of looking for larger bore instruments when I was at the opera house. I played, as everybody played, a Besson small-bore trumpet, that was all there was. I found in a shop that dealt in second-hand instruments a medium-bore Bach and I paid a huge sum for it second-hand, three times what a new Besson would cost and I played the *Ring* on that as first trumpet at Covent Garden and I thought that that was a much better sound than trying to play it on my Besson. When I took the instrument to the Philharmonia to play as an extra down the line - fourth trumpet - the first trumpet, the very famous Harold Jackson, said 'What's that trumpet?'. I said 'a Bach, would you like to blow it?' So he blew it and he said 'It's a bloody flügel horn' and that was the end of that. I don't know how many years later - I've forgotten the timescale - they were all on medium-large Bachs, they never even had a medium Bach which was called a flügel horn, they had even bigger instruments. But they did do the jump from

³⁴Howarth, E, interview with SGB.

Murphy, M., L.S.O. trumpet section interview with SGB.

³⁵Wallace, J., correspondence with SGB.

the small-bore Besson to the medium-large Bach because that's what the New York Philharmonic played. They were the biggest influence.³⁶

The principal trumpet at the New York Philharmonic from 1935 to 1973 was William Vacchiano. The influence of his choice of instrument was particularly direct for Willy Lang, at that time playing with the Hallé:

The first decent trumpet I had was a Vincent Bach, from America. Vacchiano from New York was coming for the Edinburgh Festival, and Barbirolli asked him to bring me this trumpet.³⁷

He used to conduct there [New York]...and he asked him to go and sort one out and bring it over. Barbirolli paid for it and I think I paid him back at five pounds a week or something like that. I had to meet Billy Vacchiano when he came to the Edinburgh Festival with the New York Phil... and we became firm friends and have been ever since.³⁸

The other facet of American practice which found some favour in Britain was the use of the C trumpet. However, as was noted in the previous chapter, Philip Jones had studied with Marinus Komst of the Amsterdam Concertgebouw (where they had always played C trumpets according to the French tradition) and been convinced of the efficacy of this pitch as a student - so a seed had been sown from within Europe. Nevertheless, when Jones started to play on C trumpets in the orchestras (he considered the Bb better for the opera house), it was

³⁶ Jones, P., interview with SGB. Philip Jones played at Covent Garden from 1948 to 1951.

³⁷ Lang, W., interviewed by Michael Foss in *Orchestra*, ed. Previn, A., p.124-5.

³⁸ Lang, W., interview with SGB. Since Lang joined the Hallé in 1953, his trumpet was probably brought over on one of the New York Philharmonic's subsequent visits, not the first in 1951.

Bach and, later, Benge instruments he turned to: 'I was not happy with an English Besson small-bore C trumpet for the orchestra and so I moved immediately to Bach'.³⁹

Touring America with the Royal Philharmonic Orchestra in 1963, Elgar Howarth found American players amazed that British trumpeters used Bb instruments.⁴⁰ On his return, he started freelancing in London more and became better acquainted with Philip Jones. Soon after Rudall Carte (actually a flute dealer) won the Benge franchise in this country, Howarth was lucky to find a Benge C trumpet in their shop; he bought it and almost immediately played it in a heavy Prom concert as principal with the Philharmonia orchestra - 'I must have been completely mad' (Philip Jones had just left the orchestra and Howarth was filling in).⁴¹ For him, and a few other trumpeters, the C trumpet seemed to work better straight away, although many trained on the Bb said they could not pitch on the C. Later Howarth became principal of the Royal Philharmonic Orchestra and he, Philip Jones (who subsequently re-joined the Philharmonia as principal, having left the London Philharmonic after a year, and then went on to the BBC Symphony) and Howard Snell, then principal of the London Symphony Orchestra, were virtually

³⁹ Jones, P. interview with SGB.

⁴⁰ Howarth, E., interview with SGB.

⁴¹ Ibid. For Elgar Howarth, the adoption of the C trumpet together with the use of a larger mouthpiece and revised thinking on breath support transformed his playing. The availability of the Vincent Bach mouthpieces, offering a wide range of options and sizes, helped many players.

the only London players to use the C trumpet. They were also somewhat unusual in choosing Benges: by the mid- to late-1960s nearly all London's trumpeters were using medium-large Bach Bbs and some were starting to try large bores.⁴²

While Jones maintained a very English sense of style, the American influence showed through much more in Howarth's playing: 'I made an enormous noise on the C'.⁴³

The nicest complement I had paid to me... was when we played in Chicago with the R.P.O.. We played Mahler 1... and old Schilke got Herseth to come in for the day to meet [Alan] Stringer and I - Herseth was like God to a trumpet player. ...old Schilke said to me before they came 'I enjoyed your playing last night, it's quite similar to what we are used to here'. I had tried to copy what I heard Herseth do on record, it was sort of very kind of grand with golden edges on it, I thought. Quite a healthy noise.⁴⁴

... latterly I was too loud because I finished up being extremely loud. Far too loud actually. But I was young and strong and confident and very much influenced by the Americans whom I admire enormously and who not many people did here. It was all rather decried and I thought that Herseth was actually a superb player... In his early career there are things on those records that I don't like. He was a bit loud and a bit brash. But when he got older he became a bit more sensitive and when he was in his fifties it was wonderful playing because it was very big and golden and lyrical, but never over the top - it was always balanced with everyone else... it did sink in with the younger ones that the Americans did have something we didn't. They had a greater range, they were louder, they were more virtuoso about it, as I recall. They didn't hide their light under any bushels.⁴⁵

⁴²Howarth, E., interview with SGB.

⁴³Ibid.

⁴⁴Ibid.

⁴⁵Ibid.

American trumpet manufacturers achieved total domination of the British and, for that matter, the world market-place. Their instruments have been competitively priced, are well made and play better in tune, as well as offering larger bores.⁴⁶ Latterly Schilkes and Yamahas have become popular alongside Bachs (Schilke collaborated with Yamaha on the design of many of their trumpets).⁴⁷ Even in Germany, where the rotary trumpet tradition is strong and there is no historic precedent for the use of piston-valve instruments, American trumpets gained a foothold.

Nowadays, with the inexorable spread of a uniform style and a uniform sound, more and more orchestral players - even in Germany are changing to the jazz [piston] trumpet.⁴⁸

Throughout the world, locally manufactured instruments were generally abandoned in favour of American made trumpets. Before the war locally made instruments with a bore of 10.9 to 11.2mm were preferred in Germany and France; the bore of a modern orchestral instrument however measures between 11.66 and 11.74mm.⁴⁹

Horn playing in Britain was not affected by American trends at the time the trombones and trumpets were. In many ways, the transition to the German horn before the Second World War pre-empted any immediate transatlantic influence in the 1950s and 1960s. Although Dennis Brain played in America and the huge difference in tone quality was noted by many, British players were still settling down to a compromise style

⁴⁶Hall, M. and Gomme, N., L.S.O. trumpet section interview with SGB.

⁴⁷Gomme, N., L.S.O. trumpet section interview with SGB.

⁴⁸Montagu, J., *The World of Romantic and Modern Musical Instruments*, London, 1981, p.101.

⁴⁹Tarr, E., *The Trumpet*, London, 1986, p.189.

somewhere in between the old French horn and the German horn. To have stepped further from home would have been unthinkable. Brain's effective dynasticism cannot be over-emphasized; a whole generation of players speak of having been 'Brain-washed'. In his wake came Alan Civil who, at the BBC Symphony Orchestra, preserved into another era an approach which was always traditional by comparison with prevailing tastes: he succeeded Douglas Moore, Aubrey Thonger and before him Aubrey Brain. According to Julian Baker, the BBC Symphony Orchestra has always remained traditional by comparison with its rivals, maintaining the use of medium-bore horns, typically Alexanders.⁵⁰

Nevertheless many British players did come to adopt larger bore instruments, but often they were not from America. The firm of Paxman started making horns to German designs in 1947. In 1958 Richard Merewether, an Australian player of remarkable natural scientific ability and renown in the execution of very high horn parts, came to Britain and started a collaboration with Paxmans which was to yield numerous advances in quality horn design. From the late 1950s Paxmans offered large-bore (more accurately large bell-taper and mouthpipe) models and, by-and-by, its house style came to be epitomized by the provision of a wide range of options and types: medium, large and extra large bores;

⁵⁰Baker, J., interview with SGB. Douglas Moore, Julian Baker and Tim Brown are three BBC SO players who have perpetuated a similar approach teaching at the Royal College of Music.

single, double, triple and dual-bore descant horns in full or compensating layout; descending or ascending third valves; and a range of other options including yellow brass, gold brass or nickel silver. The precise details of this range are not important here, but what is important is that Paxmans offered players the opportunity to try out different combinations of options. This was in contrast to more traditional makers like Alexander who, at the time, maintained a limited range of tried-and-tested models. Paxman's sound business practice of making horns which were suitable for a variety of schools the world over also catalysed the proliferation of fast-changing trends and fashions - no matter what the flavour of the month was, a player could walk into the Covent Garden shop and buy an instrument that fitted.

Our intention, from very early on, was to produce a number of different sizes and models... and so we've arrived at that position where we can offer the customer all these options and let them choose. This indicates what the people have wanted.⁵¹

Barry Tuckwell, first horn with the London Symphony Orchestra in the late 1950s and 1960s, played on an American Holton large-bore horn and the Paxman large-bore model has been used fairly widely by British players. Those who played second or fourth (and were thus more interested in the low register) had often been using large-bore instruments (by Conn or Reynolds, for example) anyway, but principal and solo players

⁵¹Paxman, R., interview with SGB.

turned to large-bore Paxmans too. For example, Michael Thompson (principal of the Philharmonia Orchestra until 1985 and now a notable soloist) played one until just a few years ago.

In 1972 the whole London Symphony Orchestra horn section moved to Paxman extra-large bore instruments (David Gray led the section at that time).

... when they were first introduced everyone was highly delighted... The extra-large bell lasted, as a phase, about ten years - nine or ten years. Then it started to fall by the wayside and they were realising that although, yes, they were easier to play because you could get plenty of volume, they had no carrying power. Of course, if you are playing the instrument yourself you are reliant on your colleagues to give you feedback on what it does sound like.⁵²

When they first brought out that XL model years ago, twenty years ago, enormous popularity, but nobody gets them that size any more. They have a large bore... and that's pretty popular.⁵³

Although few British horn players would admit to being influenced by American playing, it was the same spirit of expansionism that brought about this vogue; the same pressures orientated around magnitude and automatic accuracy. It was in the late 1970s and early 1980s that the term 'mid-Atlantic sound' was coined - a sound somewhere between the European and American ideals.

Each instrument develops according to the pressures on it in the orchestra. The pressure on the horn player is

⁵²Ibid.

⁵³Baker, J., interview with SGB.

to make the biggest sound with the minimum of effort and also to play in tune naturally without working it out. So you find an instrument that does it for you and they tend to go for a bigger mouthpiece which allows for more flexibility but less and less centre of the sound. A bigger horn - the same result: you have a wider note for getting it right on the recording session because if you go over time it costs more money. That's the pressure. You only have two rehearsals for a show, instead of whole week, and you still get that on a concert night. Except in the BBC, it's interesting, in the BBC they do have longer rehearsal times and in the horns they have maintained that tradition of playing. They've still got this instrument [the Alexander].⁵⁴

It is sometimes difficult to tell whether the manufacturer is responding to the needs of the practitioners or, in creating and marketing new models, he sows the seeds of desire in the player who, of course, always needs to keep abreast of any advances to stay ahead of the competition. Paxmans replaced the XL bell mandrel with the slightly more subtle 'New World' profile in 1985 and in 1990 introduced a dual bore full double.

So they switched over to these 'New World' instruments from the XL and then when the dual bore full doubles became available they, to a man, switched to those and were content there for about three years, I guess. Then, as you know the L.S.O. is self-managed, and the management started getting dissatisfied, for various reasons, with the horn section *per se*... the principal horn, Hugh Seenan, started to be got at by the management. The solution to the problem was for him to change over to a medium-bore instrument. I don't know what politics were involved, but that gave him a new lease of life and everyone was happier.⁵⁵

Tastes and requirements have changed remarkably rapidly.

Most recently the medium bore seems to be returning to favour

⁵⁴Ibid.

⁵⁵Paxman, interview with SGB.

with many British principal horns. It is difficult to ascribe much of this variety and caprice to a directed and consistent American influence (indeed, considering Paxman horns have been used in at least two shrines of the American tradition - the Philadelphia and Chicago orchestras, one might consider more of a 'coals to Newcastle' effect). Nonetheless, it might be fair to say that strands of the particularly rich and varied confection that is the British orchestral horn tradition were born out of the same needs and pressures which underlie aspects of American style.

As was noted in the previous chapter, the brass band EEB tuba was taken up in the majority of British orchestras in the post-war years when F instruments ceased to be made; 'This would have horrified many of the older generation to whom accession to the F demonstrated the successful move from band to orchestra'.⁵⁶ When Clifford Bevan joined the Royal Liverpool Philharmonic in 1961, he and the Hallé tuba player were more or less the last to play the F tuba.⁵⁷ For some time the EEB tuba remained the typical instrument used in Britain and, although this is significantly larger than the F, it seemed that further enlargement along American lines had been resisted. However, in 1978 Bevan wrote that more players were 'following American practice... because international conductors expect a fuller tone'.⁵⁸ Now tuba

⁵⁶Bevan, C., op. cit., p.168.

⁵⁷Bevan, C., interview with SGB.

⁵⁸Ibid.

players in the main orchestras usually own a CC or BBb instrument specifically for certain heavy repertoire.⁵⁹ Opera house players, like Ashley Wall of Covent Garden, probably use the larger instrument more often (in Wagner contrabass tuba parts, for example). John Fletcher felt that the tuba has very much been part of what he calls the 'musical arms race':

When I first came into the business I couldn't make a big enough sound. I was deafened by everyone around me. I assumed it must be my fault. To catch up I first moved from F tuba to Eb. I used larger mouthpieces. Then I went onto the C tuba, which - not so much because of the wider bore but because of the slightly longer tube - gives you still more depth and grunt. That's how it's happened in my corner, and I've been guilty along with the other people.⁶⁰

In symphonic brass playing, encouraged by conductors who want it ever louder, I and my colleagues (whom I love and admire and respect) make a noise which we do not like because it has become the accepted thing.⁶¹

There are various aspects of the American musical and cultural character which have been connected with this penchant for expansionism; the size of concert halls and the orchestras themselves has grown in tandem with brass instruments' bore and volume. William Scharnberg has argued that the type of horn used in American orchestras has some bearing on the hall they are resident in. Thus in Chicago and Boston where the concert halls are resonant, medium-bore

⁵⁹Hankin, D., 'Instrumental Choice', *The Trombonist*, British Trombone Society, Autumn 1993, p.30-31. George Smith, who succeeded Bevan at the Royal Liverpool Philharmonic, has always used a BBb for all repertoire. This is exceptional.

⁶⁰Fletcher, J., 'Tuba Britannica: Is big always beautiful?', *Brass Bulletin*, No. 47, p.20-21.

⁶¹Ibid.

horns work well: here as in the finest European venues, a larger bore tends to give a 'tubby, inarticulate sound'.⁶² However, in general, American halls are far less resonant than is usual in Europe and players have found larger bores to be more effective.⁶³ Similar distinctions pertain in the recording studio.⁶⁴

However the influence of conductors, many of them of European origin, is particularly noteworthy. Often working with highly technically proficient American orchestras, optimized towards a big sound and playing in large concert halls, they milked the big repertoire. These conductors then working in Europe expected to hear a similar sound.

Answering the charge that the Chicago Symphony Orchestra's reputation for being a loud orchestra (which was developed with Reiner) was advanced under Solti, Adolph Herseth offers the following:

I would not say that the maximum dynamic level has changed. I would say that the use of the maximum dynamic level has been more frequent... Solti came here in the middle of the blockbuster era when all of the conductors were playing blockbuster programs all of the time... I remember when Solti came here, he said, 'I've got a band that can really play loud music and I like loud music. So here we go.'⁶⁵

⁶²Scharnberg, W., 'What type of horn should I buy?', *Horn Call*, October 1987, vol.xviii no.1, p.39-40.

⁶³Scharnberg, W., interviewed by Max Dinning.

⁶⁴Ibid.

⁶⁵Woolworth, W., *A Biography of Adolph S. Herseth: His Performance and Pedagogical Contributions*, D.M.A. diss., Arizona State University, 1993, p.42.

Philip Jones's perspective is a little different:

Solti demands huge volume and he probably went deaf when he was with the Chicago. The thing that matters to them more than anything else is that they've got the loudest brass section in the world. They actually also have a very wonderful collection of players, I have to say, but it is the loudest and I don't want to hear it like that all the time. It's occasionally great, but it's mostly not like that.... It's power. America is all about power. It's all about the biggest and the best. So they are the biggest and the best. What does that mean for brass? Well they are the largest, the brashest, the everything-est.^{61, 66}

Solti worked in London regularly too (specifically, at Covent Garden from 1961 to 1971). Other foreign conductors became very powerful in Britain. Otto Klemperer became an American citizen having been expelled from Nazi Germany, but was named the Philharmonia Orchestra's principal conductor for life from 1959.

I could play you his [Klemperer] Bruckner 4, from when I imagine he was getting pretty deaf and it's just like opening and shutting a door. It's 'wham!'. We weren't allowed to play any less. He'd just yell at you and shout, so you just played louder and louder and louder, I don't think somebody like Haitink would approve of that level of volume... For what reason I couldn't be sure, whether he was just hard of hearing or liked to hear it like that. But it certainly was pretty loud. And it became competitive, as I said, with orchestras. The brass were expected to be very loud, very weighty and very powerful. It was rather catching, you know, contagious.⁶⁷

When Philip Jones moved from the Royal Philharmonic Orchestra to the Philharmonia as principal in 1960, he had to change to a larger bore Bach trumpet to match the sound of the

⁶⁶Jones, P., interview with SGB.

⁶⁷Wilson, A., interview with SGB.

orchestra under Klemperer.⁶⁸

I had trombone players that were blowing so loud that in fact I went slightly deaf from the trombones. They were very close just behind and we recorded a great deal and Klemperer liked a lot of volume. Well that has gone a lot louder after that time - we're talking about the late 60s early 70s. Since then it got much louder and crazier, so I should think that quite a lot of other trumpeters might be a bit deaf now too.⁶⁹

Some players have been candid enough to admit that, in certain circumstances, they played a part in the process of volume expansion.

Kempe didn't like it at the R.P.O. when we started... I began to get very confident about it all and Evan Watkin, he was a big player, and between the two of us it did start to get a bit out of hand - bigger and bigger. Kempe, to start with was very very undecided; he didn't like it, his hand would go up. But he sort of got used to it and I think we made a very good sound, the quality - it didn't rasp, it wasn't nasty, it was very rounded... He got used to it and in the end he'd even ask for more. We'd do the *Alpine Symphony* or something and you could almost not give him enough, he fell in love with it, almost drunk with it, I suppose.⁷⁰

With these bigger bores, the temptation, and we've been accused of it, was to get louder and louder and louder. It got competitive. So much so that it got to the point where it was obliterating the rest of the orchestra.⁷¹

Whereas, initially, British trumpeters had felt they were lagging behind the trombones in this escalating process - 'chasing them', by the late-1960s and early 1970s some had caught up; Elgar Howarth feels that he and other notable principals of the time - including John Wilbraham, Howard

⁶⁸Jones, P. interview with SGB.

⁶⁹Ibid.

⁷⁰Howarth, E., interview with SGB.

⁷¹Wilson, A., interview with SGB.

Snell and Maurice Murphy - were capable of 'riding the orchestra' (these last two playing with the London Symphony Orchestra).⁷² If it was the Philharmonia who seemed to succumb to expansionism first, the London Symphony Orchestra was not far behind. Indeed under the likes of Stokowski, Kertesz, Rozhdestvensky, Previn, Bernstein, Abbado and now Tilson-Thomas the London Symphony Orchestra has gained a reputation for playing the big repertoire with a confidence and verve that has been compared to the Chicago Symphony Orchestra's under Reiner (the respective characters of the the London orchestras and their relationships with aspects of national style will be considered in the next section).

⁷²Howarth, E., interview with SGB.

National schools under pressure

What is to be examined here is necessarily Euro-centric: the above presentation of American hegemony illustrates the extent to which some national styles succumbed to expansionism. With this tendency many more subtle characteristics and idiosyncracies came under threat. In discussing the subordination of some aspects of European tradition, it is not intended that America should become a *bête noire*. What is important is the modification - and in some cases replacement - of individual, differing practices by more universal objectives. Although significant aspects of this unifying wave can be traced to America (expansionism, the development of common technique and pedagogy, for example), to attribute every facet of European change thus would be an over-simplification.

Nevertheless, expansionism seems to be at the root of many causations:

After the Second World War, the differences in national schools...began to diminish. This drawback was in part produced by the ever-increasing size both of the symphony orchestras and concert halls, and the resulting search for brass instruments with larger bores and, consequently greater volumes of sound... Throughout the world, locally manufactured instruments were generally abandoned... Obviously brass sections in orchestras from Minneapolis to Moscow have come to sound nearly the same.¹

¹Tarr, E., *The Trumpet*, London, 1977, p.189.

Philip Jones is quite specific about what he considers to be the relationship between increasing volume and character of sound:

I do think that... when it comes to quality of sound - which is what all of our orchestras had, individually over the whole of Europe, an individual quality of sound related to their instruments and, of course, to their temperament and so to their composers' and their conductors' - we lost a lot of that in this country by the madness of having to play ever louder.²

The process by which British orchestral playing came under the influence of American expansionism has been examined in the previous section, but in considering the plight of national styles it is worth putting a magnifying glass to the the London orchestras and the unusually various traditions established within them. Their relationship with each other tells us as much about national traditions as does a comparison with other countries.

Accomplishing the remarkable feat of playing as principal trumpet in virtually all of London's orchestras puts Philip Jones in an ideal position to make comparisons.

When I went from Beecham's orchestra - the R.P.O. - to the Philharmonia... the weight of that orchestra was so much greater that I had to change the instrument straight away. I moved to a bigger bore Bach than the one I'd played for Beecham: he wanted an elegant sound, Klemperer wanted a heavy, menacing sound. I had to change.³

²Jones, P., interview with SGB.

³Ibid.

At this stage the Royal Philharmonic Orchestra still exhibited much that was typically and exclusively British; the Philharmonia had been pumping American iron, with the significant encouragement of a German conductor. The late 1950s and early 1960s was a pivotal period in which the careers of four elemental British conductors declined and the nation developed a taste for foreign conductors. Over the next couple of decades, this brought the likes of Karajan (recording with the Philharmonia in the 1950s), Klemperer (Philharmonia 1959-1973), Solti (R.O.H. Covent Garden 1961-1971), Rozhdestvensky, Monteux, Stokowski, Kertesz, Boulez (BBC SO 1971-75), Kempe (R.P.O. 1960-1975) and Dorati (BBC SO 1963-1966, R.P.O. from 1975) to prominent positions in the London orchestral scene.⁴ Under these musicians, international standards - based on central-European origins and, of course, American polish and aggrandizement - were brought to bear; the elegance and refinement of the British old school was compromised.

The old British conductors, of course, did keep you down. Sargent,... he didn't let you overblow... he would soon shut you up and insisted upon it. I, as a young man, resented it, terribly, because I wanted to make this roaring noise. I never played for Beecham but I'm sure he didn't want it very loud. Don't remember about Barbirolli, don't think he noticed the brass too much. Boult, you couldn't overblow with Boult, he liked a healthy noise but he wouldn't let you swamp. But of course American conductors are used to a lot of sound.⁵

⁴Beecham died in 1961, Boult's reign at the L.P.O. finished in 1957, Barbirolli carried on at the Hallé until 1968 and Sargent died in 1967.

⁵Howarth, E., interview with SGB.

Notably, the London Symphony Orchestra was the one London orchestra where Philip Jones was never principal trumpet. It was also the London orchestra where the trumpet tradition was furthest from Jones's own style.

...that's an interesting thought you've just provoked. From George Eskdale's day... they actually had a sort of cornet tradition, I think by chance.⁶

Willie Lang succeeded Eskdale in 1961: the lyrical cornet approach was perpetuated. After a short period during which Dennis Clift played (although more of a trumpeter, he had played the cornet in the army) Howard Snell became principal trumpet. As was noted in the previous chapter, Howard Snell forsook the Salvation Army for music college; 'But it [the cornet] didn't show so much with Howard. He was a straighter player'.⁷ Then came Maurice Murphy, from the solo cornet chair of Black Dyke Mills, via a Manchester orchestra (the BBC Northern) to principal trumpet of the L.S.O., just as Lang had done. In recent years he has been joined by a co-principal, Rod Franks, who also played with Black Dyke but then went to the Royal Northern College of Music, played orchestrally in Switzerland (Bergen) and spent three years with the Philip Jones Brass Ensemble. Thus, since Eskdale's accession in 1932, the L.S.O. lineage depicts the rise and decline of the brass band, cornet originated, non-orchestrally-trained strand of the British trumpet tradition. Howard Snell came at the end of the era when a player was either one

⁶Jones, P., interview with SGB.

⁷Howarth, E., interview with SGB.

or the other (and thus he decided to 'train' for the profession) and Rod Franks marks the beginning of modern, all-embracing liberalism:

...nowadays lots of them have come through brass bands, and now we are having people through the N.Y.O. scene and the county youth orchestras. Often they play in a brass band and in an orchestra. So they learn two things simultaneously, whereas before they had to learn - for instance Willy Lang had to learn how to transpose... - they were just brass banders, had the cornet and that was it.⁸

The principal trumpets that are coming through now, under Rod's age, are all trumpeters. Even though they might have played in a brass band they go to college and they come out pure trumpet players.⁹

Maurice Murphy is probably the last of an era - the last orchestral trumpeter of exclusively brass-band pedigree. Rod Franks and he agree that the bands have changed now such that cornets do not sound like they did when they played in them. Furthermore, they feel that, pursuing an orchestral career, it is impossible to exist in both camps. So much so that they do not play cornets where they are scored (in Berlioz, for example):

That's my fault. I used to be a cornet player and I think that to make a cornet sound, you need to be playing the cornet all the time. Having said that, I think cornet players in bands now play more like trumpets than they used to do, certainly when Maurice was in the bands and when I was as well. That was a much rounder sound. So I just stick it on the trumpet and if a conductor gets upset then I'll bring a cornet.¹⁰

There are times when you might need a cornet sound outside the orchestra, in studios. If they want a

⁸Jones, P., interview with SGB.

⁹Gomme, N., L.S.O. trumpet section interview with SGB.

¹⁰Franks, R., L.S.O. trumpet section interview with SGB.

cornet sound there then you stick a different mouthpiece in.¹¹

It's very much the same as the dance band world and the orchestral scene. That's grown together more over the years. It used to be totally separate, but there has been so much work where both styles have been incorporated in the same thing - the recording stuff... We find that brass bands and orchestras are getting more like that as well. I was recording with a band the other night and the cornets sound just like trumpets.¹²

As Philip Jones intimated (quoted in the previous chapter), imagining himself a young player today, the modern trumpeter - British or not - wishes to, and is expected to, assimilate and be able to deploy a tasteful vibrato. As more and more records became available and orchestras toured more, English players became aware that vibrato was used around the world; those older traditional players who maintained a vibrato-free sound became somewhat 'isolated'.¹³ So, one might say that not only are there no more Langs and Murphys coming through, there are no more Halls or Joneses either. Just as the trumpet and the cornet have grown more alike physically, the playing styles associated with them have merged too. Certainly there is still variety within British trumpet playing, but the range is smaller: the extremes have been attenuated, subjected to a common-denominator filtering

¹¹Murphy, M., L.S.O. trumpet section interview with SGB. In the last ten years the vast majority of cornet players in top bands have switched to large-bore cornets (a Boosey and Hawkes sales representative reckons that ten large-bore cornets are now sold to every one of the previous normal type, which is in turn larger than the cornets of the early years of this century). In addition, mouthpieces with shallower cups than was traditional are often used now.

¹²Ibid.

¹³Franks, R., L.S.O. trumpet section interview with SGB.

process.

As was described in the previous section, there was a somewhat more abrupt revolution in British trombone sound. In the space of just a few years the narrower tenor instruments disappeared from British orchestras. Denis Wick considers their clarity in *pp* and ability to blend with small-bore trumpets 'probably the only favourable aspect'.¹⁴ However, their lean tone matched the orchestral sound of the first half of the century well and some have mourned the passing of a timbre the like of which is seldom heard now.

The sound had a sparkle and, if one can use the word, a crackle which have totally vanished today, and a lightness which cannot be matched by a modern instrument.¹⁵

Stylistically speaking, British trombone playing has become among the cleanest and most precise in the world; perhaps a little more detached than some schools and certainly with less vibrato than elsewhere in Europe (probably next to none).

There is an over-riding characteristic of British trombone style in that the slide seems not to be an obstacle to technical fluency. An unwritten smear or portamento is hardly ever heard. Fast, controlled slide action with a valve-like legato are normal features of our trombone playing.¹⁶

¹⁴Wick, D., *Trombone Technique*, London, 1971, p.79.

¹⁵Montagu, J., *The World of Romantic and Modern Musical Instruments*, London, 1981, p.105. Passages marked *fff* or *sfz* by such composers as Holst and Elgar who knew the old instrument well cannot be executed with the same 'snap' on a large-bore trombone.

¹⁶Wick, D., 'Legato - home and abroad', *The Trombonist*, Autumn 1991, p.5.

In Germany and in some parts of America, a deliberately slower slide action resulting in a slightly *portamento* style has been perpetuated.¹⁷ The theory that a similar approach existed in Britain earlier in the century (as discussed in chapter three) is reinforced by Wick's recollection of a much older trumpet colleague's comments on a 'near perfect legato': 'a bit antiseptic - doesn't sound like a trombone'.¹⁸ One's impression is that Wick (perhaps in accordance with modern taste) does not lament the passing of *portamento* in the British style. Nonetheless, he does invite discussion, respectful of others' traditions.

In fact it might well be valid to extend this hypothesis to conclude that clean, unobtrusive articulation has become a recognizable characteristic of most British brass playing. Crispian Steele-Perkins considers Philip Jones's example to have been important in this respect, particularly through the agency of his brass ensemble:

Philip Jones introduced soft tonguing via his quintet, whereas Hall [Ernest Hall] used to be a bit "where's 'tongue, lad?". Playing in the early 60s was very 'pippy' - they had larger bore instruments but they tried to play them like small bores. People have now lost the art of playing with a bright sparkle. If it is done, it is done with very great volume and that's ugly.¹⁹

¹⁷Ibid. Heinz Fadler, 'perhaps the most highly regarded teacher in Germany', confirmed that the effect was intentional and not just due to sloppy technique.

¹⁸Ibid.

¹⁹Steele-Perkins, C., interview with SGB.

Of all the British orchestras, the L.S.O. seems to have born the charge of stepping furthest from its country's traditions. Since George Eskdale's time, it has undertaken a lot of commercial recording work, particularly film scores. The sound tracks to big American films (the *Starwars* series, for example) have frequently been recorded in London and the character of the L.S.O. seems to suit this work: much film music features the brass prominently (the sight-reading ability of London orchestras is a factor too). The type of repertoire an orchestra plays tends to mould its sound.

The L.S.O. got into repertoire that was different from everybody else, they played the Russians - Shostakovich and all that Prokofiev early on, they played Bartok, they did the early twentieth-century stuff earlier, sooner than the other orchestras. We were still playing Brahms, they were playing Mahler because they had the conductors who were doing it. They had an adventurous guy, Ernest Fleischman, running the orchestra and pushing. Then when Previn came they did all that Walton... and the American stuff: they had Copland come over and conduct... It's never been a great Brahms orchestra, it's never been famous for Beethoven.²⁰

Alan Civil found the so-called transatlantic L.S.O. horn sound of the 1970s somewhat alien to the English school:

There is now, I think, an English school of playing, and it's a mixture of French sound, from Aubrey Brain, with the technique and display that his son Dennis added, plus a bit of the German style stemming from the Borsdorf family. I think it is a good sound and a good style. Perhaps there have been some wrong steps. At one time the London Symphony horns congratulated themselves on their 'American sound' which Americans couldn't recognise. They were playing on very wide-bore instruments that produced an owl-like whoop, a constipated owl, which didn't carry at all. We called this sound 'the creeping mist', a tuba sort of sound with no detail or definition. You need a bit of edge, I

²⁰Howarth, E., interview with SGB.

think anyway, but not to the extent of French players, who get more edge than tone, with vibrato as well.²¹

The L.S.O.'s present principal conductor, Michael Tilson Thomas, considers the orchestra to be close to the precision and sound of Reiner's Chicago Symphony Orchestra.²² Furthermore, the L.S.O. has acquired a reputation for having a loud brass section.²³ While its players can agree that the demands of their repertoire affect the sound - 'if you are constantly playing the big stuff, as we are, you tend to be a louder section' - they are reluctant to accept an American label.²⁴ Although, in the 1970s, many aspects of the orchestra's brass style was in part connected to American practice (Howard Snell's use of C and Eb trumpets, Denis Wick's introduction of American-like instruments and dynamics in the trombone section, the XL bore horns) the present trumpet section has an integrity of approach which is rare today. Maurice Murphy uses a Bb trumpet for virtually everything and his co-principal, Rod Franks, does much the same (he and other members of the section make occasional use of an Eb trumpet - the issue of instrument substitution will be discussed in the next section). They prefer not to imitate other national styles (as American orchestras and, in England, the Philharmonia do when they use rotary-valve trumpets for certain German repertoire) and in effect are

²¹Civil, A., interviewed by Michael Foss in *Orchestra*, ed. André Previn, London, 1979, p.148-9.

²²Tilson Thomas, M., quoted in *BBC Music Magazine*, September 1994, p.29.

²³Parsons, A., interview with SGB.

²⁴Hall, M., L.S.O. trumpet section interview with SGB.

preserving and consolidating their own tradition. This notwithstanding the fact that they, of course, use large-bore instruments (usually American) and that there has been an undeniable increase in volume since the first half of the century.

If the L.S.O. has exhibited some American brilliance then it might also be said that the Philharmonia has picked up some German attributes, namely a heavier sound and softer, rounder attacks. When John Wallace moved from the L.S.O. trumpet section to principal trumpet at the Philharmonia he had to modify his playing: he took away much of the front of the note - 'I had to get warmer, less attack. I had to stop using the tongue'.²⁵ The origins of a softer-edged approach may lie with the Philharmonia's past conductors. Ray Premru observed the following during his long tenure as the orchestras bass trombonist:

Von Karajan didn't seem to want anyone to play on the beat. Starting a quiet brass chord he always implied that he didn't want to hear 'pah', he wanted the equivalent of an up-bow, the sound rising out of nothing. Of course that's very difficult for the brass, but in the Philharmonia we got used to it. Then with Klemperer, I think we always played behind the beat.²⁶

If aspects of the British tradition have been diluted, some other European practices have been more critically affected. Rotary trumpets have receded in the majority of German and

²⁵Wallace, J., correspondence with SGB.

²⁶Premru, R., interviewed by Michael Foss in *Orchestra*, ed. André Previn, London, 1979, p.152.

Austrian orchestras:

Bores therefore became enlarged, in some models to around 11.3mm, yet without much alteration to the instrument's character, and it is incomprehensible on musical grounds why the German trumpet has recently been replaced so widely in Eastern and Central Europe by American-style instruments.²⁷

George Maxted felt that the Conn 88H had come to represent a kind of international standard trombone sound and lamented the fact that the traditional German sound is 'seldom heard even in Germany these days'.²⁸ The Conn is admired for its blending qualities while some Vincent Bach trombones tend to sound a little brighter.²⁹

Even at the very cornerstone of the twentieth-century German horn playing tradition - Gebr. Alexander of Mainz - a small American influence has stolen its way into the *Meisters'* work. Just over a decade ago the bore of their horns' tubing was increased slightly.³⁰ While many players found this helpful (some had new mouthpieces fitted to their existing instruments) claiming it 'opened up' the high register, the older instruments are now much sought after and quality examples are rare, many having reached the end of their useful lifespan. The traditional Model 103 has thus moved

²⁷Baines, A., *Brass Instruments*, London, 1976, p.234.

²⁸Maxted, G., *Talking about the Trombone*, London, 1970, p.12. Maxted's own preference, a King instrument with a Holton 89 mouthpiece, stood a little closer to German tradition than the Conn.

²⁹Barron, R., interviewed by Michael Foss in *Orchestra*, ed. André Previn, London, 1979, p.151.

³⁰Baker, J., interview with SGB. The bore of the cylindrical tubing stands at 12.1mm (Gebr. Alexander sales literature).

slightly closer to the international common denominator. In addition, within the last fifteen years, Alexanders have introduced the larger bore (large bell taper) Model 101 as a direct response to the American market. While the Mainz firm has always had a reputation for maintaining a tradition, Philip Alexander now feels he must make an effort to supply what current taste demands.³¹

In France the selection of American trumpets and trombones has become as commonplace as anywhere else. Perhaps the most conspicuous change has been the suppression of horn vibrato, which seems to have occurred during the 1970s. Georges Barboteu, a soloist and orchestral player who has made many recordings exhibiting the typical mid-century French vibrato, went to Edmund Laloir (who was teaching at the Geneva Conservatory) in the latter part of his career for help in eradicating his vibrato.³² When Daniel Barenboim became principal conductor at the Orchestre de Paris in 1975, he discouraged vibrato. He appointed Myron Bloom, an experienced American principal horn who had been playing with the Cleveland Orchestra, to the post of co-principal in order

³¹Alexander, P., in conversation at the 24th International Horn Society Workshop, Manchester, 1992. Alexanders also make trumpets and flügel horns and they now use a thicker metal than was traditional in Germany in order to provide an American sound.

³²Zarzo, V., 'Passion for the horn', *Brass Bulletin*, No.86, November 1994, p.97. Zarzo goes on to say 'I regret it, since the great French composers such as Ravel, Debussy and many others wrote wonderful passages for the horn inspired by this very special way of playing'. As has already been noted above, it is doubtful that these composers did actually hear much of this style.

to help smooth out the vibrato. While many French players have continued to prefer the ascending third valve, the slightly smaller-bore, piston-valve Courtois/Selmer instruments have largely given way to the more universal proportions of rotary-valve instruments by the likes of Paxman and Alexander.³³

Against the sense of this section, it is worth noting that transatlantic influence is not always uni-directional; European horn playing has had some influence in America. Over the last twenty years or so, more and more American recitalists have come round to the idea of standing to play and thus are holding the bell free of their body. Formerly the majority sat, with the bell resting on the knee. William Scharnberg feels that this is mainly due to the International Horn Society's workshops where soloists of many different nationalities and backgrounds meet and hear each other play - European players often coming off the better as, quite apart from effect on sound of holding the bell free, a standing position is more imposing and is better physically (for breathing).³⁴

The small French tuba in C seems to have passed the same way as the French horn. Despite having developed a tradition characterized by outstanding agility and a capability for unequalled lightness, French tuba players have fled to the

³³Whitener, S., *A Complete Guide to Brass: Instruments and Pedagogy*, New York, 1990, p.37.

³⁴Scharnberg, W., interviewed by Max Dinning.

Germano-American standard:

Now, in the 1970s, universal tuba practice is being adopted in France. The new generation of tubists tends to play mainly on German rotary-valve instruments, especially the five-valve Alexander CC, in conjunction with the six-valve F by the same manufacturer. The Small C (often of Courtois make) is brought out only for 'Bydlo' and sometimes for tenor tuba parts, although a *saxhorn-basse* (euphonium) is more often used for these.³⁵

Accompanied by the ubiquitous American trombone section (or similar large-bore instruments by other manufacturers), the small French tuba is simply not powerful enough. André Lafosse was one of the last Paris Conservatoire professors who believed in the exclusive supremacy of the narrow trombone:

Persuaded of the superior sound of small bore instruments, he [Lafosse] never tolerated - except for foreigners - other models in his classes. He never paid any attention to evolution and refused all discussion about the so-called "complete" trombone. It was precisely during those years where definitions of the trombone were being recast internationally. We were confronted with two conceptions. The rigid one of the Conservatory and the living one of the current professional.³⁶

In 1978, Bevan wrote that 'Inevitably national differences are now giving way to a much more universal concept of tuba practice'.³⁷ At present, British tuba players' everyday reliance on the Eb instrument represents one of the few exceptions to this 'universal concept' but even here,

³⁵Bevan. C., *The Tuba Family*, London, 1978, p.158.

³⁶Douay, J., 'André Lafosse (1890-1975): master of trombone', *Brass Bulletin*, No.70, p.60.

³⁷Bevan, C., op. cit., p.121.

orchestral players have often resorted to CC tubas for larger programmes since the 1970s.³⁸

While many national styles have been subsumed, watered down and altered, it must be stated that there have been stylistic fortresses where the conformist tide has been resisted. The Vienna Philharmonic is one such bastion. There, as in Berlin and Dresden, rotary trumpets made according to the specifications of long established local manufacturers have been maintained and the traditional German trombone can also be heard. Most remarkable of all, and perhaps most precious of all, the single F Vienna horn has weathered many a security-minded, expansionist storm. There have been times when, because of supposedly unacceptable levels of inaccuracy (by comparison with the omnipresent Bb German horn), its future has been threatened; it has been suggested that one or two of the Vienna Philharmonic's horn players have not been of the same standard as heroes of the past like Karl Stiegler and Gottfried von Freiburg.³⁹ For a period it seemed that there were no quality replacements for old worn-out instruments - immediately after the Second World War it was impossible to buy a new Vienna horn.⁴⁰

³⁸The Eb instrument's future in brass bands seems secure for the foreseeable future as its virtually sole manufacturer, Boosey and Hawkes, also organize and heavily sponsor the British brass band contest scene.

³⁹Baker, J., interview with SGB.

⁴⁰Seyfried, E., 'Concerning the article by Richard Merewether: the Vienna horn - and some thoughts on its past 50 years', *Horn Call*, vol.xvi no.1, October 1985, p.35.

After the close of the Freiburg era it seemed as though the Philharmonic's adherence to the Vienna horn was not so strong as, for instance, that of the oboists to their distinctive instrument and style. There was a difficulty in replacing the old, increasingly worn-out horns being handed down, and although some were being made in emulation of historic designs, workmanship and (in the present writer's view) the patterns were not the best.⁴¹

Even during Freiburg's time not every player in the section always used a Viennese horn and, in truth, there were some occasional disasters:

How one longs to forget possibly the most embarrassing *Pastoral* ever heard from a great orchestra... when he [Freiburg] obtained no right notes from E upward throughout...such calamities are unthinkable nowadays, but the moments of taste and true grandeur are still only occasionally equalled and seldom surpassed.⁴²

Perhaps in this context it is useful to remember Hermann Baumann's oft-repeated maxim that a split note is 'charming on a low F horn, shocking on a Bb and on a high F horn a catastrophe'. In the likes of Beethoven, Schumann, Brahms, Bruckner, Mahler and Strauss the effect of the Vienna horn can be thrilling. In more recent years the Vienna horn seems to be enjoying a resurgence and has been taken up by a few other orchestras outside Vienna (the Bruckner Orchestra, Linz, for example). Instruments by Paxman, Alexander, Yamaha, Engel and Leitner are now available.

In Russia, traditions have survived partly through isolation.

⁴¹Merewether, R., 'The Vienna horn - and some thoughts on its past 50 years', *Horn Call*, vol.xv no.1, October 1984, p.34.

⁴²Ibid., p.33.

Interaction with American and European practices has been minimal until very recently and new instruments have been unavailable, even if players and orchestras could afford them. It is extremely unlikely that a Russian trumpeter, for instance, would own any alternative instruments (like an Eb trumpet), let alone think of substituting during a performance. Indeed in many cases it is the orchestra that owns instruments, which may be of reasonable quality but are probably quite old.⁴³ The most prestigious Russian orchestras like the Bolshoi Theatre Orchestra, whose players are by far the best paid in the country, and the St. Petersburg Philharmonic have undertaken more international touring and are starting to acquire new American instruments.⁴⁴ If there is to be some American or European influence on Russian orchestras, this is where it will be exerted first. Western players have been giving mouthpieces and mutes to Russian players whenever they have met.⁴⁵ Nevertheless it should be stated that heritage is very important to Russian musicians and teaching methods there do much to preserve traditions. Young horn players are still encouraged to use vibrato by teachers who are part of a coherent lineage in either the Moscow or the Leningrad tradition (vibrato is much more prominent in the former).⁴⁶

⁴³Maurice Murphy tells of a Russian trumpeter he met who was not allowed to take his instrument away from the concert hall. If he wished to practice he had to do it in the hall (L.S.O. trumpet section interview with SGB).

⁴⁴Phipps, T., interview with SGB.

⁴⁵Parsons, A., interview with SGB.

⁴⁶Phipps, T., interview with SGB.

In conclusion, it is foolhardy to assert that national differences have been totally eroded. They are still very evident. However, some of the characteristic European styles of the early- and mid- twentieth century have certainly been marginalized. In some cases the remaining evidence of earlier practices is merely vestigial, in others it has been integrated and grafted onto other strains. The British, for example, probably still play 'straighter' than most places in the world.⁴⁷ However there has been some compromise - sufficient for the tradition to be noticeably estranged from that of fifty years ago. While much of the premise for this study is to recall past practices and inform with a view to their re-consideration, there are positive aspects to continuing international influence on national styles. Indeed, sometimes the result of pressure on a national school has been a new or transformed indigenous style.

⁴⁷Howarth, E., interview with SGB.

Further tube shortening and inventiveness

It was in the interest of security and sureness of execution that, in the late nineteenth and early twentieth century, trumpet players turned to the Bb or C instrument and, similarly, horn players increasingly resorted to the shorter Bb tube length. As has been seen, there were those who protested then of degeneration and the loss of instruments' true character. In the second half of the twentieth century a second phase of tube shortening has occurred. Certainly this has been occasioned in no small part by increasing demands on performers to essay a wider range of repertoire, but a further pressure for endlessly repeatable accuracy has been highly significant and should not be ignored. The considerable effort that manufacturers and players have put into producing shorter instruments which play in tune and sound not too dissimilar to their longer brethren serves as powerful evidence of the motivating force of security. While it can safely be said that great inventiveness has always been exercised in the design of brass instruments throughout the centuries, there have also been a few technical developments and changes of priority in the latter part of this century which are also covered here.

Although the use of short trumpets in the symphony orchestra has only become significant in the latter half of the twentieth century, they have been played in various special circumstances for more than a hundred years. Before

considering their function in the symphony orchestra, the earlier background bears examination. It is perhaps pertinent to re-iterate here that shorter instruments do not add notes onto a player's range: the embouchure must be capable of producing high notes on the standard instrument, much more so than for the Bb/Eb clarinettist or flute/piccolo player.

As early as 1845 a German cavalry band had a high D trumpet and saxhorns and cornets had been made up to piccolo Bb pitch.¹ It was the revival of the performance of trumpet parts in baroque music which triggered the serious use of short instruments. Kosleck's A trumpet of the 1880s - although being pitched a semitone below the modern Bb - precipitated the use of ever shorter valve trumpets for this repertoire rather than the correct, long, natural trumpets. As early as 1885 Teste, playing at the Paris Opéra, had a three valve trumpet in high G built by Besson for a performance of Bach's *Magnificat*.² However it was in the D pitch, at half the length of the original baroque instruments, that they became known as 'Bach' trumpets. Bate gives Mahillon as the designer of the first D trumpets, (initially built in straight, unfolded form) in 1892, but

¹Baines, A., *Brass Instruments*, London, 1976, p.239.

²Bate, P., *The Trumpet and Trombone*, London, 1978, p.45 and p.192. Anthony Baines (op. cit., p.239) reports that Teste felt a trumpet in high D would be inadequate. The Besson G had crooks to F and Eb.

Tarr reckons them to have been in use since 1870 in Belgium.³ During the ensuing decades this instrument was taken up by other manufacturers and became standard equipment for the execution of Bach and Handel trumpet parts, which were usually in D, in France and Germany.⁴ While it did not escape notice that these instruments were totally unrelated in sound and character to the original long, natural Bach trumpets, they proved suitable for the large-scale, 'festival-size' performances of baroque music (particularly choral works) which were the norm.⁵ In 1906 Pietzsch wrote gratefully of the opportunity the D trumpet offered in the rendering of baroque parts with 'perfect intonation and rich tone'.⁶ Indeed this was the instrument's chief strength: it gave symphony orchestra players a way of attempting baroque music without studying a vastly different technique.⁷ Among significant exponents of such repertoire in the early years of the century was Heinrich Täubig of the Leipzig Gewandhaus.⁸ Smaller instruments were built for the Second

³Ibid. Bate writes that the Mahillon D trumpet was inferior to the Kosleck/Morrow A by Silvani and Smith, but that it proved more popular, presumably it's being in the correct key for most baroque work made it highly convenient.

Tarr, E., *The Trumpet*, p.190.

⁴Buckner, J., *Substitution of Trumpets in Orchestral Music: Origins, Development and Contemporary Practices*, D.M., Northwestern University, 1989, p.113-114.

⁵Bate, P., op. cit., p.193/4.

⁶Pietzsch, H., *The Trumpet*, 1906, revised edition, Michigan, n.d., p.30.

⁷In the 1930s Werner Menke of Leipzig designed long D and F trumpets of the correct baroque length which were equipped with two valves. Whilst being an eminently sensible idea in principle, these instruments did not become popular because they required considerable specialized study (see Bate, P. op. cit., p.48 and p.130).

⁸Tarr, E., op. cit., p.180.

Brandenburg Concerto; Alexander of Mainz made a piccolo trumpet in F in 1894 and the Paris house of Besson had been making similar instruments with a crook to Eb since 1885.⁹ By 1905 a piccolo Bb trumpet by Mahillon had been used for this piece.¹⁰

Thus baroque music and the D trumpet in particular had brought shorter tubes to the symphony orchestra player:

...let's go back to pre-war days - a trumpeter in an orchestra owned two instruments: a Bb and a D and he played everything Bachian on a D and the whole of the rest of the repertoire, whatever it was, on the Bb. That was absolutely standard and that is the practice I inherited when I started in 1940 and all the people of my generation started that way.¹¹

In addition, Rimsky-Korsakov (in *Mlada* 1892), Stravinsky (*Rite of Spring*), Prokofiev, Ravel, d'Indy, Respighi, Ibert, Britten and Tippett are among the twentieth-century composers who latched on to the 'Bach' D trumpet (or the Eb) as a provider of high notes and scored for it occasionally. (Xenakis and Berio have specified the Bb piccolo).

By the late 1940s Adolph Scherbaum was using the piccolo Bb

⁹Whitener, S., *A Complete Guide to Brass: Instruments and Pedagogy*, New York, 1990, p.102. Buckner, J., op. cit., p.117.

¹⁰Baines, A., op. cit., p.239. Whitener, S., op. cit., p.103. Tarr gives the following as among the first successful executants of the Brandenburg Concerto: A. Goeyens of Brussels (in 1902 on an F trumpet and in 1906/7 on the piccolo Bb), Ludwig Wehrle of Cologne (1905), Herbert Barr at the Leeds Festival (1922) and Paul Spörri who recorded it in 1932 (Tarr, E., op. cit., p.190).

¹¹Jones, P., interview with SGB.

trumpet in the performance of all baroque D parts.¹² Others followed suit, particularly as the design of piccolo trumpets improved, offering better intonation and response. In 1938 Paolo Longinotti (principal trumpet of the Suisse Romande orchestra from 1949-1960 and 'before Scherbaum, one of the few great piccolo trumpet specialists') had corresponded with Vincent Bach about the improvement of piccolo trumpets, which were 'at the time only partially satisfactory prototypes' and in the 1950s he collaborated with the maker Otto Hayman of Geneva.¹³ However, it was a little later, at the end of the 1950s, that a breakthrough in design seemed to occur: the Selmer piccolo Bb became the most popular model and was championed by Maurice André.¹⁴

Although in 1978 Bate wrote that the Bb piccolo's usefulness was 'strictly limited' to the performance of the Brandenburg for those players who preferred it to an F trumpet, along with intermediate pitches like Eb and F/G it was in fact being used in the orchestra increasingly.¹⁵ By the second half of the century, soloists had begun to prove the worth of short instruments and, with wider acceptance in specialist fields, it is not surprising that they came to be considered

¹²Tarr, E., op. cit., p.181. Scherbaum played the Second Brandenburg Concerto over 400 times, recording it on a dozen occasions. He is described as 'until the appearance of Maurice André, the leader in the rediscovery of the trumpet as a solo instrument'.

¹³Mathez, J.-P., 'Paolo Longinotti 1913-63', *Brass Bulletin* No.47, p.59.

¹⁴Tarr (op. cit., p.177) gives the complement of André's preferred equipment as a Vincent Bach C trumpet, the Schilke Eb and the Bb/A by Selmer.

¹⁵Bate, P., op. cit., p.192.

performed the most demanding repertoire - are cited as being among the first to realise the potential advantage short trumpets might offer the symphony orchestra player. Certainly those players who had trained in France (most notably Georges Mager and Roger Voisin in Boston) would have been used to D trumpets for certain repertoire. It could be argued that the gradual adoption of the C trumpet in America constituted the first phase of further tube shortening in the twentieth century: the Bb trumpet is now virtually extinct in American orchestras.¹⁸ However, by the 1950s the use of soprano trumpets in standard orchestral repertoire had grown: European orchestral players were astonished at the repertoire the Philadelphia Orchestra's trumpet section used short trumpets for, substituting pitches where a passage would lie better.¹⁹ Samuel Krauss had become principal trumpet in Philadelphia in 1945 and had been among those who encouraged Vincent Bach to develop more high trumpets.²⁰ He used the D, Eb and F pitches in the orchestra.²¹ Players in other American orchestras took up the idea too (for example in the Minneapolis Symphony Orchestra) and the use of soprano trumpets as part of the symphony player's armoury increased during the late 1950s and

¹⁸Fladmoe, G., *The Contributions to Brass Instrument Manufacturing of Vincent Bach, Carl Geyer and Renold Schilke*, Ed.D. dissertation, University of Illinois, 1975, p.200.

¹⁹Buckner, J., op. cit., p.145 and p.150. In 1954 the Amsterdam Concertgebouw trumpeters observed the Philadelphia Orchestra swapping trumpets in a way totally unfamiliar to them.

²⁰Fladmoe, G., op. cit., p.190.

²¹Buckner, J., op. cit., p.148.

early 1960s; William Vacchiano thought that they were employed to a greater extent after 1960.²² Vincent Bach and, later, Schilke provided players with a wide range of high trumpets to choose from, just as they did in the mezzo-soprano range. Bach catalogues and literature endorsed the importance of short trumpets for symphony players and often suggested suitable instruments for particular repertoire.²³ Models with larger bores and bell sections were developed in an attempt to get closer to the sound of Bb and C instruments and to achieve better balance in the orchestra.²⁴ A commitment to the provision of quality soprano and piccolo trumpets was cemented when Selmer took over the Vincent Bach Corporation in 1961.

According to Tarr, it was the English who became most adventurous in use of short trumpets.²⁵ As was mentioned in the previous chapter, George Eskdale had shown himself able to use Bb, C, D and Eb trumpets and Philip Jones had broken the Bb-dominated mould of the Ernest Hall oligarchy by playing the C trumpet in the orchestra. Elgar Howarth, John Wilbraham and Howard Snell were the few who followed suit. Elgar Howarth remembers that Philip Jones was one of the first to bring D and Eb trumpets into the orchestra playing certain passages on a rotary-valve Scherzer D/Eb; Howarth used this instrument within the Philip Jones Brass

²²Ibid., p.149-151. Vacchiano played in the New York Philharmonic from 1934-73.

²³Fladmoe, G., op. cit., p.197 and p.199.

²⁴Whitener, S., op. cit., p.17.

²⁵Tarr, E., op. cit., p.191.

Ensemble and later acquired his own (which had a slightly larger bell).²⁶ As well as providing more security, instruments in higher pitches sometimes made fingering and intonation easier - 'we used to play Beethoven Seven on the Bb trumpet... it was complete nonsense playing in E major on the Bb trumpet, absolutely crazy'.²⁷ In addition some players found shorter trumpets useful for smaller scale orchestral parts, particularly those written for the classical natural instrument, even up to the Brahms-size orchestra.²⁸ While the sound may be of a smaller scale and a soprano D trumpet, for example, may give more open notes or make the transposition easier in certain pieces, the sound is even further removed from the long natural instruments intended than with the standard Bb trumpet. Small wonder then that, even in performances by fine orchestras with well-respected players, trumpet parts in Mozart, Beethoven, Mendelssohn, Schubert, Schumann and Brahms have lost their drama and character: the instruments used have sometimes been just half the correct length.

In the recording studio some players had already found that the C trumpet was more effective than their usual Bb. For some reason it sounded better on record and in broadcasts.²⁹

²⁶Howarth, E., interview with SGB.

²⁷Ibid.

²⁸Gomme, N., L.S.O. trumpet section interview with SGB.

²⁹Daniel Tetzlaff, second trumpet with the Minneapolis Symphony Orchestra in the 1950s, was among those to express this opinion in print (Buckner, J., op. cit., p.134).

As principal trumpet of the London Symphony Orchestra in the early 1970s, Howard Snell often found himself in the recording studio; he had Schilke build a four-valve Eb trumpet and used it extensively as a 'basic orchestral instrument' (the fourth valve lowered the trumpet to Bb to give a full range).³⁰ Other players in the L.S.O. at the time (John Wallace and Willie Lang) acquired similar instruments and then players in other orchestras did too. Lang describes it as a 'soloistic instrument', good for 'studio playing'.³¹ Renold Schilke remarked that he had favourable comments about this instrument from European conductors working in England; it had a more traditional, darker sound than would be expected from an Eb trumpet.³² This was probably due to Schilke's individual bore specifications.

The recording industry demanded that you played everything ten times over accurately and that's how you made your name. I think that at that point people began to look for solutions and quite a few people, I think Howard Snell was the earliest, decided that the four-valve Eb instrument by Schilke was a safer bet than the dicey Bb or C... 'safety first' was the the four-valve Eb and as players got a little older, they got more nervous about the accuracy for recordings and tended to move toward these things.³³

Some players have expressed the feeling that a smaller trumpet 'gets onto the microphone' better.³⁴

³⁰Buckner, J., op. cit., p.176.

³¹Lang, W., interview with SGB.

³²Ibid., p.177.

³³Jones, P., interview with SGB.

³⁴Howarth, E., interview with SGB.

However, this was not the end of the road as far as tube shortening in the symphony orchestra trumpet section went: by the 1970s and 1980s the Bb/A piccolo progressed from the baroque soloists' arena to the orchestra, perhaps first being admitted for the execution of those few D trumpet parts by Rimsky-Korsakov, Stravinsky *et al.* (Tarr considers it more likely that such parts would be played on the piccolo trumpet now).³⁵

Philip Jones was the first to own a Selmer piccolo Bb trumpet in England and showed it to John Wilbraham (while he was playing in the P.J.B.E.); Wilbraham was 'fascinated' and became well known for playing piccolo trumpets in the orchestra.³⁶ 'Jumbo [John Wilbraham] started on the piccolos and then everybody had piccolos'.³⁷ Such an instrument's use in a standard symphony orchestra performance is highly conspicuous, visually and sonically. It is surprising that the practice ever became established; the only possible motivation is safety.

Very quickly the Bb piccolo became the equivalent of what Alan Civil called the 'securicor' - with a certain irony. The piccolo trumpet became used far too much and it was completely wrong: it doesn't matter who makes it or how big the bore is or whatever they do, there is no way a piccolo trumpet 2' 6" long is ever going to sound like an orchestral trumpet.³⁸

³⁵Tarr, E., *op. cit.*, p.175.

³⁶Jones, P., interview with SGB. Philip Jones bought the Selmer in Paris. John Wilbraham played in the BBC Symphony Orchestra in the 1970s.

³⁷Murphy, M., L.S.O. trumpet section interview with SGB.

³⁸Jones, P., interview with SGB.

Wilbraham represented the *ne plus ultra* in changing instruments, but many others copied him; 'it went crazy for a while'.³⁹ He had a reputation to maintain as a high player but by using more secure short instruments the effect was to up the ante for everyone else.

I've seen Jumbo [John Wilbraham] use two different Ebs on a session and pick one up to play a few notes on and put it down and play the other one. He would never play anything above a G [g^2 , written] on any instrument. If it was above a G he would pick up another [smaller] instrument.⁴⁰

While it is felt that the mania for trumpet substitution has 'settled down' in recent years (Philip Jones considers it a 'nonsense' looking for 'security at all costs for anything that's above a G at the top of the stave' and hopes that it has 'receded entirely') orchestral trumpeters still usually own a Bb piccolo instrument (Tarr considers them 'part of the standard equipment needed) for occasional use and almost certainly a D/Eb.⁴¹ The use of G or Bb piccolo trumpets has largely taken over from the D trumpet in the performance of baroque music, even though some feel the D to make a far more acceptable sound.⁴²

Virtually exclusive use of mezzo-soprano trumpets (Bb or C) is now only found in a few orchestras. In Russia, tradition

³⁹Hall, M., L.S.O. trumpet section interview with SGB.

⁴⁰Murphy, M., *ibid.*

⁴¹Hall, M., L.S.O. trumpet section interview with SGB.
Jones, P., interview with SGB.

Tarr, E., 'Trumpet', *New Grove*, p.641.

⁴²Fladmoe, G., *op. cit.*, p.200.

Whitener, S., *op. cit.*, p.17.

has always been very powerful and together with the extreme difficulty Russian players have in obtaining American or European instruments this has kept trumpet substitution almost non-existent. In Berlin, Dresden and Vienna the tradition of rotary Bb and C instruments has remained strong and substitution has not been as widespread as elsewhere (although it was a Dresden trumpeter who was one of the first to make occasional use of a high trumpet, as noted above, and fine rotary-valve soprano and piccolo trumpets are available). Although some English players have been among the most progressive in trumpet substitution practices, other older players have remained faithful to their training and backgrounds: Laurie Evans maintained a traditional Bb trumpet approach as principal at the London Philharmonic Orchestra until very recently and Maurice Murphy and Rod Franks prefer to use the Bb instrument for virtually everything.⁴³ Nevertheless, in the typical professional orchestra undertaking a wide variety of work, trumpeters need to make recourse to short trumpets in order to survive: such is the pressure for repeatable accuracy.⁴⁴ It is accepted that certain pieces and passages can be played on shorter

⁴³ Steele-Perkins, C., interview with SGB.
Murphy, M. and Franks, R., L.S.O. trumpet section interview with SGB. These two players' cornet-playing background may account for their affinity with the Bb pitch. When Murphy was engaged to record the demanding high Eb trumpet part in Eric Crees's *West Side Story Suite* arrangement with the P.J.B.E., he in fact still used his standard Bb instrument (Jones, P., interview with SGB).

⁴⁴ Ellison, S., correspondence with SGB.

trumpets.⁴⁵ Adolph Herseth is quite certain about the necessity for different pitches of instrument:

Well, obviously every player from here on will have to be able to adapt to using different pitched trumpets... If I get a passage... that looks like I can play it on the piccolo trumpet, I play it on piccolo trumpet. If it plays better on a G trumpet, I'll play it on G trumpet. If it plays better on an Eb or F trumpet, I'll play it on that. That's an adaptation I think every player's going to have to learn to do, and be willing to do.⁴⁶

Buckner's work provides a detailed catalogue of trumpet substitution practices and goes somewhat towards recording players' motives and composer/conductor reactions.⁴⁷ His overwhelming conclusion is that trumpeters should be free to select whatever instrument suits them and the situation best (this is in effect what happens world-wide, save where a particular tradition is strong enough to counteract convenience). It is assumed that composers accept this and have no intent as to the timbre of their trumpet parts, irrespective of the key the parts are written in.

Differing approaches to the use of the double horn provide material for consideration in the context of tube shortening. As was discussed in the previous chapter, while in some

⁴⁵Hall, M., L.S.O. trumpet section interview with SGB. A typical example of such use might be for the fast articulation in 'Samuel Goldenberg and Schmuyle' from the Mussorgsky/Ravel *Pictures at an Exhibition*.

⁴⁶Woolworth, W., *A Biography of Adolph S. Herseth: his Performance and Pedagogical Contributions*, D.M.A. dissertation, Arizona State University, 1993, p.66.

⁴⁷Buckner, J., op. cit.

schools of horn playing (that originated by Anton Horner, for example) the use of the F side is very important, for others the Bb side is used almost exclusively (save for the lowest register). This latter practice is more prevalent in Europe: early use of single Bb horns in the Berlin Philharmonic and Dennis Brain's adoption of a single Bb Alexander instrument being significant influences in this matter. It is true that latterly a lot of horn sections have returned to the use of full doubles (sections often do this now where they might formerly have used single Bbs on first and third), and this would indicate a return 'to the view that the properties of the traditional F pitch are too valuable to be wholly thrown away', but this is no absolute indication as to how the instrument is used.⁴⁸ Many players of the present generation have been taught to use the Bb side almost exclusively in the registers encountered in the first and third chairs (even if they regularly undertake study and arpeggio practice on the F side); 'Some instructors have been known to teach only the Bflat and A horn, as though the F had never existed; fortunately such ignorance is rare'.⁴⁹ The tremendous variety of fingering alternatives available to the double-horn player are rarely explored to the full, the modern practitioner usually preferring to rely on tried and tested standard fingering - especially in orchestral work

⁴⁸Whitener, S., op. cit., p.34 and p.36. Baines, A., op. cit., p.226.

⁴⁹Cousins, F., *On Playing the Horn*, Chapel-en-le-Frith, 1992, p.52.

where there is little time for detailed experimentation.⁵⁰

To use the same terminology as has been applied to the trumpet, horn players have thus been substituting a shorter tube at will for nearly a century (notwithstanding the nicety that the Bb side of a double horn is not quite the same as a single Bb horn). Nevertheless, tube-shortening escalation has not stopped there: descant horns in high F (f-alto, half the length of the standard F horn), usually made by Alexanders, have been played since the early years of the century in certain exceptional circumstances - typically the highest horn parts by J.S. Bach.⁵¹ Double descant horns (i.e. in Bb and f-alto or F and f-alto) were also tried in Germany but there were incompatibility problems matching the two sides: the f-alto horn ideally needs a smaller bore and bell:

Since the very early years of the present century some players (Stiegler in Vienna, Romeo Caletti of Milan, New York and Sydney) had been making use of small single f-alto descant horns, but these were of little help for

⁵⁰Downes, F., interview with SGB. It is very unlikely that the kind of 'enharmonic' fingering suggestion given below (from Adkins, H., *Treatise on the Military Band*, London, 1941, p.114) would be used by a modern horn player. Today the horn tends to be thought of as a chromatic valved instrument much more than a descendant of the natural horn.



⁵¹Baines, A., op. cit., p.226. As early as 1883 Gumbert had suggested the use of an 'F alto horn or Diskant-horn in 6-foot F'. In 1906 Alexanders built a descant horn in G with a crook to F for performances of Handel's *Judas Maccabeus* and Bach's B minor Mass at the Mainz Festival.

the majority of players. By 1939 there had been one endeavour known to me to combine this in a double horn with Bb, and I used it in Australia where it had been imported from Germany to special order for an older colleague; it was far from successful - but one could learn a great deal from it. The Bb horn was extremely poor.⁵²

In practice few players were familiar with or had access to descant horns. At the start of the second half of the century it seemed quite natural for players like Philip Farkas to perform Bach's First Brandenburg Concerto on his standard F/Bb double horn.⁵³

However in 1959 Richard Merewether, having already had an F/f-alto horn built by Philip Alexander in Mainz, collaborated with Paxmans of London to design and produce the first satisfactory Bb(A)/f-alto double horn.⁵⁴ It used a dual bore system and twin change valves ganged to a single thumb lever. F/f-alto doubles followed soon and in 1967 the first triple horns in F/Bb/f-alto, again made possible by dual bore technology.⁵⁵ In 1968 a Bb/bb soprano model was

⁵²Merewether, R., 'On the design of the horn', *Horn Call*, vol.xxi, no.1, October 1990, p.78.

⁵³Farkas, P., 'Thoughts on tone colouring, practising, teaching and rapport with colleagues - even conductors', lecture at 24th International Horn Society Workshop, 1992. For this piece Farkas recommends removing the F slides from the instrument to reduce weight and practising the part a tone higher, in G, so that it feels easier in F.

⁵⁴Merewether, R., op. cit., p.78.

Paxman, R., 'In memoriam: Richard Merewether', *Horn Call*, vol.xvi, no.2, April 1986, p.13.

Paxman, R., interview with SGB.

⁵⁵Whitener (op. cit., p.39) has it that the F/f-alto came first, but this is not supported by Robert Paxman's own chronology; neither is the former's date for the introduction of the first triple (given as 1965, op. cit., p.104).

introduced - the shorter of this instrument's sides being the same length as the Bb trumpet.⁵⁶ These double and triple descant horns allowed players switch to a shorter tube for the very highest notes or phrases in a passage while still using their standard-pitched instrument for the rest. Unlike the trumpeter substituting instruments, the double/triple descant horn player gives little visual cue as to his actions. The sonic evidence is, however, significant unless the shorter tube is used with great discretion. Some players have used the f-alto horn in more standard symphony orchestra repertoire and one notable soloist, Herman Baumann has used it extensively in recordings and concerts. Baumann has a very individual approach anyway (his vibrato is most conspicuous) but much of his reputation for a distinctive tone quality - and, it might be added, unusual security - can be accounted for by his use of the f-alto tube. The difference or, as some maintain, inferiority of the sound of this shorter tube is easily detectable to an informed listener if it is used for any length of time. Some find it difficult to accept it as being a true horn sound.⁵⁷

Even when played by a skilled artist, an association with the less interesting sound of the brass band tenor horn - or *alto horn* as it is known outside Britain - is hard to ignore (not

⁵⁶ Richard Merewether first tried the bb soprano tube length in a performance of Bach's Cantate No.143 with Britten in 1968. He had previously used a Bb/f-alto for this work but on this occasion he shortened the f-alto side to bb soprano; the result was the 'finest horn he owned' (op. cit., p.81).

⁵⁷ Downes, F., interview with SGB.

surprising as this instrument has a similar tube-length being pitched in Eb). Paxmans and other makers have worked hard to ameliorate this effect and some advances have occurred:

Certainly on the early horns in f-alto, the f-alto/Bb doubles, the f-alto side had very little resistance because of its length and tended to sound rather bugley... the mediocre players who try to use such instruments - because of the lack of resistance the thing goes a bit wild - they weren't able to control them properly. But more recently, again with the assistance of some of the top English players, we've refined the f descant instrument and introduced more resistance into it by changing the tapers... It better matches the resistance one encounters on the Bb.⁵⁸

Some present-day players (including Michael Thompson and Richard Watkins in England) have turned to these refined double descant horns for some solo work and although here the Bb side is used predominantly the overall tube shortening trend is clear: to have a short, safe tube available becomes of greater importance as an option to the usual Bb side than the traditional F length (12'). As with the use of short trumpets in the orchestra, although the use of the double descant now seems to be more in perspective, there was a period when the attraction of new technology and added safety caused some concern.

Although very recently horn playing has begun to swing back to the style of more musical days, there was a plague of F alto (6') horns which, for a short time, swept through hornist circles and caused the downfall of more than one player. The problem is that once the 'ease' of an F alto has been sampled, it is only possible for the highly competent and experienced player to go back to the longer tubes. The F alto cannot stand on its own because it is much too 'saxhornish' for any orchestra to tolerate for any length of time... there is

⁵⁸Paxman, R., interview with SGB.

a sound-threshold in normal programmes beyond which even Philistines become restless, and the F alto is beyond it.⁵⁹

The same dual bore idea has been used more recently by Paxmans in their Model 25 dual bore F/Bb double horn. In this instrument the bore of the F side tubing had been increased slightly such that the response of the two tubes might be better matched:

...on the assumption that players can produce the type of sound that they want on the Bb horn, when they switch to the F side it appears more stuffy, so we've increased the diameter of all the cylindrical tubing on the F basso horn, reducing the resistance so it much nearer matches the resistance encountered on the Bb.⁶⁰

This provides firm evidence that many modern horn players think of the Bb-alto tube as yielding their preferred horn tone and they consequently wish to match other tube lengths to it.⁶¹ Even the nomenclature has 'shortened': what was once simply an F horn now requires further specification as either F-basso or f-alto; the old Bb-alto length (as differentiated from Bb-basso) is now just Bb.

Even though there is firm historical precedent for the use of a shorter tube in the trombone section, namely the Eb alto, it was largely abandoned as an option in the first half of this century in many places (its presence was more continuous

⁵⁹Cousins, F., op. cit., p.52. Cousins does acknowledge the worth of f-alto and even bb-soprano instruments in the performance of the very highest baroque works.

⁶⁰Paxman, R., interview with SGB.

⁶¹Robert Paxman agreed that this hypothesis follows for a lot of players.

in Germany but not in America or Britain, nor - as far as most accounts go - in France).⁶² In 1942 the alto trombone was described as 'now obselete'.⁶³ Its revival was partially motivated by the same pressures of accuracy and precision as have been discussed with respect to the trumpet and horn, but with this instrument the composer's intent is often being honoured by the use of a shorter tube. Not only does it offer advantages of security but the lighter, smaller sound - sometimes described as a bridge between the trumpets and the lower trombones - is more appropriate in classical and other scores where the composer has originally specified an alto trombone. There are no grounds for arguing that the alto trombone could contribute to the degeneration of trombone sound where their use corresponds with original scoring. Some French scores take the first (tenor) trombone very high - and it is not unheard of for a player to resort to the alto for the solo in Ravel's *Bolero* - but by-and-large those parts originally conceived for the alto are the only ones warranting or receiving its use.⁶⁴

Arthur Wilson has been described as a pioneering 'leading exponent' in Britain playing an Eb alto by Lätzsch in the

⁶²Wick, D., *Trombone Technique*, London, 1971, p.93.

⁶³Howes, F., *Full Orchestra*, London, 1942, p.55.

⁶⁴André Lafosse's (Paris Conservatoire Professor from 1948-1960) introduction of an alto trombone class is worthy of note (Douay, J., 'André Lafosse (1890-1975): master of trombone', *Brass Bulletin*, no. 70, p.57.)

Philharmonia from the 1960s.⁶⁵ Instruments of this type were hard to come by until relatively recently and few players had access to one in the 1960s.⁶⁶ There was also some initial reluctance to learn the different technique necessary:

When I was playing it first off, I was one of the few. People just didn't bother with it because it was too much hard work with the different [slide] positions and the pitch, but there is no doubt that these days, with the demands of accuracy, even the trombones are using the alto more than they would have done - for high register stuff.⁶⁷

Gradually, through the course of the second half of this century instruments by the likes of Lätzsch, Bach, Conn, Courtois, and Yamaha have become more widely available and players and teachers have warmed to its potential. Through the 1970s and 1980s principal players in orchestras like the London Symphony Orchestra and the Chicago Symphony Orchestra adopted the alto trombone (in Mozart, Mendelssohn, Beethoven and Brahms, for example).

It might be argued that the transition from the G bass trombone to the Bb/F instrument (with predominant use of the Bb length) constitutes part of the tube shortening trend. Admittedly the change was brought about largely in the interests of greater agility, manageability and a broader sound but it is worth noting that the G bass was found to be

⁶⁵Bassano, P., 'God's trombone', *The Trombonist*, The British Trombone Society, London, Summer 1992, p.29. Bassano remembers some 'unbeatable Brahms' playing with Wilson in the Philharmonia section.

⁶⁶Parsons, A., BBC Symphony Orchestra trombone section interview with SGB.

⁶⁷Wilson, A., interview with SGB.

somewhat treacherous in the high register in both tuning and accuracy.⁶⁸ Using the same Bb tube length as the first and second trombone, a bass trombonist is thus more fully enabled in the high register - although care must be taken that the larger bore does not result in a sound which overbears the other trombones. While every bass trombonist will naturally be judged on prowess in the low register, any experienced practitioner will attest to the necessity of a complete range: there are numerous examples in standard repertoire where three *tutti* trombones are required to operate in the high tenor range. To be able to cope with all situations a bass trombonist needs a range of over five octaves.

As a supplement to the above consideration of how technological advance - in shape of tube shortening - has affected brass performance practice in the second half of the twentieth century, a brief resumé of the influences of some other manufacturing, design and technological advances is presented below. The subject of brass instrument design is highly complex and esoteric; the simplest of overviews is all that is intended here. In truth there have been few real innovations, or at least inventions, in recent decades. Many developments in manufacturing and instrument design merely reflect a change in taste and priorities.

⁶⁸Jones, P., interview with SGB.

Makers have found modern technology useful in improving the repeatability and quality control of good designs.⁶⁹ Hydro-forming is now sometimes used to explode parts (particularly bell sections) to the desired shape in a concrete or cast die whereas formerly the time-honoured method of beating the metal into shape over a mandrel was used. The effects of annealing are of interest to many manufacturers at the moment as this can affect the final vibrational characteristics of the instrument.⁷⁰

As the machining of valve parts has become more accurate the use of compensating systems has grown less troublesome in high quality instruments. The seal and action of both piston and rotary types has improved and allowed more complex designs to be made.

Thus fine instruments are available to professionals, amateurs and students alike. Many professionals of just thirty or forty years ago would have been overjoyed to own the kind of instruments students expect to use now.⁷¹ Furthermore, there is great variety available and it is

⁶⁹Schmidt, (Herr), in conversation with SGB at the Alexander workshop in Mainz. Alexanders now use electronic transducers at the mouthpiece and bell end of new horns to test their response, although all their instruments are tried by a human too.

⁷⁰Annealing is a process whereby the metal is heated to a critical temperature which pushes the molecules further apart to make working it easier and less damaging to its structure. If metal is bent indiscriminately too many times it loses desirable qualities and goes hard.

⁷¹Steele-Perkins, C., interview with SGB. Lang, W., interview with SGB. Wilson, A., interview with SGB.

possible to acquire individually specified instruments by choosing from a range of options (Holton and Schmid are among those to offer different mouthpipe components for their horns; at Paxmans the buyer is able to specify the desired metal type, bore, solid or hollow valve rotors, detachable screw rim or fixed bell, descending or ascending third valve, extra A/handstopping valve, string or lever action, and all that on top of the instrument type - single Bb or F, full double, compensating double, double descant, full triple, compensating triple etc. - the permutations are virtually endless; Vincent Bach trombones can now be made up from a choice of slide and bell sections). By interchanging screw rim and cup components a similarly bewildering array of mouthpiece variants are possible.

While some have maintained that the material a brass instrument is made from is of negligible importance to the sound (experiments with instruments covered in putty and fashioned out of paper and even cheese have been undertaken in order to prove this point), manufacturers and players continue to respect the subtle variety different metals can offer.⁷² Yellow brass (the most popular - 70% copper, 30% zinc), gold or red brass (more copper than yellow brass,

⁷²Bevan, C., *The Tuba Family*, London, 1978, p.46. The same writer has found a Patent of 1864 relating to a mouthpiece made of seaweed (*ibid.*, p.129). On the subject of culinary experimentation, it is reputed that acousticians at Surrey University lined a trombone with peanut butter in an attempt to simulate the effect of the coating of condensation and saliva found on the internal surfaces of all instruments once played-in.

perhaps 85% to 15%), nickel (63% copper, 27% zinc, 10% nickel) and German silver (82% copper, 18% nickel) have proven the most regularly used materials.⁷³ Schilke has had some success with a new metal called beryllium in his trumpet bell sections and other makers have experimented with different alloy mixes, but the traditional materials tend to remain most popular. Of greatest influence is the thickness of materials and their characteristics during and after the manufacturing processes which create variations in hardness and stiffness.⁷⁴

Many of the organological developments of the twentieth century have combined to change tone quality and while it is a mistake to generalize too broadly, one trend does seem to hold across the board - namely the suppression or reduction of overtones in brass instruments' sound. Bate has this to say about the trumpet in particular:

The modern tendency to reduce the brilliance of trumpet tone has been deplored by many critics, especially in Britain by those old enough to remember the noble playing of such as John Solomon and Walter Morrow. Fashions, however, change in music as much as in other arts, and it is not impossible that a reversal of

⁷³ Fladmoe, G., op. cit., p.151. Merewether, R., *The horn, the horn...*, Paxmans, London, n.d., p.16. The reader is referred to Morley-Pegge, *The French Horn*, London, 1973, p.121-128 for more detailed information on materials and manufacturing. Nickel and silver instruments tend to enhance brilliance and thus can compensate for a slightly dull sounding embouchure (for some time the opposite effect was commonly held to be true, probably because many large bore American horns were made in nickel: it was the bore not the metal which gave the characteristic).

⁷⁴ Merewether, R., 'On the design of the horn', *Horn Call*, October 1990, vol.xxi no.1, p.80.

opinion may occur some time in the future.⁷⁵

As was evidenced earlier in this chapter, to describe a trombonist's tone as 'bright' was often a negative assessment. The most recent trends in trombone design still seem to be orientated around the desire for a darker, heavier sound (this tendency will also be discussed in the concluding chapter):

Manufacturers try to find ways to give players the dream they want, which is as big and round and dark and heavy a sound as possible when you are playing in the extreme loud register.⁷⁶

Some of the most recent collaborations between players and manufacturers have sought to amplify the core of the sound while suppressing brightness. When Ian Bousfield (principal trombone, L.S.O.) helped Yamaha develop the YSL 681B model he wanted to 'stop the sound breaking up at high dynamic levels' and to provide 'good solid sound and great projection with less edge than usual':

Obviously the first thing we had to do was beef up the sound of the Yamaha and make it sound more substantial - it was too light for the demands of the L.S.O., however easy it was to play. This was achieved quite quickly by almost doubling the weight of the original instrument when we produced the first prototype.⁷⁷

Similarly, Douglas Yeo has been associated with Yamaha in the

⁷⁵Bate, P., op. cit., p.76.

⁷⁶Yeo, D., interviewed by Roger Green in 'Bass sounds from Boston', *The Trombonist*, British trombone Society, London, Spring 1994, p.16. Douglas Yeo is the Boston Symphony Orchestra bass trombonist.

⁷⁷Bousfield, I., 'Sounds substantial', *The Trombonist*, British Trombone Society, London, Spring 1991, p.18-20.

development of a new bass trombone model. It was designed for 'enormous output of sound, although at the same time trying not to lose the flexibility of the very soft tones'.⁷⁸ The most modern trombones tend to be rather free-blowing, giving the player less resistance than did the Conn 88H of thirty years ago, for example. 'Open-wrap' layouts with less bends in the F extension tubing help achieve this.

The same principle of adding weight has given rise to a range of products. The trumpet designer, Dave Monette was one of the first to build up heavy metal around certain parts of an instrument in order to affect the tone. Other manufacturers have followed, most commonly offering mouthpieces whose outer dimensions have been built up. Denis Wick's 'Heavy top' mouthpieces can be bought as complete new mouthpieces or alternatively a 'Booster' can be placed onto the player's existing mouthpiece - it simply surrounds the mouthpiece cup with a greater thickness of metal. They are available for trumpets, trombones, horns, cornets and tubas and are claimed to offer 'Much darker yet more centred sounds for the trombone; a much more secure high register and bigger volume for trumpets' and 'enormous increase in volume'.⁷⁹

Undoubtedly this advertising-speak exaggerates the effect, but there is no need to be as sceptical as some have been as to

⁷⁸Yeo, D., op. cit., p.17.

⁷⁹Wick, D., 'Big is beautiful', *The Trombonist*, British Trombone Society, London, Autumn 1992, p.28.

Wick, D., 'There's more to a brass mouthpiece than meets the eye', *The British Bandsman*, London, 30th January 1993, p.6-7.

the existence of this phenomenon (it is not surprising that altering the physical characteristics of the outer surfaces of an instrument or mouthpiece affects the sound - any waveguide is subject to skin effects). What is interesting is the motivation. Many seemingly still desire an increase in volume, they really believe that 'Big is beautiful'. Roger Bobo has written of the 'lack of dynamic flexibility' in heavy, thick instruments.⁸⁰ Perhaps it was ever thus: around 1915 Couesnon of Paris would fit 'l'Amplificateur' to customers' trumpets which matched a mouthpiece to the mouthpipe of the instrument more precisely - a different principle (not without good foundation) but nevertheless playing on the same hunger for volume.⁸¹

It is worth mentioning here that Gunther Schuller, considering results of acoustical experimentation by Boegner, judges such techniques as detrimental to the sound of the horn:

Too much weight affects the formation of overtones negatively and... it is the amplitude and great number of overtones that give the horn its unusually rich timbre.⁸²

The transposing mute for the horn has been a small but useful innovation. It can be used to replace the hand in the bell for the more difficult hand-stopped (+) notes, usually in the low register where achieving a characteristic stopped sound

⁸⁰Bobo, R., *Brass Bulletin*, No.86, p.97.

⁸¹Bate, P., op. cit., p.75.

⁸²Schuller, G., *Horn Technique*, London, 1962, p.2.

with the hand can be extremely difficult. The effect with the hand is a little different to that of the transposing mute, but still quite separate from the sound of the non-transposing straight mute, which should be different altogether.

In addition to those shorter instruments mentioned above, improvements in manufacturing have brought good examples of the rarer orchestral brass instruments (the bass trumpet, Wagner tubas, the contrabass trombone, the 'Cimbasso', etc.) within reach of more players.⁸³ A greater variety of valve configurations is now available to bass trombonists (two thumb switches can be arranged as a dependent or independent pair) and instruments have become more 'complex and specialized'.⁸⁴

⁸³For information on these last two instruments the reader is referred to Gregory, R., op. cit., p.94-105 and Bevan, op. cit., p.212-216.

⁸⁴Whitener, S., op. cit., p.55-57. See also Wick, D., *Trombone Technique*, London, 1971, p.92.

Fin de siècle counteractions

If the trends of expansionism, uniformity and security can be said to have reached their height in the 1970s, this would be the time one might expect to sense the beginnings of a reaction. As has been described thus far, there were certainly numerous earlier points in the century when the paladins of individual causes cried 'degeneration', but their pleas for a *volte face* were swept aside in the name of progress. However, now it seemed the goal had been reached and brass instruments had become louder and more accurate than ever before - and yet this apogee left many feeling unsettled and unfulfilled:

I think there is some reaction against the power and loudness of the big symphony orchestra. Huge volume from large and highly developed instruments has lost its titillation. Loudness isn't exciting in itself anymore. There's nothing worse than a very loud orchestra playing with no intensity. I mean, brass sections can now play *so loud* with no feeling of strength, of real power. There's a lack of physicality in the playing.... A trend towards less noise...is one thing that may lead orchestras back to more individuality.¹

John Fletcher echoes these feelings.

The central ability to speak through the instrument, which is what all the greatest brass players have done in the past - and was what made them the special ones we actually wanted to listen to - has partly gone... In symphonic brass playing, encouraged by conductors who want it ever louder, I and my colleagues (whom I love and admire and respect) make a noise which we do not like because it has become the accepted thing. I'm not talking about lack of dynamic range. (People are very good at pianissimo.) I'm concerned about actual

¹Harrell, L., interviewed by Michael Foss in *Orchestra*, ed. André Previn, London, 1979, p.182.

character of sound.²

Commenting on the general increase in trumpet bores, Anthony Baines writes as follows:

But elsewhere, following the later view that symphonic brass must be able comfortably to overwhelm the orchestra in the popular Romantics, the dimensions have been progressively widened even up to 11.8mm in order to produce the desired volume without the tone breaking up and the player likewise. The end result has been a full but rather droopy sound, often not well-focused on attack, and there are now signs of a reaction against this.³

Co-incident with this state of affairs came the rising star of 'authentic', or historically informed, performance practice on period instruments (or close copies). While this was not a totally new phenomenon - the likes of Dolmetsch, Landowska and Deller had set these wheels in motion somewhat earlier - it did start to enjoy considerable commercial success. Thus the seeds of dissatisfaction fell on fertile ground as taste in orchestral sound underwent a revelatory experience: in the period instrument bands, wind and brass instruments took on quite distinct and highly differentiated personalities - contrast, lightness and transparency became more important than blend, weight and projection. A time bomb was also set as Leonhardt, Harnoncourt, Hogwood, Norrington et al. marched forward, inexorably towards the central repertoire of the large symphony orchestra. Now they have arrived there and

²Fletcher, J., 'Tuba Britannica: is big always beautiful?', *Brass Bulletin*, No.47, p.21. Fletcher considers dead acoustics, like that of the Royal Festival Hall, and the mores of the record industry to have contributed to this loss of character.

³Baines, A., *Brass Instruments*, London, 1976, p.234.

today we sit at the supposed junction of historical recreation, living (and recorded) memories and the reality of our present. They barely meet up.

As with modern string technique, which has given some ground, there are signs that brass performance practice in symphony orchestras is subtly altering its stance, ready to counter the probing authenticist. Many in the profession, and not necessarily always the oldest, find it difficult to see how there could be any significant cross-influence between the specialist period instrument groups and their symphony orchestra home-base. Yet the effect has already taken root, albeit in a moderate fashion to begin with.

The Chicago Symphony Orchestra trumpets were among the very first to switch to rotary-valve German-type instruments for appropriate repertoire in 1965.⁴ Herseth and his section started using Monke rotary trumpets for Haydn, Mozart, Beethoven, Brahms, Schubert, Schumann and Bruckner as it was felt that the 'darker' sound with 'softer attacks' was more suitable.⁵ They found such instruments more suitable in works which were scored for trumpets in the alto range (at the F pitch, for example). Richard Birkemeier maintains that

⁴Tarr, E., 'Adolph Herseth', *New Grove*, vol.xvi, p.532.

⁵Woolworth, W., *A Biography of Adolph S. Herseth: his Performance and Pedagogical Contributions*, D.M.A. dissertation, Arizona State University, 1993, p.39. Another attempt at achieving this sound was the 'Vindobona' model by Vincent Bach - a piston-valve trumpet built with special bore proportions.

the sound of German rotary trumpets is close to that of the old F trumpet.⁶ The orchestra also began using cornets where they were scored. Other American orchestras (including Boston, Cleveland, Minnesota, Cincinnati and Los Angeles) have followed suit and it is now not unusual for rotary trumpets to be used for up to fifty percent of pieces in a particular season.⁷ Today the Philharmonia in London is an example of a European orchestra which acts similarly in the selection of instruments.⁸ Buckner reports a similar trend in some German orchestras: there piston instruments are used for French music.⁹ The motive behind this practice of extensive instrument substitution is clearly that players should use every means possible to adapt their sound to given repertoire. This is in stark contrast to the L.S.O. trumpeters' attitude of maintaining a particular approach on one type of instrument (this issue will be discussed further in the concluding chapter).

As was found in German orchestras earlier in the century, many models of rotary trumpet have difficulty balancing the weight of large trombones, and so this trend has a knock-on effect. The idea that trombonists might use different instruments for different repertoire is not new - after all, Arthur Falkner and Jesse Stamp used trombones of German

⁶Buckner, J., *Substitution of Trumpets in Orchestral Music: Origins, Development and Contemporary Practices*, D.M. dissertation, Northwestern University, 1989, p.170.

⁷Ibid., p.171-3.

⁸Wallace, J., correspondence with SGB.

⁹Buckner, J., op. cit., p.169.

dimensions for Brahms in the very early years of the century (as was described in chapter three). George Maxted gave the following example of how the principle might work:

Ideally I suppose one should use a variety of instruments, which would probably mean three or four different instruments for some concerts such as the following:

Ruy Blas 'Overture'

'Cello Concerto' Elgar

Bruckner 'III Symphony'

The 'Overture' would require a German type alto trombone, the 'Concerto' would require an English small bore and the Bruckner a German large bore tenor.¹⁰

A player of Maxted's generation would encounter conductors who knew and appreciated these particular trombone sounds; 'To play any one of these works with an appropriate conductor on the wrong instrument would lead to considerable frustration'.¹¹ Since then, the omnipresent American trombone has redefined a standardized sound and, as Denis Wick suggests when discussing similar repertoire problems, the player is expected to emulate different sounds with the one instrument - to do a Conn-job, one might say. Moreover, there cannot be many conductors of the modern era who would become frustrated at the absence of a narrow (or German) trombone in virtually any symphony orchestra. Now there are signs that this attitude is shifting. Some sections find that when the principal uses an alto trombone, balance and blend is better if the other players move to a more moderate bore. Even in such big, glamorous orchestras as the New York

¹⁰Maxted, G., *Talking about the Trombone*, London, 1970, p.37.

¹¹Ibid. Nonetheless, Maxted suggests that 'neither the audience nor the critics would be any the wiser'!

Philharmonic this may happen.¹² It is a reflection on modern American playing that such a scaled-down outfit is deployed to play German repertoire like Schumann's *Rhenish* Symphony. In Britain conductors and players have been experimenting with smaller bores for certain repertoire. Charles Mackerras, conducting Gounod's *Romeo and Juliet* at Covent Garden in early 1995, specified that small bore trombones should be used.¹³ The Opera North section down-size for certain repertoire, including lighter operas. The considerable range of mouthpiece rims and cups available today also allows some change in sound.

John Eliot Gardiner's Orchestre Romantique et Revolutionnaire and Roger Norrington's London Classical players are among those who have played and recorded works of the mid to late nineteenth century (perhaps most notably Wagner) on what they consider to be period instruments. There is now wider recognition of and familiarity with the considerable effect of instruments of this period. The pragmatic view that modern instruments should serve repertoire from the romantics on unchallenged can now be questioned. Of course, the conductor and players will always have the most significant influence on the sound: some players have been disappointed

¹² Alessi, J., 'of Slides, Sinatra and Trombone Technique', *The Trombonist*, Spring 1995, p.26. Alessi has been principal trombone of the New York Philharmonic since 1985.

¹³ Parsons, A., 'London Slidelife', *The Trombonist*, British Trombone Society, Spring 1995, p.39. Harold Nash, Dave Chandler and Dick Tyack (using an English G bass) were the players.

to find that, even in baroque and classical work, a conductor like John Eliot Gardiner will still want out-sized dynamics and will require them to over-blow their instruments in a vain attempt to produce modern volume levels.¹⁴

Incidentally, in such situations modern standards of accuracy and tuning are also applied mercilessly. In the recording studio budgets are tightly controlled; unscheduled re-takes (on account of a badly split note, for instance) can cost thousands of pounds and there is tremendous pressure for players to apply modern fixes, like using finger holes on natural trumpets, to make life a little safer. Needless to say, this affects the sound.

While many string and wind players dedicate themselves to pre-nineteenth-century period performance, it is not unusual for brass players to have feet in several camps, and thus there is some prospect of cross-fertilization between the genres. Furthermore, the period ensemble conductors sometimes work with modern orchestras (as in the recent Harnoncourt Beethoven cycle with Philharmonia, for example).

Perhaps the most interesting development in Britain in recent years has been the re-birth of the New Queen's Hall Orchestra, the brain-child of John Boyden, an experienced record producer. This orchestra plays on the type of instruments that would have been used in the original Queen's

¹⁴Vanryne, R., in conversation with SGB. Steele-Perkins, C., interview with SGB.

Hall around the first and second decades of this century (narrow-bore brass, French horns, French bassoons, Boehm system wooden flutes, gut strings etc.). Boyden has written a substantial invective on the state of the modern 'stainless steel' symphony orchestra and the recording industry entitled *The Reasons Why*; he cites three primary objectives.

The first reason for the NQHO's revival is the need to return to a more expressive type of playing, particularly in the strings.

The second is the need for players to be released from the strait-jacket of 'standardised' or 'international' playing; such conformity being neither artistic nor healthy.

The third reason is the fact that the instruments of the symphony orchestra have changed so much since the late 1920s that, in music written before the 1940s, it is impossible for them to achieve either a correct internal balance, or to reproduce the characteristic timbres of their predecessors.¹⁵

A fixation with precision and accuracy - 'safety first' - has reduced spontaneity and in this respect, as well as that of greatly increased volume, the brass has been a highly significant participant. While there are some weaknesses in the detail of his coverage concerning the brass, the general thrust of his argument is refreshing and, conceptually there is much which concurs with the findings presented in this thesis. Hearing the N.Q.H.O. live is convincing: internal balance is excellent and illuminates much detail which is ordinarily lost (in the woodwind especially); the brass add colour but not much weight. By modern standards there are

¹⁵Boyden, J., *The Reasons Why*, London, n.d., p.1.

some accuracy problems, particularly in the horns. There are practical problems with making Boyden's vision an effective reality, mainly stemming from the economics of concert promotion. Players cannot dedicate themselves to the old instruments because the New Queen's Hall Orchestra only provides occasional work.

John Boyden insists that the N.Q.H.O. is not about authenticity. His mission is more concerned with reclaiming lost individuality and freedom, the re-discovery of an aesthetic. Hence his quintessentially English orchestra plays a whole concert of Russian music, or German music without concern for what the appropriate original instrumentation or performance practice might have been in those countries. The N.Q.H.O. simply hopes to speak honestly in its own accent and thereby enhance the quality of its expression and communication. If such a venture becomes more popular it will be because of an aesthetic appreciation, a change in listening taste, more than out of respect for an effective piece of musical archaeology.

There are more general signs of reflection and re-consideration which point to a desire for such an aesthetic change. Medium-bore horns seem to be increasing in popularity and some notable British players are now using them, in some cases having built a career on larger instruments. Michael Thompson and Hugh Seenan (principal horn, L.S.O.) are two such examples; Claire Briggs (City of

Birmingham Symphony Orchestra) and Tim Brown (BBC Symphony Orchestra) now lead sections playing medium-bore Alexanders. Even in America, opinion seems to have more respect for the 'focused sound' and 'carrying power' of these types of instrument.¹⁶ There is also a trend amongst American trumpeters for experimenting with more modestly bored instruments and Yamaha are developing new models to satisfy this demand.¹⁷ Some have hoped for a return to more moderate values.

I wouldn't be surprised if narrower bores and smaller mouthpieces didn't come back. These things have always gone in cycles. Certainly the large-bore brass instruments are terribly loud. But to go back is very difficult. The large instruments are versatile. You can get a very good blend in pianissimo, and also play loudly without any funny nanny-goat bleat that you have on badly played narrow-bore instruments. Of course people only remember the bad side of old instruments. What they had, well played, was a kind of vibrancy that translates to a charmless shout on the modern large instruments.¹⁸

Makers are also becoming more interested in studying old instruments and manufacturing methods. Traditional virtues could make a comeback. John Wallace, now turning to a solo career after having been principal trumpet in the Philharmonia, has been impressed by such instruments:

There is a certain spread of McDonald Hamburger consensus note-getting school, but this doesn't hold sway in Berlin, Vienna or Paris. After hearing Art of Brass Vienna in Bremen I am changing over to hand-beaten Austrian instruments. There are so many craftsmen in

¹⁶Whitener, S., *A Complete Guide to Brass: Instruments and Pedagogy*, New York, 1990, p.40.

¹⁷Jones, P., interview with SGB.

¹⁸Fletcher, J., interviewed by Michael Foss in *Orchestra*, ed. Previn, A., London, 1979, p.181.

Germany and Austria turning out hand-made traditional trumpets now - this is the way forward for brass - not mass-produced McDonald Hamburger Yamahas.¹⁹

While the evidence of a late twentieth century back-lash is, as yet, small and the opinions expressed at the head of this section might equally well apply today (attitudes are still entrenched in many quarters), the time is ripe for change.²⁰ The recent growth of players' institutions like the International Horn Society, the International Trumpet Guild and the International Trombone Association has done much to promote the exposure of different playing approaches. Philip Jones is of the opinion that, having achieved great advances in technique, players will now want to reclaim their individuality.²¹

¹⁹Wallace, J., correspondence with SGB.

²⁰In auditioning for a German orchestra in front of all its principals, Robert Vanryne - primarily a period instrument performer who has often played for John Eliot Gardiner - essayed Haydn's Trumpet Concerto, the usual audition piece. At the point where the solo part rises to a high db^3 (concert) in the first movement, most trumpeters crescendo in accordance with common trumpet lore that the highest notes are the most important. A player familiar with the natural trumpet has learnt that often this is not musically or technically desirable (the old instrument tends to 'tighten' and become less loud in the extreme high register). Accordingly Vanryne, aware that he would be flaunting expectation, followed his musical instinct and phrased off at the summit. Among the auditioning panel, the trumpeters were visibly shocked that the opportunity to show prowess in the all-important high register had been passed over. The principal oboist, however, congratulated Vanryne on the most musical performance of the piece he had heard. Vanryne did not get the job, such is the power of convention, but this anecdote illustrates how experience gained in period performance may feed back into the symphony orchestra.

²¹Jones, P. interview with SGB.

CHAPTER SIX

The nature of recordings as a resource

The advent of recordings and their increasing quality and availability throughout the twentieth century provides a considerable resource in the study of performance practice. Nevertheless, there has been little dedicated work on recorded materials and thus there is limited accepted methodology. Robert Philip's recently published *Early recordings and musical style* provides a valuable model.¹ Although Philip is interested in the development of instruments to an extent, he is mainly concerned with the wider stylistic features of early twentieth-century performance practice (chapter headings include 'Flexibility of tempo', 'Tempo rubato', 'String vibrato', 'Woodwind vibrato' and 'Orchestral portamento'). A much deeper study of organology is necessary to understand changes in this century's orchestral brass performance and perhaps this is why Philip largely leaves the topic un-explored. The balance of material presented in this thesis is therefore quite different but, although Philip's detail of analysis is not attempted, there are similarities in the method of presentation. Accordingly, the historical survey of extant information, contemporary writings and opinions precedes a separate section on what can be heard in the recordings themselves. For Philip, this helps expose disparities

¹Philip, R., *Early recordings and musical style: changing tastes in instrumental performance, 1900-1950*, Cambridge, 1992.

between textbook received opinion and recorded fact, one of his main conclusions being that recordings can tell a quite different story to other available sources: thus we should be wary of how accurate our interpretations of performing practice materials from eras before recordings might be. Here, organizing recorded examples in one chapter makes comparisons much clearer and connections (particularly when considering matters of national style) simpler. A similar trial of recorded fact against the written word is intended but where issues like balance and timbre are concerned, recordings often fail to provide conclusive evidence.

Indeed, there are numerous problems with using both imperfect and the most modern recordings in the context of this thesis. From the earliest wax cylinders to today's digitally-mixed mutli-channel masters, the instruments' placement with respect to the microphones (or microphone, or horn), the acoustic environment and - most importantly in the second half of the century - the recording engineer's actions can transform, enhance or obstruct the real-life sound and intentions of the players (and sometimes of the conductor). However, where technology has allowed control of the relative balance of instruments, it might be justifiable to consider the fruits of the engineer's and the conductor's labours an indication of contemporary taste - even if the results are beyond reality (for instance, a soloist who soars effortlessly above a *fortissimo* orchestral *tutti* or a passage too low in an instrument's range to appear 'front stage' as

it might with assistance from knobs and faders). The mixing desk-produced phenomenon of unreal balance has been a significant incitement and encouragement for players to try to reproduce these levels of sound in the concert hall. To some degree, records have educated audience taste to expect super-developed sounds live. In big halls, and there are many big halls in America, this can require massive brass playing.

Similar considerations affect what is heard in the way of timbre and tone colour. Quite apart from the effects of studio practice, the inherent limitations of the media concerned (for example, high frequency attenuation often accompanied by an aural blanket of 'sizzling bacon'; compressed dynamic range; susceptibility to pitch instability) can radically change what is heard. Yet it is this writer's conviction that, given a broad enough field of comparison, the human ear is remarkably good at interpreting imperfect information. There are many cues which help inform high level judgements in complex musical textures (articulation, relative tuning, an instrument's intrinsic balance over a given range, etc.) such that it should not be surprising if a knowledgeable listener claims to be able to discern, say, the difference between a French horn and a German horn, or further the difference between tube-lengths of horn.

Happily, the trend and the technological weakness are sometimes non-complimentary: when narrow-bore brass sounds brighter (relative to the orchestral texture) on an old recording with reduced high-frequency content, one can be certain that the effect is significant. To pursue this particular example, when on the same recording narrow-bore French horns *do not* sound as bright or brassy - indeed they may not be particularly audible at all, by modern standards - it seems reasonable to assume that the same balance was heard in the flesh and that organological predispositions, tastes and orchestral manners were somewhat different.² Other stylistic features (i.e. those not related to balance and timbre, like vibrato and quality of articulation) are often amply clear.

The phenomenon of recording has had a not inconsiderable effect on orchestral performance practice across the board, but from what has been said in the preceding chapters

²In presenting this idea, the author has sometimes been reminded of the fact that horn bells face backwards and therefore, under primitive recording conditions, the sound may have been lost. It is a characteristic feature of the horn that the listener hears reflected sound (any recording engineer placing microphones behind horns is sadly amiss of this appreciation). Certainly the close acoustic environment can drastically affect horn sound and sounding boards are sometimes placed behind horns in imperfect recording environments, but no such problem occurs in the concert hall (unless curtains, sopranos' skirts or, worst of all, heavy percussion are positioned behind the horns - in the last case inaudibility may be a result of the players ceasing to play!). Neither is any such problem encountered in modern, live, single microphone-placement recordings. In short, the normal surroundings of the floor and walls (hopefully not too close) provide ample reflected sound to give a realistic impression of horn sound on a recording.

(particularly chapter five) it is clear that the effect for brass has been significant. When a master recording was cut as one side of a 78 rpm disc there was certainly pressure to play safely even if, in those early days, the results were sometimes not terribly revealing. As time passed, technology came to offer solutions:

Since the advent of the tape recorder, recording sessions are actually easier on the nerves than live performances; in the old days, recording was downright agony, because the slightest slip required recutting a whole twelve-inch disc, whereas with present techniques, the offending measure or two can be replayed and then edited into place. In the disc days, each passing second of the the three and a half to four minutes required for a side was accompanied by a rise in tension in almost geometric ratio, so that the careful listener could literally hear a long solo passage changing from an artistic expression to desperate note-grabbing.³

Today, digital editing techniques are such that a patch of perhaps just a few seconds can be dropped into a larger 'take' seamlessly. Yet today's player is unlikely to accept that recording is any less pressurized than it ever was simply because technology is no longer the limiting factor. Now time and hence money is a most precious commodity in the studio (economics dictate to such an extent that some orchestral musicians talk of needing to drop a mute or kick a music stand in order to force a re-take or edit when they feel particularly unhappy with a passage). The latest trend is for the studio to be dispensed with and quality recordings to be made live. This may re-assert the importance of the

³ Philip Farkas, *The legacy of a master*, ed. Stewart, M. Dee, Illinois, 1990, p.125-6.

act of performance as an event but all too often finished products are the result of pasting together several different concerts. It could also be argued that this practice 'infects' live performance with safety-minded recording-studio concerns.

What follows is a brief survey of some of the more remarkable facets of twentieth-century orchestral brass playing which present themselves discernibly over recorded media. There is not space here to examine many recordings in great detail, but it is hoped that sufficient support to the historical material in chapters two to five is provided. 78 rpm discs, long play records, compact discs and radio broadcasts have been an invaluable resource in many aspects of this research. The select discography which appears at the end represents an attempt to document most of the significant recorded source materials influencing the findings and thoughts offered throughout the thesis.⁴ Certainly, if the nucleus of a special archive were to be assembled, there would be a significant 'wish-list' to add to this discography. It is by no means exhaustive or all-encompassing, but it has proved a sufficient fund of evidence and comparisons relating to most of the important aspects of orchestral brass performance practice since the advent of recordings.

⁴The discography is presented in two different ways. Since national style and the identity of particular performing traditions have been key concerns, recordings are firstly presented chronologically, grouped by nationality and orchestra. Secondly, a more conventional alphabetical list of pieces is provided.

Describing the niceties of different tone qualities and stylistic features in words is prone to inadequacy, not to mention a degree of subjectivity. Furthermore, it is not as if assessments could (or should) be carried out in laboratory conditions; as has been discussed, the performing environment, recording conditions and the influence of a conductor make any kind of attempt at a 'control' impossible. To use language like 'thin', 'thick', 'heavy' and 'more bright' results in little more than a rough comparative indication.⁵ As one tries to become acquainted with as many of the different approaches and tastes witnessed in the twentieth century, an open-minded respect for some of the finest brass players the world has known compromises the will to qualify. Accordingly, none of the following descriptions are intended as *measures* of quality; rather, they might act as aids to aural identification and appreciation.

⁵Although acoustical research has found many of these seemingly arbitrary labels to constitute a reasonably reliable nomenclature from one listener to another: see Stroehrer, M., *An investigation of the verbal description of trombone tone quality with respect to selected attributes of sound*, PhD diss., University of North Texas, 1991. Sandell, G., *Concurrent Timbres in Orchestration: A Perceptual Study of Factors Determining "blend"*, PhD diss., Northwestern University, 1991 (particularly p.10-21) Solomon, L., 'Semantic approach to the perception of complex sounds', *Journal of the Acoustical Society of America*, No.30, 1958, p.421-425.

**Examples from British, French, American, German, Austrian,
Russian and Czech recordings**

The earliest recordings of British orchestras give some impression of the sound and character of narrow-bore brass. Listening to such recordings, the French horn in F emerges as an instrument of a quite different nature to that which is customary today. Perhaps the best examples available of French horn playing in Britain feature Aubrey Brain. Earlier examples do exist (of Thomas Busby as the London Symphony Orchestra's principal, for example) but they are much rarer and the quality of reproduction is less good.⁶ On slightly later L.S.O. discs (from 1924 to 1929) and those of the BBC Symphony Orchestra in the 1930s there are frequent glimpses of Aubrey Brain's 'ethereal quality of tone' and 'stylish grace of phrasing'.⁷ Just a few examples are sufficient to convince of his exceptional technical and artistic ability.⁸ In his recording of the Brahms Horn Trio with Adolf Busch (violin) and Rudolf Serkin (piano) he seems capable of the softest and most discreet articulation and although notes always speak with immediacy there is little evidence of the tongue. Notwithstanding the age of the recording, there is no doubt that his tone is superlative at all times; it has focus and warmth, but above all a kind of

⁶Weber Overture *Oberon*/L.S.O., Nikisch (1914).

⁷Pettitt, S., *Dennis Brain: a Biography*, London, 1989, p.43-4.

⁸For example:

Berlioz *Symphonie Fantastique*/L.S.O., Weingartner (1925)

Strauss *Don Juan*/L.S.O., Coates (1926)

Weber Overture *Oberon*/L.S.O., Coates (1926)

Brahms Piano Concerto No.1/Backhaus, BBC S.O., Boult (1932).

inner sheen which is rarely heard in such perfection. There is in his playing some tangible connection with the nineteenth century as he seems able to endow different notes with slightly different tone colours: a subtle shading of timbre which complements his phrasing in the same way that judicious use of the right hand did for the virtuoso hand-horn artist. Some of this is due to the intrinsic qualities of the French horn in F and its bore (perhaps the distinct colours of natural horns in F, E, Eb, D and Db are retained to some extent as the respective valve combinations come into play), the rest is due to Aubrey Brain's magic. It is impossible to know how much, or whether at all, movement of the right hand contributed to this effect but there are just a few times when the subtlest of *portamento*-type smeared slurs may betray such practice, or an imitation of it (such as in bar 20 of the first movement).⁹ Slight alteration of right-hand position would certainly contribute to variations in tone quality. The importance of good hand technique would not have been lost on players of this period, even if some twentieth-century writers (like Blandford) have mourned its decline.

By today's standards, the French horn in Brain's hands is capable of astonishing dynamic discretion. In small scale

⁹Brahms Horn Trio/Brain, Busch and Serkin (1933). Brain may have been fitting in with the violin's style of articulation. It is worth recalling that Brahms specified 'Waldhorn' in this work and had it played using hand technique at its première in 1865.

chamber music the modern horn struggles not to dominate other instruments, but here it seems capable of the most infinite degrees of *pianissimo*. At louder dynamics the tone can be penetrating but without the bloom of some modern horn sounds, particularly in the lower register. It is perhaps this facet which leads those accustomed to larger bores to find the sound thin or light; certainly the French horn never had great weight. In British orchestras of the time string and wind tone was also not as full and heavy as in some places on the continent and in America. There was also minimal use of vibrato (or at least less than elsewhere) in the wind and, to an extent, the strings. Throughout the century this has broadly remained true, American strings playing with great strength all the way to the back of the sections (which are often larger anyway). The greater degree of transparency in British orchestral sound let through a lighter (some would say more refined) horn tone. Probably it would not have been as effective elsewhere in the world, especially in the largest and deadest halls (acoustically).

Having thus declared that there was a happy balance of instrumental sound in early twentieth-century British orchestras, it must be stated that recordings of the period are quite startlingly devoid of the kind of conspicuous, powerful horn playing that is usual today. Some of this can be put down to technological deficiencies, but there is more to it than that. In many orchestral *tuttis* the horn tone is subsumed in the general wash of sound, often barely distinct

from the string sound. The special circumstances of the recording process may also have been contributory: when a mistake-free, uninterruptable three or four minutes of playing were required horn players may have 'backed off' in order to save the record company numerous retakes. The instrument was notoriously 'dicey' and while the rewards of a more daring approach may have been worth the risk in an excited live atmosphere, the cold analysis of the microphone is rarely as benevolent.¹⁰ Nonetheless, it must be remembered that the modern music of the time was just that - new and full of unfamiliar challenges. These were players expert in Mozart, Beethoven, Schubert, Brahms and the like. Their sense of orchestral manners was orientated around their performance practice for this repertoire. For example, they never swamped the lower woodwind, allowing bassoons to balance on equal terms on the many occasions where such scoring occurs.¹¹ The technique and skill of players such as 'God's Own Quartet' and the next generation of Brains (Aubrey and Alfred) must have been formidable - the notes were not beyond the very best (recall that Elgar consulted Borsdorf on the suitability of his more exacting horn writing, the latter doing nothing to moderate it and indeed perhaps influencing further enterprise) - but their sense of proportion and

¹⁰Although judging by the accounts of those who heard Paersch, Borsdorf and the Brains (especially Dennis towards the mid-century) regularly, these few could not be said to be any less accurate on their French horns than is usual today on the larger double horn.

¹¹The effectiveness of this balanced instrumental combination, much-used by Brahms, is neatly exemplified in the L.S.O./Coates recording of Humperdinck's *Hansel and Gretel* (at the beginning of the overture).

etiquette may well have been somewhat different. On recordings at least, they seem not to have pushed the sound in an attempt to rise out of the orchestral texture. When windows in the scoring appear, their tone often appears powerful and dramatic but there was not the same desire to dominate. Perhaps it just was not in their make-up. To them the horn meant poetry and beauty - nobility too, but not ostentatious spectacle. The instrument, the player and the environment were not pre-disposed to the very loud, full and often brassy playing we are used to now.

Not that the French horn in F is incapable of brilliance, as Farquharson Cousins explains when discussing a particular extract from Dvorak's Symphony No.8 in G:

We should remember that when Dvorak wrote this work in 1889 the horns would be in F, the tube that gives itself more easily to the open cuivre - the 'frissante' employed by Tchaikovsky. It is the 'ripping-calico' effect found at the opposite end of the spectrum where the three notes of Oberon lurk. Mahler uses the term 'schmetterlich'. Played on the modern F/Bflat double horn there is a good case for resting the thumb valve!¹²

Yet this effect only becomes occasionally noticeable in recordings when a slightly later generation of horn players has taken over. Perhaps sometimes it was there previously and has been lost in the crackle and fizz of the 78 rpm disc, but it is with the advent of the Dennis Brain phenomenon (indeed, this is Cousins's generation) and not with great

¹²Cousins, F., *On Playing the Horn*, Chapel-en-le-Frith, 1992, p.39.

advances in recording technology that it appears to have assumed a place in the British horn player's vocabulary. More than one commentator of the time considered Dennis Brain's power (on both the French horn in F and his later instruments) extraordinary.¹³ Arthur Wilson, with Brain in the Philharmonia of the 1950s, found his playing in the final movement of Brahms's First Symphony exceptional, as if he were over-blowing his instrument.¹⁴ And yet, by modern standards, Dennis Brain's playing has been described as light; some have said that in solo works he tended to just use different gradations of *mezzoforte*.¹⁵ However, there is no doubt that his unique talent and strength was a catalyst in the process of enlarging orchestral horn sound.

The way British horn players learnt to develop more sound is neatly exemplified by comparison of just a couple of extracts from the repertoire. In the 1935 première recording of Walton's Symphony No.1 (the London Symphony Orchestra under Hamilton Harty), Walton reputedly wanted more sound from the horns than they were able to give for a certain passage (the counterpoint between horns and tuba starting at the bar before rehearsal number 34 in the first movement). By 1951, when Walton himself conducted the Philharmonia in the same

¹³A thorough evaluation of Dennis Brain's playing appears in Pettitt, op. cit., p.166-173.

¹⁴Wilson, A., interview with SGB. The well known horn theme at bar 30 is referred to.

¹⁵Baker, J., interview with SGB. Perhaps it is in Dennis Brain's famous recordings of the Mozart Horn Concertos that this tasteful moderation is most evident, although this observation in no way detracts from the genial variety of character inherent in these performances (the 1953 recordings were made with Karajan and the Philharmonia).

work, he was more satisfied.¹⁶ Though all is not always what it seems in matters of balance on recordings, this seems to be born out by a comparison of the two interpretations.¹⁷ In Previn's popular 1966 recording with the L.S.O. the horns have become a lot more dominant force throughout the symphony (Barry Tuckwell was this orchestra's principal horn from 1955 to 1968 and ushered in what might be considered a modern style of horn playing while Alan Civil perpetuated a more traditional approach). So indeed have all the brass, Denis Wick's trombones being extremely forceful.¹⁸ Most modern recordings are similarly so. Some of Elgar's most florid horn writing in his Second Symphony remains within the general texture on the conductor's own recording of 1927.¹⁹ In many modern recordings (Solti's with the L.P.O., for example), passages such as that from rehearsal number 146 in the last movement have been transformed in character.²⁰ There are many passages of what might be termed 'herioc' horn writing in both of Elgar's symphonies (and in his other music) which simply do not cut through in the modern style on the old recordings. One could find many similar examples in Strauss's tone poems too.²¹ An extrovert *cuivré* approach has replaced what comes over as a discreet seemliness.

¹⁶This was Lady Walton's reminiscence, reported to this writer.

¹⁷Walton Symphony No.1/L.S.O., Hamilton Harty (1935)

Walton Symphony No.1/Philharmonia, Walton (1951).

¹⁸Walton Symphony No.1/L.S.O., Previn (1966).

¹⁹Elgar Symphony No.2/L.S.O., Elgar (1927).

²⁰Elgar Symphony No.2/L.P.O., Solti (1975).

²¹Strauss *Don Juan* and *Tod und Verklärung*/L.S.O., Coates (1926 and 1928).

Although it was not really until the 1950s that the tide of expansionism began to sweep through British brass sections, it was in Sir Thomas Beecham's London Philharmonic Orchestra that German double horns first came to be heard regularly after 1932. Notwithstanding those stylistic features of typical British playing already mentioned, the earliest L.P.O. records do exhibit a slightly heavier and thicker horn sound.²² In foreign orchestras this type of tone had been in evidence for some time and was often more pronounced (in particular, see the discussion of the Philadelphia Orchestra below). An early Boston Symphony Orchestra disc of the Prelude to Act Three of *Lohengrin* exemplifies the point admirably (at this time the Boston orchestra was predominantly a German one - this was before Monteux replaced Karl Muck and many of the German players were replaced with French ones).²³ What also seems clear on many pre-Second World War recordings from America and the continent is that the string and wind tone tends to be a little more full.

The nasal blare of the worst old recordings does little to favour the sound of narrow-bore trumpets and trombones, but here too it is possible to find examples which do much to capture the character their sound. Probably some of the brilliance and 'clash' of their tone does not reach us due to the reduced bandwidth of early recordings, but there is still a sense of a brightness rarely heard today. The peashooter

²²Rossini Overture *The Silken Ladder*/L.P.O., Beecham (1933).

²³Wagner Prelude to Act III of *Lohengrin*/Boston Symphony, Muck (1917).

trombones were capable of great agility, the lightness of their tone combining with a snapping kind of articulation at louder dynamics (by all accounts this last facet was only kept under control by the finer players). Again Elgar's own recordings of his symphonies, *The Music Makers* or *Falstaff* with the L.S.O. are useful exemplars but one of the finest is of the overture *Cockaigne* played by the Royal Albert Hall Orchestra.²⁴ Here the trombones produce a good tone of appropriate character in *forte* and *fortissimo* (avoiding the all too easily produced ripping effect) without obliterating the rest of the orchestra: their colour adds to the orchestral texture but doesn't dominate it (and this in 1926, before any kind of multi-channel balancing existed). Later recordings exhibit the same scale and quality of sound with a little more clarity.²⁵ However, in British playing of the first half of the century there are sporadic reminders that modern standards of technique were lacking. Slips and uneven articulation in fast passages reveal weaknesses in slide technique; ensemble and tuning are not always as would be hoped today.²⁶

Even the much-maligned G bass trombone can be heard to good effect in standard orchestral situations, the distinguished tone quality being its strongest point; it could never be as

²⁴Elgar Overture *Cockaigne*/R.A.H.O., Elgar (1926).

²⁵For example: Ireland *Epic March*/L.P.O., Wood (1942).

²⁶The trombones seem in a little trouble on Sir Henry Wood's Queen's Hall Orchestra recording of 'The Ride of the Valkyries' (issued 1940).

mobile as the Bb/F. In the hands of a good player, the problem with the G bass was not what it did, but rather what it could not do. Given anything moderately fast the instrument became rather unmanageable and in the high register, or where an awkward passage presented itself, tuning could be wayward. Arthur Wilson remembers a well known G bass player who would not attempt Rossini's *William Tell* overture - it was not written for his instrument.²⁷

The sound of narrow trombones can be heard on many brass band recordings right through the 1960s.²⁸ Although the finest are superb, some may be a little over-strident (this was less likely to be tolerated in the orchestras). When Sir Henry Wood was persuaded to conduct a massed bands performance of 'The Ride of the Valkyries', he is reported to have commented that he wished he had the band trombonists in his orchestra.²⁹

British trombone playing now has a reputation for being as straight and unwavering as is found anywhere; slide technique is such that the cleanest of articulation is possible. Broadly speaking, this is characteristic of the British school for much of the century - especially since the 1950s.

²⁷Wilson, A., interview with SGB. There seem to be no such problems in Toscanini's 1953 recording with the NBC Symphony Orchestra: the Bb/F bass was well established in America.

²⁸For example: Eric Ball's *Journey into Freedom* etc./Black Dyke Mills Band, Geoffrey Brand (1968-70). These performances provide excellent examples of a more traditional cornet sound (with smaller bore instruments yielding greater variety in production).

²⁹Willie Lang, interview with SGB.

Nonetheless, on the older recordings there are occasional hints of a more archaic style. In the L.S.O./Coates Wagner extracts there are soloistic passages where the trombone tone is warmed a little by the use of a discreet vibrato.³⁰ Furthermore, the kind of slewing articulation of which Arthur Wilson spoke (see chapter three, page 120) can be found on those rare discs where solo trombone playing by an orchestral musician is featured. Jesse Stamp, one of the foremost orchestral trombonists of his time, exhibits such slide technique.³¹

Ernest Hall's playing provides the earliest evidence of the traditionally straight British trumpet style in recordings as principal in the L.S.O. from 1924 to 1929 (he actually played in the section from 1912) and the BBC Symphony from 1930 to 1950. Again Elgar's records of his own music corroborate contemporary accounts: Hall has a very direct, unwavering sound which projects well and can be very piercing while remaining proportionate and intact.³² His successor at the L.S.O. from 1932 to 1960, George Eskdale, had a very different approach. A more obvious lyricism (with frequent use of vibrato) can be heard, for example, in Anthony

³⁰ Wagner Extracts from *The Ring*/L.S.O., Coates, (1926).

³¹ Offenbach 'Barcarolle' from *Tales of Offenbach*/Jesse Stamp, Jack Mackintosh and military band (1930). As mentioned in chapter three, Stamp was also known for using German-type trombones in suitable repertoire.

³² However there are occasional instances in L.S.O. recordings of the 1920s (Coates's Wagner excerpts, for example) where an inconsistency of style is heard within the trumpet section (this was probably true of other orchestras of the time too): a fast tremulous vibrato comes from another player in the section.

Collins's cycle of Sibelius symphonies with the L.S.O. in the early 1950s. In particular, the short solo passages in the fourth movement of the Second Symphony demonstrate what has been called a cornet-based sound.³³ His vibrato is not wide and of moderate speed, but it makes for a distinctive colour.

Philip Jones's continuation of a Hall-type tradition can be heard on Klemperer's Philharmonia disc of Mahler's Second Symphony. To ears accustomed to sounds of American magnitude, his playing may appear under-sized, for here was one of the few voices that attempted to resist expansionism. The almost total lack of vibrato may also surprise; even the straightest of today's players tend to use a small amount every now and then - in particular types of figure or perhaps towards the end of a phrase or note. In more soloistic items and later in his career Philip Jones has used the tiniest degrees of vibrato, for example in muted passages in Shostakovich's First Piano Concerto.³⁴

In modern recordings British orchestral trumpeters still tend to have one of straightest approaches in world, even though a moderate vibrato has become part of their vocabulary. Its use seems to be most likely in what is interpreted as suitable repertoire - perhaps in French music, for example. The perpetual vibrato of the cornet soloist, as evinced by

³³Sibelius Symphony No.2/L.S.O., Collins (1953).

³⁴Shostakovich Concerto for Piano, Trumpet and Strings/
Alexeev, Jones, English Chamber Orchestra, Maksymiuk (1987)

Harry Mortimer, never found its way into the British orchestral blood stream. Mortimer was the Philharmonia's first principal trumpet, but only stayed for a short while; he did not enjoy the enduring success that players like George Eskdale, Willie Lang, Harold Jackson and Maurice Murphy found in the orchestras having learnt to straighten their playing somewhat when necessary.

In early twentieth-century France the constitution of orchestral brass was much the same as that in Britain (narrow-bore horns, trumpets and trombones). Later developments in French performance practice have led to the belief that the way these instruments were played was rather different, but recordings made up to the 1930s demonstrate that styles in the two countries were not that dissimilar. In particular, for at least the first two decades of the century French horn playing appears to have been as free of vibrato as in Britain. By all accounts, Edouard Vuillermoz played without noticeable vibrato although his sound may have been a little thicker and more 'velvety' than was usual on this side of the channel; his articulation was also more fluid and smooth, often with quite 'smeared' slurring.³⁵ The principal horn of the Orchestre de l'Association des Concerts Colonne uses no discernibly deliberate vibrato in a 1929 recording of *Pavane pour une Infante défunte*.³⁶ There is only a slight (but fast) vibrato in the trombone solo of

³⁵ Humphries, J., interview with SGB.

³⁶ The horn is a little sharp and, on this occasion, clearly not of the same calibre as the best in Britain.

Ravel's *Bolero* recorded by the Orchestre de l'Association des Concerts Lamoureux under the composer (1930) - the heavy slide *portamento* is much more striking.³⁷

During and after the 1930s much greater differences, many organologically based, arose between the French and the British schools. After the widespread change to Selmer horns with ascending third valves, French players began to develop a conspicuous wobble which, by the 1950s, had become rather strong. This can be heard on numerous solo discs by Lucien Thevet, Louis Bernard, Gilbert Coursier, George Barboteu and others. Exactly the same effect can be found in orchestral recordings. A 1960 Orchestre de la Société des Concerts Symphoniques de Paris recording of Borodin's *Prince Igor* overture provides a good example of what has been termed a 'saxophoney' sound: in the horn solo (from letter E) the tone quality of the Selmer horn in Bb and the speed and width of the vibrato do create this illusion. A similar although perhaps a little more delicate sound can be heard at the beginning of the Finale of Stravinsky's *The Firebird* (Pierre Monteux and the Paris Conservatoire Orchestra).³⁸

³⁷ Above a trombone solo in *L'enfant et les Sortilèges* Ravel wrote 'vibrer avec la coulisse', the necessity of this direction possibly indicating that slide vibrato, at least, was not very pronounced ordinarily at that time. As with any brass instrument, trombone vibrato can be achieved using just the embouchure. In practice, slide vibrato tends to be somewhat wider.

³⁸ *Gramophone's* catalogues give the date of this recording as 1968, but the quality leads one to believe that the performance may have occurred somewhat earlier. According to *New Grove*, Monteux conducted in Paris from 1929 to 1938, but he may have returned later to make records).

As Philip Jones was quoted as saying (see chapter four, page 239-40), a frequent use of trumpet vibrato became another idiosyncratic feature of French orchestras, particularly around the mid-century. At its most exaggerated (in the Sabarich style) it was quite without parallel. At the end of Monteux's *The Firebird* the principal trumpet wails above the orchestra quite unperturbed that his pronounced and quite fast vibrato makes him conspicuous to the extent that a listener joining the piece at the very end might think they had walked in on a trumpet concerto. At times in this disc and in Monteux's *Petrushka* with the same orchestra it seems as though the trumpeter's rate of vibrato is related to the tempo of the music (perhaps at a semi-quaver speed), again just as French woodwind players like Marcel Moyse have done. There is variety in the speed and depth of oscillation; there are passages in *Petrushka* where the trumpet imitates the flute, for example, using a very fast and narrow vibrato.³⁹ Vibrato has been used in orchestral brass playing in many places but the French type can be distinguished by a more continual application: it has been used as a device to supplement the basic colour of the instrument, much as woodwind players do (and this originated at the Paris Conservatoire). Elsewhere, vibrato in brass playing is likely to be added just to particular notes or at particular points rather than throughout a phrase.

³⁹ Stravinsky *Petrushka*/Paris Conservatoire Orchestra, Monteux (1968?).

French brass playing can also be distinguished by a rather punchy attack, often resulting in a rather deliberate, broken articulation (although great store is set by dexterity and speed such that this should never sound laboured). In Maurice André's solo playing this kind of production becomes very uniform in its application; semi-quaver runs are often executed without any variety of stress. André also epitomizes much about the French approach in his dedication to a solo repertoire.

As has been detailed in chapters four and five, post-war American playing marks the beginning of the modern era of symphonic brass playing. In this respect, there is a large amount of truth in the assertion that it is only slightly inferior technological quality in recordings of the 1950s and 1960s by orchestras such as the Chicago Symphony Orchestra, the New York Philharmonic, the Cleveland Orchestra etc. which dates the playing. Perhaps in the last ten years there has been a small retreat from the extremes of extrovert confidence and aggression making room for a little more refinement. The completeness of the American approach at this time was significant: from third trumpet to bass trombone or tuba there was a total surety of technique and consistency of style. Such accomplished teamwork often led to impeccable tuning and ensemble. All this was more-or-less in place by the 1960s.

In particular, there was an all-round lyricism of approach.

For example, where the first trumpet is called to 'ride' the orchestra players would make their tone all the more conspicuous by a somewhat exaggerated vibrato. In Bruno Walter's account of Mahler's Fifth Symphony with the New York Philharmonic, William Vacchiano often uses a noticeable vibrato (evident in the opening bars) but it becomes more pronounced in melodic material over the top of the full orchestra.⁴⁰ However, it is not excessively wide and there is some variety in its application. Vacchiano was taught by Max Schlossberg, who had played in Russia, but this general stylistic feature has its origins in the synthesis of German and French trumpet schools more than anything.⁴¹ Listening to Vacchiano (New York Philharmonic, 1935-73), Roger Voisin (Boston Symphony, 1949-67) and Adolph Herseth (Chicago Symphony, 1948 to the present) on record gives a fair representation of what constitutes an American trumpet school and the variety within it.

The New York Philharmonic trombone section that was to be so influential in the 1950s can be heard on the same Walter disc playing with an even accuracy and weight, again very modern in its proportions. The sound remains uniform and focused, almost irrespective of dynamic and pitch. Gordon Pulis (principal trombone) shows no sign of strain as he ascends into the high register. This is prototypical powerful American trombone playing.

⁴⁰Mahler Symphony No.5/New York Philharmonic, Walter (1947).

⁴¹Tarr, E., op. cit., p.186.

James Chambers, (the New York Philharmonic's principal horn, 1946-69) was very much of the Anton Horner school and that characteristic large-bore sound can be heard in the third movement of Mahler's Fifth Symphony. It has a distinctive bloom and weight - perhaps it might be described as slightly soft focus. The degree of incisiveness found in many modern European orchestras is lacking. The Viennese influence spoken of in chapter four reveals itself here in fluid slurs and a very smooth *legato* for lyrical passages; sometimes there is a suspicion of a swoop on stressed slurs. While articulation is very rounded for this kind of expression (as if speaking in vowels), in staccato material there can be a 'poppy' kind of attack with quite distinct use of the tongue. The same kind of traits can be heard on early Philadelphia records. Perhaps Horner's sound is not quite as 'forward' as Chambers's (that is probably due to changes in recording technology) but his sound is undeniably very fine.⁴² Mason Jones was another Horner pupil, succeeding his teacher and Chambers as principal horn of the Philadelphia Orchestra in 1946 and remaining there for some thirty years (Chambers spent two years there before moving to New York). Jones's sound, similarly warm and thick, has come to epitomize the Philadelphia horn style and can be heard to beautiful effect in the second movement of Tchaikovsky's Fifth Symphony.⁴³ Notably, in such lyrical solo passages he often used a narrow but quite distinct vibrato.

⁴²Brahms Symphony No.3/Philadelphia Orchestra, Stokowski (1928)

⁴³Tchaikovsky Symphony No.5/Philadelphia, Ormandy (1975)

By comparing the above type of sound with that audible on Chicago Symphony Orchestra recordings (especially those made since Dale Clevenger became principal there) the extremes of large and medium-bore schools found in America are illuminated. In the *obbligato* passages of Mahler's Fifth Symphony Clevenger's tone is much more brassy and biting.⁴⁴ There is a bright resonance which is hard to achieve on the larger instrument. Clevenger's virtuoso approach always lends a precision to his articulation, although he too exhibits some of the above-mentioned smoothness and fluidity in *legato*. Indeed a virtuosic approach has been an essential part of the C.S.O.'s sound since Fritz Reiner's tenure as conductor in the 1950s.

As a postscript to the discussion of American horn sound, it is interesting to compare the London Symphony Orchestra horns of the 1970s (when Paxman XL bores were used). In an arrangement by Stokowski of Duparc's song 'Ecstase' which features the principal horn, David Gray undoubtedly plays with more bloom to his sound than would be expected of the most traditional English players, but the style is still English. Always unerringly straight, the tone has clarity; movement from note to note is clean and there is moderation in all aspects of articulation. Schooling, tradition and an individual's mental concept often prove to be at least as important as the equipment used.

⁴⁴Mahler Symphony No.5/Chicago Symphony, Abbado (1981).

With the mature American style must come the excesses too: even on recordings where the balance can be (although arguably should not be) 'normalized' there is sometimes such weight and blatancy of brass sound that much of the composer's scoring is obliterated or subjugated. The damage is often worse live. This problem has not been confined to America but at times it has almost seemed to become a stylistic feature there. In singling out orchestras like the Chicago Symphony as primary 'culprits', it is quite clear that any criticism is directed at the aesthetic - the style - rather than at quality of playing. There is nothing second-rate about this orchestra; where the loudest sort of playing is required nobody does it better and this is an aspect of the American tradition. Nevertheless, be it an integral part of an orchestra's heritage or not, its effect can be contrary to the musical purpose of certain repertoire. Brahms, for instance, does not need brass capable of sweeping the rest of the orchestra aside. It may be captivating in some music (Solti's C.S.O. recording of Strauss's *Alpine Symphony* works as a *tour de force* for the orchestra's brass, for instance) but to attempt to apply it as a general *credo* in orchestral brass playing is unimaginative. This has manifest itself outside America too; in many London Symphony Orchestra records, particularly of the 1960s and 1970s, the

trombones have come over as formidably powerful.⁴⁵ Often it is the trombones which sound most over-strong: trumpets and horns tend to have more interesting musical material to play and thus their dominance is more tolerable. There is nothing more fatiguing to the ear than hearing what should be subordinate supporting harmonies barked out in the middle of the orchestral pitch range.⁴⁶ Furthermore the quality of sound is important: where the timbre stays broadly the same even at the loudest dynamics, the aural imagination has nothing different or extra to interest it. American orchestras have been criticized for using the same approach (in dynamics, articulation and sound) and in the last ten years or so they have gone a little way towards addressing this problem. There is certainly much to be said for an integrity of style (as will be discussed in chapter seven) but not where this upsets the natural internal balance of the music and restricts variety of sound. In a sense, the Americans may be victims of their own success as their precision and accuracy can often lead to an in-human, machine-like feel.⁴⁷

⁴⁵In Previn's Walton Symphony No.1, for example. Again this 'naming of names' is intended in the same spirit of impunity as above (with regard to the C.S.O.) as the quality of the orchestra is not in question. It is again the demands of a particular listening aesthetic, ultimately mediated by a conductor, which create this kind of playing.

⁴⁶The same might be said of much modern tuba playing. In Mendelssohn and Berlioz, for example, the effect can be monstrous. In this respect and others, old recordings like Weingartner's 1925 L.S.O. *Fantastic Symphony* exhibit better balance than many modern ones.

⁴⁷In the Cincinnati Symphony Orchestra's account of Respighi's *Church Windows*, the envelope, attack and totally unimpeachable sustain of the brass (especially the trombones) is almost synthesizer-like.

Throughout this thesis the German horn and German horn playing have been spoken of as more-or-less unified and consistent entities, usually in comparison with the French type. However, throughout history the area of Europe now known as Germany and Austria has undergone numerous changes of name, boundary and politics. In horn playing too there has been a variety of approaches and schools (recall what was discussed in chapter two about the different bell and bore sizes of horns from the nineteenth-century Austrian and Bohemian traditions). The most striking late twentieth-century manifestation of such distinctions can be heard on recordings. Many west-German players and certainly those in Berlin (considered to be in the west culturally if not geographically) retain a straight sound. Others still show what might be described as an eastern-European influence in the use of vibrato, most notably Peter Damm (famous as the principal horn of the Dresden Staatskapelle as well a soloist) and Herman Baumann (playing orchestrally in Hamburg, Dortmund and Stuttgart before devoting himself to teaching and solo work). Today, the most striking examples of the use of orchestral horn vibrato can be found in performances by Russian and Czech orchestras. This is not often as strong or as perpetual as the French type but is common in solo passages (the second movement of Tchaikovsky's Fifth Symphony is a reliable example) and occasionally even when playing as a section (as at the beginning of the Czech Philharmonic's Sibelius Fifth Symphony under Delogu). Russian and Czech horn players tend to have a more prominent and distinct

manner of production than is usual in Britain.

Surprisingly, given its proximity to the eastern block, horn playing in Vienna has remained more or less free from vibrato. Perhaps in the Freiburg era the smallest amounts were used very occasionally, but in more modern recordings the playing remains straight. Viennese playing is characterized by very smooth slurring with not infrequent hints of *portamento*, superb examples being found in the slow movement of Furtwängler's 1945 Brahms Second Symphony with the Philharmonic. This kind of soft-tongued fluidity is in stark contrast to many more 'precise' modern styles. It has been said of Dennis Brain that he tended to tongue virtually every note (albeit imperceptibly), even over a slur, and this has become part of modern performance practice for many players.⁴⁸

The opening bars of Schmidt's Fourth Symphony (recorded under Mehta in 1972) demonstrate the soft-tongued and almost flute-like rotary trumpet sound of the Vienna Philharmonic. Rotary trumpets are used in Berlin too but there the attack and articulation is a little more pronounced. This distinction is applicable across the board and constitutes one of the main differences between Austrian and German brass playing: the former uses rounder and less conspicuous production - even accented notes tend to have a feel of a diaphragmatic

⁴⁸Frank Lloyd is a modern British horn player who uses the same kind of technique.

push rather than a heavy tongue. However, in both the Vienna and Berlin orchestras, their traditional instruments are capable of very contrasting sounds in louder dynamics, becoming searing and brassy more easily than more usual modern instruments (this effect can be heard in Karajan's live recording of Bruckner's Ninth Symphony with the V.P.O.; in particular, in the opening bars the horns progress from a dark sombre sound to an exceedingly brassy *cuivré*).

Firm proof of the value of recorded evidence in addition to the written word and received opinion is provided by a consideration of Russian brass playing. Their trombones have an almost reedy tone colour. Furthermore, even Edward Tarr's description of their 'impassioned expression' does little to prepare one for the vehemence, penetrating intensity and searing volume of Russian trumpet playing.⁴⁹ The use of small mouthpieces in generally large-bore Bb trumpets does not make for the broadest of tones and, combined with extensive use of vibrato as an expressive device, this has caused the style to be maligned on occasion. However recordings by the finest Russian orchestras under Mravinsky, Svetlanov and others testify to a convincingly appropriate quality of sound that few other nationalities of trumpeter can come close to (in Tchaikovsky, Prokofiev, Shostakovich et al.); Russian trumpeters have been quite unsurpassable for raw, passionate declamation.

⁴⁹Tarr, E., *The Trumpet*, London, 1988, p.185.

CHAPTER SEVEN

**Evaluating the trends of expansionism, homogeneity,
uniformity and security**

That the trend of expansionism has existed and had considerable influence is an inescapable conclusion, simply born out by the organological evidence and expert accounts presented thus far (the only proviso being that there are now some signs of a reaction). It is in Britain and France that the process of enlargement of instruments' physical dimensions and the corresponding increase in volume of sound produced has been most keenly felt. The Anglo-French tradition formerly favoured narrow-bore trumpets, trombones and horns and thus it is in these countries that the furthest distance has been travelled. Nevertheless, the general trend has had effect worldwide, the only exceptions being a handful of orchestras well known for their sense of tradition.

Perhaps evidence enough has been provided in this matter, but the argument has rarely been put more forcefully than by John Fletcher, who related the whole issue to a 'musical arms race':

It's happened to such an extent that the french horn [sic] and the trombone as I know them have almost ceased to exist and the tuba is going the same way. If you've got trombones which, once you get below a mezzo piano, lose all their life and vibrancy and become mere honking hooters (which I declare is what's happened: I don't give an opinion, I state it) then it's difficult for a tuba player to hang on to more old fashioned virtues. So we all use very bulbous gear and big mouthpieces.¹

¹Fletcher, J., 'Is big always beautiful?', *Brass Bulletin*, No. 47, p.21-22. On the development of the tuba, he added 'they've gone right away from being brass instruments and sound more like ship's hooters, with about as much artistry as those are capable of'.

Fletcher is not alone in his tirade:

I have a pet complaint - the level of volume demanded of us now. I can play loud, perhaps as loud as anybody, but I don't like to do it. There's a point on a brass instrument where, if you blow past it, the overtones and quality of sound actually go. I regret that our ears - musicians and public alike - have got accustomed, through hi-fi and recordings, to hearing things in an unnatural way. In a recording, conductors listen to the playback done very loud. Then in the concert they want to hear the music that way too, demanding from us, specially the brass, such a volume that the quality goes right off. Even a fortissimo should still be contained, have definition and quality. 'Play out,' they say, 'a bit more, a bit more.' One of the old school, like Boult, is so refreshing because he will reduce the dynamic level... That is the old idea of balance.²

Philip Jones prefers this 'old idea of balance' too:

I left the profession of orchestral playing when it had reached what I thought were ridiculous proportions because at no time did I have either the interest or the desire to develop the technique to blow ever louder for people like Rozhdestvensky who wanted it like that the whole time.³

The results of expansionism have presented both practical and musical problems. For the players in close proximity to the brass (often back desk strings or woodwind) the sheer volume of sound can be most uncomfortable, not to say detrimental to their own musical efforts. Some orchestras have used deflector shields to protect players in front of the trumpets and trombones, but many brass players find this very off-putting, reflected sound affecting their judgement of dynamic level.

²Premru, R., interviewed by Michael Foss in *Orchestra*, ed. Previn, A., London, 1979, p.180-181.

³Jones, P., interview with SGB.

In other orchestras, certain players have taken their own measures - ear-plugs and the like; the London Symphony Orchestra bassoonists have been putting cotton wool in their ears for years.⁴ Brass players themselves suffer too:

I had to have my ears examined a while ago because I was sitting in front of the trumpets. As string players know very well, sitting in front of the modern brass instruments is just not fair to the ear. That's why there is all this business with ear plugs. It's a shame, it really is... It may be that orchestras are just getting too loud, I don't know. But again it's conductors. Any young brass player wants to get a great, exciting sound. And Ozawa likes it. He hires the driving players, not so refined and controlled...I guess that's traditionally part of the American way.⁵

This last point highlights the musical effects of making the ability to play forcefully a priority. Put simply, if a primary requirement of a professional brass player is to be able to produce modern levels of volume with comparative ease, player 'A' who exhibits this capacity will be employed before player 'B' who does not but who has, for example, superior articulation and, more importantly, musical imagination. It is true that professional standards are so high and competition so great that weakness in any area of playing or musicality is not tolerated, but the frame of reference for assessing players' skills is skewed. Consider the kind of priorities which are uppermost in the appointment of an orchestra's principal oboe or clarinet.

⁴Murphy, M., in conversation with SGB.

⁵Barron, R., interviewed by Michael Foss in *Orchestra*, ed. Previn, A., London, 1979, p.182. Other American players have admitted part of this is a kind of American snobbism - 'you have to use the biggest because that means you are the best!' (Yeo, D., 'Bass sounds from Boston', *The Trombonist*, London, Spring 1994, p.15).

A great deal of effort is required to play large instruments and significant amounts of time must be spent in developing an athletic mastery of breath control. Certainly, fine brass players - whatever kind of instrument they played and along with wind players and singers in general - have always needed excellent breath control, but time is finite and hours spent super-developing breathing necessarily replace other aspects of musical development. This is not to suggest that players who develop this kind of breath control cannot also be highly talented musically but the overall balance of priorities is clear. Of course, the acquisition of physical mastery of an instrument and artistic growth should be complementary. However, even confining consideration to technical matters there is an extent to which respective goals are mutually exclusive:

As symphony orchestras demand - and get - stronger, bigger, louder, fuller trombone sounds, the compatibility between this 'heavy' playing and the virtuosity and range needed for the concerto player becomes something of a problem.⁶

Outside the orchestra, reservations have been expressed about the volume of modern brass: for the last two successive years (1994 and 1995), adjudicators in the Boosey and Hawkes National Concert Band Festival have advised bands to consider balance carefully, lest the brass swamp the variety of

⁶Wick, D., *Trombone Technique*, Oxford, 1973, p.87.

colours available to the symphonic wind ensemble.⁷

Certainly some of the problem is due to over-exuberant playing - particularly where amateur groups and young players are concerned - but the fact that many of today's standard instruments have been designed and built for optimum fullness and weight of sound is a contributory factor.

Perhaps it could be said that the taste for a weightier sound originated in Germany and eastern Europe: as was described in chapter two, a predilection for horns and trombones with larger bell sections dates from the nineteenth century in these regions. It was in 1892 that George Bernard Shaw commented on the 'vast mass of brass' in Mahler's Hamburg orchestra, the respective instruments' characters somewhat undifferentiated, to contemporary English taste (see the passage quoted on page 14).⁸ However, many German instruments of this period did exhibit a degree of variety of timbre which largely has been lost since. The traditional German trombone, of moderate bore in the slide but with a rapidly expanding bell, changes tone quality according to dynamic:

German trombones produce a dark, almost sombre tone quality at softer dynamic levels and assume a resonant brightness at *fortissimo*. This contrasts with American trombones, which tend to hold a more consistent timbre throughout the dynamic range. (A similar change of

⁷Guy Woolfenden (1994) and John Greaves (1995) at the Bedworth Regional Festival.

⁸Bernard Shaw, G., 'Siegfried at Covent Garden', *The World*, 15 June 1892, *Shaw's Music: The Complete Musical Criticism of Bernard Shaw*, ed. Dan H. Laurence, London, 1981, vol.iii, p.646.

timbre occurs in rotary valve trumpets and the horns used in the above orchestras - particularly the unique Vienna horn). The distinctive qualities of the German trombone contribute a great deal to the overall effect the Vienna and Berlin brass sections achieve in Wagner, Mahler, and Strauss.⁹

Now only found in a few German orchestras of particularly strong heritage, most trombonists accustomed to the American type find it somewhat unusual:

Players of the German school use traditional instruments which have a completely different response, tone quality, and 'feel' from trombones made throughout the rest of the world... For German trombones tend to have a soft, dull, warm quality of sound, which in loud playing 'breaks up' at a much lower level of dynamics than, say, American instruments which are more resonant at softer levels, and tend to maintain the same kind of tone quality from *ppp* to *fff*.¹⁰

In questioning the pedigree of the brass in a particular German orchestra - labelling them 'mongrels, differing chiefly in size' and criticizing a lack of individuality of tone - Bernard Shaw pointed to a cloying similarity of sound. This is one form of homogeneity: instruments sounding more alike so that they lose some of their distinguishing features. Yet, in another sense, it would seem that German instruments possess a certain variety of character often missing today.¹¹ Thus another form of homogeneity might be described as the tendency for an instrument's timbre to

⁹Whitener, S., *A Complete Guide to Brass: Instruments and Pedagogy*, New York, 1990, p.52.

¹⁰Wick, D., op. cit., p.6.

¹¹There is no way of vouching for how they were played. Bernard Shaw's reference to cornets in the Hamburg Opera, most unusual in a German orchestra, might justifiably rouse suspicions that this was not the finest of groups.

remain broadly the same at all dynamics. According to the modern 'American dream' in trombone playing, the sound should never become over-bright or, as Denis Wick expresses it above, approach a stage where it might be said to have broken up:

Manufacturers try to find ways to give players what they want, which is as big and round and dark and heavy a sound as possible when you are playing in the extreme loud register...

... you can get tenor trombonists trying to play on something too big. They keep wanting to play a louder, rounder sound. Tenor sounds want to become bass sounds, bass trombone players want tuba sounds, and so on.¹²

As the use of large-bore American trombones became more and more widespread, Anthony Baines wrote:

But a danger here is a modern fashion for every player to use the most enormous dimensions possible, whereby not only famous passages in Berlioz's *Symphonie Fantastique* but the tender chorale harmonies in the finale of Bruckner's Third Symphony lose all their colour to become daubs of meaningless grey.^{01, 13}

These characteristics epitomize the difference between the American trombone of the second half of the twentieth century and the German trombone. Greater homogeneity of tone across the dynamic range is a goal. It is to this end that devices such as built-up mouthpieces and bands around the bell flare ('to help the timbre remain centered and round in louder dynamics') have sometimes been employed.¹⁴

¹²Yeo, D., 'Bass sounds from Boston', *The Trombonist*, Spring 1994, p.15 and p.16. Douglas Yeo is the Boston Symphony Orchestra's bass trombonist.

¹³Ibid., p.246-247.

¹⁴Whitener, S., op. cit., p.61.

The modern bass trombone (primarily being played using a Bb tube) sounds more similar to the tenor than when, formerly, G or F bass trombones were used, although it is only in Britain that a longer instrument has been used regularly within the last hundred years - the wide-bore Bb (usually Bb/F) bass had become popular in Germany by the end of the nineteenth century. In addition, the larger American-type tenor brings the tone of the first and second player closer to that of the bass. This makes for greater homogeneity within the section, which may or may not be desirable, dependent on the musical context. In addition, the weightier, fuller character of the modern trombone section creates a stronger bridge with tuba tone - the blend is better. Again, this could be seen as desirable in some circumstances, undesirable in others. Many writers on orchestration have commented on the rather ill-matched marriage of convenience that constitutes the bottom of the orchestral brass choir and, to an extent, this problem has been alleviated by the manner in which the trombone and tuba have developed. However, where a score has been designed with very different roles and timbres in mind for the trombones and tuba the effect is compromised. Of course it is a subjective matter as to quite how independent these instruments should sound, but it is not hard to think of many examples where the trombones and tuba should operate with idiosyncrasy, rather than as an amorphous, utilitarian foundation. Bernard Shaw's concept of 'finely contrasted families' would seem to be an admirable objective for much of the standard orchestral repertoire. Certainly in much French

and British scoring the character of parts written for narrow trombones is ill-served by the modern bass brass combination. Furthermore, there are also many salient examples outside the Anglo-French tradition where the effect of increasing homogeneity has been unfortunate in some degree: Brahms, true to the nature of the German trombone, tends to write either chorale material in dark, sombre mood or blaze forcefully (the contrast is not so great with an American-type trombone); the same holds for Bruckner, if on a larger scale; Wagner extends his trombone family into the contrabass register and creates a bridge between the contrabass tuba and the *horns* by the introduction of Wagner tuben; Sibelius sometimes uses the tuba as a bass to the horn section and often writes quite independent tuba parts, implying great contrast with the trombones; and the sheer depth of tuba writing in much Russian music dissociates the instrument somewhat.

The effect of organological changes over the last one hundred years has demonstrably narrowed the gap between the sound of the trombones and the tuba. Certainly the instruments still have much of their character intact, but the standard modern equipment of the second half of the twentieth century does not quite have the same 'purity and individuality of tone' - Bernard Shaw again - as is possible with older instruments (pace the modern professional player who knows that present demands and tastes dictate the type of equipment in use and that older types present technical limitations - this matter

will be re-visited below; a kind of genetic 'purity' is intimated, rather than an assessment of tone quality).

Perhaps the most frequently observed (or, sometimes, misheard) congruence in this unfolding chain of homogeneity is that between trombone and horn. It has already been noted (in chapters three and four) that with the advent of the double horn and the Bb tube length, a kinship between the two instruments was seeded which had not existed hitherto: until the latter part of the nineteenth century the F crook was commonly taken to be the shortest crook which yielded a quintessential horn tone.¹⁵ While fine players have done much to retain traditional qualities, the physical similarity of the two instruments (they share the same tube length) cannot help but make them sound more alike. Often it is the familiarity of a passage (the *Tuba Mirum* from Mozart's Requiem or the solo at the beginning of Tchaikovsky's Second Symphony) and then the nature of the articulation (the action of valves is usually distinguishable from all but the finest of slide practitioners) which first informs us which instrument is playing. With modern instruments and in an unfamiliar context, perhaps with detached notes at a dynamic around *mf*, the actual tone itself can be virtually indistinguishable;

¹⁵This is not to deny that shorter lengths gave different and significant colours in the orchestra - Beethoven's A horns in the Seventh Symphony and Berlioz's 'Queen Mab' scherzo from *Romeo and Juliet*, where the third horn is crooked in Bb alto, spring to mind.

Similarly the large-bore French horn sound which has been customary in the U.S.A for a long time has only recently become established in Britain. In the interim period there appeared to be two horn or trombone sections in the same orchestra, since at certain dynamics and in the hands of not very good players, the medium-bore horn sounds very much like the large-bore trombone. I can recall hearing a performance by a well-known British orchestra of the Symphony in C by Schubert where the repeated accompanying octaves which alternate between trombone and horns in the first movement sounded exactly the same.¹⁶

No clearer an example of an oxymoron than a 'large-bore French horn' could present itself in this context. This was written in the early seventies when Denis Wick was playing in a London Symphony Orchestra freshly replete with extra large-bore Paxman horns. The extent to which these instruments might have alleviated such a problem is doubtful: in the instance quoted a far more radical solution would have been for the horn players to have actually used a C tube (possible by depressing valves one and three on the F side of a double horn) as the composer intended, or at least use the second valve on the F side giving a horn in E. Of course this would have made their playing much less safe and is thus unlikely to have been accepted in a modern symphony orchestra, and yet today's natural horn players run this very gauntlet regularly. Christopher Mowat feels that there is 'bad distinction' between the trombone and horn at the moment.¹⁷ Bate observed a similar phenomenon but keeps a balanced perspective on the relative merits of narrow and wide-bore:

¹⁶Wick, D., op. cit., p.80. Wick is presumably referring to the minim concert E octaves from bar 134 on.

¹⁷Mowat, C., BBC Symphony Orchestra trombone section interview with SGB.

In Britain there are many highly respected players who feel that the modern German-American school has deliberately sacrificed something of the individual character of the instrument, and that the tone cultivated, especially in the softer dynamics, approaches too nearly to that of the wide-bore Horns which they also prefer. On the other hand, British players, too, deplore the bad period when stridency was a common characteristic of the trombone in Britain.¹⁸

Again, this aspect of homogenization may be a little less problematic where German scoring and performance practices are relevant; perhaps it could be argued that the respective colours of trombone and horn are more important to the Anglo-French tradition ('On Debussy's palette the tones of horns and trombones, for example, could never be confused in the way they could on Bruckner's').¹⁹ That Austro-German romantic music has seemed to constitute the cornerstone of the symphony orchestra repertoire, particularly for brass players, may account for a tolerance of growing homogeneity.

In Britain many have found the significant change from narrow-bore brass to modern instruments and their attendant performance practices to have effected a kind of role reversal for the trombone and horn:

There's been a sort of reversal. I think Jim Brown mentioned that the horns used to be very mellow and the trombones were edgy, now it seems to be the other way round - the horns seem to have the edge when they play like that, like the Alexanders they have in this orchestra.²⁰

¹⁸Bate, P., *The Trumpet and Trombone*, London, 1978, p.62.

¹⁹Bevan, C., *The Tuba Family*, London, 1978, p.156.

²⁰Saunders, S., BBC Symphony Orchestra trombone section interview with SGB. Jim Brown was a well known London horn player.

The Alexander Model 103, now regarded by many as a 'traditional' horn by comparison with instruments by Paxman, Yamaha, Holton, Conn and other American makers, offers a similar kind of variety of sound as has been described above for the German trombone. It has the capacity to develop a brassy (for want of a better word - rich in overtones) sound more easily than some other horns, while in quieter dynamics remains smooth. Of course, much depends upon the player and the effect strived for; no hard and fast definitions can be laid down in such matters. However, most horn players agree that the Vienna horn offers the most timbral variety, progressing from a dark, round *pp* to an incredibly ferocious *ff* when necessary. The essence here is in the actual tone quality - sheer physical amplitude may not be that great but the sound itself endows great perceived power. This kind of sound could not be called homogeneous: the horns of the Vienna Philharmonic can emerge from a quiet sustained sound which hides amongst the string ensemble to blaze over the orchestra. The exceptional timbre (harmonic content of the sound) becomes conspicuous without swamping with excessive volume;

At low and medium-volume levels, the Vienna horn has the pure, deep tone of the F horn and, as the volume increases, it condenses to a bright heroic quality at a lower dynamic than the Bb and double horn. The lower threshold of the brighter timbre is used to good effect by the Vienna players in works by Bruckner, Strauss, and other 19th-century composers.²¹

²¹Whitener, S., op. cit., p.37.

Most of the modern horns used in symphony orchestras around the world today cannot approach this variety of sound. Their tone has greater homogeneity: it remains more uniform over the dynamic range, greater volume being required to transform the sound to give a bright, open quality - especially on the Bb tube which tends to be used predominantly by high players (playing first or third).

John Fletcher and Willie Lang were among those to express concern about the respective sounds of the orchestral brass family, feeling that things had become somewhat confused (along with Denis Wick, they experienced some of the most extreme changes during the 1970s in the London Symphony Orchestra);

The brass in English orchestras is a bit mixed up at the moment. I think the chief difficulty for trumpets is that the other brass instruments have changed so much. The wider the bore, the safer the instrument, and that's what many players have gone for. The old French horns, for instance, led a rather dangerous life with their narrow bores, but played well they had a wonderful pure sound. Now trumpets, which are more or less as they were, perhaps with slightly bigger bores, seem out on a limb in the new orchestral brass sound. Trombones are sounding like horns, horns are sounding like hooters,²² and the trumpets are trying to find out where we are.

²²Lang, W., interviewed by Michael Foss in *Orchestra*, ed. Previn, A., London, 1979, p.124. When discussing the same subject more recently (interview with SGB), Bill Lang said that he thought the horns sounded more like baritones. There is a significant difference which relates to the way these large-bored horns were played in the L.S.O. - Julian Baker remembers that there were phases when they were played in different ways, either very loudly and brassily or with a more mellow baritone-like approach (interview with SGB).

As the organological evidence presented in chapter three (from page 74 on) illustrates, the trumpet could be said to have been subject to the most extreme process of homogenization. Forsyth, among others, pointed out that the first stage in the taming of the classical trumpet occurred with the acceptance of mezzo-soprano instruments whence, in his judgement, 'It has also become, except in name, a different instrument' (a more full quotation appears above on page 74).²³ However, he does consider the 'flexibility and power of blending' of the new instrument to be of use in 'modern music, where the Trumpet-part is woven more cunningly into the tissue of the music'.²⁴ Similarly, Frank Howes relates the change to a twentieth-century taste for integrated ensemble sound:

Purists deplore the reduction of parts written for different kinds of trumpets in different keys at different periods to the modern common denominator of a short trumpet in C. It is an example of standardization not elsewhere paralleled in the evolution of the orchestra.... The explanation is perhaps to be found in the word 'blend'. The tones of the orchestra have become more various but they must at all costs combine into a homogeneous tutti... Evolution has over-reached itself in the case of that noble savage, the trumpet, and a price has to be paid for the civilising process that has made it a well-behaved co-operator in the orchestral team-spirit.²⁵

Bate is also clear about how far the modern trumpet has come from its ancestral background. He outlines the changes in

²³Forsyth, C., *Orchestration*, London, 1935, p.90. See also page 95 - '...should clearly differentiate the new from the old instrument. For they are really not the same instrument at all'.

²⁴Ibid., p.94.

²⁵Howes, F., *Full Orchestra*, London, 1942, p.54.

physical characteristics of the trumpet as follows:

... first, a body tube narrow in proportion to its length and basically cylindrical. Second, a 'bell' section in which the body of the instrument expands in gentle curve to form a marked terminal flare. Third, a mouthpiece (almost always detachable) broadly in the form of a hemi-spherical cup with a thickened rim. These features together can be regarded as definitive of the true trumpet, and the name should properly be reserved for those instruments only which show them... In modern trumpets, however, things are somewhat different. Today several inches of the 'mouthpipe' into which the mouthpiece fits are nearly always slightly tapered. This is, physically, quite a minor deviation from tradition, but it does have important acoustical effects and eases *legato* playing in some parts of the compass. It is therefore welcomed by players. In instruments made fifty years ago this feature is hardly to be discerned at all and it has made its appearance over a period during which ideals of trumpet technique and tone have changed greatly. In addition, the bell expansion in many modern trumpets begins much earlier and in some examples this section may occupy as much as half the total tube-length. In a typical American instrument recently measured the bell represented 50 per cent of the tube-length, the tapered mouthpipe 21 per cent, and the cylindrical bore (disregarding valve tubes again) only 29 per cent. We therefore have today an instrument tending towards 'cornet' proportions, and the characteristic tone has changed accordingly.²⁶

Jeremy Montagu agrees that the trumpet has lost its classical proportions:

This change in trumpet bore has meant that many textbooks on musical instruments are out of date... As Arthur Benade pointed out, there is a greater proportion of cylindrical tubing in the modern horn than there is in the trumpet, and the trumpet is entirely conical in bore except for the various tuning slides and the valves.²⁷

Bate also notes that, concurrent with the introduction of mouthpipe tapers, the old hemi-spherical mouthpiece has

²⁶Bate, P., op. cit., p.41.

²⁷Montagu, J., *The World of Romantic and Musical Instruments*, London, 1981, p.101.

become 'obsolete' and a deeper cup 'with a distinct element of cone in it' is usual.²⁸ He continues, making clear his opinion that trumpet tone has moved closer to that of the cornet:

There is no doubt that during the last thirty or forty years the 'accepted' tone of the orchestral trumpet has tended more and more towards that of the cornet, whose typical bell-shaped mouthpiece with a rather ill-defined throat is illustrated..... The modern tendency to reduce the brilliance of trumpet tone has been deplored by many critics, especially in Britain by those old enough to remember the noble playing of such as John Solomon, and before him Walter Morrow.²⁹

Thus the modern instrument - half trumpet, half cornet - blends in an orchestral tutti and with the rest of the brass better than its nineteenth-century forbears. Again Bernard Shaw's 'finely contrasted families', in this case the trumpet and the cornet, have been subject to the trend towards homogeneity. Forsyth wrote of the cornet's 'power of combining', 'save in the topmost register, it will "fit in" with almost anything in the orchestra', 'The Cornet more than any other Brass instrument is able to "drop out of sight" at will', 'the quality of its tone is in the main soft and placid'.³⁰ The modern symphony orchestra trumpet plays a hybrid role and is capable of some of these disappearing acts by virtue of the fact that its martial character has been compromised. Many players value the ability to 'get lost

²⁸Bate, P., op. cit., p.74.

²⁹Ibid., p.75 and p.76.

³⁰Forsyth, C., op. cit., p.108.

among the woodwind'.³¹ Little wonder then that orchestras rarely play cornets on cornet parts, or if they do there is little timbral contrast. The process of homogenization works in the other direction too: as was noted in chapter five (page 285-6) modern cornet players in brass bands make a much more trumpet-like sound than in former eras.³²

As with the German trombone and the Vienna horn, the rotary-valve trumpet offers more tonal variety. It can blend very well in quieter dynamics, or it can become very conspicuous and brilliant as the air-flow is increased. Many have observed that the piston trumpet tends to retain a comparatively consistent timbre regardless of dynamic level.³³ Furthermore the modern instrument with a larger bore gives less difference of colour through the different registers; the old narrow-bore piston trumpet had, for example, quite a distinct character in the low register.³⁴

There is one final point which might be said to affect all instruments and homogeneity. The use of vibrato in the twentieth century has, in some ways, contributed to a

³¹Howarth, E., interview with SGB. Elgar Howarth found an American Benge trumpet most adept in this regard.

³²It is also worth noting that the timbral variety achieved by the use of narrow-bore trombones in brass bands - setting the perpetual saxhorn flavour of the rest of the ensemble into relief - has diminished in recent decades as large-bore orchestral trombones have inevitably been adopted.

³³Buckner, J., *Substitution of trumpets in orchestral music: origins, development and contemporary practices*, D.M. dissertation, Northwestern University, 1989, p.169.

³⁴Steele-Perkins, C., interview with SGB.

similarity of expression. Certainly imaginative employment of a wide variety of types of vibrato can complement the basic colours of respective instruments, but as a device used in a soloistic context it can take attention away from tone colour, and in tutti passages it can blur distinctions between families of instruments. Perhaps an analogy can be drawn from the following passage about the increasing use of string vibrato this century:

To a late twentieth-century listener, this sparing use of vibrato by earlier string-players can give an impression of somewhat tentative and inexpressive playing. But a number of players brought up before the days of universal vibrato complain on the contrary that the modern use of it imposes uniformity of expression and tone, and that the old approach was far more expressive. As Jelly d'Aranyi comments, 'Variety of tone!... It was what Joachim and all of us stood for, and is ignored by many prominent violinists, who just establish a vibrato and stick to it.'³⁵

While the vibrato formerly used in some schools has been inhibited (French horn playing, for example), it is used more in other areas. Whatever the extent of vibrato, there is a tendency among some modern performers to endeavour to make all notes sound the same, completely uniform in strength and articulation, presumably so that no one note sounds weaker. Tarr wrote of Maurice André's 'totally equal articulation in all registers' which he considered 'consistent with the style of the day'.³⁶ While this demonstrates a degree of technical mastery, it represents a total turn-around from the days of the hand-horn artist, who would use the inhomogeneity of his

³⁵ Philip, R., *Early Recordings and Musical Style*, Cambridge, 1992, p.105.

³⁶ Tarr, E., *The Trumpet*, London, 1988, p.179.

instrument to inflect a line and thus add expression. There has been a general (although not universal - there are always exceptions) trend towards the development of instruments and playing styles which iron out inhomogeneities. Perhaps this trend might be traced back to the invention of the valve:

For the brass as for the woodwind, one bought the full chromatic range (with uniform timbre on all notes) at the price of greater richness of sound.³⁷

Yet, as Berlioz pointed out when discussing the valve horn, there is no reason why *all* the old techniques should die with the introduction of new technology.

Semantically, uniformity and homogeneity mean much the same thing. However, in examining uniformity in this thesis a consideration of the balance between the survival of national styles and idiosyncracies and spreading internationalization is intended. Much of the material presented in chapters four, five and six deals with this issue and there is no need to re-iterate those findings here. It is true to say that the British and French traditions have changed the most, for nowhere are narrow bore brass instruments regularly played anymore (save in certain very recent specialist orchestras). It is also true to say that American instruments and practices, born out of the synthesis of certain German and French styles, now represent an international frame of reference on to which regional styles are superimposed. This

³⁷Tarr, E., op. cit., p.163.

applies for the vast majority of professional orchestras worldwide. Those few exceptions which have retained a strong link with their heritage (Vienna Philharmonic, Berlin Philharmonic, Dresden Staatskapelle, Moscow Philharmonic, St. Petersburg Philharmonic, Czech Philharmonic, etc.) while admittedly among the finest, are just a few among hundreds. This is not to deny that there are still recognizable traits in the orchestral brass playing of most countries, but the distinguishing features are not as contrasted as they were in the earlier decades of this century (and, one presumes, before that in the nineteenth century when organological differences were certainly significant). Today organological idiosyncracies are simply much rarer.

The following opinions, each from a respected professional player, reflect a growing uniformity in the orchestral world:

I suppose it is not really surprising that so many players all over the world... have merged by devious ways and have arrived at the same conclusions and are now virtually all using the same instrument. In some ways it is a pity, as national characteristic sounds tend to have disappeared and it is now difficult to tell one from another.³⁸

There had been a trend towards likeness and neutralization of differences.³⁹

Orchestras do sound much the same today. Characteristic voices - Koussevitsky's Boston, Toscanini's NBC, or say Beecham's Royal Philharmonic - have disappeared, and in the good orchestras a general high technical competence and similarity in sound is everywhere... I've almost never had a conductor say anything to me, that he wants a

³⁸Maxted, G., *Talking About the Trombone*, London, 1970, p.38.

³⁹Farkas, P., 'Thoughts on Tone Colouring, Practising, Teaching and Rapport with Colleagues - even Conductors', lecture presented at the 24th International Horn Society Workshop, R.N.C.M, July 6, 1992.

specific kind of sound. A better sound, yes! That's about as specific as they get. By and large never, 'I'd like a more French sound, or a different kind of vibrato', whereas in the old days I think they might. Those old autocrats thought they must teach everybody everything, including how to sound.⁴⁰

My experience is that most conductors don't ask for a particular kind of sound. Barbirolli would tell the strings exactly what he wanted, but when it comes to wind few seem to have any preference. A Russian conductor, used to the fellified sound of Russian horns, doesn't ask players here to use that vibrato. And I'm sure he wouldn't tell his own players to stop using it for certain pieces. It's as if they have blinkers on. Just look at the score, make sure the notes are together and in tune, that's it... But now, generally speaking, it's so very difficult to tell any differences in orchestral sound.⁴¹

The role of conductors in shaping orchestral sound can be significant, especially where there has been a long-standing relationship. It has been argued that since the advent of fast air travel and the international conductor, taking his own repertoire of concert material around the world, this effect has diminished leaving orchestras without the same coherent stylistic sense of direction. And yet the Vienna Philharmonic, perhaps the orchestra with the strongest intact traditions in the world, is self-governing and has never devoted itself to a long-term principal conductor. Other self-governing orchestras, like the London Symphony Orchestra, also enjoy a degree of individuality. Today, players use their respective international societies as forums for the exchange of ideas. Within these guild-like meetings there is the chance to hear different national styles outside the often restrictive world of the orchestra.

⁴⁰Hadcock, P., interviewed by Michael Foss in *Orchestra*, ed. Previn, A., London, 1979, p.178.

⁴¹Civil, A., *ibid.*, p.180.

The rapid expansion in the last couple of decades of the likes of the International Horn Society and the International Trumpet Guild speaks of players' desire to re-discover an identity and character which the rigours and pressures of modern symphony orchestra playing sometimes seem to suppress. John Wallace is very positive about the liveliness of national traditions:

There is still an amazing variety of brass playing to be heard world-wide. There is a certain spread of McDonald Hamburger consensus note-getting school, but this doesn't hold sway in Berlin, Vienna or Paris... If you had heard the trumpet group "10 of the best" in Bremen with Vizzutti, Dokshitzer, Thibaud, Nilsson, Sauter et alia you could hear the different mentalities.⁴² •

However, it is undeniable that the developments of the twentieth century have led to much improved 'note-getting'. There is now much greater security in orchestral brass playing; even in less-than-front-rank groups there can often be fewer split notes, poor tuning and mis-pitchings than might have been heard in a top professional orchestra in the first decades of this century. The over-riding reason for this is not that players are now better, although there are now many more people playing at a high level (a greater strength in depth), but that the instruments themselves have been optimized for security. The very best players of exceptional talent have always performed with no little accuracy, but now this level of security is within reach of many. In simplistic terms, tube-shortening and larger bore sizes have

⁴²Wallace, J., correspondence with SGB.

made playing the notes and keeping them in tune easier. The pay-back for this gain (the law of compensation always applies) is that the sound of shorter instruments with larger bores is different. In terms of the tradition and ancestry of the instruments these shorter tubes result in a 'shorter sound' which is often less than ideal.⁴³ As was outlined in chapter five, shorter tubes have been around since turn of the century, at the latest, so their invention is not a twentieth-century issue. However, the decision to use them more and more widely, the pressures that precipitated their employment and the development of better examples are all phenomena of the last one hundred years.

There has been a general change in aesthetic towards cleanness of execution and precision. Robert Philip finds that attitudes regarding ensemble, *rubato* and *portamento* have changed radically in the twentieth century - that in each case some degree of flexibility and freedom has been replaced by exactitude.⁴⁴ Again, this has little to do with improvements in players' abilities (it is often presumed that standards of performance were not as high in the first half of the twentieth century): Philip provides convincing evidence that what are commonly perceived as inaccuracies, according to today's perspective, were in fact part of the performance practice of the time. The very best performers of the early century, who were exceptionally talented and

⁴³Jones, P., interview with SGB.

⁴⁴Philip, R., op. cit., Part I 'Rhythm' (p.5 - p.94) and Part III 'Portamento' (p.141-179).

spent every bit as much time rehearsing as modern ensembles do (chamber ensembles such as the Adolph Busch Quartet; virtuoso artists like Kreisler, Szigeti, Cortot and Paderewski; and conductors like Strauss, Toscanini, Weingartner and Mengelberg), exhibited the same stylistic features as some of the admittedly ill-rehearsed and sometimes technically poorer-sounding orchestras. While split notes and bad tuning cannot be dealt with as stylistic features in the same way as *tempo rubato* and *portamento*, a performing culture's attitude to such matters can (and has) varied. Are they small excusable slips, hazards necessarily encountered in the business of making exciting music, or catastrophes damaging to an orchestra's reputation and indicative of low standards? The following extract from Philip Farkas describing an incident during his time with the Chicago Symphony Orchestra and Fritz Reiner illustrates this point:

On another occasion he called the horns together at one of these parties and told us that he had just returned from Vienna, where he heard some marvellous horn playing. "I want us to be just like that," he said.

"Sir," I said, "they miss a lot of notes in Vienna."

"That doesn't matter, they told me that they don't care. They take chances and make music. They're not commercial about it as we are, they don't care about missing a note as long as they make music and that shall be our new attitude; we'll take chances but above all, we'll make music."

The next day was the first rehearsal of the season. About 10 minutes into it someone in the horns cracked a note. Reiner stamped his feet, broke his baton, and shouted at us, "Don't crack notes! I won't stand for it in my orchestra!" That was the end of "Make music at all costs."⁴⁵

⁴⁵ Philip Farkas, *the legacy of a Master*, ed. and collected by M. Dee Stewart, Illinois, 1990, p.27-8.

Reiner's reaction faithfully represents what has become the modern fashion in performance. This almost all-pervading cult of accuracy affects orchestral brass players' training and outlook. It also affects the equipment they use. Not all the advances in instrument design have been universally appreciated:

The horn does have a reputation for difficulty, though nowadays you can get working models, you might say, which ensure that all the notes that used to be bad on, say, Alexander horns are easier to get. The tubing has been ironed out and the notes are in the centre, as it were, but in doing this they've somehow made a metal instrument without much character. People playing these horns tend to sound all the same to me. That's my own prejudice, and I find them difficult to play. I like a horn with a bit of a problem that you must work out for yourself.⁴⁶

Nevertheless, the desire for security in orchestral brass playing has largely been answered by the organological changes of the last few decades.

Having thus considered the specific trends of expansionism, homogeneity, uniformity and security, the broader results and implications of this century's developments are discussed in the remainder of this concluding chapter.

⁴⁶Civil, A., interviewed by Michael Foss in *Orchestra*, ed. Previn, A., London, 1979, p.123.

Evolution versus degeneration

As will by now be apparent, the history of developments in twentieth-century orchestral brass playing does not lend itself to straightforward assessment, even if it has proved possible to apply broad summarizations in the evaluation of the four trends presented above. Each possible conclusion is subject to exception, each organological change or trend tempered by the most important variable of all - the human element.

What must be stated unequivocally is that the most obvious evolution this century has been the all-round increase in technical accomplishment. It is no longer the province of a gifted élite to sound good on brass. Forsyth, considering the F trumpet, found that 'at most one or two in a generation can make it bearable'.¹ Today conservatoires around the western world turn out hundreds of competent trumpet players every year who, with their modern equipment, are capable of playing the standard repertoire with an accuracy only a handful could aspire to formerly:

It's extraordinary, there were one or two absolutely splendid players at that time [before 1950] but I think you could say that there are now 50 to 1 in those days, the standard is so much higher. It may have been a result of changing the instrument, we hope that teaching methods are more enlightened.²

¹Forsyth, C., *Orchestration*, London, 1935, p.93.

²Wilson, A., interview with SGB.

Anthony Baines remembers how lower expectations used to affect the listening experience:

Particularly under the stress of orchestral playing it was, up to less than fifty years ago, only players of exceptional talent who invariably pitched the right note. One remembers orchestral trumpeters who never throughout their professional lives felt absolutely confident in striking the sounding *f''* which begins Beethoven's *Egmont* Overture; and the anxiety of the audience, equally in London or Vienna, as a famous solo passage for horn was approached, and the relief and admiration, in that order, when all went well.³

Baines also credits improvements in embouchure training as being important alongside changes in instrument design. The development of thorough and analytically-based pedagogical methods has been significant in the last fifty or sixty years. It was in America that brass players first began to take education seriously. As a result there is now a much greater understanding of the physiological aspects of the art; the hit-or-miss method of learning an instrument, whereby only those happily endowed with natural aptitude succeeded, is less prevalent. Published methods and journals give students and teachers an analytical insight into embouchure and breathing problems. In the earlier decades of this century, few of the best players were interested in teaching and it is sometimes felt that the 'secrets of the trade' were jealously guarded lest work should be lost to younger competition.

Outside the orchestra, opportunities for performance have

³Baines, A., *Brass Instruments*, London, 1978, p.35.

blossomed and this has been an important factor in the generally increased levels of stamina and technique. In Britain, the brass band movement has flourished since the nineteenth century but more recently arenas for orchestral brass instruments have developed. There is now a sizeable chamber music repertoire for brass - for the standard quintets and ten piece groups as well as other combinations (the work of Philip Jones has been significant in this area). American, British and central European wind band traditions (broadly based on varieties of military or marching band) have developed such that the symphonic wind band is now a vital part of performance programmes at all levels of music education. This is not to mention the many varieties of jazz and dance band music.

Another effect of the above progress has been a rise in the standard of amateur brass playing. While near-professional results have been obtained by the very best brass bands for a long time, in orchestral brass playing the former gulf between professionals and the best amateurs has narrowed. Although it may seem cynical to say, the comparison with brass bands is useful in that orchestral instruments are now closer to being 'half-tube' instruments (like saxhorns) than what Prout et al. considered to be their more distinguished 'whole tube' forbears.⁴

⁴The terms 'whole tube' and 'half-tube' relate to the position of an instrument's typical tessitura in its harmonic series. Thus the old long trumpet (pitched in F or lower) and the F horn are 'whole tube', whereas the modern Bb or C trumpet and Bb alto horn are not.

So there seems little doubt about the advancement of some aspects of playing. However, great artistry is less easy to 'develop':

In recent decades players seem to have increased their technical attainment beyond any dreams of my own youth (though this is not necessarily accompanied by an advance in sensibility as to what to do with it).^{02, 5}

Philip Jones feels that the technical progress made this century is a foundation on which orchestral players could build again more individual voices. In weighing the pros and cons of this century's developments, he considers certain aspects of musicianship immutable:

Evolution, without any doubt, because you can never control the number of people in any generation or century who are really outstanding musicians. They are born... But the evolution of instruments has been colossal. What they will do now, I feel certain, is take stock; when they have reached an optimum of technical proficiency, which they must be close to now, take stock and say to themselves 'Now what do I actually want out of it?' and then they might start saying 'Well maybe different tone qualities in orchestras' so that orchestras might become less anonymous.⁶

This touches on a fundamental truth that any organological study does well to notice: the human element and the infinite variety contained therein always has significant influence. The players themselves - their physical make-up, experience and sense of ideals - matter a great deal.

In trying to be dispassionate about the various claims of

⁵Merewether, R., 'On the design of the horn', *Horn Call*, October 1990, vol.xxi no.1, p.82.

⁶Jones, P., interview with SGB.

degeneration which have arisen, it is important to retain respect for subjective opinion; for here again the human element is substantial. It is naive to imagine that a definitive assertion of what is 'best' or 'worst' is possible. Furthermore, there will always be the 'Jeremiahs', as John Wallace puts it.⁷ In the case of the horn, Reginald Morley-Pegge and Robin Gregory have pointed out that misgivings about the instrument's progress have been provoked throughout its history: 'The horn has undergone three major changes during the last two hundred years, each of which has provoked the cry of *sic transit gloria*'.⁸ Similar claims of degeneration relating to the development of the modern symphony orchestra have been levelled at other instruments outside the brass family: for example, *Recovery or Ruin of the Art of Violin Playing (The Steel String, Enemy of Art)* was published in 1938.⁹

It may be possible to criticize wide bores and short tubes - to defend some of the qualities of the older instruments - on purely abstract aesthetic grounds. Elgar Howarth finds that, below *mf*, the sound of large modern instruments can lose character.¹⁰ Willie Lang considers the sound of larger bore brass instruments to have 'lost their centre':

⁷Wallace, J., correspondence with SGB.

⁸Gregory, R., *The Horn, a Comprehensive Guide to the Modern Instrument and its Music*, London, 1969, p.18.

⁹Philip, R., *Early recordings and musical style: Changing tastes in instrumental performance, 1900-1950*, Cambridge, 1992, p.97.

¹⁰Howarth, E., interview with SGB.

But I still think that with the small bore you can get the sound that you want to get, it'll maybe take a while... The small bore helps you really... Ernest Hall managed on a very small bore Mahillon and by God did it sound very grand.¹¹

In many circumstances it is also easier to play in longer phrases on smaller bore instruments. Philip Jones feels that shorter tubes, particularly in the trumpet section lead to a 'shortening of the sound - it's a less resonant sound'.¹² There has been little significant acoustical experimentation designed to examine the different timbres resulting from various tube-lengths and bores. Theory states that, for a given pitch, the waveform in a long tube has more nodal points than in a shorter tube; this is likely to manifest itself in a sound which has a greater proportion of higher harmonics. There is some experimental evidence that the Vienna horn in F produces a stronger second partial (as well having a different spectrum of higher partials) than a typical modern double horn (presumably on the Bb side).¹³ There are many factors which contribute to this effect but the longer tube is significant. It stills remains a subjective matter whether more or less high harmonic content

¹¹Lang, W., interview with SGB.

¹²Jones, P., interview with SGB.

¹³Widholm, G., 'Meßmethoden zur objectiven Beurteilung der Qualität von Blechinstrumenten', *Alta musica* 8, 1985, p.129-147 as interpreted in Suppan, A., 'Das Wiener Horn und der Wiener Klangstil', *Brass Bulletin*, 1993, p.35. Investigations into the properties of different materials and wall thicknesses have been carried out by the likes of Klaus Wogram at the Physikalisch-Technische Bundesanstalt in Braunschweig. Transducers can be used to simulate the time function of the lip opening, based on the 1941 finding that its vibration is virtually sinusoidal (see Wogram, K., 'The Acoustical Properties of Brass Instruments', *Horn Call*, April 1983, vol.xiii no.2, p.19).

is preferable, but it is hopefully not too controversial to suggest that - within reasonable limits - the former is intrinsically more interesting to the ear.

It has been said that it is possible to imitate the sound of small-bore instruments on the modern large bore.¹⁴ Certainly there is some flexibility, given a player who wishes to produce a given effect, but the fact is that the physical optimization of the instrument works against it. Conversely, small-bore instruments do not automatically solve all the problems that might be said to be associated with larger instruments. In unsympathetic hands they can sound rough and over-strident.¹⁵

It is reasonable that different instruments should give different strengths and that one advantage must be traded against another. For Farquharson Cousins, recalling one of Emerson's maxims, 'you win one way and you lose another. This is really the nub of the whole thing: with technical advancement something goes, and it is to do with the soul'.¹⁶

¹⁴See Wick, D., *Trombone Technique*, London, 1973, p.80.

¹⁵Philip Bate draws attention to *Grove's Dictionary of Music and Musicians*, 5th edition, London, 1954, vol. viii, p.558: 'Sir Michael Costa at the Sacred Harmonic Concerts of 1848 insisted on the use of reverse-bell trombones in an attempt to ameliorate their tone as heard in the auditorium. At this time apparently 'overblowing' and stridency were common among English players.' (*The Trumpet and Trombone*, London, 1978, p.69). However, there is no guarantee that this problem was caused by narrow-bore instruments: as discussed in chapter two, it is quite possible that German trombones were used in many places in Britain at that time.

¹⁶Cousins, F., interview with SGB.

To what extent the loss of or diminution of one characteristic or another constitutes degeneration is dependent on our notion of tradition and its interaction with present conditions. The role of tradition in current musical and cultural contexts is considered in the final section of this chapter. Perhaps the most disturbing way in which degeneration could be said to have occurred has nothing to do with arguments about absolute and abstracted qualities, but in growing conformism and the subordination of the *idea* of individual tradition (the individual traditions themselves are often transient). This theme is also taken up in the following pages.

Authenticity, tradition and identity

Recently it has become clear that historically informed performances on period instruments yield significantly different results in repertoire at least up to the late nineteenth century. So much so that the modern symphony orchestra's central ground has been affected, prompting reaction:

They are trying to head off the enemy at the pass: more than one orchestra has begun to contemplate what the future might be like if each big city shared its orchestral life between two major ensembles - and the Beethoven symphonies belonged to the other one.¹

Those details of organology and performance practice presented in this thesis might furnish authenticists with sufficient motivation to reconsider music written well into the twentieth century too; indeed this is already happening to a degree. Yet when examined in detail, the sheer extent of national and chronological variations just in orchestral brass playing (not to mention the rest of the orchestra) forces careful speculation as to the issues involved. Ideal theoretical considerations must be weighed against practical feasibility and this, in turn, precipitates much wider thoughts on the function and nature of performance in the large symphony orchestra.

¹Crutchfield, W., 'Fashion, Conviction and Performance Style in an Age of Revivals', *Authenticity and Early Music: a Symposium*, ed. Kenyon, N., Oxford, 1988, p.19-26.

The pit-falls inherent in the most naive conceptualizations of authenticity have largely been exposed by the proliferation of ensembles working on music of the baroque and classical eras. Hopefully, a diversity of 'historically informed' approaches is now accepted - each with equal validity be they from Britain, Germany, Holland, France, America, Canada or wherever. Perhaps, for some, this still presents too prescriptive an agenda, running dangerously close to the much vaunted idea of a definitive version:

Many of them embrace in large measure the intention-of-composer idea of authenticity, augmenting it with the notion that the conventions the composer was accustomed to, even though it never occurred to him to specify them, ought to be present as well in authentic performance: timbre, articulation, ornamentation, tempo, and dynamics. This gives rise to the museum model, the precise reconstruction of sounds as near as possible to those heard by the composer.²

The twentieth century presents conundrums for those who seek to follow a composer's intent. Where a composer has conducted or endorsed recordings and performances, perhaps spread over a lifetime or in different countries with quite different orchestras, it becomes clear that no one 'museum model' is possible. Howard Mayer Brown cites Stravinsky's own recordings as an example of evidence that we should be 'cautious about accepting at face value the strictures concerning fixed intentions of even the most articulate and demanding of composers'.³ Few would hold the 'museum model'

²Crutchfield, W., op. cit., p.25.

³Mayer Brown, H., 'Pedantry or Liberation? A Sketch of the Historical Performance Movement', *Authenticity and early Music*, ed. Kenyon, N., Oxford, 1988, p.28.

to be a reality or a desirable goal. Today's performer struggles to shake off contemporary orchestral manners: for example, learned reference points for volume and balance, accuracy in ensemble and pitch (tuning), expression and articulation. If a player works hard (perhaps devoting the majority of a performing lifetime) to 'get inside' a particular type of instrument and its repertoire many of the older manners appear to reveal themselves. Yet these discoveries can never be more, or less, than the result of an interaction between a particular (contemporary) musician's personality, background and physical attributes and the materials of performance - the instrument and the repertoire.

In 'Tradition, Anxiety and the Current Musical Scene', Robert P. Morgan argued that a lack of engagement with the present was responsible for a brand of musical archaeology: confused or worried by the present we resort to reviving the past.⁴ He also observed that this potentially furnishes performers with many different guises which they may choose to adopt, but no sense of a central identity (he invented the analogy of a house with many rooms which could be entered at will but no feeling of where home was).

By recognizing that some modern instruments are perhaps not the most suitable for all of the symphony orchestra repertoire, brass players may indeed achieve a more

⁴Morgan, R., 'Tradition, Anxiety and the Current Musical Scene', *Authenticity and Early Music*, ed. Kenyon, N., 1988, p.57-82.

appropriate sound and style. An adventurous approach to instrumentation must be applauded and when, for instance, orchestras like the Chicago Symphony and the Philharmonia in London change to rotary valve trumpets for Viennese music, no doubt the results satisfy the performers and audience that this is more suitable. Arguably this kind of authenticity has little to do with the past since rotary trumpets are still used exclusively in Vienna and other places; a stylistic authority is intended. Nevertheless, a question is raised as to the identity of the player and the orchestra. To plunder Morgan's analogy, where is 'home'? To take the principle to the (logical) limit, the player is faced with a multitude of different instruments, each appropriate for a particular period and repertoire. Crutchfield worries about attempting to assimilate many authoritative approaches:

...if we seek nothing more than to write dozens more programs for the floppy discs we insert in students' brains - then it would be better if we had never started.⁵

The obverse extreme, which largely obtains in modern symphony orchestras, is that many use variants of the same more or less versatile equipment and stylistic language and, not surprisingly, emerge with similar compromises. Given the accoutrements of modern global communications and interaction, there is a danger that the pool of 'performance knowledge' available tends to become universal. Potentially assuming a canonic authority, a universality of received opinion is

⁵Crutchfield, W., op. cit., p.25.

created and the temptation to consider a particular style or attribute correct or definitive grows. This is the wasting disease that afflicts a sizeable proportion of western performance. It accounts for the stigma attached to the narrow-bore trombone - thought of as an inferior antique with a small, over-bright, harsh sound and reserved for occasional outings in pre-twentieth-century period instrument enterprises; it accounts for a widespread distaste of horn vibrato except in those regions formerly influenced by or behind the iron curtain; it accounts for a similar antipathy towards wide or fast trumpet vibrato - or indeed, in many places, towards the complete suppression of vibrato on this instrument (this last being quite acceptable in most situations on the rest of the brass); it accounts for the rarity of a distinctive cornet tone in the orchestra; it accounts for the almost total absence of any kind of small tuba in regular orchestral use; and it accounts for a diminution in the variety of styles found across the world. The modern pragmatisms in place are often little more authentic, correct or quintessentially characteristic, but they do have the support of current convention.

Perhaps it is a symptom of the age of recorded media that judgements seem to have to be made with reference to a quintessential artefact. Hopefully this thesis shows that it is hardly possible to define universal quintessential sounds and styles for orchestral brass - each stylistic icon is the product of particular players using particular instruments.

By narrowing the parameters of place and time, matters become more predictable but not necessarily more repeatable.

Today's greater uniformity and universality of approach are not necessarily indicators of a stable, inherent rightness. In comparison with previous eras, late twentieth-century orchestral brass performance practice is not exceptional in that it too reflects present conditions, fashion and taste. Furthermore, modern instruments and practices are only supremely versatile within the parameters of current taste. They are a result of contemporary mores. In that sense they do represent a tradition in themselves and they do have a relevance to their age. One of the most important components of performance is the desire to speak with a distinct and meaningful voice - to interpret and communicate the composer's music with a significance to the performer's own context and environment; a self-confidence and authority of expression is required. This is a key difference between performance and reproduction. Finding a meaningful voice is crucial. It need not necessarily be a vernacular or universally common voice, but there must be a sense of comfort with and mastery of the language. While the scale of advance in technical achievement confirms a certain mastery, commonality and widespread uniformity have inhibited expressive variety and imagination.

An alternative to trying to adopt different tongues appropriate to different musics is to cultivate an *individual*

stylistic integrity which then serves all situations. This entails a shift in the relationship between versatility and specialization. Those orchestras which are most respected for their tradition maintain their identity in all situations: the Vienna Philharmonic retain their idiosyncratic instruments and performance practices whether they play Brahms, Debussy or Verdi. By refusing to use rotary trumpets the London Symphony Orchestra trumpet section are protecting their identity. They see it is a practical issue as much as anything, knowing full well that they are expert on their familiar instruments and not on others. More importantly, to try to master other different instruments would dilute their efforts:

We've been asked to play on rotary-valve trumpets but to do that, like the American orchestras and Berlin and Vienna do, you need a long time to practise it... for the bigger symphonies I wouldn't like to be squirting around on one... It's the difference between a football and a rugby ball... The front of the note on a Bb piston is very direct. The front of the note on a rotary-valve trumpet is non-existent... To have spent years trying to get a note down the middle - my teacher Maurice Murphy made me do that - and to go on to something and to start bending it all over the shop is a waste of schooling really.⁶

The 're-discovery' of lost performing traditions has taught us that intense specialization is necessary to assume an authoritative and convincing understanding of an instrument and its repertoire. For example, Anthony Halstead, Crispian Steel-Perkins and Bruce Dickie - leading specialists on the natural horn, trumpet and cornett respectively - have won

⁶Franks, R., L.S.O. trumpet section interview with SGB.

back credibility for their instruments through a more or less exclusive devotion. It is true that these disciplines have been resurrected in the last few decades and that there has been no previous continuity of experience, but the same necessity for intimate specialization exists with all types of instrument.

A de-centralization of cultural attitudes could only usher in stronger and richer regional identities and enhance the variety of experience in orchestral music making. This does not mean that those local idiosyncracies which have been disenfranchised should necessarily be re-instated as part of a purge of 'inauthentic' practices. Rather the possibility of regional variations should be validated again. The late twentieth century and postmodernism claim to make available and juxtapose a great diversity of musics and performance styles (witness this same phenomenon in fashion, art and architecture). Yet this cultural eclecticism does not seem to be embraced by the modern symphony orchestra. Perhaps it might theoretically be possible for a region to have four orchestras each with different instruments and specialisms: one for Austro-German romantic music, another for French music, another for English music and another equipped as a modern American orchestra might be. This might be wonderful for variety but would foster the notion that they should each only play their own appropriate repertoire - the large symphony orchestra becoming the most extravagant of period instrument ensembles. Although it is conventionally assumed

that music of the past forms the backbone of its repertoire, the symphony orchestra cannot attempt 'museum model'-like authenticity and continue to serve the variety of periods and styles it hopes to. Furthermore, this broad coverage is essential for its musical well-being. For no symphony orchestra claiming to be a cultural flagship of its age can remain in good health without communing with a range of styles, including contemporary music. It needs a balanced diet, indeed it has a duty to present that balanced diet in a fresh and topical way.

The key to an approach which satisfies the cultural pluralism of our age without sacrificing contextual identity is individualism.⁷ The atrophy of individual instinct in recent decades has been argued in many spheres of culture and society. In *Music, Closed Societies and Football*, Hans Keller propounds a powerful anti-collectivist and anti-conformist line.⁸ He draws on his own experiences as a Jew at the time of the *Kristallnacht* pogrom, on those in later life visiting communist Czechoslovakia, on psycho-analytical work, on his thoughts on modern music and, finally, on football (where he judges the English 1966 World Cup side to have inaugurated a defensive and restrictive style which has

⁷Even within a period instrument framework, much is based on individual aesthetic judgement (part of the reason why authenticity has been so popular recently is that the style of the small period instrument orchestras happily corresponds with current tastes for clarity and transparency).

⁸Keller, H., *Music, Closed Societies and Football*, London, 1986 (first published as 1975 (1984 minus 9), London, 1977).

successfully suppressed individual talent and flair throughout European football). Keller defines 'The New Mediocrity' thus:

Our civilisation, stupidly open-eyed, gaping, is walking straight into a mortal danger - *the dictatorship of mediocrity*, which more or less hidden collectivism inevitably produces. Whether you look to the responsible liberalism of the mass media, which give the public what responsible mediocrities think the public wants, or to the new, Maoist left which, as we have seen, has once again abolished the concept of genius, we are faced with a pseudo-democratic conspiracy against individualism. Yet - we must not cease to remind ourselves - there is little collective talent, and no collective genius: in this sense, the new left knows what it has abolished.⁹

There are reasons why uniformity and conformism suit the world of the symphony orchestra - if a little healthy cynicism may be pardoned. Given a universally common palette, anything outstanding, original or different must come from the conductor. Conversely, to license much greater individual expression among orchestral players or, further, to expect some kind of distinguishable identity from them compromises conductors' power to endow that original quality. Now, for some conductors this would not be a problem; for a George Szell, this would be intolerable. For a record company which sells most effectively if it has the authority and charisma of a familiar star-figure to market, it would not be ideal: it would not do for a different orchestra to transform a performance more than the conductor did. Similarly, recordings fair better world-wide if there is a

⁹Ibid., p.274.

more or less common orchestral language or style.

Surprisingly, the same often holds for concert promotion where one would have assumed a local audience would be most interested in their home team. Probably this does not apply in those places which have worked hard to build up subscription-series-loyalty (the Americans have been particularly successful in this respect). More significantly, though, it is more difficult to imagine this happening in, for example, Vienna or Berlin where there are orchestras with very strong identities.

Philip Jones hopes that players and orchestras will indeed want their identity back.¹⁰ It would be a great shame if, having reached a zenith of technical achievement at the end of the century (and there is no guarantee that this will be sustained indefinitely) there was not the confidence to turn again to the same kind of organological and stylistic variety which was evident earlier in the century. If only conductors, critics, audiences and compact disc buyers - not to forget the players themselves - could be a little more adventurous and open-minded there could be great opportunities for original and enriched music-making. Accepting that the capacity for enormous volume, a desire for clinical accuracy and dispassionate safety are aspects of late twentieth-century style might help tastes move on. Some might say that the period instrument movement is already precipitating

¹⁰Jones, P., interview with SGB.

change in this respect. Just to hear more moderately sized (in bore) brass instruments in *some* orchestras, not all, might help reinstate a plurality of approach and a tolerance of differences: those parameters which would be compromised - for example, loudness and ease of tuning (note 'ease', there is no reason why narrow instruments cannot be played beautifully in tune by gifted players) - could be amply compensated by aesthetic gains (beauty of sound, detail of phrasing and articulation). There is a greater wealth of serviceable talent now than at any time previously, it is natural for a demand for greater differentiation and diversity to arise.

APPENDIX

Interviews

The following interviews were undertaken by the author. In all cases, conversations were tape recorded and then transcribed in full later.

Anthony Parsons (12.7.94 at BBC Maida Vale Studios)

Anthony Parsons is the BBC Symphony Orchestra's present co-principal trombonist and one of its longest serving members. He is editor of the British Trombone Society's journal *The Trombonist*.

Christopher Mowat, Stephen Saunders and Tony Parsons (as above)

These three members of the BBC Symphony Orchestra trombone section were interviewed together. Christopher Mowat is the orchestra's principal trombone and was a member of the Philip Jones Brass Ensemble (for whom he has arranged music). Stephen Saunders (bass trombone) also has experience with period instrument ensembles and the New Queen's Hall Orchestra.

Farquharson Cousins (13.7.94 at 'The Preston', Harrow)

Cousins is a widely respected 'old school' English horn player, a contemporary of Dennis Brain. He was at various times principal horn of the Birmingham Symphony Orchestra, the Yorkshire Symphony Orchestra, the Scottish Orchestra, the Scottish National Orchestra and the BBC Scottish Orchestra. His *On Playing the Horn*, quite unique in its approach, was reprinted in a second edition in 1993.

Philip Jones (14.7.94 at Trinity College of Music, London)

Philip Jones was principal trumpet at the Royal Opera House, Covent Garden, in the Royal Philharmonic, the Philharmonia, the London Philharmonic, the New Philharmonia and the BBC Symphony. The brass ensemble he founded and directed for 35 years maintained an international reputation. As well as being until very recently principal of Trinity College London, he has received many awards (including the O.B.E. and the C.B.E.) and has sat on the Arts Council of Great Britain.

Maurice Murphy, Rod Franks, Nigel Gomme and Malcolm Hall
(16.7.94 at the Henry Wood Hall, London)

These four trumpeters form the regular trumpet section of the London Symphony Orchestra. Maurice Murphy was principal cornet of the Black Dyke Mills Band before taking up orchestral playing in Manchester and then coming to London. Respected all over the world for his work with the L.S.O. and outside it, his playing is familiar to millions as the soloist in the *Coronation Street* theme music. Rod Franks (the L.S.O.'s co-principal and also an ex-principal cornet at Black Dyke) and Nigel Gomme were both members of the P.J.B.E. and continued ensemble work with London Brass. Malcolm Hall has been a long-serving member of the L.S.O. alongside Murphy.

Clifford Bevan (16.7.94 in London)

Clifford Bevan was the Royal Liverpool Philharmonic Orchestra's tubist for many years. Author of *The Tuba Family*, he has an active interest in organological matters, editing the Piccolo Press guide *Musical Instrument Collections in the British Isles*. He has also played with the London Serpent Trio.

Robert Paxman (20.7.94 at Paxman, Long Acre, Covent Garden)

Paxman horns are played across the world. In collaboration with the late Richard Merewether, Robert Paxman's firm have introduced many new and improved models and continue to offer a very wide selection of types of horn.

John Humphries (21.7.94, Epsom)

John Humphries is a well known writer on the horn and horn music. He has completed a reconstruction of the second movement of Mozart's Horn Concerto in D (1791) and the KV494a Fragment in E.

Willie Lang (23.7.94, Muswell Hill)

Lang achieved fame as a cornet player before the Second World War, notably as principal of Black Dyke Mills Band. In the 1950s he started working orchestrally in Barbirolli's Hallé and then came to London as principal trumpet of the London Symphony Orchestra.

Elgar Howarth (26.7.94, Highgate)

Elgar Howarth became principal trumpet of the Royal Philharmonic Orchestra in the 1960s having previously played

at Covent Garden and in other London orchestras. He was a member of the P.J.B.E. for ten years, editing a series of brass ensemble music with Philip Jones. He has always composed and since leaving trumpet playing has made a name as a conductor, particularly of new music.

Arthur Wilson (26.7.94, Muswell Hill)

Having been the principal trombone of the Philharmonia Orchestra for many years, including playing under Karajan and Klemperer, Arthur Wilson now teaches at the Royal Academy of Music.

Julian Baker (27.7.94 at the Savage Club, London)

Julian Baker now teaches the horn at the Royal College of Music. He had an active playing career in Manchester and London, latterly with the BBC Symphony Orchestra.

Crispian Steele-Perkins (11.8.94, Dorking)

Having played the modern trumpet in many orchestras and ensembles in London, Crispian Steele-Perkins dedicated himself to the study of the natural trumpet. He now works as a soloist and orchestral player with numerous period instrument groups including the English Baroque Soloists, Collegium Musicum 90 and the New Queen's Hall Orchestra. He has a sizeable personal collection of instruments, using types from the baroque period on in his work.

Frank Downes (16.8.94, Birmingham)

Frank Downes is an ex-member of the City of Birmingham Symphony Orchestra and has taught the horn at the Birmingham Conservatoire.

Two sample transcripts (those of the conversations with **Philip Jones** and **Elgar Howarth**) are included in this appendix to provide examples of the interviewing technique, but it is hoped that they might make interesting reading in themselves anyway.

Interview with Philip Jones at Trinity College London**14.7.94**

SB: Somebody mentioned I should see Sidney Ellison.

PJ: Mmm. That's a very good idea. Yes, wonderful. And Bob Walton is a good idea too because he's been around a long time too and done a great deal. Ellison played the Brandenburg on an F trumpet before the war, as a student, and that really was very unusual. He did a long time with the L.P.O.. Bob Walton was in the L.P.O. pre-war - he was Beecham's first or second first trumpet, anyway very early on in the L.P.O.'s time and of course played through the whole lot of the orchestras: the R.P.O. and the Philharmonia. Very much from the old style. He must have seen a great deal change in his time. I saw him the other day - he's in marvellous shape - there was a concert in my honour at the Royal College of Music since I am retiring, and Bob was there. That's very good. Do talk to him.

SB: When people move around the orchestras, as you have done, how well do they mix? I'm thinking particularly of adapting to either the cornet-based or orchestrally-based schools of British trumpet playing.

PJ: Oh very well. Nowadays the background is much more cornet to trumpet than straight in as a trumpet. Bob was certainly a trumpeter, I was a trumpeter, both because we came from professional backgrounds. Those of us who came through the families that were professional musicians in orchestras all came straight and those later on, or even at that time - Harry Mortimer - came through the brass band world.

SB: Willy Lang.

PJ: And Maurice Murphy, they were cornet ones, and nowadays Rod Franks of course - he came from Black Dyke too. But the basic reason for that was the two strands. In orchestral playing a lot of the wind families were several generations. The Waltons were three generations. Mine was three generations in brass. His was actually strings: his brother was a cellist, his father was a string player, his grandfather was something else. I don't think there was any brass in the family until he himself, but they trained through the orchestras.

SB: Have the people from cornet-playing backgrounds gravitated towards the L.S.O.?

PJ: No, I don't think so. It is true that the L.S.O. has had from George Eskdale's day... now yes, that's an interesting thought that you've just provoked. From George

Eskdale's day, he was a very very fine soprano cornet - Eb cornet player in the brass band - hence he had a wonderful ability to play Bach, much better than anybody else of his time. Er, they actually did have a sort of cornet tradition, I think by chance. They didn't look for a cornet player because immediately before George's day was the famous name, John Solomon and Ernest Hall, who was a trumpet player, although he had played the cornet as a youngster in music hall. I've got his old cornet, or at least I hope it's a cornet. It's from 1905 or something like that. So there was, even then in the L.S.O. some cornety thing and it's certainly continued with all the others. They've all been cornet players. There was a little period when Dennis Clift played, he was a trumpeter first and foremost, although he had to play the cornet in the army. So I think it's tremendously mixed, lots of trumpet and cornet, and nowadays lots of them have played the cornet and come through brass bands, and now of course we are having people through the N.Y.O. scene and the county youth orchestras. Often they play in a brass band and in an orchestra. So they learn two things simultaneously, whereas before they had to learn, for instance Willy Lang had to learn how to transpose, and so did Harry Mortimer of course. They were just brass banders, had the cornet and that was it.

SB: Speaking of transposition leads on to a question about the instruments. This century has seen people using shorter trumpets of different keys. Now I appreciate that transposition has always been part of the trumpeters bag of tricks, so is the use of shorter trumpets purely for overcoming tuning difficulties and for ease of execution?

PJ: I think the first... well lets go back to pre-war days, a trumpeter in an orchestra owned two instruments: a Bb and a D and he played everything Bachian on a D and the whole of the rest of the repertoire, whatever it was, on the Bb. That was absolutely standard and that is the practice that I inherited when I started in 1940 and all the people of my generation began that way. There had been great experiments in France at the beginning of the century on shorter instruments [...], the piccolo Bbs were there then and were of course exceptional instruments [...], not in general use. Post-war, people started getting interested in safety. The recording industry demanded that you played everything ten times over accurately and that's how you made your name. I think that at that point people began to look for solutions, and quite a few people, I think Howard Snell was the earliest, decided that the four-valve Eb instrument by Shilke was a safer bet than playing the dicey Bb or C. Very few of us played the C, Howard was one of them, but in my opinion that is the orchestral instrument, that the Americans use, that the Dutch use, that the French use and it's not used primarily in Germany or Austria and is not used here at all now, but was used by three of us at around the same time: Snell, Howarth and myself. L.S.O., R.P.O. and Philharmonia. That went straight out of the window when we stopped, and

they reverted to the Bb. But, 'safety first' was the four-valve Eb and as players got a little older, they got more nervous about the accuracy for the recordings and tended to move towards these things. The worst problem among orchestral players was when the piccolo became current through the Selmer instrument. I was the first to own a Bb piccolo, by Selmer, in this country. By pure accident I was in Paris, I went to Selmer's because I was interested in instruments. I was looking at something quite different and they said 'Have you seen one of these?' and it was a piccolo Bb. I brought it home and showed it to Jumbo Wilbraham who was working with me in the ensemble, and he was fascinated by it. Very quickly the piccolo Bb became what Alan Civil called the f-alto horn, the 'Securi-Cor', with a certain irony. The piccolo trumpet became used far too much and it was completely wrong. It doesn't matter who makes it or how big the bore or whatever they do, there is no way a piccolo trumpet 2' 6" long is ever going to sound like an orchestral trumpet and I'm hoping, and I think it has been recognised more and more and more and it's receded entirely for looking for security at all costs for anything that's above a G at the top of the stave, which is a nonsense. Of course the wonderful thing is that people like Maurice Murphy never cared about that and I can tell you a story, when we recorded *West Side Story* in the Eric Crees arrangement, the top trumpet is an Eb trumpet part and then Bbs and Flugel down the line, and the Eb part on my record (it's been recorded by the L.S.O. brass as well) was Maurice Murphy and Maurice said to me at the beginning of the first session 'Philip, do you mind if I play this on the Bb', I said 'Maurice, you play it on any instruments you like, you are here because you're Maurice Murphy' and he didn't even play the Eb that time. It was all done, that real top line, on the Bb [...], that was Ernest Hall, that was actually George Eskdale although he played the C trumpet but he played everything properly, I mean properly on a proper orchestral instrument for orchestral work. Fine to have lovely trumpets of every shape and size: an E for the Hummel, a G for that and a piccolo Bb/A for the very high Bach stuff - fine. But when it comes to sound you can't cheat.

SB: This is one of the trends that I'm concentrating on, and it's happened with other brass instruments - the inexorable shortening of the tube.

PJ: And shortening of the sound. It's a less resonant sound.

SB: Ernest Hall confirmed the Bb instrument as THE orchestral instrument and John Solomon, before him, pioneered it, but Morrow was very keen on the longer F.

PJ: And Ernest, when he went to college [R.C.M.] had to play the F trumpet, he had to buy one and learn it because he'd come off the Bb cornet and had possibly owned a Bb trumpet, but that wouldn't do for Morrow. He had to have an F trumpet. That's a very good discipline, of course. It means

you select the notes not by the fact of the short tube where it's there already, you actually have to find the note. You might get some very useful thoughts on that from Bob Walton because Bob was the favourite pupil of Ernest in his early days of teaching and so would probably not have played the F, in fact I'm sure he won't have done but he will have known about it.

SB: Another thing that Crispian Steele-Perkins told me was that Ernest Hall and Eric Pritchard had slide trumpets and I was wondering how late anybody was required to study those. Was that into the first decade of this century?

PJ: I think not, I think it would have stopped before the start of this century. It might have just crept in pre-war, but that's quite true because I had the slide trumpet of Ernest Hall and sold it to Crispian so he could use it. It was just an interesting instrument, but not necessarily to play. I know that Ernest was given that instrument. So I think he probably never played it. He didn't buy it, it was German, a Kohler, a maker in Marylebone here. Of course that's another sadness, all the little makers that existed, Brown is a famous make to me of cornets and trumpets as well. I went to Brown regularly when I was a student, I was on the south of the river and he was on the south of the river and he mended things and made things. But they've all disappeared now.

SB: American instrument makers have taken the trade, I guess.

PJ: I suppose so in the fact that they have the odd maker, but there's relatively few of them in a large country. We had rather a lot of brass makers and people that could fix things and change things and we don't have them now.

SB: I'm very interested in the relationship between the repertoire people play and the developments in instruments. Someone said to me that the developments have lagged behind the demands of the orchestra, which I'm not quite sure about - with that Strauss, Mahler, Bruckner repertoire...

PJ: Well if we take Strauss, yes. The F trumpet went out of the window very quickly on the continent as soon as Mr. Strauss arrived but it took a longer time here because we are so conservative and so slow, but of course they couldn't actually play the pieces here, I'm sure.

SB: They played the cornet a lot to get round it.

PJ: Yes, to get round it. There was a resistance to using the Bb in those days and Ernest was early on in those days, to actually be able to play Strauss. Certain passages on the F trumpet were, I would have thought, missed more often than ever got. So I think yes we lagged behind, but as soon as Strauss really got going the continent woke up and shortened the tube, shortened it to Bb. I think what has happened

after the war is that they've gone to the Eb, except for the few real trumpet players who can play anything on anything, which is what I think they should be able to do. The relatively good player can now get round the repertoire by using shorter tubes. When these instruments weren't available, only the fine trumpeters could actually play the stuff. So that's changed things quite a bit when I think about it.

SB: Mahler scored for the F trumpet and the Bb trumpet together. Do you think we lose something when both are played on the Bb?

PJ: No, no. He wrote for the F trumpet because that's what he was told to do by his professors of composition.

SB: So he didn't want any difference of sound at all?

PJ: No, no, none at all. What he was interested in was off-stage trumpet things that we now play on flügel horns and what have you. I'm sure, in Vienna, although I never actually got around to finding out, but I bet that Mahler 3 is played on an interesting little instrument off-stage. I think in the score it's called a bugle, so it may have been any of the saxhorns.

SB: So the core romantic repertoire has been more influential for today's instruments than, say, the Stockhausen, Ligeti and Berio, the stuff which is really technical. Something like Birtwistle's *Endless Parade* is unlikely to have much influence trumpet playing compared with the earlier repertoire.

PJ: Yes, played on the C trumpet by a virtuoso. Not an orchestral player. Of course Wallace played it on a C trumpet as well and he's an orchestral player too. But the fact remains that that was mainstream trumpet writing, people couldn't play it on little trumpets because it goes too low as well as high. So only for the virtuosos.

SB: The same as the stuff Stockhausen has written for his son Markus.

PJ: Yes, but you've got to get over the instrument, which is what I think it's all about. So I'm very happy that composers are continuing to make us do things which are possible to do on proper-sized instruments. The little ones are proper instruments but for very specialized jobs.

SB: I read that you studied with a player from the Amsterdam Concertgebouw.

PJ: Komst. Marinus Komst.

SB: Was that exceptional for a British brass player? String and wind players tend to study abroad but I've not heard of

many brass players doing that.

PJ: I don't think that anybody did. I didn't study for long, but I was always interested in what was going on in places other than my own country. For instance as a student I played the C trumpet as well as the Bb because I was intrigued by the sound. It is very different and I was playing some pieces at college which were written for the C trumpet, so why not the C trumpet? In fact my Professor gave me a very hard time about it and threatened to throw me out of the college for being so arrogant. Too bad, I continued to do it but didn't tell them. The reason I went to the C trumpet full-time after the opera house - the opera house I think is a Bb-trumpet job, I don't think there is any doubt about that. Maybe one might choose to play a C trumpet for something but I would normally say Bb without any doubt. Even with the Strauss, it's over the range and it's the right sound. But when I went to study with Marinus Komst, the Concertgebouw players had always played on C trumpets - the whole section, Bbs they did not play and I don't think they've changed the policy to today. And Marinus said to me 'Philip, why do you play the Bb? It is so difficult' and I thought this was interesting, here's this great man. I went home and flipped through the repertoire. The number of Gs there are in the repertoire that matter, a tremendous amount, and they're As on the Bb trumpet. So I thought, if this great man says that I'll do it. But, I changed the sort of instrument. I was not happy with an English Besson small-bore C trumpet for the orchestra and so I moved immediately to Bach. I had had the experience of looking for larger bore instruments when I was at the opera house. I played, as everybody played, a Besson small-bore trumpet - that was all there was - and I found in a shop that dealt in second-hand instruments a medium-bore Bach, and I paid a huge sum for it second-hand, three times what a new Besson would cost and I played the *Ring* on that as first trumpet at Covent Garden and I thought that that was a much better sound than trying to play it on my Besson and when I took the instrument to the Philharmonia to play as an extra down the line - fourth trumpet - the first trumpet, the very famous Harold Jackson, said 'What's that trumpet?', I said 'Bach, would you like to blow it', so he blew it and he said 'It's a bloody flügel horn' and that was the end of that. I don't know how many years later - I've forgotten the timescale - they were all on medium-large Bachs, they never even had a medium Bach which was called a flügel horn, they had even bigger instruments. But they did do the jump from the small-bore Besson to the medium-large Bach because that's what the New York Philharmonic played. They were the biggest influence.

SB: And for the trombones too.

PJ: They made an enormous mistake, the English, they got instruments, not many of them but the big boys got them, they got the instruments but couldn't play them in tune which wasn't surprising because what they hadn't bothered to find

out was that we used rather large mouthpieces on the whole and the Americans used rather shallow mouthpieces. They have larger instruments which vibrate very freely, but they have the smaller mouthpieces to cope with the tuning. Well it took the British ages to sort that one out.

SB: Talking about bore, and related to that the actual size of the sound, the volume of sound, if I could read you a few quotes, which you've probably heard before, from John Fletcher: He talks about a 'musical arms race - headed by the timps', 'trombones below an *mp* lose all their life and vibrancy and become mere honking hooters', 'conductors want it louder and louder' and 'I and my colleagues make a noise which we do not like because it is the accepted thing'.

PJ: Yes, yes. That is absolutely correct. I left the profession of orchestral playing when it had reached what I thought were ridiculous proportions because at no time did I have either the interest or the desire to develop the technique to blow ever louder for people like Rozhdestvensky who wanted it like that the whole time. I just wasn't interested. I do recognise that there is a Russian school which starts at *forte* and goes up to six *fs* and actually is possible, if you want to do that.

SB: It's good for their repertoire.

PJ: And he was used to it, but that was all they ever played. When you hear them play Mozart or Haydn it's absolutely laughable. Their production and ideas of direction of the stuff and the actual style, it's absolutely useless. But there is nobody better for Shostakovich and Prokofiev which is not surprising because it is tank music - terrific stuff, big symphonic stuff. Just like, I imagine when I listen to that stuff, the Russian tanks rolling over the plain into Poland. That's what it is all about. That, to me, is acceptable, but when it comes to quality of sound, which is what all our orchestras had, individually over the whole of Europe, an individual quality of sound related to their instruments and of course to their temperament and so to their composers' and their conductors'. We lost a lot of that in this country by the madness of having to play ever louder. Solti demands huge volume and he probably went deaf when he was with the Chicago. The thing that matters to them more than anything else is that they've got the loudest brass section in the world. They actually also have a very wonderful collection of players, I have to say, but it is the loudest and I don't want to hear it like that all the time. It's occasionally great, but it's mostly not like that.

SB: The surprising thing to me is how influential that sound has been.

PJ: It's power. It's power. America is all about power. It's all about the biggest and the best. So they are the biggest and the best. What does that mean for brass? Well

they're the largest the brashest, the everythingest. But I think that there will be, there probably is, some change of approach because I was talking to Yamaha the other day and Yamaha are very good at trends and they told me they see a trend in the States for the brass, the trumpets in particular to go back to smaller-bore instruments. Now that's very interesting. That must mean not volume but quality.

SB: The pendulum is swinging. It's difficult, anyway, to criticize people like Adolph Herseth.

PJ: They're unique, unique. The whole of that section was fantastic and still is fantastic, but do you need to play at that volume all the time? My answer is 'no you don't', not even in a symphony orchestra.

SB: The sad thing to me is that we have lost the variety. The French and the English schools have disappeared to a large extent.

PJ: Yes.

SB: And if anybody went to an orchestra with an old narrow-bore instrument everybody would laugh at them.

PJ: Yes, yes.

SB: And you can't decide unilaterally that you are going to use that sort of instrument.

PJ: No. All you can do is, say an orchestra like... what's it called?

SB: The New Queen's Hall.

PJ: Yes, the New Queen's Hall. I'm presuming - I've only heard them on the radio, I've not heard them live yet - I'm presuming they are not cheating and they are using instruments of about 1900 which would be small-bore Bessons or the equivalent.

SB: Crispian Steele-Perkins uses a King.

PJ: The beautiful old Booseys and Bessons were very very small and I don't know if many of those are left now because they turned them into sackbutts by cutting up the bell. So I don't know, they might not be around. I don't know I haven't seen the orchestra. What are they doing, using French horns?

SB: Yes, the piston instruments in F.

PJ: Well I hope they are doing the same with the trombones, they are playing the real pea-shooter. Marvellous sound. Listen to the old records, the Queen's Hall orchestra with Coates or somebody playing bits of Wagner - fantastic, there's nothing wrong with that sound but it's all of a piece

of course and once the trombones bust in, they were the first to do it, well, no, the German horns, the Alexander horns from Germany were brought into the L.P.O. when the L.P.O. was first formed, the first horn there, whose name escapes me for the moment..

SB: Charles Gregory and Francis Bradley shared it. Alan Hyde is reputed to have been connected with the German instruments.

PJ: Thankyou, Alan Hyde who was the son of the Lloyds Bank boss, a rich young man, went across to Germany, thought this was the thing for him, brought back a team of those instruments and they played them. That didn't actually change the trumpets and trombones because they continued to play the pea-shooters, but relatively the Alexander wasn't that big, it was a good deal bigger than the French horn but it didn't completely overturn the brass sound for volume and balance. Then trombones were the next ones and they had the American trombones - from when the New York lot came and that's when the trumpets just realised they couldn't win and they had to change.

SB: There was as certain amount of inertia in the sense that the player is very influential: if you give a player a different instrument it will take a while before they make a very different sound.

PJ: Yes, yes.

SB: Perhaps to start with, the German horns sounded a bit like the French horn.

PJ: Yes, they sounded a bit like it. They had that sound in their heads.

SB: It works the other way as well. Farquharson Cousins reckons that the French horn players in the N.Q.H.O., although they are making a huge leap in the right direction but they still have some of the character of modern horn players.

PJ: That wouldn't surprise me. It's the sound we have in our head.

SB: I found the sound of that orchestra wonderful. The G bass trombone, everything.

PJ: Yes, yes. Very difficult instrument to play on the top. The top range was very out of tune and very few of them mastered it up there and nowadays a lot of music is written where the three trombones are going upstairs together, which it wasn't in those days, they didn't have to go high very often. My first bass trombone player was Gerry McElhone, I think he changed to Bb/F when he went to Covent Garden, but for many years and certainly when we were in the L.P.O.

together in the 50s, the G trombone was still the bass trombone. As late as that. I think he was probably the last G trombone player and he was always very sharp and out of tune on the top. I've got him on record, but I could never get him to play in tune. The instrument was very sharp.

SB: Has there been a certain sort of piece in the repertoire which has forced people to abandon the older instruments? I have been told that the first time Walton's First Symphony was recorded Walton tried to get horns to give more in the horn and tuba counterpoint passage in the first movement: he wanted that to really come out and they couldn't do it. When he recorded it himself the 1950s, when they had German horns, they were able to do more what he wanted. They had come to terms with it.

PJ: Yes and they had come to terms with the fact that more than one had to play the top octave. I mean there would be Aubrey Brain and some others, and of course I can remember right at the beginning of my career, horn players, if they got the right notes on 1 and 3, were doing well, except for one or two players who could get most of the notes and upsettingly Dennis Brain could get all the notes. He set such a standard that no longer could they get away with it. And what is fascinating to me is that standards today are fascinating technically. The youngsters in London Brass are amazing technicians now, for stamina and everything. What seems not to change, because of the nature of what I'm going to say, is the musicianship. The musicianship is always the same. A musician is a musician whether it is in 1800 or the twenty first century and so that will depend on how far you can go as a musician yourself, but what you can do technically has staggeringly advanced and not just in brass instruments. The woodwind do all their multiphonics which didn't exist, except by accident - all there now and any player of any consequence will know about them. All of the range that the trumpeter has to do, that the trombone has to do. The ability to move on the slide - colossal. They always had virtuosi - one would be famous for the whole of Europe or something. Now it's common. That part has advanced tremendously since World War II, it advanced slowly between World War I and World War II and then at a great rate of knots after World War II, and of course the people who were able to produce the instruments that would do it, would play more notes in tune without you having to do it all. Valves that go beautifully, mixing and blending of metals to produce different sorts of sound - darker etc. All of which we just didn't talk about because when I was a young man you had a trumpet that was the trumpet and you had a mute which was a fibre mute, no metal mutes, and you had a mouthpiece and that was it. You didn't have several mouthpieces, you had one, more or less the one you were given when you were a kid. Fascinating the way it's changed even in my lifetime.

SB: To conclude I'd like to ask a slightly wild question, you can't really make more than a sweeping judgement on it,

do you think this century has seen a process of evolution or degeneration?

PJ: Evolution, without any doubt, because you can never control the number of people in any generation or century who are really outstanding musicians. They are born. You can be influenced but either you are one or you aren't. But, the evolution of the instruments has been colossal. What they will do, I feel certain, is take stock, when they've reached an optimum of technical proficiency, which they must be close to now, take stock and say to themselves 'Now what do I actually want out of it?' and then they might start saying 'Maybe different tone qualities in orchestras' so that orchestras might become less, erm, what's the word, less anonymous. You can get Daniel Barenboim insisting he wants his Chicago sound in Paris - ridiculous, absolutely ridiculous and I would say it to his face, I know him quite well. He wouldn't take any notice of it but it is ridiculous. I want to hear a French orchestra sound like a French orchestra. OK, it will sound odd when they play Bruckner, but it's a French orchestra. If I want to hear Bruckner played in a Bruckner fashion OK I'll listen to the Vienna, very interesting it is too and why shouldn't they be different, why should we have to say 'Is that the Vienna or is that an imitation called the Paris Conservatoire?', or whatever.

SB: Added to that uniformity the instruments also sound a lot more homogeneous: the trombone sounds more like the horn. They all blend together in a way they would never have done sixty or seventy years ago.

PJ: Yes, there has been evolution in the ability of making the instruments better, but the next thing we await, and we'll have, I'm sure, is people wanting to have their character back. In the search for technique they have lost some character, but the individual will say I want my character as well as my technique and they will lead the others to follow. No, I'm very optimistic about it.

SB: Coming up to the turn of a century is the perfect time to look back and say 'We need to cherish that before it is forgotten'.

PJ: Second half of the century, amazing advances in technology in everything in our world. Damn it, we've gone to the moon, we all get in aeroplanes - I know when I first got in an aeroplane, it was an adventure beyond belief. You didn't go very high and you wobbled a lot. Now we go in a plane at 40000 feet mostly, 35000-40000 and you eat a meal - you could be here. We take all that for granted. The tempo of life has changed. It's too fast. Nobody has chance to stand and to stare and therefore the tempo of life for orchestral players has changed. When I went abroad it was an adventure as a young man. Now a young man has been abroad and he's seen the world several times and is bored out of his

mind, and probably rather tired. All that is changing. That has got to settle again. It can't go on being like that because humans will not accept that level of living. So I think our fascination with technology will begin to dim and fascination with quality of life will begin to grow a bit. Well that's what I hope for, that's my credo.

SB: One of the reasons I'm writing this is because not being connected with the performing world I can stick my neck out. Maybe I can say things that people who earn their money by getting the notes or doing what conductors want won't say.

PJ: You can quote me on anything. I don't mind what you say because I have always been known - in fact I'm constantly hearing 'Philip, do you remember saying so and so' - and in fact I am astonished that I was so outspoken and was still having a career but the fact remains that I have always believed that you say what you believe. I don't wrap things up very often, I will wrap things up if it's necessary not to hurt somebody, but I will not wrap things up. I believe that the short instruments have done certain damage and certain good things and I am prepared to say so. I don't care that someone might say 'well who was he - he couldn't play a Brandenburg', I never said I could, in fact I always recommended somebody who could because I knew who could. I always recommended the best person for the job. If it was a job that I thought I couldn't do very well I said 'Thankyou very much for asking me but I think you should ask so and so'. I think that is the way we should all be in our profession. Why should we be geniuses at everything? We're not, nobody is. If you've got the guts to say that and the guts to live by it, you'll have a happier life. That's also something that you have to recognise as a professional player. It's very stressful and you'd better recognise that than think that you are going to do everything equally well. You have a team round you, that's why I had a brass ensemble of quality because I looked for people who could do things better than me on everything. In fact there were certain things I could do better than any of them which was putting them together and saying you will play this and you will not play this. That is a certain sort of talent. The rest of it as far as playing is concerned, I was always looking for the best possible - to show them in the best light and if possible limelight and whenever that was possible it worked very well and I think that's what professional work should be: working with them and not against them (one-up-manship). One-up-manship is a very dangerous thing to play with when you are sticking your neck out as a player.

SB: London seems a lot more dangerous place than, say, Berlin or Vienna where the players are salaried.

PJ: Yes, probably, but I think that times are getting better in that, OK the standards are very high but the crazy times of the sixties when people thought that the answer to it was drink and that did some terrible damage to some players.

They don't do that any more, that's gone right out of the window. Which is a good thing.

SB: Thinking of some of the German sections, they often get two weeks off before a special concert.

PJ: Oh yes. They have it so cushy compared to us.

SB: That must have a lot do with them being able to preserve their tradition.

PJ: Absolutely. And they can play for a lot longer life because they are properly looked after. The Americans don't run about. We do. It's only these people who are all freelancers and so can't be paid a proper salary, with a few exceptions of the BBC and the Opera House. The other orchestras have to scratch around and fight like mad - a) one with the other and b) everyone thinks 'I might not have a job tomorrow so I'd better do six today' which is very very sad.

SB: That must make it very difficult for London players and sections to have any sense of identity. They're always conforming to how people want them to play, they never say 'No sorry, we don't play like that'.

PJ: No, no, that's right. We are the most wonderful chameleons, we can turn on virtually any style.

SB: But little sense of where 'home' is.

PJ: It would be nice to be able to say 'this is our style'. I think it is to some degree. I think, you see, if you listen to, just taking the brass sections but we could take any other section, if we listen to the brass of the Philharmonia and the L.S.O., to take just two. Incredibly different approach. Very bright, very powerful is the L.S.O.. Rounder, grander is the Philharmonia. That's a generality, but that's a style that has been set for a very long time. When I went from Beecham's orchestra - the R.P.O. - to the Philharmonia, I knew what I was going into because I had played as an extra, but going as first trumpet, the weight of that orchestra was so much greater that I had to change the instrument straight away. I moved to a bigger bore Bach than one I'd played for Beecham; he wanted an elegant sound, Klemperer wanted a heavy, menacing sound. I had to change. I had trombone players that were blowing so loud that in fact I went slightly deaf from the trombones. They were very close just behind and we recorded a great deal and Klemperer liked a lot of volume. Well that has gone a lot louder after that time - we're talking about the 60s/early 70s. Since then it got much louder and crazier, so I should think that quite a lot of other trumpeters might be a bit deaf now too. But *that's* changing now. But we still have qualities, types of sound within the orchestras and I think players do tend to gravitate, the best players, to the

sound that they rather like to hear. Laurie [Evans] at the L.P.O. came out of my school, that was the R.P.O. sound which was a little gentler than the L.S.O. sound, and we would say elegant. Some of us moved from that orchestra to the Philharmonia and Laurie was associated with that sound. He took that sound to the L.P.O. and they have not been a shouty group. They had a period when they were very incisive when their excellent Australian player, first trumpet who's now in Melbourne, he had a very incisive sound. But by-and-large, since his time, the L.P.O. has had quite a warm sound.

SB: I sometimes wonder if it is a taboo subject in this country but could we talk about vibrato.

PJ: Yes.

SB: It's rarely mentioned. For horn players it is certainly an unspoken rule that you don't use vibrato. Is it at all the same for orchestral trumpeters?

PJ: I think orchestral trumpeters have changed to some degree and use a certain amount of vibrato now. I think they don't use it in *forte* playing, they only use it in lyrical playing, for a solo. But in *tutti* I would say 'no', it is not good. I have not detected, haven't noticed it and I think I would have noticed it. I think when you hear Maurice, or Rod, or John Wallace playing a solo, even inside orchestral repertoire, they will warm it up, but in a very restrained way - nothing like the Russian or French vibrato. The Russian vibrato came from the French. The French taught the brass instruments to the Russians because everything that mattered in St. Petersburg was French.

SB: Arban went over there.

PJ: Yes, yes. So that's quite interesting in a way, how that developed from a rather sharp quick vibrato into a very heavy overpowering vibrato, which is, I suppose you might say, part of the Russian character.

SB: There's a similar indirect route in America's case. A lot of French and German players went to America...

PJ: Yes, yes, and very acceptable, I would say absolutely essential in any of the major American orchestras - vibrato and a vibrato in the section. Pretty heavy vibrato on solos, more than here. I think we are rather good - a nice compromise, the English way with vibrato. I think it is rather important. I actually didn't use vibrato in my playing. I tried to imitate my professor who had a very compact sound and he didn't use vibrato but there was a warmth within the sound and I think as long as you can do that it's OK. I think if I were a young man now I would want to be able to use vibrato when I wished to. It was taboo when I was a young man, unheard of. George Eskdale used vibrato coming from a brass band and his world with the

L.S.O. was absolutely contrary to the BBC - Ernest Hall and George Eskdale were the two grand players then. The one that came then was Harold Jackson, who of course had come from the brass bands very much, and used it when he chose to, not all the time.

SB: It's interesting how individuals have influenced things. Thinking of French playing, one player can be so influential.

PJ: I remember hearing Sabarich coming over and playing *Pictures at an Exhibition* and I was a very young man, a student still, and I thought 'What an extraordinary way of playing' because he cut up the opening into just chopped bits of phrase and he used a heavy, heavy vibrato and I thought 'What an extraordinary thing' and the octave was out of tune, but it didn't seem to matter, everybody said 'That was great'. When I say everybody I mean the French thought it was great. We, the English thought it was a bit odd. Fouveau, of course had a very quick vibrato but very controlled. Sabarich had a very wild vibrato and then Maurice André has a very controlled vibrato which is very sweet and changed the whole scene - of course plus his piccolo trumpet whereby he could play, using his fine technique and ability, all sorts of pieces nobody had thought of, like oboe concertos from the baroque times, much to the annoyance of oboe players. Furious, they were.

SB: A lot of that may have come from the Paris woodwind playing, which influenced Goossens and Kell to use vibrato where there had been none before on the oboe and clarinet in England.

PJ: But you see the French trumpeters always competed with the oboe players and they thought that if it was OK for oboe players, it was OK for trumpets and that was quite right, but we didn't. We had this idea that unless you were a brass bander that an orchestral player played straight, grand, a bit heavy-duty. Of course you didn't really, er, you weren't pressed that hard technically at all and so nobody played concertos. Ernest Hall played the first modern performance of the Haydn, in the 20s, in this country and I know how he played it. On the Bb trumpet, as the Germans still do and absolutely dead straight. Very very square indeed, with wrong trills - starting on the main note, phrasing was... All of that changed out of all recognition, I suppose, really, after the second world war. Eskdale's was one of the first recordings in England and they only recorded the second and third movement, they wouldn't do the first - if it went on too long on the record, I mean who the hell would buy a trumpet record.

SB: I have that record and I've always wondered why I was missing the first movement.

PJ: That's the reason. Exactly that. A trumpet concerto, 'Who's going to buy that?' It was a fantastic best seller.

SB: Well that's solved a mystery for me!

PJ: It never was made. Eskdale made it very late in his career, in Vienna, invited by the Viennese to go and play it. I have heard that record a long long time ago, by that time it was 33, long play, and by that time I think he was past his best. It was a fantastic sound. Very fine bell-like sound. Totally the opposite to Ernest. So you had two camps actually: his pupils and Ernest's pupils and they never mixed, never played in the same orchestras. Ellison will be able to tell you a lot about that because he was a pupil of Eskdale, and he did move between them.

SB: He must have been very flexible.

PJ: He was.

SB: Thankyou very much for helping me like this. [tape off]

**Interview with Elgar Howarth
26.7.94, Highgate**

SB: One of the things I discussed with Maurice Murphy was the idea of identity. I think it's much easier for, say a Vienna or Berlin player to retain some sense of identity because they have time off before important concerts and not the sort of London pressure where they are constantly doing this for one person and the next day they will do something else for somebody else. I think that L.S.O. section has retained a lot of character in that climate.

EH: Well they don't work very much elsewhere, do they? Maurice does a bit of freelance I think, although I see Maurice once every blue moon. But they do seem pretty self-sufficient working there, they always have. Bill Lang hardly ever worked anywhere else actually. He didn't do much freelance work and he didn't swap around playing in the other orchestras because the L.S.O. was always so busy.

SB: One of the things I put to them was that there has been, probably by chance, a sort of cornet tradition there. There seem to have been a lot of players who have gone from the bands to the L.S.O..

EH: Eskdale was a cornet player. Bram Wiggins was with him - he was a cornet, Salvation Army. Quite a cornety type of player.

SB: The only exceptions I could find were somebody called Clift and Howard Snell.

EH: Dennis Clift. Howard Snell was Salvation Army so he was brass band. But it didn't show so much with Howard. He was a straighter player. He'd given it a lot of thought because he's a very intelligent, thoughtful fellow actually.

SB: It is notable that quite a lot of the most interesting comment comes from L.S.O. players, like John Fletcher, Bill Lang. But at the same time they have produced the biggest, flashiest sound. Perhaps the most like an American sound.

EH: They have that kind of bravado, in the Wick/Lang, well, Snell time; Alan Stringer had a year there, or nearly a year there. I think that is true to say, yes.

SB: If I can read you a quote from John Fletcher - you've probably heard it before - it seems ironic that he should be so good at making that kind of sound and then says things like 'the trombones below an mp lose all there life and vibrancy and become mere honking hooters', 'conductors want it ever louder', 'I and my a colleagues make a noise we do not like because it is the accepted thing'.

EH: That's true to a certain extent. I played there quite a bit and early on I couldn't make enough sound, at least I didn't think I could and latterly I was too loud because I finished up being extremely loud. Far too loud actually. But I was young and strong and confident and very much influenced by the Americans whom I admire enormously and who not many people did here. It was all rather decried and I thought that Herseth was actually a superb player.

SB: And still is.

EH: Yes. In his early career there are things on those records that I don't like. He was a bit loud and a bit brash. But when he got older he became a bit more sensitive and when he was in his fifties it was wonderful playing because it was very big and golden and lyrical, but it was never over the top - it was always very balanced with everyone else.

SB: So do you think that the more traditional British trumpet school - Ernest Hall to Philip Jones - has been somewhat compromised and has met somewhere in ther middle.

EH: Yes. I think that is true enough to say. It was said about me that I was the last of the Ernest Hall players and that was odd because I was actually a cornet player and had a very small tone as a cornet player. I gave up cornet fairly early, I gave up when I was about 16 or 17 and I became really rather a big player. I had a couple of lessons from Ernie but I had been taught by his first ever pupil, so I was influenced by that. And yet the cornet did show with me quite a bit every now and again. But I think I was probably straighter than most of them are now, I think. I mean I don't like anything I hear of myself on record. It sounds terrible. But maybe that is true for everybody. I think the other thing that has influenced it is that it did sink in with the younger ones that the Americans did have something which we didn't. They had a greater range, they were louder, they were more virtuoso about it, as I recall. They didn't hide their lights under any bushels, whereas it was the accepted thing to be rather over modest.

SB: Reserved.

EH: Yeh. All that kind of thing. And that still exists to some extent and it's really quite nice that it does. It's a very British thing. The other thing that comes into it is all the different instruments. Especially with the trumpets.

SB: I was going to ask you how instruments changed during your playing career. Did you start on a narrow-bore Boosey?

EH: Yes. I did have, at college... I went straight from a brass band to university actually. I did that thing up in Manchester where I went to the college for trumpet lessons.

You couldn't get American instruments anyway because they weren't available. You must have heard all this before.

SB: There was an embargo.

EH: There was, yes. Boosey and Hawkes had a thing and you couldn't get them. The very few Bachs that were around were very closely guarded, you couldn't get one. I started on an 'Empire', a Boosey. Dreadful instrument, I'm sure. Fairly narrow bore. My teacher was playing the so called Besson 'Symphony' model which was a C and Bb, a real nonsense of an instrument really, which he played with all the Bb slides in and wouldn't have dreamt of playing on the C side because the C trumpet was *verboden* to anybody who came from Ernest Hall, whereas with George, oddly enough very very few of them ever played the C trumpet but George himself did.

SB: George Eskdale.

EH: Yes. I suppose it must have been a fairly small C trumpet but you see Ernest Hall's Bb was a narrow bore instrument, the Mahillon that he played was a small bore instrument. I actually blew it a couple of times when I had a couple of lessons with him and I couldn't really get much out of it. But he was a great big man and I suppose he overblew it - you've probably had all this from Philip Jones who knows about this better than I do because he was a Hall pupil and knew that instrument very well I think, because Ernest used to play it in lessons. So I started on that, and then I didn't like it and somehow or other I got a very very old King which again, oddly enough, was a C and Bb but with a switch conversion. I did muck about with it a bit on the C side. I've got it still, it's in Suffolk. The valves let me down and I had them re-done and I started my first job at Covent Garden on that. The others were playing, they had been playing the Cs and Bbs of the Besson 'Symphony' which was smallish bore but Harry Dilley, now I wonder if he was playing that when I arrived... anyway Ray Allen, who was the second trumpet, had gone on to what was called a 'Ten Ten' which Dennis Clift very rudely used to call a tin-tin - he was a rather funny man, Dennis Clift. Dilley, very shortly, was sent by the Olds family a trumpet called the 'Opera' model - which is all bullshit really - but they sent it to Harry as a gift so he played it. There were various things he didn't like. The G written - it was Bb of course - the F concert was wildly sharp, I remember, and he wrote and told them so and they sent him umpteen mouthpipes and he used to have about three mouthpipes stuck on, you know soldered on at one point. He played that for years and years and years until about 1968, I think it was. I had left the Garden a long time by then and I was on an American tour and he asked me if I would buy him, get him a new Bach because everyone was playing Bach, except for me actually. So I did. I picked one up in New York and he played that for the rest of his career, about another fifteen or twenty years, seventeen years perhaps. That was a medium-large Bach which most

people were playing by then. It had to happen. The trombones went big first as I remember and Arthur Wilson and Evan Watkin were the first to get big bores.

SB: I'm seeing Arthur Wilson at 3.00pm!

EH: Oh good, I haven't seen him for donkey's years. Give him my regards. He and Evan Watkin, I believe were the first to get big bores, but there was also a guy called George Maxted who was a terribly famous player. I didn't know him well, I knew him after the best part of his career was over. But he was said to be really virtuoso. The first we ever had really, here, I think. But he was also said to be very neurotic and basically his nerve went. He couldn't cope with having to wait for twenty minutes and then play a Brahms symphony, waiting all the other movements. I don't think he played a big bore. I think Arthur introduced George to the idea of a bigger bore instrument and he and Evan Watkin, who were sort of mates but in different orchestras; Arthur was in the Philharmonia and Evan was the first trombone in the R.P.O.. Evan would have been slightly older, probably quite a bit older than Arthur. They got the big instruments and made this bigger sound and of course we all started to get Bach mouthpieces. Initially at the Garden, when I first went there, you couldn't even get an American mouthpiece. I had some terrible old thing that somebody had made me which was really dire. They got me one, what used to happen was that people used to do jobs on the boats going over, you know jazzers playing in the salon orchestras, they used to go to New York for three days, go to Manny's shop, which was famous. You couldn't get the mouthpieces here and the guys at the Garden, Peter Reeve was the other trumpet and he got from somewhere or other an old second-hand Bach so he was playing Bach, Bb, medium bore and I had this terrible old King. They got me a Bach mouthpiece, no that came later I think. I'd been there only a matter of months and one of the trombones came in one day, Derek James, and he'd been into Soho and Bill Lewington, do you know that name?

SB: Yes, has the shop.

EH: Famous trader, Bill was a saxophone player who went into the trade. Derek had been to this tiny little shop, about as big as this, on top of a barber shop or a knocking shop or something in Soho, and he'd seen that they had a Benge trumpet about which we had only heard stories because it was a west coast instrument and I had only heard a couple of people mention it. He said 'they've got this Benge, why don't you go and have a look at it'. So I did and it had been sold to Bill in part exchange by an American student who was going to study in Vienna and so he had to have the German trumpet. So he decided he would sell his Benge in London, to get more money and then he was going to buy German when he got there. So he sold his Benge to Bill and I bought it for £87. It was an enormous amount of money because I was earning £18 a week at the time. But I had to have it. As

soon as I blew it I liked it. It had a terrible weakness, it had a dreadful top D, I remember, which almost wasn't there on the instrument, so it was a very risky instrument for a, well I became a first trumpet eventually. It was sharp but it always felt that it was on edge this note, so you could never attack it confidently. It was a nightmare really. Anyway I bought it and I found I could blow it really well. It blew rather like a very loose cornet. I could never play Bachs. They didn't suit me, they were too stiff. I don't think really I was a natural trumpet player, I should have been a horn player really, but I wasn't, I was trumpeter. But shortly after I got an American mouthpiece, a Bach mouthpiece. We all played 5As, which was a very very strange mouthpiece to play but we did. We all played the same and I really struggled on it because it was deeper than anything I had had in my life before. It took me ages, but eventually the other boys took the old mouthpiece off me and forced me to play on this and it worked - they did me a great favour. I played on that mouthpiece for a while and then when I left the Garden I toured America with the R.P.O. in 1963 and I discovered that everybody was playing much bigger mouthpieces than we were. They were playing 1 1/4s mostly, but Dilley, the first trumpet at the Garden had got a 1 and I admired his playing very much. He was a cornet player, a big and though I don't suppose he'd like me to say so he was a very lyrical warm cornet style trumpet player. Very accurate, good stamina, good range. He had this 1 and it suited him very well, so I got a 1 in Manny's shop or somewhere and played that. It nearly killed me. It took me six months and I thought I would never make it. I remember playing second trumpet in the Messiah and my lip went. My muscles wouldn't support it. But I stuck with it and after probably eight months it was absolutely clear that it was going to be much better. The other reason was that I found the halls in America were terribly hot and one's lips used to swell much more than in Britain where we were in a cooler environment. So the 5A I was playing used to feel like a pin-prick sometimes in American halls. I did feel that I needed more room, so I persevered with the 1 and that is what I played until the end of my career. Various people in the meantime had come up with large-bore instruments, large-bore trumpets. We were already playing medium large American which were bigger than the instruments we had been brought up with but they came up with this large bore model. It was aimed partly at the marching band but also they thought that, with all this splurde and blurb about it, it was for the big sound in the symphony orchestras, for the session lyrical player and all this. It was all nonsense. Various of us flirted with, I mean I tried them in a shop or something that somebody else had, but it was an anonymous instrument. It didn't have enough character, I felt, for a symphony orchestra where you had to play a variety of music. I felt it didn't fit classical at all. Rather like John's remark about the trombones - until you played *mf* it had no character and below *mf* it was a very boring, dull, inflexible noise. You couldn't lose the sound. You couldn't get into the woodwind

section and get lost. So it was a waste of time really. So we, all of us, stuck with medium-large and that is what I stayed with all my career. On the brass ensemble side, when Philip and I got together; he'd already got his ensemble going for a long time before but we got it going really well. We got five of us together who were really interested and I have often thought since that it would have been an idea if both of us had had a go on medium bore, for the ensemble. It would have suited nearly all the repertoire. It would have suited the little bit of romantic music that we had like Ewald, it would have suited the old music terribly well - we didn't play much Gabrieli as it happened but the bit that we did play it would have suited, it would have suited the arrangements that I did of Tudor music. It would have suited all that very well and we could have laid-off a lot. One of the problems was that nobody had worked out how to play in a brass ensemble because we were one of the first here and I was a very big player by then, I was really giving off in the orchestra and I think that we both of us, probably me too much, used to give-off rather too much in the ensemble sometimes. I think it would have been more interesting for us and for audiences if we played something a bit smaller and nattier where it would have had even more character at very low dynamics and staccato playing. It was something actually that I was rather good at, but not a lot trumpet players, oddly enough are. They find staccato quite difficult, a lot of people. I was really rather good at that and I think that if I had bothered to get or could have found a medium bore, which wasn't easy to find, I think it would have been an interesting thing to have got into more. Maybe if I had stayed as a player I would certainly have investigated all those things.

SB: Was the Benge a C?

EH: Well that was the other thing that happened. No it was a Bb and I played that and then when I went to the States in '63 I discovered that they were absolutely amazed that we played Bb trumpets, especially the first trumpets. David Mason and I, I was his assistant, we played Bb trumpets. They couldn't imagine that we played a Sibelius symphony, or hardly anything actually. So that made me think - and I didn't know Philip Jones then, I knew him socially very slightly, but when I got back I got to know him better as I started freelanceing because the R.P.O. didn't have much work. Now he was playing C trumpet but he was about the only one of his generation. George by that time was dead, or if he wasn't he wasn't playing. I only ever met George once. But I got it in my head that it was an idea because I was struggling with it. I was playing very well up to a point but I had various things that were wrong which I couldn't fathom. I was doing breath support completely incorrectly. I didn't have any embouchure problems except... the embouchure was strongish but it was never as strong as it ought to have been. It worked, I didn't have any problem getting going, it never let me down. But the breath was all

wrong and I had to really re-learn how to play from that point of view and by that time I was nearly your age well I was your age actually, 28. Somebody, one of the flute dealers here, Rudall Carte somehow got the Benge agency for the trumpet. So I went round and to my astonishment they had a C trumpet. I hadn't had enough money when I was in America to buy because I was very hard up and by that time I had got two kids and another one on the way, so I couldn't chuck my money around on trumpets. They had this C trumpet. I'd had a tootle on somebody else's. There was a lad in London who had a Bach C, I think it was a Bach C, and I could immediately... most people say that they can't pitch, I remember Maurice saying to me that he couldn't pitch on a C trumpet, Alan Stringer couldn't pitch, but they didn't seem to have any problem playing the Bb, for what they did. I didn't want to do what they were doing anyway but what they did they did terribly terribly well and it worked on the Bb trumpet without any trouble for them. Whereas I couldn't make it do what I wanted it to do inside the orchestra, inside the orchestra in certain pieces. So I had tried this chap's trumpet very briefly for half a rehearsal and it seemed to work OK. So I bought, I splashed out, I bought this trumpet from Rudall Carte and I played it that night in a Prom. First trumpet with the Philharmonia. I must have been completely mad. Maybe I did a rehearsal, bought it the night before and played the following night. It was a Strauss program, very hard and I was not established at all as a first trumpet. Philip Jones had been the first trumpet there but had packed it up. He was always packing it up, Philip, at that stage of his life and he packed it up and they were looking for a new first trumpet and I didn't want the job because I didn't want to be a first trumpet. I thought it was too much responsibility because I wanted to compose really and my idea was to play the trumpet for a living and to not practice very much, I was terribly lazy, and compose as my main thing, but it didn't really work out because if you are playing in London you are on the street wandering between rehearsal halls all day long, if you are any good, if you have a career. Anyway, I bought this C and what with that and the size 1 mouthpiece and meeting Philip, I never had lessons from him but when we were working together he gave me... very outspoken chap actually and made himself very unpopular with certain people at that time, but not with me, I immediately saw that here was a guy who could help me enormously. I said to him 'It doesn't work for me you know, it's all...', I used to get bad pressure problems in the back of the head and throat because I was supporting too high. He said 'Of course you are, silly fellow', 'Silly fellow' he used to say, 'You are supporting completely wrong' and I said 'Well how do you do it?' and he said 'You take it lower'. This old stupid idea of the diaphragm support here [points to upper area just below rib cage] which is a complete load of crap that nobody ever explained properly, and it is not until I got it there [points to just below belt line] which Murphy does without anybody ever telling him, he did it from the first day he blew anything. I remember sharing a room with

Maurice on tour: I got him to come with the Sinfonietta - he'd never been to London or done anything there and I got him to come on an Italian tour and we roomed together on the trip. He's terribly good at high notes, Maurice, he can always play up to top F without even taking it out of the case, almost, and I never could. I said to him 'How the hell do you do it' and he said 'Oh come on, you can do it' and I said 'No, I can't, I don't know how to do it' and I said 'Go on, play a top F' so of course he did, I said 'What does it feel like?' and he said 'Oh I don't know I've always done it'. I said 'Well analyze it, you know' because I got quite analytical about it all, like a lot of modern players, but Maurice wasn't. He said 'Something happens down there' [points to below the belt line] so I knew then that I was on the right lines because that was what I was discovering for myself. So all that helped, plus the C trumpet and six months later I was like a new person, I was like a new player. Much bigger, louder, much more confident, much more self-confident. If I missed a few, which I did now and again, it didn't bother me because I knew how to correct it and I knew it would be OK the next time. So I wasn't in a nervous state thinking 'Christ, what's gone wrong, I missed top C last night' because I knew I would get it today if I set it up properly.

SB: It's interesting and it just shows that it doesn't matter how much you look at the changes in instrument, the individual and changes in the individual are more important.

EH: Oh, infinitely. Oddly enough I made an enormous noise on the C trumpet. The nicest complement I had paid to me, for me personally, was when we played in Chicago with the R.P.O., we played Mahler 1, I remember, on tour, and old Schilke, who was making trumpets, had been in the orchestra and knew Herseth terribly well. In fact he got Herseth to come in for the day to meet Stringer and I, it was very very nice of him, Cichovitz was his second trumpet at the time, he's a famous teacher now. Well these two fellows came in and of course Cichovitz we knew about but Herseth was like God to a trumpet player, I suppose I was about 30, and they were terribly nice men, no bullshit, didn't take the trumpet and demonstrate what they could do - he didn't blow a note actually, Herseth. But old Schilke said to me before they came 'I enjoyed your playing last night, it's quite similar to what we are used to here'. I had tried to copy what I heard Herseth do on record, it was sort of very kind of grand with golden edges on it, I thought. Quite a healthy noise. So that's how my career went in the orchestra.

SB: You mention the name Schilke, perhaps that could, in a adjacent way take us on to the four valve Eb trumpets that Howard Snell started playing. Is that just an illustration of the increased pressure on players to get the notes? A question of security?

EH: Yes, especially for recording. You had to get it right in

the studio 'now'.

SB: And tone quality is just subjugated.

EH: Well oddly enough, the smaller trumpets record terribly well. Very often I found that, playing the Bb, sometimes when hearing myself on record I was really rather disappointed, because the bigness of the sound, which I find attractive and most people said they liked it - several people tried to copy what I was doing, younger colleagues, well actually to be honest, several of the older ones did, because I was blowing a bit like the Ernest Hall idea, as I understood it, although I never heard him in his hey-day, it was quite a healthy, big sound - but it didn't record terribly well. Sometimes people who recorded on a smaller instrument sounded much better on record. So I think that was part of it with Howard, because he was recording more than I was in the orchestra, not overall perhaps because by then I was recording with Philip, the London Sinfonietta, the Nash Ensemble, we were broadcasting and all that, as well as the orchestra. But it seemed to be true that the smaller instruments got on the mike easier, so that was part of it. I never had any flirtation with them at all. I didn't like the Schilke, I could only actually play the Benge. I couldn't play Bach, I tried a couple of times briefly, but I couldn't do anything on them, I couldn't fill them or something. There was no flexibility, I was quite a flexible player and if I couldn't be flexible I got very disconcerted and the Benge could do all that for me, whereas most people thought the Benge was a heap of rubbish really, too light they thought. Howard Snell had one, I used to think he sounded wonderful on it. He had got a Benge C round about the same time as me and I did think he sounded very, very... He was a player who had enormous difficulties, rather like myself, only his difficulties were different. He had articulation problems, Howard, which I never had. But he worked at it very much and I think also the added resistance of a smaller instrument helped him in that respect. He had trouble with staccato, which the smaller instrument helped. But I never actually have held a Schilke four-valve in my hands, as far as I can remember. They've all come in now. Everybody's got them, or seems to have now, but it's twenty years since I stopped playing, more or less.

SB: This business of going on stage with three trumpets and picking one up for one passage and another for a different passage...

EH: Well we did start that. Philip started that to a certain extent.

SB: Really. He didn't quite own up to that!

EH: Oh he did, yes. He played the C most of the time in the orchestra. He was a light player actually. He didn't give-off. He could be strong when he had too, but he couldn't

ride the orchestra, not like I could and not like Howard could, not like Maurice or John Wallace. Just couldn't build up the decibels. I suppose it was air speed. He didn't want to either. He didn't believe in it. I think almost quite sensibly he didn't. But he used to use the D for various bits, which most of us hadn't thought of, and I quickly acquired that and the Eb: he had a Scherzer D/Eb, a little rotary, tiny little thing that you could really raise the roof on. I borrowed that a couple of times inside the ensemble and liked it, so he got me one. It was slightly different from his, slightly larger bell. In fact it's at the Philharmonia at the moment, I've given it to them on permanent loan and one of their boys, I forget which one, one of them plays it. It would be a shame for it to be here doing nothing, it's a really lovely instrument. So I took that and I did play the odd bit in Strauss, or especially if it was muted - if there was an awkward muted bit where tone quality didn't matter to the same extent. Beethoven Seven, you see we used to play Beethoven Seven on the Bb trumpet, it was absolutely nonsense, completely nonsense playing in E major on the Bb trumpet, absolutely crazy.

SB: On the question of transposition, was there ever a time when you might have been playing something modern-ish and it was scored in C, that you would pick up the C trumpet because it was more convenient - it might save a bit of mental effort.

EH: Oh, no. I don't think that enters into it with anybody. I think if you are a professional trumpeter you just transpose. I can't imagine, I never knew of anybody who had any trouble, you could use any old instrument.

SB: That must become more difficult as the repertoire gets...

EH: Not really no. Some of the Strauss E natural parts are as nasty to read as anything. The *1812 Overture*, Eb trumpet, is not easy. Quite tricky the first time you read that. So no, I wouldn't have said so. All the stuff I played at the Sinfonietta, basically I played the C trumpet, but occasionally I would play the Eb because it seared more easily.

SB: But the virtuoso stuff that people like Hardenberger play - *Endless Parade*, you wouldn't dream of mucking about with that.

EH: No, you see that's a different tradition, and it's one which I think that people here really ought to explore, but they don't because I think it's true to say that quite a lot of the profession don't actually rate Håkan. They don't like the sound and I think they find the style too gentle, too sweet perhaps, they maybe think it's too cornety. It belongs to the French tradition. From sixteen to nineteen he was in France all the time, at the Conservatoire, and he lived in

the house of his teacher, Pierre Thibaud. So he was brought up in this curious French tradition which is half trumpet, half cornet really, the way they play. He's picked up that style and he doesn't want to play like an orchestral player, he never has. He's never wanted to play like that. He's talked about it because when he was younger he used to get very sensitive about people saying it was, not namby-pamby, but a bit too sweet - he would say 'How do they think you are going to play a solo? Do they think you are going to play it the way you are going to play a Shostakovich symphony or something?'. He said 'If I was doing that job I would use a different tack, I would change what I am doing'. But he has absolutely no need to switch onto an Eb trumpet for the sake of security of high notes, for instance. He plays up to F on the C trumpet absolutely with out any real problem, and can do it all day. He doesn't get tired. The French system does seem to, part of it I'm sure is psychological - if you are taught that that is what you do, it's like me, when I was a kid and played the cornet, my father said 'Those are the cornet solos and you play those', so I learnt to double tounge and triple tounge in all those Polkas and Airs and Variations with millions of semiquavers without even thinking about it, or thinking it was hard or anything else, getting a digital and tounge synchronization without any problem. I think that is what the French thing must be, that you are taught that the range of the trumpet isn't to top C, it is to top F, so you learn that. I think they must have pretty good basic training about proper breath support. Håkan does seem to take it pretty high to me sometimes, but he obviously is supporting correctly because his lip doesn't go. I've heard him tired once. That was in a stretch of ten days two or three years ago up in Manchester when we were making a record and he had been playing every day for about six hours. *Endless Parade*, Max Davies's Trumpet Concerto and a piece by Michael Blake-Watkins and we were finishing up with thw Blake-Watkins which is the hardest blow, rather sustained. Have you heard it?

SB: No, I don't know it.

EH: A rather sustained piece. At one point in the second session of the afternoon, after about two hours, I suddenly thought 'My God, he sounds a little bit tired' and I said to him 'Do you want to have a rest?' and he said 'Yes', and I said 'We'll have a break' and he said 'No, we've had a break, just give me five minutes' and he wandered around the studio, the orchestra just sat there, he wandered around the studio and played a couple of low notes, and it was as if he had never played that day. Completely. He finished up the session on a long, long high Eb concert, really loud, riding the band and yet it's not that blunted shrieky sound of the session player, who plays an octave higher than that anyway, it is an absolutely orthodox way of getting the note.

SB: Something I wanted to ask you regarding your experience conducting and conducting abroad is about national styles of

brass playing.

EH: I think the British are, curiously, one off. This rather straight... the L.S.O. probably is a one off, you see, I think it wasn't just the players either, it was the repertoire; the L.S.O. got into a repertoire that was different from everybody else's: they played the Russian, Shostakovich and all that, Prokofiev, early on, they played Bartok, they did the early twentieth-century stuff earlier, sooner than the other orchestras. We were still playing Brahms, they were playing Mahler because they had the conductors who were doing it. They had an adventurous guy, Ernest Fleischman, who was running the orchestra and was pushing. Then when Previn came they did all that Walton and all that type of mid-twentieth-century repertoire. Nobody was playing Walton really. It was more or less forgotten and Previn resurrected it really. And the American stuff, they had Copland come over and conduct. Nobody else was doing anything like that. They were doing all that type of repertoire, so I think that laid an emphasis on a more lyrical style. It's never been a great Brahms orchestra, it's never been famous for Beethoven. I was still finding out how to play Beethoven trumpet parts effectively. I think I did find out how to do them very effectively when most trumpet players had never given it a second thought because they thought it was... I remember John Wilbraham saying 'He was a terrible composer, Beethoven' because he thought the trumpet parts were boring, whereas I didn't. But I should think he liked Shostakovich, and Stravinsky and Gershwin and all that.

SB: A lot of the national practices, I think, are born out of the repertoire, take the Russian school of trumpet playing. Maybe the stridency is disappearing though. The most recent recordings are not as individual and characterful as they have been. They are playing American instruments, I suppose better instruments and I get the impression that they actually want to westernize and move into line.

EH: Well we'll all become middle class if we get the chance, won't we? We'll all become bourgeois and polite and all that. That's one way of looking at it, but on the other hand what was wonderful about the Russian stuff, it was terribly rough, and it was very crude, but in certain kinds of music - Scriabin *Poem of Ecstasy*, it was wonderful actually. And when we played it it was pretty pallid. It didn't have any paprika in it or anything. Whereas that dreadful tinny, overblown vibrato noise, which is terribly vulgar, did work terribly well, I thought. It lacked nobility but my God, it didn't half tell, in what they did. We haven't been at all influenced by them, it seems to me. But they are being influenced by us. Maybe overall I'm not against it, I think they did need to do something about the way they played other kinds of music, because it was pretty appalling.

SB: Mozart and Beethoven.

EH: Oh terrible, terrible. And those dreadful horns playing Mozart.

SB: I guess my idea of things becoming more internationalized comes about being based as a horn player because the French vibrato has disappeared. I think that's quite sad. I do actually like the Russian vibrato in some things.

EH: Yes, in Tchaikovsky, for a solo. Tchaikovsky Five.

SB: But I think we are going to lose that.

EH: Yes, we are. And that's a great shame. But maybe that will come back. The so-called authenticists - who would have thought that would have happened twenty years ago. It didn't exist in my career. It's something that if I had continued as a player I would have tried to get into because I did feel that I had done as much symphony orchestra playing as I wanted to do. Because I didn't think that I would get any better at it. I'd played nearly everything that I wanted to play. It would be coming round again, apart from new pieces, of course. So I think I would have tried to get into that. I wouldn't be at all surprised if in the future, some bright spark of a conductor somewhere says why don't we try to do it the way they used to do it in 1948 or 1964.

SB: That's very much my feeling of what ought to happen, and that's part of the reason why I'm doing this work. But talking to the players, they think it's all very well for certain bands, period instrument groups, but they can't see it encroaching on their symphony work.

EH: But they couldn't have seen that twenty years ago in terms of playing the open horn, or the open trumpet.

SB: The Philharmonia now swap round using rotary trumpets for some things.

EH: Yes, they do that.

SB: Do you think that works, or do they end up sounding the same whatever?

EH: Well, it depends what you do with the mouthpiece. You've got to do something with the mouthpiece, it doesn't work with an ordinary Bach mouthpiece. I'm not sure what they use. But I think it's a nice idea for Bruckner, particularly Bruckner more than anybody else.

SB: Both Maurice Murphy and Rod Franks said that they wouldn't entertain that thought, and what is quite ironic since they both come from a cornet playing background, they don't use cornets in Berlioz, for instance, because they think they would still sound like a trumpet player.

EH: Well probably they do. I had great problems playing the cornet when I was a trumpet. I couldn't focus the sound because I used to overblow it, even though I was brought up on the cornet and oddly enough I can play the cornet better now than I could when I was playing, but then I mean I can't play properly anyway. But I disagree very vehemently with that. I always did play the cornet. I used to play the cornet part in *Fantastic Symphony* and whenever it was a cornet part I always insisted that we did play cornet and I think that it is up to the conductors really to balance, but of course they don't. By-and-large conductors don't say anything to the brass, either because they are scared, because brass players have a reputation for being difficult to deal with, for being stroppy, or because they don't know anything about it. So they are frightened to get on to ground that they are unfamiliar with. They can say to the strings, you know, 'Take two up-bows and can you play a bit nearer the bridge', because they have been brought up with that. Just because they are not string players, over a while you get enough knowledge to know what you want, and also in Britain and in London particularly, rehearsal time is so prescribed for a conductor that you haven't got a lot of time to say anything to the brass or woodwind anyway, less to percussion. The number of times that you hear a conductor say 'Could the triangle be a bit louder, or could you try, can you use a slightly lighter stick', it just doesn't happen. Sadly, the few times that you do, usually there is resentment because they are not used to it. So they say 'What's wrong with it?' or 'It will sound terrible like that', trying to make the conductor look foolish in front of everybody else. So there is all that part of it. So I very much think that the cornet should be used. I'm worried about what is happening with cornets in brass bands. They have gone for big bores because Boosey's...

SB: Sounding more trumpety.

EH: Yeh, oddly enough I've just done a little article on this for one of the magazines, or at least that is part of it. I said to the Grimethorpe boys, 'Do you really like these big instruments?' because there are certain things they simply cannot do; they have difficulty with staccato, they have great difficulty doing real light and shade within a phrase in the way that cornet players used to be able to, when it was a very lippy kind of thing that you were doing, not so much a breathy thing as a real lippy thing that you could do on the old small cornets. In fact the last, oh it must have been a couple of years ago, I took my old cornet up there, which is a small-bore instrument, and of course they are all pretty young up there and they had never played one. I got one of the better players to try it, and he did say 'Yes, it gives you a lot in certain ways but it does feel a bit hard to blow and I can't give-off on it' and they all said the thing about the big cornet is that you can make a so-called good sound, in inverted commas, even as an average

player. I think that is true. You can make quite a warm, biggish sort of noise and even with those, what I think are terrible mouthpieces, those Wick mouthpieces, God knows how they play on those but they do, and they do make a pretty good sound. But it lacks any sense of variety of vocabulary in the sense of production; staccatos are not so good, any kind of *portato* style of playing which cornets always used to wonderful at, Willie Lang was wonderful at that. Slightly different from *legato*, it was a real *portato* soft tounded kind of thing. They are not so good at that as they used to be. Soft dynamics are more difficult to control, especially in the top of the instrument and to sustain, it is much more difficult for them. But a lot of the music that is being written doesn't ask for it, so they are playing *ostinato* - type music a bit, or you could say more trumpety music, but certainly not ballad-type music a lot of the time. What I would like to see is two things happen, well I'd like to see several things happen: I'd like to see the first cornet job divided between two players and ideally one of them being a more old-fashioned, English style player, maybe with a slightly smaller instrument so he can play all the old stuff in that very contained way, without having to give-off a lot, if he could make a big sound OK, so he's a traditionalist. And then I'd try to have another player who was either very good at a more jazzy style, because they are terribly bad at that, or was more gifted in modern music, because they do a lot of 7/8s and 5/16s and sometimes the traditional players are not very good at that, for some reason or other, and if you had somebody who was good at that, maybe with a bigger instrument... and I'd like to see, not those two players, but two other players somewhere in the section, maybe on the back row, who could play the piccolo trumpet a bit, with a different mouthpiece which they could swap. There's no reason at all, if you've got decent chops, why you can't swap mouthpieces. All the old-fashioned stuff about never changing mouthpieces is all complete nonsense.

SB: Martin Winters has sometimes played an Eb trumpet with Howard Snell.

EH: He has done, and he's also played piccolo trumpet with a band and it sounds terrific. It gives a real top and means you can play certainly up to high Eb concert and maybe a semitone or tone higher as well. Which you can do on the soprano cornet but you can't play piano up there on the soprano cornet very easily. Mostly you've got to play above *mf*, but with a piccolo trumpet you should be able to play piano up to a top F. I could, and I wasn't terribly good at high notes, as I've told you. I could play very loud and quite softly up to an F written on a piccolo trumpet. I'm sure that if you had that, plus somebody who only played the, you've got to have a soprano cornet player who only plays the soprano cornet, because I don't think they are going to change for their contest, there would be too much reaction. So whoever plays soprano is going to be stuck with playing the high notes at contests. I think he should always be on

the soprano cornet and never take the piccolo, because if you do you'll never play top C on the soprano cornet again because psychologically you've blown it. But if there were two other guys who could do that, you could then have a real top on the band, which would be very interesting for modern composers to write for and you could also write big-band stuff that much more effectively if you had that extra fourth on the range. And I'd like to see a couple of people doubling on the flügel horn as well.

SB: The other thing with bands, whether you call it a problem or change I'm not sure, is the trombones; if you go back to Elgar and Holst, even through to Walton, the trombones, you can see it in the score where there are things written like *fffz*, there is meant to be a very snappy sound. You don't get that anymore, you get a much smoother, blending sound and they don't provide the timbral contrast that they used to. I think the same thing has happened in the orchestra.

EH: Absolutely, they have been very very very lacking in imagination, the trombones, I have to say, and I don't understand it because there are some extremely bright people. I don't mean it as a pun but Dudley Bright, for instance is a very bright man, he composes, he is good musician. David Purser is another very very bright man, very quick guy. But there are plenty of others, very bright people and they don't seem to have twigged that if they use a smaller bore instrument for certain pieces, it would give an enormous difference of colour. And there is no reason at all why it should rasp in the worst ways that it used to, and it certainly was pretty terrible, what went on. But they were mostly military players, a lot of them were, and they didn't really know much about the repertoire, I'm talking pre-war and immediately post-war. If you play with a decent mouthpiece in a smaller trombone you can get very elegant playing and you can have a brightness of attack which you can't have with these bigger ones unless you play *forte*, at least *forte*.

SB: I spoke to the BBC Symphony Orchestra trombone section.

EH: Was that Chris?

SB: Chris Mowat, Tony Parsons and Stephen Saunders. He admitted, he said that for some of the newer repertoire it might be easier to pick out notes with a smaller trombone, but they just seemed so conservative about the whole business.

EH: They are always frightened about what the others are going to say. There is a great fear, and particularly with trombones more than any others, there is a great fear of what the rest of the pack would say about you if you do something slightly different, and I think that is a really great shame. I suppose you do get used to making that beautiful baritone

noise, and it is difficult to throw it away, but you wouldn't be throwing it away completely, you would make a lighter baritone noise but again with more vocabulary. And OK play the bigger instruments for all those noisy pieces, but it would, especially in ensemble use... God knows why they have persisted in playing big trombones in brass quintets. Iveson used to play a smaller one and it was lovely, and so dextrous and so subtle and an enormous vocabulary of nuance. You can't do it on a big one, it's not controllable.

SB: I don't know if you have heard the New Queen's Hall Orchestra.

EH: No I haven't. What do they use?

SB: I think the trumpets play Kings. The idea is that they should play on turn of the century instruments.

EH: To be honest, I don't know any more, I'm on very thin ice because I haven't really looked at trumpets for twenty years.

SB: These are actual old instruments from the first decade of the century, the trombone section use pea-shooter bore instruments and they actually have a G bass.

EH: This is the group that's going now?

SB: Yes, the present New Queen's Hall Orchestra. But it is as much the whole ethos as the instruments, the idea that the brass are there to add colour to the sound but not to dominate. It really makes - I heard an all Rakhmaninov concert - it really brings the scoring to life, the wind came out...

EH: You could actually hear what was going on.

SB: The strings play on gut which helps as well. I just wonder whether in years to come we are going to say 'Well we really had it very much wrong at the end of the twentieth century - it was really too loud'.

EH: Yes, I think you are right. Yeh, I think you are right and it is very difficult for me to say that because I was one of the people who pumped up all the noise.

SB: That's the ironic thing, people like John Fletcher, yourself, Philip Jones...

EH: We did it because it hadn't been done here. Brass playing was a bit polite. I remember Herseth saying 'We admire you British players enormously and all the things... but what we do think sometimes is that it is far too polite', it needed more kick, more clout. The old British conductors, of course, did keep you down. Sargent, for instance, who was a bit of a boring conductor in many ways,

he didn't let you over-blow, I have to say, he would soon shut you up and insisted upon it. I as young man resented it, terribly, because I wanted to make this roaring noise. I never played for Beecham but I'm sure he didn't want it very loud. Don't remember about Barbirolli, don't think he noticed the brass too much. Boult, you couldn't overblow with Boult, he liked a healthy noise but he wouldn't let you swamp. But of course American conductors are used to a lot of sound.

SB: And people like Rozhdestvensky and Klemperer.

EH: Oh yes, not half. Kempe didn't like it at the R.P.O. when we started, he was chief conductor at the R.P.O. when I went there and when I took over, I began to get very confident about it all and Evan Watkin [first trombone], he was a big player and between the two of us it did start to get a bit out of hand, bigger and bigger. Kempe, to start with was very very undecided; he didn't like it, his hand would go up. But he sort of got used to it and I think we made a very good sound, the quality - it didn't rasp, it wasn't nasty, it was very rounded...

SB: That's the thing with Maurice Murphy: you can live with it because it is such a nice sound.

EH: Yes, so attractive. And he got used to it and in the end he'd even ask for more. We'd do *Alpine Symphony* or something and you could almost not give him enough [laughter], he fell in love with, almost drunk with it I suppose.

SB: But then people like Philip Jones are admitting that they actually had a hearing loss with the trombones behind them for long periods. Philip Jones said he was going deaf. Isn't this a problem.

EH: Well he is, what, sixty-seven [laughs]. Yes, I started to get crackles in my ears, but I suspect that that happened anyway in the old days. I think if you were sitting in front of the trombones, and also, again, it's the repertoire: they didn't play very much trombones in the old days but as soon as they had to do their Mahlers and Shostakovich, even Bruckner although you don't have very long spells of it in either Mahler or Bruckner actually. Everybody thinks Wagner, but you never play very long very loud. But the modern repertoire, you are sitting in front of a huge wall of sound a lot of the time and you sort of get used to it, but it doesn't do you much good, no. I mean these days, nearly everywhere, especially in pits, on the continent and increasingly here, they've all got plastic screens in front of the brass, absolutely everywhere.

SB: Aesthetically, do you think it is something that is necessary, to have that extreme.

EH: No, I don't. Extreme of violent degree of hard dynamic.

SB: Something like the *Rite of Spring*, that's a violent piece.

EH: I do think it gives a very very exciting effect but I haven't heard a performance of that for years, but I know what you mean, it is frightening.

SB: I heard that at the Royal Northern, which isn't a big hall and they made an awful lot of noise.

EH: Which orchestra?

SB: The Northern students.

EH: Yeh, the trumpets there were terribly loud at one point, far too loud for what the rest of the orchestra was doing. Yeh, I would say it is too loud. Oddly enough, I don't meet it too much in the kind of repertoire I do; with modern music I find I'm not very often shutting brass up. Perhaps I should, I don't know. I had to keep them down now and again in *Gawain* at the Garden, but not much actually.

SB: It is amazing how the sort of playing required for the big repertoire spills over into other things. For instance trying to get trombones to play quietly for the Mozart *Requiem*, it almost ceases to be part of their nature.

EH: Yes, because the physical feel is wrong. When in the morning you have been playing Tchaikovsky or something, and you've got all that physical feeling, then in the afternoon you have to play a bit of Mozart, it just doesn't feel right at all. But I think that that is something that the players themselves really should examine for themselves, and I think that they should be able to do those things much more effectively, and again it is difficult for me to say that because I don't think I did do it very effectively. It is the best part of thirty years since I was playing. I think I was playing really seriously about 1968-1970, so it is a hell of a long time ago, and I think in that period playing has come on a lot, they are much better schooled and educated, they are taught better than my generation was. I think it is a pity that there isn't really a group of people sufficiently enquiring to think 'Is what we are doing right?', because it does all get to be a terrible roaring match, almost a pride in it, 'We're louder than you' and that is obviously wrong.

SB: It has to happen piecemeal too, you can't unilaterally decide to go back to a smaller instrument or whatever.

EH: Yes, it needs to be a collective decision, like the Philharmonia have decided to have a go on the rotary instruments. It needs some very strong-minded guy somewhere. It is very difficult.

SB: I think John Boyden, who is behind the New Queen's Hall Orchestra, has that sort of 'mission', but whether it will...

EH: Oh does he run that, John?

SB: Mmm.

EH: Oh really.

SB: I'm not sure if that has enough financial clout to do it. I hope so, I think it is one of the most exciting orchestras I've heard for a long time.

EH: Are they recording?

SB: They have done a couple of things, but what they are saying is that you don't get the same effect with a recordings, the games that are played to iron out the balance.

EH: Mmm, revolting. It is amazing what they can do now. But it is nothing to do with what is going on. The conductor might just as well beat time, these days, and get it together. I mean, that's all I try to do to be honest because there is not much time to do anything else. You can't influence the balance because they are doing it all the time as you go along. You haven't got time to go and listen because you are up against the clock, so you are entirely in their hands. Whether the big-time conductors still have enough clout, I suppose they do for their repertoire, but for what I do and for the degree of clout which I've got with recording firms, which is next to nothing, you really have no chance to do anything about it. So the balance is all entirely to do with the engineers, you might almost forget about it.

SB: I seem to be concluding that maybe the buck stops with the trombonists, but maybe they would have it that there are other factors; John Fletcher thought the timps were in on the 'musical arms race'.

EH: Well I think it has been at the L.S.O., with Kurt, that was certainly very healthy. I don't know if that is true elsewhere with lots of orchestras. I'll tell you where there is lovely trombone playing, they do play big instruments but by the nature of their job they don't play terribly loudly, but it is beautiful playing, superbly balanced, very well in tune, is Opera North. I think it is overall, well I can't say really because I don't know British orchestras well enough because I don't work here very much, I never work with London orchestras, or once in a blue moon. But the trombone playing is superb there. I just heard them at the Garden because they were guests there playing *Gloriana*, which is a piece I didn't know, and there is a great trombone bit in the second act and it was absolutely magnificent. It was all very contained, not overblown, not woofy, really elegant,

marvellous playing, the bass trombone as well actually. And it is not that pushed noise, it is really terrific playing. It would be worthwhile, you should talk to them maybe. Chris Houlding, up at Manchester is the first trombone and Robert Birkenshaw is the second and I forget the name of the bass trombone, he's a new lad, or newish. But Chris Houlding is a very bright fellow and might have ideas about it. I suppose that if he came to London, you see, he would have to get into the blowing race, but they haven't had to do that there because they play in a small theatre at Leeds so they can't play very loud because it would be a nonsense, and any conductor at all would stop them if they started to get into all that. I often have asked them for a bit more in some pieces, but by-and-large not. They know what works and they do it. And when they play symphony concerts, which they do very often, the balance is very good, it's healthy but it is not at all that wall of noise that you get out of London. What's the R.P.O. like these days?

SB: I heard them on Sunday night in the Proms, but I was a long long way away and it may have been that, but it sounded pretty much like that, particularly the tuba, it may have been where I was sitting but he was thumping out notes which seemed totally detached from everything else.

EH: I think it is grotesque what I hear some tuba players do, utterly grotesque, and no conductor seems to even notice it, they don't say anything.

SB: I think the conductors have a lot to answer for, they should be a little more discerning.

EH: Yes, well I think, as I said it's because they are scared and also because they are not sure what's possible and what is not, so if the guy says 'Well I'm sorry, that's not possible', it's a bit like harps, you say 'Oh, really?', you're not quite sure unless you've really gone into it. But surely they can hear that the tubas are grotesquely loud sometimes. There was a Danish guy, don't know how he is playing now, this was some years ago, in the Stockholm Philharmonic, and they all used to say how wonderful he was and it was grotesque, it was three times too loud all the time, and nobody ever seemed to say anything to him, to shut him up.

SB: If one conductor reads my work I shall be pleased! It does seem a good time to look back now, almost a crisis point, and there are the period orchestras around which show that we can learn from looking to the past. Philip Jones said that he was trying to interest Yamaha in making a copy of Ernest Hall's trumpet and apparently there is a trend in America now to move back to smaller bores.

EH: A curious thing about all of this is that the jazzers' trombone playing is tiny. They have never played loudly and the trumpets have always played incredibly loudly. All those

trumpets, I don't know what they are like now because I don't know them, but the few jazz trumpeters that I worked with on sessions all belted the living daylights, they couldn't play softly actually, they couldn't play below *mf* and the trombones all played this tiny little watery sound, there was no balance at all. It was the opposite in the orchestras, the trombones were making this thumping great din and the rest of us were chasing them. But they did get caught you see, because I caught them, and Wilbraham caught them, and Snell caught them, Snell could play very very biggily, Maurice holds his own easily and I imagine Rod Franks does these days, very good player actually. Who is it at the R.P.O. these days? Is it still Derek James on trombone? He could play terribly loudly, he played a big instrument with a small mouthpiece, I don't know if he still does but in my time he was always known, he was an oddity with a small mouthpiece, so he did have very good control but he also seemed to be as loud as anybody else or even louder if he had to be, but he kept it very very elegant, he could play mysteriously quietly. He developed a curious technique when he was at the Garden where there was hardly any sound at all. Kempe used to have his hand up straight away at one time, in Wagner, and they all got worried about it and Derek developed this way of playing which was... I mean you could actually hardly hear anything at all, and he could control it, I don't know how he did it. It frightened the living daylights out of the rest of section because they couldn't match it. One of lads in particular got the jitters, in fact it finished him off, it saw him off. And then round about there's Boustead is it at the L.S.O.?

SB: Bousefield.

EH: Bousefield is it, yes. Well I knew him when he was the first trombone at the Yorkshire Imperial Metals Band and then I think he went to the Hallé, didn't he. Very good player. I wonder if he's interested in doing anything different.

SB: Eric Crees still plays at the L.S.O. One of the things Maurice Murphy said was 'It doesn't matter what I do, there's no point me changing instrument with that trombone section behind me'.

EH: Yes, well he's right. Well Crees is a very bright man, but they do all get into this rut of the noise.

SB: I suppose it is the notes they play as much as anything, they don't get much chance to play melodically or...

EH: No, middle of the instrument. Really, as a conductor, you hardly notice trombones, you're so preoccupied with the strings, woodwind solos and intonation. Horn, horn you notice a lot, you are aware of a lot, trumpet a bit less than that, trombones, you know you hardly worry about them. They are only playing chords aren't they, they do hardly anything else, in any of the repertoire. The number of times they

play a bit of counterpoint is negligible. It must be a very soul destroying life for somebody with a real technique. That's why that chap Christian Lindberg made up his mind, I think he did nine months in the opera house orchestra in Stockholm and he said 'I knew I couldn't stand this for the rest of my life, I just had to do something else', which is why he has gone for soloing.

SB: One chap I spoke to, Cliff Bevan, said that the worst part was the feeling that it was like working at Ford; you went in in the morning and churned out some notes and went home again.

EH: Yes. I could never understand why Fletcher got so worked up about it all. I remember Philip saying once 'What are you so bothered about? Nobody notices the tuba'. You don't you know, unless it's terribly loud or out of tune, but by and large you are much more concerned by what is happening in the middle of the viola section than worrying about tubas, you haven't got time.

SB: Speaking of time, I musn't take up too much of yours. Thanks very much for giving me so much.

EH: I'm glad somebody has decided to say something about it [tape off].

BIBLIOGRAPHY

Bibliography

- Adkins, H.E., *Boosey and Co.'s Complete Modern Tutor for the Bass Trombone*, London, 1926.
- Adkins, H.E., *Treatise on the Military Band*, second edition, London, 1941 (first published in 1931).
- Adler, Samuel, *The Study of Orchestration*, second edition, London, 1989.
- Adorno, Theodor, *In Search of Wagner*, tr. Rodney Livingstone, London, 1981.
- Adorno, Theodor, *The Jargon of Authenticity*, London, 1973.
- Alessi, Joseph, 'of Slides, Sinatra and Trombone Technique', *The Trombonist*, London, Spring 1995, p.26.
- Anderson, G., '14 Ways to Improve Intonation on Tuba and Euphonium', *TUBA Newsletter*, Tennessee, Winter 1975.
- Arnold Jacobs, *the legacy of a master*, ed. M. Dee Stewart, Illinois, 1987.
- Authenticity and Early Music*, ed. Nicholas Kenyon, London, 1988.
- Bach, Vincent, 'Do you know your brasses?', *The Instrumentalist*, January-February 1950, vol.iv no.3, p.20.
- Bach, Vincent, *Embouchure and Mouthpiece Manual*, New York, 1954.
- Backus, J., *The Acoustical Foundation of Music*, London, 1970.
- Baines, Anthony, *Brass Instruments: their History and Development*, London, 1976 (reprinted 1978).
- Baines, Anthony, 'Cornet', *New Oxford Companion to Music*, ed. D. Arnold, 1983, vol.i, p.496.
- Baines, Anthony, 'Morrow, Walter', *Grove Dictionary of Music and Musicians*, fifth edition, 1954, vol.v, p.901.
- Baines, Anthony, 'Solomon, John', *Grove Dictionary of Music and Musicians*, fifth edition, 1954, vol.vii, p.882.
- Baines, Anthony, 'Review of Books: Brass Instruments', *Galpin Society Journal*, vol.xxxiv, 1981, p.157-158.

- Baines, Anthony, 'Trombone', *New Grove Dictionary of Music and Musicians*, p.635.
- Baines, Anthony, 'Trombone', *Grove Dictionary of Music and Musicians*, fifth edition, 1954.
- Baines, Anthony, 'Trumpet', *Grove Dictionary of Music and Musicians*, fifth edition, 1954.
- Baines, Christopher, *European Musical Instruments: The Galpin Society Guide to the 21st Anniversary Exhibition at the Edinburgh Festival 1968*, London, 1968.
- Bands: the Brass Band Movement in the 19th and 20th Centuries*, ed. Trevor Herbert, Oxford, 1991.
- Bassano, Peter, 'God's trombone', *The Trombonist*, London, Summer 1992, p.29.
- Bate, Philip, *The Trumpet and Trombone: an outline of their history, development and construction*, London, second edition 1978 (first published 1966).
- Baumann, Hermann, 'Which Horn for which Music?', *Brass Bulletin*, Moudon, 1972, No.3, p.16.
- Benade, Arthur, *The Fundamentals of Musical Acoustics*, London, 1976.
- Benade, Arthur, 'The Physics of Brasses', *Scientific American*, July 1973, p.24-35.
- Bennet, J., *Forty Years of Music 1865-1905*, London, 1905.
- Berlioz, Hector, *Grand Traité d'Instruments et d'Orchestra Modernes*, Paris, 1844, tr. by Mary Cowden Clarke as *Treatise on Modern Instrumentation and Orchestration*, London, 1882.
- Berlioz/Strauss *Treatise on Instrumentation*, revised edition by Richard Strauss, Leipzig, 1905, tr. Theodore Frost, New York, 1948.
- Berlioz, Hector, *Memoirs*, tr. David Cairns, London, 1970.
- Berlioz, Hector, *Memoirs of Hector Berlioz*, tr. R. Holmes and E. Holmes, annotated and revised by E. Newman, New York, 1935.
- Berlioz, Hector, *Mémoires de Hector Berlioz*, Paris, 1878.
- Bernard Shaw, George, *Shaw's music: the complete musical criticism of Bernard Shaw*, ed. Dan H. Laurence, second edition, 3 vols., London, 1989 (this edition first published 1981).

- Bevan, Clifford, *The Tuba Family*, London, 1978.
- Birkemeier, Richard, 'The F trumpet and its last virtuoso, Walter Morrow', *Brass Bulletin*, Moudon, No.88, p.34-45.
- Birkemeier, Richard, *The Orchestral Trumpet of the Nineteenth Century: An Historical and Acoustical Survey*, D.Mus dissertation, Northwestern University, 1984.
- Black, Leo, '...'More than Authenticity'', *Musical Times*, February 1992, p.64-5.
- Blaikley, D.J., 'The French Horn', *Proceedings of the Royal Musical Association*, vol.xxxv, 1909.
- Blandford, W.F.H., 'Studies on the Horn, No.1 - The French Horn in England', *Musical Times*, August 1922, p.544-547.
- Blandford, W.F.H., 'Studies on the Horn, No.2 - Wagner and the Horn parts of Lohengrin', *Musical Times*, London, September and October 1922, p.694.
- Blandford, W.F.H., 'Some observations on horn chords: an acoustical problem', *Musical Times*, London, February 1926, p.128.
- Blandford, W.F.H., 'The "Bach Trumpet"', *Monthly Musical Record*, London, March-April, May and June 1935.
- Blandford, W.F.H., 'The Fourth horn in the 'Choral' Symphony', *Musical Times*, London, January, February and March 1925.
- Bliss, Arthur, *As I Remember*, London, 1970.
- Bousfield, Ian, 'Sounds Substantial', *The Trombonist*, London, Spring 1991, p.18-20.
- Borland, J.E., *The Brass Wind Instruments*, London, 1903.
- Boyden, John, *The Reasons Why*, London, n.d. (c.1992/3).
- Brain, Aubrey, 'The German horn: a comparison', *Monthly Musical Record*, July 1st 1931, p.195.
- Brain, Dennis, 'About the French Horn', *Brass Today*, London, 1957.
- Brain, Dennis, 'The French Horn', *Record News*, April 1958.
- Bracegirdle, Lee, 'The New York School; its development and its relationship with the Viennese style', *Horn Call*, April 1984, vol.xiv no.2, p.23.
- Brass Today*, ed. Frank Wright, London, 1957.

- Bridges, Glenn, *Pioneers in Brass*, Michigan, 1965.
- Bruce, G., *Festival in the North: the Story of the Edinburgh Festival*, London, 1975.
- Buckner, James, *Substitution of trumpets in orchestral music: origins, development and contemporary practices*, D.M. dissertation, Northwestern University, 1989 (Ann Arbor university microfilms no. 90-16228, 1990).
- Burum, Heinz, 'Meine Erlebnisse un Erfahrungen, mit Kollegen and Schulern in 50 Jahren als Trompeter und Trompetenlehrer', *Brass Bulletin*, Moudon, 1982, No.37, p.58-67.
- Camden, Archie and Kerrison, Jan, *How to Choose an Instrument: Woodwind and Brass*, London, 1953.
- Carse, Adam, *The Orchestra from Beethoven to Berlioz*, London, 1948.
- Carse, Adam, *Musical Wind Instruments*, London, 1939.
- Carse, Adam, 'The French horn in England', *Hallé*, Manchester, June 1950.
- Carse, Adam, *The History of Orchestration*, London, 1925.
- Carse, Adam, 'Trumpets', *Musical Opinion*, No.43, 1920, p.293.
- Corder, Frederick, *The Orchestra and How to write for it*, London, 1923.
- Cousins, Farquharson, 'Correspondence: The Degenrate Horn', *Music and Letters*, October 1950, vol.xxxi no.4, p.378-380.
- Cousins, Farquharson, *On Playing the Horn*, second edition, Chapel-en-le-Frith, 1992 (first published 1983).
- Dale, Delbert, *Trumpet Technique*, London, 1965.
- Daubeney, Ulric, 'Instrumentation: Some Strange Survivals', *Musical Times*, July 1922, p.482-484.
- Daubeney, Ulric, *Orchestral Wind Instruments, Ancient and Modern*, London, 1920.
- Davis, Joyce, *Cornet à Pistons in French and French influenced orchestration 1830-1936*, D.M.A. dissertation, Ohio State University, 1990.
- Day, C.R., *A Descriptive Catalogue of the Musical Instruments Recently Exhibited at the Royal Military Exhibition, London 1890*, London, 1891.

- Del Mar, Norman, *Anatomy of the Orchestra*, London, revised edition 1983 (first published 1981).
- Del Mar, Norman, *Orchestral Variations*, London, 1981.
- Del Mar, Norman, *Richard Strauss: a Critical Commentary*, London 1962, three volumes.
- Donnington, Robert, *The Interpretation of Early Music*, revised second edition, London, 1989 (first published in 1963).
- Douay, Jean, 'André Lafosse (1890-1975): Master of Trombone', *Brass Bulletin*, Moudon, No. 70, p.60.
- Dunhill, Thomas, *Chamber Music*, London, 1913.
- Duttenhöfer, Eva-Maria, *Gebr. Alexander: 200 Years of Musical Instrument Building in Mainz, an essay in organology*, Mainz, 1982.
- Duttenhöfer, Eva-Maria, 'Gebr. Alexander, Mainz 1782-1982', *Horn Call*, October 1982, vol.xiii no.1, p.30.
- Eger, Joseph, 'Breaking the Endurance Barrier', *Woodwind World*, No.2, May 1958, p.5-6.
- Ehmann, W., 'New Brass Instruments Based on Old Models', *Brass Quarterly*, New Hampshire, vol.1 no.3, 1958.
- Eliot, T.S., 'Tradition and the individual talent', *Selected Prose of T.S. Eliot*, ed. Kermode, New York, 1975.
- Elkin, Robert, *Royal Philharmonic*, London, n.d..
- European Musical Instruments at the Edinburgh International Festival, 1968*, ed. Melville-Mason, Galpin Society, London 1968.
- Farkas, Philip, *The Art of Brass Playing*, Indiana, 1962.
- Farkas, Philip, *The Art of French Horn Playing*, Indiana, 1956.
- Farmer, H., *The Rise and Development of Military Music*, London, 1912.
- Fitzpatrick, Horace, 'Notes on the Vienna Horn', *Galpin Society Journal*, March 1961, p.49-51.
- Fitzpatrick, Horace, *The Horn and Horn-playing and the Austro-Bohemian Tradition 1680-1830*, London, 1970.
- Fladmoe, Gary, *The Contributions to Brass Instrument Manufacturing of Vincent Bach, Carl Geyer, and Renold Schilke*, Ed.D. dissertation, University of Illinois, 1975 (Ann Arbor university microfilms no.76-6760).

- Fletcher, John, 'Tuba Britannica: Is big always beautiful?', *Brass Bulletin*, Moudon, No.47, p.20-21.
- Foreman, Lewis, *From Parry to Britten: British Music in Letters, 1900-1945*, London, 1987.
- Forsyth, Cecil, *Orchestration*, second edition, London, 1935 (first published in 1914).
- Foss, Hubert and Goodwin, Noel, *London Symphony, Portrait of an Orchestra*, London, 1954.
- Foster, Myles, *The History of the Philharmonic Society of London 1813-1912*, London, 1912.
- Franquin, Merri, 'La Trompette et le Cornet', *Lavignac Encyclopedie de la Musique*, Paris, 1927, vol.ii, part iii, p.1596-1657.
- Gane, Peter, 'Face of the LSO', *The Trombonist*, London, Summer 1993, p.19.
- Gatty, N.C., Stone, W.H. and Blaikley, D.J., 'Trombone', *Grove Dictionary of Music and Musicians*, fourth edition, ed. H.C. Colles, vol.v, p.390.
- Gregory, Robin, *The Horn, a Comprehensive Guide to the Modern Instrument and its Music*, second edition, London, 1969 (first published in 1961).
- Gregory, Robin, *The Trombone, the Instrument and its Music*, London, 1973.
- Gross, Ernest, H., 'The influence of Berlioz on contemporary nineteenth century use of brass instruments', *Brass Bulletin*, Moudon,
- H.G., 'Berlin Philharmonic Orchestra', *Musical Times*, January 1928, p.69.
- Hampson, J.N., *Besses-o' th-Barn Band*, Northampton, 1893.
- Hankin, Daniel, 'Instrumental Choice', *The Trombonist*, Autumn 1993, p.30-31.
- Harvey, David, *The condition of postmodernity*, Oxford, 1990.
- Herbert, Trevor, 'The Sackbut in England in the Seventeenth and Eighteenth Centuries', *Early Music*, November, 1990, p.609.
- Heyde, Herbert, *Trompeten, Posaunen, Tuben*, Leipzig, 1980.
- Horwood, Wally, *Adolphe Sax - his life and legacy*, Baldock, Herts., 1980.

- Howes, Frank, *Full Orchestra*, second edition, London, 1942.
- Husted, B.F., *The Brass Ensemble: its History and Literature*, D.M. dissertation, University of Rochester, 1961.
- Jacob, Gordon, *Orchestral Technique*, second edition, London, 1940 (first published in 1931).
- Janetzky, Kurt and Bröchle, Bernard, *The Horn*, London, 1977.
- Jeans, James, *Science and Music*, Cambridge, 1937.
- Kampen, Paul, Letters to the editor, *Horn Call*, April 1991, vol.xxi no.2, p.9.
- Keller, Hans, 'Arrangement for or against', *Musical Times*, January 1969, p.22-24.
- Keller, Hans, *Music, closed societies and football*, London, 1986 (first published as 1975 (1984 minus 9), 1977).
- Kennedy, Michael, *The Hallé Tradition*, Manchester, 1960.
- Kenyon, Nicholas, *The BBC Symphony Orchestra*, London, 1981.
- Kleinhammer, Edward, *The Art of Trombone Playing*, Illinois, 1963.
- Kneller, Godfrey, 'Trombones to the Fore', *The Musician*, July 1954, reproduced as 'The English Rose', *The Trombonist*, Summer 1993, p.26-27.
- Knott, Handel, 'Correspondence: The Horn', *Music and Letters*, April 1951, vol.xxxii no.2, p.200-201.
- Langwill, Lindsay, *An Index of Musical Wind-Instrument Makers*, third edition, Edinburgh, 1972 (first published in 1960).
- Laplace, Michel, 'Ravel et le "nouveau" trombone', *Brass Bulletin*, Moudon, No.47, p.36.
- Leuba, Christopher, 'The Viennese "Pumpenhorn"', *The Instrumentalist*, Illinois, No.16, 1961.
- Mansur, Philip, 'Thoughts and Observations on Vienna and Vienna Horns', *Horn Call*, April 1984, vol.xiv no.2, p.45.
- Marcuse, Sybil, *A Survey of Musical Instruments*, London, 1975.
- Mathez, Jean-Pierre, 'André Cazalet: The horn, the brasses and France', *Brass Bulletin*, Moudon, No.81, p.48-55.

- Mathez, Jean-Pierre, 'Arban (1825-1889)', *Brass Bulletin*, Moudon, 1975, No. 11, p.22.
- Mathez, Jean-Pierre, 'Boosey and Hawkes; a spectacular revival', *Brass Bulletin*, Moudon, No.85, 1994, p.80.
- Mathez, Jean-Pierre, 'Jan Hasenhörl: La trompette en liberté', *Brass Bulletin*, Moudon, No.78, November 1992.
- Mathez, Jean-Pierre, 'Paolo Longinotti 1913-63', *Brass Bulletin*, Moudon, No.47, p.59.
- Mathez, Jean-Pierre, 'Zdenek Tylsar: A great Czech horn virtuoso', *Brass Bulletin*, Moudon, 19
- Maxted, George, *Talking About the Trombone*, London, 1970.
- McDonald, Donna, *The Odyssey of the Philip Jones Brass Ensemble*, Bulle (Switzerland), 1986.
- Merewether, Richard, 'On the design of the horn', *Horn Call*, vol.xxi no.1, October 1990, p.78.
- Merewether, Richard, *The Horn, the horn*, Paxmans, London, 1979.
- Merewether, Richard, 'The Vienna-horn - and some thoughts on its past 50 years', *Horn Call*, October 1984, vol.xv no.1.
- Montagu, Jeremy, *The French Horn*, Princes Risborough, 1990.
- Montagu, Jeremy, *The World of Romantic and Modern Musical Instruments*, London, 1981.
- Morgan, G., 'BBC Welsh Symphony Orchestra Trombones', *The Trombonist*, London, Summer 1992, p.14.
- Morley-Pegge, Reginald, 'The Evolution of the French Horn from 1750 to the Present Day', *Proceedings of the Royal Musical Association*, London, vol.lxix, 1943.
- Morley-Pegge, Reginald, *The French Horn*, second impression of 1973 second edition, London, 1978 (first published 1960).
- Morley-Pegge, Reginald, 'The Degenerate Horn', *Music and Letters*, January 1951, vol.xxxii no.1, p.94-96.
- Morrow, Walter, 'The Trumpet as an Orchestral Instrument', *Proceedings of the Royal Musical Association*, June 1895, vol.xxi, p.138.
- Musical Instrument Collections in the British Isles*, ed. Clifford Bevan, Winchester, 1990.
- Nettel, R., *The Orchestra in England*, London, 1946.

- O'Loughlin, Niall, 'Civil, Alan', *New Grove Dictionary of Music and Musicians*, p.423.
- O'Loughlin, Niall, 'Tuckwell, Barry', *New Grove Dictionary of Music and Musicians*, p.248.
- Orchestra*, ed. André Previn, interviews by Michael Foss, London, 1979.
- Otis, P.A., *The Chicago Symphony Orchestra*, Chicago, 1924.
- Pallansch, R., Butterfield, D. and Bobo, R., 'Tuba Design - Improvements are Needed', *The Instrumentalist*, Illinois, February, 1973.
- Parsons, Anthony, 'London Slidelife', *The Trombonist*, Spring 1995, p.39.
- Paxman, Robert, 'In memoriam: Richard Merewether', *Horn Call*, vol.xvi no.2, April 1986, p.13.
- Pearson, Maurice, *The LSO at 70*, London, 1974.
- Perantoni, D., 'Contemporary Systems and Trends for the Tuba', *The Instrumentalist*, Illinois, February, 1973.
- Pettitt, Stephen, *Dennis Brain: a Biography*, second edition, London, 1989 (first published 1976).
- Philip, Robert, *Early recordings and musical style: changing tastes in instrumental performance, 1900-1950*, Cambridge, 1992.
- Philip Farkas, the legacy of a master*, ed. M. Dee Stewart, Illinois, 1990.
- Pietzsch, Herman, *Die Trompete*, 1906, revised edition tr. John Bernhoff, Michigan, n.d.
- Piston, Walter, *Orchestration*, New York, 1955.
- Prout, Ebenezer, *The Orchestra*, 2 vols., London, 1897.
- Read, G., *Thesaurus of Orchestral Devices*, London, 1953.
- Reynolds, M., 'Incurable Curator', *The Trombonist*, London, Spring 1992, p.24.
- Rooley, A., *Performance: Revealing the Orpheus Within*, Shaftesbury, 1990.
- Russell, Thomas, *Philharmonic Decade*, London, 1945.
- Sandell, Gregory, *Concurrent Timbres in Orchestration: A Perceptual Study of Factors Determining "Blend"*, PhD diss., Northwestern University, 1991 (U.M.I. microfilms).

- Scharnberg, William, 'Upon the retirement of Clyde Miller', *Horn Call*, April 1984, vol.xiv no.2, p.98.
- Scharnberg, William, 'What type of horn should I buy?', *Horn Call*, October 1987, vol.xviii no.1, p.39-40.
- Schuller, Gunther, *Horn Technique*, second edition, London, 1962.
- Schweikert, Norman, 'A history of the organised horn ensemble in the U.S.', *Horn Call*, October 1985, vol.xvi no.1, p.31.
- Seyfried, E., 'Concerning the article by Richard Merewether: the Vienna-horn - and some thoughts on its past 50 years', *Horn Call*, vol.xvi no.1, October 1985, p.35.
- Shapiro, Harry, 'James Stagliano (1912-1987)', *Horn Call*, October 1987, vol.xxviii no.1, p.57.
- Solomon, L.N., 'Semantic approach to the perception of complex sounds', *Journal of the Acoustical Society of America*, No.30, p.421-425.
- Stone, W.H., 'Trombone', *Grove Dictionary of Music and Musicians*, ed. Fuller Maitland, London, 1910, vol.v, p.164.
- Stoneman, J., 'Keep Music Live (And Mahler Dead?)', *The Horn Magazine*, Winter 1995, vol.3 no.1, p.11.
- Street, S. and Carpenter, R., *Bournemouth Symphony Orchestra Centenary Celebration*, Wimborne, 1993.
- Stroeher, Michael, *An investigation of the verbal description of trombone tone quality with respect to selected attributes of sound*, PhD diss., University of North Texas, 1991 (U.M.I. microfilms).
- Suppan, Armin, 'Das Wiener Horn und der Wiener Klangstil', *Brass Bulletin*, Moudon, 1993, p.39.
- Tarr, Edward, 'André, Maurice', *New Grove Dictionary of Music and Musicians*.
- Tarr, Edward, 'Hall, Ernest', *New Grove Dictionary of Music and Musicians*.
- Tarr, Edward, 'Eskdale, George', *New Grove Cictionary of Music anf Musicians*.
- Tarr, Edward, *The Trumpet*, tr. Stephen Plank and Edward Tarr, London, 1988 (first published as *Die Trompette* in 1977).

- Taylor, Arthur, *Labour and Love: An Oral History of the Brass Band Movement*, London, 1983.
- Thévet, Lucien, *Méthode Complète de Cor*, Leduc, 1960.
- Tomlinson, Gary, 'The web of culture: a context for musicology', *Nineteenth Century Music*, April 1984.
- Tuckwell, Barry, *The Horn*, London, 1983.
- Wagner, Irving, 'National Practices in Brass Performance', *The Instrumentalist*, Illinois, October 1976, p.52-53.
- 'Which horn do you prefer - F - or - Bb? A symposium', *The Instrumentalist*, Illinois, January-February 1951, p.73-80.
- Whitener, Scott, *A Complete Guide to Brass: Instruments and Pedagogy*, New York, 1990.
- Wick, Denis, 'Legato - home and abroad', *The Trombonist*, London, Autumn 1991, p.5.
- Wick, Denis, 'There's more to a brass mouthpiece than meets the eye', *The British Bandsman*, London, 30th January 1993, p.6-7.
- Wick, Denis, *Trombone Technique*, Oxford, revised 1973 (first published 1971).
- Wilson, Arthur, 'Mix 'n' Match', *The Trombonist*, London, Autumn 1994, p.14-15.
- Wohlthart, Martina, 'Das Alten der alten Musik', *Neue Zeitung*, 1993, p.4-7.
- Woolworth, William, *A Biography of Adolph S. Herseth: his Performance and Pedagogical Contributions*, D.M.A. dissertation, Arizona State University, 1993 (U.M.I. microfilms no. 9320671).
- Yancich, Milan, 'Willem Valkenier - a profile', *Horn Call*, October 1983, vol.xiv no.1, p.51-55.
- Yeo, Douglas, 'Bass sounds from Boston', *The Trombonist*, British Trombone Society, Spring 1994, p.14-17.
- Yeo, Douglas, 'Horn players of the Boston Symphony Orchestra 1881-1988', *Horn Call*, April 1988, vol.xviii no.1, p.47.
- Zarzo, Vincent, 'Passion for the horn', *Brass Bulletin*, Moudon, November 1994; No.86, letters, p.97.

SELECT DISCOGRAPHY

The recordings detailed in this discography are presented in two ways:

- 1) By nationality and orchestra/performer, in chronological order (p.475-488)
 - British Recordings
 - American Recordings
 - French Recordings
 - German Recordings
 - Austrian Recordings
 - Russian and Czechoslovakian Recordings
- 2) Alphabetically by composer (p.489-497)

British Recordings

BBC Symphony Orchestra

Brahms Piano Concerto No.1/Wilhelm Backhaus, Sir Adrian Boult
1932 HMV DB 1839/43 Biddulph CD re-issue LHW 017

Elgar *Enigma* Variations/Sir Adrian Boult
1936 HMV DB 2800-2

Black Dyke Mills Band

Eric Ball *Journey into Freedom, Resurgam and High Peak*/
Geoffrey Brand
1968-70 RSR Brass RSRD1001

Brain, Aubrey

Brahms Horn Trio/Adolf Busch, Rudolf Serkin
1933 2B.6708-15/DB.2105-8 Testament CD re-issue SBT 1001

Mozart Divertimento in D K334/Lener Quartet, Dennis Brain
1939 CAX 8451-60/Columbia LX 841-5 EMI CD re-issue
CDH 7 64198 2

Mozart Horn Concerto No.3 in Eb K447/BBC Symphony Orchestra,
Sir Adrian Boult
1940 2EA 8663-6/HMV DB 3973-4 EMI CD re-issue CDH 7 64198 2

Brain, Dennis

Mozart Horn Concerto No.2 in Eb K417/Philharmonia Orchestra,
Walter Susskind
1946 CAX 9499-502/Columbia DX 1356-6 EMI CD re-issue
CDH 7 64198 2

Wagner 'Siegfried's Horn Call' extract from *Siegfried*
1947 2EA 11986; C 3622 Testament CD re-issue SBT 1012

Mozart Four Horn Concertos/Philharmonia Orchestra, Herbert
Von Karajan
1953 Columbia 33CX 1140

London Philharmonic Orchestra

Rossini Overture *The Silken Ladder*/Sir Thomas Beecham
1933 Columbia LX255 and 'The Shellac Show', Radio 3, 2.1.95

Berlioz extracts from *The Damnation of Faust*/Sir Thomas
Beecham
1937/8 CAX 8082/8144, 8142/3, Columbia LX 702/3

Debussy *Prelude à l'après-midi d'un faune*/Sir Thomas Beecham
1939 CAX 8394/5 Columbia LX 805

Bizet *Carmen Suite*/Sir Thomas Beecham
1939 CAX 8551/4 Columbia LX 823/9

Chabrier *España*/Sir Thomas Beecham
1939 CAX 8667/8 Columbia LX 880

Berlioz Overture *Roman Carnival*/Sir Henry Wood
1940 'Vintage Years', Radio 3, 5.7.93

Ireland *Epic March*/Sir Henry Wood
1942 'Proms Archive', Radio 3, 7.8.95

Elgar Symphony No.2/Sir Georg Solti
1975 Decca 421 386 2

Copland *Fanfare for the Common Man*/Carl Davis
1988 Virgin VJ 7 91466-2

London Symphony Orchestra

Weber Overture *Oberon*/Artur Nikisch
(Thomas Busby, principal horn)
1914 (private collection tape)

Wagner arr. Wood *Song of the Rhinedaughters*/Sir Henry Wood
(Aubrey Brain, principal horn)
mid to late 1920s (private collection tape)

Berlioz *Fantastic Symphony*/Felix Weingartner
1925 National Sound Archive tape PM10

Holst *The Planets*/Albert Coates
Humperdinck Overture *Hansel and Gretel*/Albert Coates
Strauss *Don Juan*/Albert Coates
Weber Overture *Oberon*/Albert Coates
Wagner Extracts from *The Ring*/Albert Coates
1926 Koch Historic CD re-issue 37704-2

Elgar Symphony No.2/Sir Edward Elgar
1927 CR 1268-79/HMV D 1230-35 EMI CD re-issue 1992, 'The Elgar Edition', vol.i

Elgar *Civic Fanfare* and National Anthem (arr. Elgar)/Sir Edward Elgar
1927 BR 1137/HMV RLS 708 EMI CD re-issue 1992 'The Elgar Edition', vol.i

Elgar *The Music Makers*/Sir Edward Elgar
1927 CR 1157,1159 and 1161/HMV D 1349 and 1347 EMI CD re-issue 'The Elgar Edition', vol.i

Stravinsky *The Firebird*/Artur Nikisch
1928 'The Changing Orchestra', Radio 3, 28.12.94

Strauss *Tod und Verklärung*/Albert Coates
1928 Koch Historic CD re-issue 37704-2

Elgar Symphony No.1/Sir Edward Elgar
 1930 Cc 20675-7 and 20682-9/HMV D 1944-9 EMI CD re-issue
 1992 'The Elgar Edition', vol.i

Elgar Symphonic Study *Falstaff*/Sir Edward Elgar
 1931/2 2B 2011-14 and 2017-20/HMV DB 1621-4 EMI CD re-issue
 1992 'The Elgar Edition', vol.i

Walton Symphony No.1/Sir Hamilton Harty
 1935 Decca X108-113 Dutton CD re-issue CDAX 8003

Sibelius Symphony No.2/Anthony Collins
 1953 Decca LXT2815 (ACL34)

Sibelius Symphony No.5/Anthony Collins
 1953 Decca BR3068

Sibelius Symphony No.7/Anthony Collins
 1955 Decca LXT2960

Rimsky-Korsakov *Scheherazade*/Pierre Monteux
 1958 RCA Victorola VIC 1013

Ravel *Daphnis et Chloe* (Part 3)/Pierre Monteux
 1959 'Vintage Years', Radio 3, 28.10.94

Brahms Symphony No.2 (Finale)/Pierre Monteux
 1962 'Vintage Years', Radio 3, 28.10.94

Walton Symphony No.1/André Previn
 1966 CD re-issue BMG CML099

Bax *Tintagel*/Sir John Barbirolli
 1967 HMV CD re-issue HMV 5 68469 2

Tchaikovsky Symphony No.4/George Szell
 1971 Decca ZAL 10976 SPA 206

Duparc arr. Stokowski 'Ecstase'/Leopold Stokowski
 (David Gray, solo horn)
 1972 'Vintage Years', Radio 3, 5.11.94

Holst *The Perfect Fool* ballet music Op.39/André Previn
 1975 EMI CDC 749784 2

Prokofiev Symphony No.7/André Previn
 1977 CDC 7 47855 2

Mahler Symphony No.2 /Gilbert Kaplan
 1988 IMP Classics DPCD 910

New Symphony Orchestra

Elgar Cello Concerto/Sir Sir Edward Elgar, Beatrice Harrison
 1928 CR 1754-9/D 1507-9 EMI CD re-issue CDH 7 69786 2

Philharmonia Orchestra

Wagner *Siegfried Idyll*/Guido Cantelli
1951 2XEA 162; ALP 1086 Testament CD re-issue SBT 1012

Walton *Symphony No.1*/Sir William Walton
1951 EMI SLS 5246

Brahms *Symphony No.1*/Guido Cantelli
1953 2XEA 400-401; ALP 1152 Testament CD re-issue SBT 1012

Strauss *Four Last Songs*/Elisabeth Schwarzkopf, Otto Ackermann
1953 HMV RLS 751

Mahler *Symphony No.2*/Otto Klemperer
1961/2 EMI CD re-issue CDM 7 69662 2

Philip Jones Brass Ensemble/Philip Jones

'Trumpet Voluntary' (including arrangements of music by
Giovanni Gabrieli, Susato, Byrd, Purcell, Locke and Scheidt)
1971-1981 Decca 421 633-2

Bernstein arr. Eric Crees *West Side Story Suite*/Eric Crees
Weill arr. David Purser *Kleine Dreigoschenmusik*/Eric Crees
1985 Decca 417 354-2

'Music for the Courts of Europe' (including arrangements of
music by Farnaby, Bull, Gibbons, D.Scarlatti and J.S.Bach)
1988 Decca 417 524-2

Shostakovich *Concerto for Piano, Trumpet and Strings*/Dmitri
Alexeev, Philip Jones, English Chamber Orchestra, Maksymiuk
1989 EMI CD-CFP 4547

Queen's Hall Orchestra

Wagner 'Ride of the Valkyries' from *Die Walküre*/Sir Henry Wood
n.d. Issued 1940 on 'Marching to Victory' Decca K761 TA1779-
11/TA1780-1

Royal Albert Hall Orchestra

Elgar *Overture Cockaigne*/Sir Edward Elgar
1926 'The Record Producers', Radio 3, 2.1.95

Stamp, Jesse

Offenbach 'Barcarolle' from *Tales of Hoffmann* arr. cornet,
trombone and military band/Jack Mackintosh (cnt)
1930 Regal MR111 WAR 134 Choice CD re-issue CD1 BM1

Verdi 'Misere' from *Il Trovatore* arr. cornet, trombone and
military band/Jack Mackintosh (cnt)
1930 Regal MR111 WAR 135 Choice CD re-issue CD1 BM1

American Recordings

Boston Symphony Orchestra

Wagner *Prelude to Act III of Lohengrin*/Karl Muck
1917 'The Changing Orchestra', Radio 3, 30.12.94

Mussorgsky/Ravel *Pictures at an Exhibition*/Serge Koussevitzky
1930 'The Changing Orchestra', Radio 3, 30.12.94

Chicago Symphony Orchestra

Ravel *Pavane pour une Infante défunte*/Philip Farkas, Reiner
1959 'The Reiner Sound', Vol.2, RCA Victorola

Rimsky-Korsakov *Scheherazade*/Fritz Reiner
1960 'Vintage Years', Radio 3, 25.9.93

Nielsen *Symphony No.2*/Morton Gould
1966 BMG CD re-issue 74321 29255 2

Mahler *Symphony No.6*/Sir Georg Solti
1970 Decca 425 040-2

Strauss *Till Eulenspiegel*/Sir Georg Solti
1975 Decca 436 753-2

Mahler *Symphony No.5*/Claudio Abbado
1981 Deutsche Gramophon 427 254-2

Bartok *The Miraculous Mandarin*/Sir Georg Solti
1990 Decca 436 753-2

Rimsky-Korsakov *Scheherazade, Tsar Saltan*/Daniel Barenboim
1992 Erato 4509-91717-2

Columbia Symphony Orchestra

Wagner *Liebstedt from Tristan and Isolde*/Felix Weingartner
1913 National Sound Archive tape PM12

Cincinnati Symphony Orchestra

Respighi *Church Windows, Roman Festivals*/Jesus Lopez-Cobos
1994 Telarc CD-80356

Cleveland Orchestra

Rakhmaninov *Symphony No.2*/Sokolov
1928 'Vintage Years', Radio 3, 22.10.94

Walton *Symphony No.2*/George Szell
1961 CBS Masterworks CD re-issue Sony MPK 46732

Clevenger, Dale

Haydn, Michael *Concertino for Horn*/Franz Liszt Chamber Orch.
1984 Teldec CD re-issue 4509-94525-2

NBC Symphony Orchestra

Beethoven Overture *Leonore No.3*/Arturo Toscanini
1939 RCA Victor Gold Seal VD 60340

Wagner 'Ride of the Valkyries' from *Die Walküre*
1952 RCA Victor Gold Seal VD 60340

Rossini Overture *William Tell*/Arturo Toscanini
1953 RCA Victor Gold Seal VD 60340

New York Philharmonic/Philharmonic Symphony Orchestra

Respighi *Fountains of Rome*/Sir John Barbirolli
1939 'The Changing Orchestra', Radio 3, 27.12.94

Mahler Symphony No.5/Bruno Walter
1947 CBS Masterworks CD re-issue Sony MPK 47683

Mahler Symphony No.8/Leopold Stokowski
1950 Arkadia CD re-issue CDGI 761.1

Tchaikovsky *Hamlet*/Leopold Stokowski
1958 'Vintage Years', Radio 3, 5.11.94

Philadelphia Orchestra

Brahms Symphony No.1, No.2, No.3 and No.4/Leopold Stokowski
1928 Biddulph CD re-issue WHL017/8

Tchaikovsky Symphony No.5/Eugene Ormandy
1975 ARL 10664 RCA Victorola CD re-issue BMG VD87820

Debussy *Prelude à l'après-midi d'un faune*/Eugene Ormandy
Ravel *Pavane pour une Infante défunte*/Eugene Ormandy
1972 RCA Victorola 09026-61211-2 (Mason Jones, solo horn)

Strauss *Ein Heldenleben*/Eugene Ormandy
Strauss *Also Sprach Zarathustra*/Eugene Ormandy
Strauss *Till Eulenspiegel*/Eugene Ormandy
1973 CBS 77359

Sibelius Symphony No.5/Eugene Ormandy
1975 BMG CD re-issue 74321 24216 2

Sibelius Symphony No.1/Eugene Ormandy
1978 BMG CD re-issue 74321 24216 2

Mahler Symphony No.10 (Deryck Cooke completion)/James Levine
1980 RCA RD84553(2)

Voisin, Roger

Haydn Trumpet Concerto in Eb/Unicorn Concert Orchestra,
Harry Ellis Dickson
1959 Decca ACL-R 56

French Recordings

André, Maurice

Fasch Concerto for Trumpet, 2 Oboes, Strings and Continuo/
Orchestre de Chambre Jean-François Paillard/Jean-François
Paillard

1972 Erato 4509-94584-2

Haydn, Michael Concerto for Trumpet in D major/Orchestre de
Chambre Jean-François Paillard, Jean-François Paillard

1972 Erato 4509-94584-2

Telemann Sonata for Trumpet in D major/Wiener Solisten

1972 Erato 4509-94584-2

Telemann Concerto for Trumpet in Eb major/Les Solistes de
Liège, Géry Lemaire

n.d. EMI C 063-28 271

Loeillet Concerto for trumpet in D major/Les Solistes de
Liège, Géry Lemaire

n.d. EMI C 063-28 271

Barboteu, George

Boscha Andante Sostenuto for Horn and Harp/Lily Laskine (hp)

1971 Erato CD re-issue 4509-94801-2

Dauprat Sonata for Horn and Harp/Lily Laskine (hp)

1971 Erato CD re-issue 4509-94801-2

Beethoven Sonata Op.17 for Horn and Piano

Koechlin Sonata Op.70 for Horn and Piano

Schumann Adagio and Allegro Op.70 for Horn and Piano

n.d. Arion 30 A 111

Coursier, Gilbert

Beethoven Sonata Op.17 for Horn and Piano

n.d. (1950s) L'Oiseau Lyre OL50033

Paris Conservatoire Orchestra

Tchaikovsky Symphony No.5/Georg Solti

1956 Decca LXT 5241

Stravinsky *The Firebird*/Pierre Monteux

1968? Decca CD re-issue 421 635-2

Stravinsky *Petrushka*/Pierre Monteux

1968? VICS 1296 Decca CD re-issue 421 635-2

Orchestre de l'Association des Concerts Colonne

Ravel *Pavane pour une Infante défunte*/Gabriel Pierné
1929 Decca 25321/3 (78rpm), Music and Arts CD re-issue CD-703

Orchestre de l'Association des Concerts Lamoreux

Ravel *Bolero*/Maurice Ravel
1930 Polydor-Gramophon 66947/8 (78rpm), Music and Arts CD-703

Ravel *La Valse*/Albert Wolff
1931 Brunswick 90186/7 (78rpm), Music and Arts CD-703

Debussy *La Mer*/Igor Markevitch
Roussel *Bacchus et Ariadne*/Igor Markevitch
1960 Deutsche Grammophon DGG 2538080

Orchestre de la Société des Concerts Symphoniques de Paris

Borodin *Overture Prince Igor*/René Leibowitz
1960 Reader's Digest/RCA RDM 1006

Orval, Francis

Brahms Horn Trio/Beaux Arts Trio (Grumiaux and Sebok)
1976 Philips 9500161

Thevet, Lucien

Brahms Horn Trio/Dubart, Ambrosini
1957 Decca LXT 5332

Vescovo, Pierre Del

Dukas *Villanelle* for Horn and Piano/Jean Hubeau (pno)
1969 Erato CD re-issue 4509-94801-2

Mozart Horn Concerto No.4 K495/Orchestre de Chambre Jean-François Paillard/Jean-François Paillard
1973 Erato CD re-issue 4509-94801-2

German Recordings

Baumann, Hermann

Mozart Horn Concerto No.2 in Eb major K417/Concerto Amsterdam
1967 Teldec CD re-issue 4509-94525-2

Haydn Horn Concerto No.3 in D major/Concerto Amsterdam
Danzi Horn Concerto in E major/Concerto Amsterdam
Rosetti Horn Concerto in D minor/Concerto Amsterdam
1969 Teldec CD re-issue 4509-94525-2

Berlin Philharmonic Orchestra

Stravinsky first mvmt of *The Firebird Suite*/Oskar Fried
1928 'The Changing Orchestra', Radio 3, 29.12.94

Mendelssohn Overture to *A Midsummer Night's Dream*/Wilhelm Furtwängler
early 1930s 'The Changing Orchestra', Radio 3, 29.12.94

Bruckner Adagio from Symphony No.9/Wilhelm Furtwängler
1944 'The Changing Orchestra', Radio 3, 29.12.94

Stravinsky Suites *Petrushka* and *The Firebird Suite*/Leopold Stokowski
1958 EMI CD re-issue HMV 7 67640 2

Weber Overtures *Oberon* and *Der Freischütz*/Herbert Von Karajan
1972 Deutsche Grammophon 419 070-2

Beethoven Symphony No.9/Herbert Von Karajan
1977 Deutsche Grammophon 415 832-2

Holst *The Planets*/Herbert Von Karajan
1981 Deutsche Grammophon 400 028-2

Mahler Symphony No.1/Bernard Haitink
1987 Philips 420 936-2

Bayreuth Festival Orchestra

Wagner Transformation scene from *Parsifal* Act I/Knappertsbusch
1951 'The Record Producers', Radio 3, 3.1.95

Dresden Staatskapelle

Weber *Der Freischütz* (complete opera)/Carlos Kleiber
1973 Deutsche Grammophon DGG 2720 071

Strauss *Don Juan*/Rudolf Kempe
1970 CZS5 68110-2

Weber Overture *Der Freischütz*/Colin Davis
1989 Philips 426 319-2

German Brass

'Bach 300' (arrangements by Enrique Crespo)
1984 EMI CDC 7 47430 2

Leipzig Gewandhaus Orchestra

Schumann Konzertstück for Four Horns and Orchestra Op.86/
Peter Damm, Herman Märker, Werner Pilz and Georg Böhner,
Konwitschny (cnd)
n.d. Philips GL5797

Bruckner Symphony No.9/Kurt Masur
1975 BMG CD re-issue 74321 29947 2

Strauss *Four Last Songs*/Jessye Norman, Kurt Masur
1984 Philips 7337 322

North German Radio Symphony Orchestra

Bruckner Symphony No.3/Gunther Wand
1992 Live recording made in Hamburg, Radio 3, 17.7.94

Scherbaum, Adolf

Haydn Trumpet Concerto in Eb/Hamburg Radio Orchestra, Stepp
1961/3 SAPM 198651

Stuttgart Chamber Orchestra

Bach Brandenburg Concerto No.2/Karl Münchinger
(Paolo Longinotti, trumpet)
1955 Decca LX 3029

Symphoniker-Orchestra des Bayerischen Rundfunks

Bruckner Mass in F minor/Colin Davis
1995 Philips 422 358-2

Austrian Recordings

Vienna Philharmonic Orchestra

Brahms Symphony No.3 (third movement)/Clemens Krauss
1930 'The Changing Orchestra', Radio 3, 26.12.94

Mahler Symphony No.9/Bruno Walter
1938 EMI CD re-issue CDH 7 63029 2

Strauss *Don Juan*/Richard Strauss
1944 PREI 90216

Brahms Symphony No.2 (second movement)/Wilhelm Furtwängler
1945 'The Changing Orchestra', Radio 3, 26.12.94

Brahms *Academic Festival and Tragic Overtures*/Knappertsbusch
Brahms *Variations on a Theme of Haydn*/Knappertsbusch
1958 Decca ECS701 ZAL 3658/7

Wagner Final scene of *Das Rheingold*/Georg Solti
1958 'The Record Producers', Radio 3 3.1.95

Strauss *Also Sprach Zarathustra*/Herbert Von Karajan
1959 SDD175

Schmidt Symphony No.4/Zubin Mehta
1972 Decca 440 615-2

Bruckner Symphony No.4/Karl Böhm
1974 Decca 425 036-2

Mahler Symphony No.2/Zubin Mehta
1975 Decca 440 615-2

Bruckner Symphony No.9/Herbert Von Karajan
1976 Deutsche Grammophon 435 326-2

Strauss *Don Juan* and *Till Eulenspiegel*/André Previn
1980 EMI CDD 7 64106 2

Dvorak Symphony No.8 in G major/Herbert Von Karajan
1985 Deutsche Grammophon 431 095-2

Schumann Symphony No.4/Herbert Von Karajan
1987 Deutsche Grammophon 431 095-2

Vienna State Opera Orchestra

Humperdinck Overture to *Hansel and Gretel*/Desarzens
1960 RDM 1002

Mendelssohn 'Nocturne' from *A Midsummer Night's Dream*/
Desarzens
1960 RCA L70P, 5503/4

Russian Recordings

Afanasiev, Boris

Shebalin Concertino for Horn and Orchestra in C minor Op.14
No.2/All-Union Radio Symphony Orchestra
n.d.(Afanasiev premiered the piece in 1960) Melodiya 335-0976

Bolshoi Theatre Orchestra/Bolshoi Symphony Orchestra

Rakhmaninov Symphony No.2/Evgeni Svetlanov
1964 2YRM.1072

Prokofiev *Romeo and Juliet* complete ballet/Algis Zuraitis
1982 EMI CFP CDB 7 62843 2

Rimsky-Korsakov Suites *Capriccio Espagnol* and *The Golden Cockerel*, Overtures *Russian Easter Festival*, *The Tsar's Bride* and *May Night*/Alexander Lazarev
1992 Erato 4509-94808-2

Leningrad Philharmonic Orchestra

1946 Stravinsky *Petrushka*/Evgeni Mravinsky
 1958 Prokofiev Symphony No.6/Evgeni Mravinsky
 1962 Debussy *La Mer*/Evgeni Mravinsky
 1966 Shostakovich Symphony No.5/Evgeni Mravinsky
 Koch CD re-issues 'Recent Releases', Radio 3, 9.4.94

Tchaikovsky Symphony No.4 and Symphony No.5/Evgeni Mravinsky
 1960 Deutsche Grammophon 419 745-2

Moscow Philharmonic Symphony Orchestra

Verdi Requiem/Igor Markevitch
 1962 Philips 903096L

Moscow Radio Symphony Orchestra

Glazunov 'Autumn' from *The Seasons*/Boris Khaikin
 1970 HMV ASD 2522

Berlioz Overtures *Le Corsaire* and *Benvenuto Cellini*, Liszt
 Symphonic Poem *Tasso*/Gennady Rozhdestvensky
 1978 Melodiya ASD3714

Russian National Orchestra

Tchaikovsky Symphony No.4/Mikhail Pletnev
 1994 Live at the Brighton Festival, Radio 3, 8.5.94

USSR Radio Symphony Orchestra

Rimsky-Korsakov *Scheherazade*/Rakhlin
 n.d. SAGA XID 5012

Tchaikovsky Fantasy Overture *Romeo and Juliet*/Vyacheslav
 Ovchinnikov
 1979 Olympia OCD 142

Tchaikovsky Symphony No.4/Vladimir Fedoseyev
 1984 Olympia OCD 142

USSR Symphony Orchestra

Rakhmaninov Symphony No.1/Evgeni Svetlanov
 1966 Melodiya SUCD 10-00141

Tchaikovsky Symphony No.4/Evgeni Svetlanov
 1967 Melodiya ASD 2592

Rimsky-Korsakov Overture *Russian Easter Festival*/Evgeni
 Svetlanov
 1985 Melodiya C10 23327 003

Czechoslovakian Recordings

Czech Philharmonic Orchestra

Mahler Symphony No.4/Karel Sejna
1962 Supraphon SUA 10157

Franck Symphony in D minor/Sir John Barbirolli
1962 Supraphon 11 0613-2

Wagner *Siegfried Idyll*/Zdenek Kosler
1969 Supraphon 11 1112-2

Shostakovich Symphony No.7/Vaclav Neumann
1974 Supraphon 11 0723-2

Sibelius Symphony No.5/Gaetano Delogu
1980 Supraphon 11 0655-2

Czechoslovak Chamber Harmony

Dvorak Wind Serenade in D minor Op.44/Turnovsky
1967 Supraphon 50760

Prague Symphony Orchestra

Sibelius *The Tempest*/Vaclav Smetacek
1963 Supraphon 11 0655-2

Stefek, Miroslav

Beethoven Sonata for Horn and Piano
1980s Supraphon LPM47 MM130

Alphabetically by composer

Bach, J.S. Brandenburg Concerto No.2

1955 Stuttgart Chamber Orchestra/Münchinger

Ball, Eric Journey into Freedom, Resurgam and High Peak

1968-70 Black Dyke Mills Band/Brand

Bartok The Miraculous Mandarin

1990 Chicago Symphony Orchestra/Solti

Bax Tintagel

1967 London Symphony Orchestra/Barbirolli

Beethoven Overture Leonore No.3

1939 NBC Symphony Orchestra/Toscanini

Beethoven Sonata Op.17 for Horn and Piano

n.d. Gilbert Coursier

n.d. George Barboteu

1980s Miroslav Stefek

Beethoven Symphony No.9

1977 Berlin Philharmonic Orchestra/Karajan

Berlioz extracts from The Damnation of Faust

1937/8 London Philharmonic Orchestra/Beecham

Berlioz Fantastic Symphony

1925 London Symphony Orchestra/Weingartner

Berlioz Overture Benvenuto Cellini

1978 Moscow Radio Symphony Orchestra/Rozhdestvensky

Berlioz Overture Le Corsaire

1978 Moscow Radio Symphony Orchestra/Rozhdestvensky

Berlioz Overture Roman Carnival

1940 London Philharmonic Orchestra/Wood

Bernstein arr. Eric Crees West Side Story Suite

1985 Philip Jones Brass Ensemble/Eric Crees

Bizet Carmen Suite

1939 London Philharmonic Orchestra/Beecham

Borodin Overture Prince Igor

1960 Orchestre de las Société des Concerts Symphoniques de Paris/Leibowitz

Boscha Andante Sostenuto for Horn and Harp

1971 George Barboteu, Liliy Laskine

Brahms Horn Trio

- 1933 Aubrey Brain, Adolf Busch and Rudolf Serkin
- 1957 Lucien Thevet, Dubart and Ambrosini
- 1976 Francis Orval, Beaux Arts Trio

Brahms Overture Academic Festival

- 1958 Vienna Philharmonic Orchestra/Knappertsbusch

Brahms Overture Tragic

- 1958 Vienna Philharmonic Orchestra/Knappertsbusch

Brahms Piano Concerto No.1

- 1932 Wilhelm Backhaus, BBC Symphony Orchestra/Boult

Brahms Symphony No.1

- 1928 Philadelphia Orchestra/Stokowski
- 1953 Philharmonia/Cantelli

Brahms Symphony No.2

- 1928 Philadelphia Orchestra/Stokowski
- 1945 Vienna Philharmonic Orchestra/Furtwängler
- 1962 London Symphony Orchestra/Monteux

Brahms Symphony No.3

- 1928 Philadelphia Orchestra/Stokowski
- 1930 Vienna Philharmonic Orchestra/Krauss

Brahms Symphony No.4

- 1928 Philadelphia Orchestra/Stokowski

Bruckner Mass in F minor

- 1995 Symphoniker-orchestra des Bayerischen Rundfunks/Davis

Bruckner Symphony No.3

- 1992 North German Radio Symphony Orchestra/Wand

Bruckner Symphony No.4

- 1974 Vienna Philharmonic Orchestra/Böhm

Bruckner Symphony No.9

- 1944 Berlin Philharmonic Orchestra/Furtwängler
- 1975 Leipzig Gewandhaus Orchestra/Masur
- 1976 Vienna Philharmonic Orchestra/Karajan

Chabrier España

- 1939 London Philharmonic Orchestra/Beecham

Copland Fanfare for the Common Man

- 1988 London Philharmonic Orchestra/Davis

Danzi Horn Concerto in E major

- 1969 Hermann Baumann Concerto Amsterdam

Dauprat Sonata for Horn and Harp

- 1971 George Barboteu, Lily Laskine

Debussy *La Mer*

- 1960 Orchestre de l'Association des Concerts Lamoreux/
Markevitch
1962 Leningrad Philharmonic Orchestra/Mravinsky

Debussy *Prelude à l'après-midi d'un faune*

- 1939 London Philharmonic Orchestra/Beecham
1972 Philadelphi Orchestra/Ormandy

Duparc arr. Stokowski '*Ecstase*'

- 1972 London Symphony Orchestra/Stokowski

Dukas *Villanelle for Horn and Piano*

- 1969 Pierre del Vescovo, Jean Hubeau

Dvorak *Wind Serenade in D minor Op.44*

- 1967 Czechoslovak Chamber Harmony

Dvorak *Symphony No.8 in G major*

- 1985 Vienna Philharmonic Orchestra/Karajan

Elgar *Cello Concerto*

- 1928 Beatrice Harrison, New Symphony Orchestra/Elgar

Elgar *Civic Fanfare and National Anthem (arr. Elgar)*

- 1927 London Symphony Orchestra/Elgar

Elgar *Overture Cockaigne*

- 1926 Royal Albert Hall Orchestra/Elgar

Elgar *Enigma Variations*

- 1936 BBC Symphomy Orchestra/Boult

Elgar *Symphonic Study Falstaff*

- 1931/2 London Symphony Orchestra/Elgar

Elgar *Symphony No.1*

- 1930 London Symphony Orchestra/Elgar

Elgar *Symphony No.2*

- 1927 London Symphony Orchestra/Elgar
1975 London Philharmonic Orchestra/Solti

Elgar *The Music Makers*

- 1927 London Symphony Orchestra/Elgar

Fasch *Concerto for Trumpet, 2 Oboes, Strings and Continuo*

- 1972 Maurice André, Orchestre de Chambre J.-F. Paillard

Franck *Symphony in D minor*

- 1962 Czech Philharmonic Orchestra/Barbirolli

Glazunov '*Autumn*' from *The Seasons*

- 1970 Moscow Radio Symphony Orchestra/Khaikin

Haydn, Joseph Horn Concerto No.3 in D major

1969 Hermann Baumann Concerto Amsterdam

Haydn, Joseph Trumpet Concerto in Eb

1959 Roger Voisin Unicorn Concert Orchestra/Dickson

1961/3 Adolf Scherbaum Hamburg Radio Orchestra/Stepp

Haydn, Michael Concertino for Horn in D major

1984 Dale Clevenger, Franz Liszt Chamber Orchestra

Haydn, Michael Concerto for Trumpet in D major

1972 Maurice André, Orchestre de Chambre Jean-François Paillard

Holst The Perfect Fool ballet music

1975 London Symphony Orchestra/Previn

Holst The Planets

1926 London Symphony Orchestra/Coates

1977 Berlin Philharmonic Orchestra/Karajan

Humperdinck Overture Hansel and Gretel

1926 London Symphony Orchestra/Coates

1960 Vienna State Opera Orchestra/?

Ireland Epic March

1942 London Philharmonic Orchestra/Wood

Koechlin Sonata Op.70 for Horn and Piano

n.d. George Barboteu

Liszt Tasso

1978 Moscow Radio Symphony Orchestra/Rozhdestvensky

Loeillet Concerto for Trumpet in D major

n.d. Maurice André, Les Solistes de Liège/Géry Lemaire

Mahler Symphony No.1

1987 Berlin Philharmonic Orchestra/Haitink

Mahler Symphony No.2

1961/2 Philharmonia Orchestra/Klemperer

1975 Vienna Philharmonic Orchestra/Mehta

1988 London Symphony Orchestra/Kaplan

Mahler Symphony No.5

1947 New York Philharmonic Orchestra/Walter

1981 Chicago Symphony Orchestra/Abbado

Mahler Symphony No.6

1970 Chicago Symphony Orchestra/Solti

Mahler Symphony No.8

1950 New York Philharmonic Orchestra/Stokowski

Mahler Symphony No.9

1938 Vienna Philharmonic Orchestra/Walter

Mahler Symphony No.10

1980 Philadelphia Orchestra/Levine

Mendelssohn 'Nocturne' from *A Midsummer Night's Dream*

1960 Vienna State Opera Orchestra/Desarzens

Mendelssohn Overture *A Midsummer Night's Dream*

early 1930s Berlin Philharmonic Orchestra/Furtwängler

Mozart Divertimento in D K334

1939 Aubrey Brain, Dennis Brain and the Lener Quartet

Mozart Horn Concerto No.1 K412

1953 Dennis Brain Philharmonia/Karajan

Mozart Horn Concerto No.2 K417

1946 Dennis Brain Philharmonia/Susskind

1953 Dennis Brain Philharmonia/Karajan

1967 Hermann Baumann Concerto Amsterdam

Mozart Horn Concerto No.3 K447

1940 Aubrey Brain BBC Symphony Orchestra/Boult

1953 Dennis Brain Philharmonia/Karajan

Mozart Horn Concerto No.4 K495

1953 Dennis Brain Philharmonia/Karajan

1973 Pierre del Vescovo Orchestre de Chambre Jean-François Paillard/ Jean-François Paillard

Mussorgsky/Ravel *Pictures at an Exhibition*

1930 Boston Symphony Orchestra/Koussevitzky

Nielsen Symphony No.2

1966 Chicago Symphony Orchestra/Gould

Offenbach 'Barcarolle' from *Tales of Hoffmann*

1930 Jesse Stampe and Jack Mackintosh, military band

Prokofiev *Romeo and Juliet* complete ballet music

1982 Bolshoi Theatre Orchestra/Zuraitis

Prokofiev Symphony No.6

1958 Leningrad Philharmonic Orchestra/Mravinsky

Prokofiev Symphony No.7

1977 London Symphony Orchestra/Previn

Rakhmaninov Symphony No.1

1966 USSR Symphony Orchestra/Svetlanov

Rakhmaninov Symphony No.2

1928 Cleveland Orchestra/Sokolov

1964 Bolshoi Symphony Orchestra/Svetlanov

Ravel *Bolero*

1930 Orchestre de l'Association des Concerts Lamoreux/Ravel

Ravel *Daphnis et Chloé*

1959 London Symphony Orchestra/Monteux

Ravel *La Valse*

1931 Orchestre de l'Association des Concerts Lamoreux/Wolff

Ravel *Pavane pour une Infante défunte*

1929 Orchestre de l'Association des Concerts Colonne/Pierné

1959 Chicago Symphony Orchestra/Reiner

1972 Philadelphia Orchestra/Ormandy

Respighi *Church Windows, Roman Festivals*

1994 Cincinnati Symphony Orchestra/Lopez-Cobos

Respighi *Fountains of Rome*

1939 New York Philharmonic Orchestra/Barbirolli

Rimsky-Korsakov *Capriccio Espagnol*

1992 Bolshoi Symphony Orchestra/Lazarev

Rimsky-Korsakov *Overture May Night*

1992 Bolshoi Symphony Orchestra/Lazarev

Rimsky-Korsakov *Overture Russian Easter Festival*

1985 USSR Symphony Orchestra/Svetlanov

1992 Bolshoi Symphony Orchestra/Lazarev

Rimsky-Korsakov *Overture The Tsar's Bride*

1992 Bolshoi Symphony Orchestra/Lazarev

Rimsky-Korsakov *Scheherazade*

1958 London Symphony Orchestra/Monteux

1960 Chicago Symphony Orchestra/Reiner

n.d. USSR Radio Symphony Orchestra/Rakhlin

1992 Chicago Symphony Orchestra/Barenboim

Rimsky-Korsakov *The Golden Cockerel*

1992 Bolshoi Symphony Orchestra/Lazarev

Rimsky-Korsakov *Tsar Saltan*

1992 Chicago Symphony Orchestra/Barenboim

Rosetti *Horn Concerto in D minor*

1969 Hermann Baumann Concerto Amsterdam

Rossini *Overture The Silken Ladder*

1933 London Philharmonic Orchestra/Beecham

Rossini *Overture William Tell*

1953 NBC Symphony Orchestra/Toscanini

Roussel *Bacchus et Ariadne*

1960 Orchestre de l'Association des Concerts Lamoureux/
Markevitch

Schmidt *Symphony No.4*

1972 Vienna Philharmonic Orchestra/Mehta

Schumann *Adagio and Allegro Op.70 for horn and piano*

n.d. George Barboteu

Schumann *Konzertstück for Four Horns and Orchestra Op.86*

n.d. Peter Damm, Herman Märker, Werner Pilz and Georg Böhner
Leipzig Gewandhaus Orchestra/Konwitschny

Schumann *Symphony No.4*

1987 Vienna Philharmonic Orchestra/Karajan

Shebalin *Concertino for Horn and Orchestra in C minor Op.14 No.2*

n.d. Boris Afanasiev, All-Union Radio Symphony Orchestra

Shostakovich *Concerto for Piano, Trumpet and Strings*

1989 Dmitri Alexeev, Philip Jones(tpt), E.C.O., Maksymiuk

Shostakovich *Symphony No.5*

1966 Leningrad Philharmonic Orchestra/Mravinsky

Shostakovich *Symphony No.7*

1974 Czech Philharmonic Orchestra/Neumann

Sibelius *Symphony No.1*

1978 Philadelphia Orchestra/Ormandy

Sibelius *Symphony No.2*

1953 London Symphony Orchestra/Collins

Sibelius *Symphony No.5*

1953 London Symphony Orchestra/Collins

1975 Philadelphia Orchestra/Ormandy

1980 Czech Philharmonic Orchestra/Delogu

Sibelius *Symphony No.7*

1955 London Symphony Orchestra/Collins

Sibelius *The Tempest*

1963 Prague Symphony Orchestra/Smetacek

Strauss *Also Sprach Zarathustra*

1959 Vienna Philharmonic Orchestra/Karajan

1973 Philadelphia Orchestra/Ormandy

Strauss *Don Juan*

1926 London Symphony Orchestra/Coates

1944 Vienna Philharmonic Orchestra/Strauss

1970 Dresden Staatskapelle/Kempe

1980 Vienna Philharmonic Orchestra/Previn

Strauss *Ein Heldenleben*

1973 Philadelphia Orchestra/Ormandy

Strauss *Four Last Songs*

1953 Elisabeth Schwarzkopf, Philharmonia Orchestra/Ackermann

1984 Jessye Norman, Leipzig Gewandhaus/Masur

Strauss *Till Eulenspiegel*

1973 Philadelphia Orchestra/Ormandy

1975 Chicago Symphony Orchestra/Solti

1980 Vienna Philharmonic Orchestra/Previn

Strauss *Tod und Verklärung*

1928 London Symphony Orchestra/Coates

Stravinsky *Petrushka*

1946 Leningrad Philharmonic/Mravinsky

1958 Berlin Philharmonic Orchestra/Stokowski

1968? Paris Conservatoire Orchestra/Monteux

Stravinsky *The Firebird*

1928 London Symphony Orchestra/Nikisch

1928 Berlin Philharmonic Orchestra/Fried

1958 Berlin Philharmonic Orchestra/Stokowski

1968? Paris Conservatoire Orchestra/Monteux

Tchaikovsky *Fantasy Overture Romeo and Juliet*

1979 USSR Radio Symphony Orchestra/Ovchinnikov

Tchaikovsky *Hamlet*

1958 New York Philharmonic Orchestra/Stokowski

Tchaikovsky *Symphony No. 4*

1960 Leningrad Philharmonic Orchestra/Mravinsky

1967 USSR Symphony Orchestra/Svetlanov

1971 London Symphony Orchestra/Szell

1984 USSR Radio Symphony Orchestra/Fedoyesev

1994 Russian National Orchestra/Pletnev

Tchaikovsky *Symphony No. 5*

1956 Paris Conservatoire Orchestra/Solti

1960 Leningrad Philharmonic Orchestra/Mravinsky

1975 Philadelphia Orchestra/Ormandy

Telemann *Sonata for Trumpet in D major*

1972 Maurice André, Orchestre de Chambre J.-F. Paillard

Telemann *Concerto for Trumpet in Eb major*

n.d. Maurice André, Les Solistes de Liège/Géry Lemaire

Verdi *'Misere' from Il Trovatore*

1930 Jesse Stampe and Jack Mackintosh, military band

Verdi *Requiem*

1962 Moscow Philharmonic Symphony Orchestra/Markevitch

Wagner Extracts from *The Ring*

1926 London Symphony Orchestra/Coates

Wagner Final scene from *Das Rheingold*

1958 Vienna Philharmonic/Solti

Wagner *Liebestod* from *Tristan and Isolde*

1913 Columbia Symphony Orchestra/Weingartner

Wagner Prelude to Act III of *Lohengrin*

1917 Boston Symphony Orchestra/Muck

Wagner 'Ride of the Valkyries' from *Die Walküre*

n.d. (issued 1940) Queen's Hall Orchestra/Wood

1952 NBC Symphony Orchestra/Toscanini

Wagner 'Siegfried's Horn Call' extract from *Siegfried*

1947 Dennis Brain

Wagner *Siegfried Idyll*

1951 Philharmonia Orchestra/Cantelli

1969 Czech Philharmonic Orchestra/Kosler

Wagner arr. Wood *Song of the Rhinedaughters*

mid to late 1920s London Symphony Orchestra/Wood

Wagner Transformation scene from *Parsifal* Act I

1951 Bayreuth Festival Orchestra/Knappertsbusch

Walton Symphony No.1

1935 London Symphony Orchestra/Harty

1951 Philharmonia Orchestra/Walton

1966 London Symphony Orchestra/Previn

Walton Symphony No.2

1961 Cleveland Orchestra/Szell

Weber *Der Freischütz* (complete opera)

1973 Dresden Staatskapelle/Kleiber

Weber Overture *Oberon*

1914 London Symphony Orchestra/Nikisch

1926 London Symphony Orchestra/Coates

1972 Berlin Philharmonic Orchestra/Karajan

Weber Overture *Der Freischütz*

1972 Berlin Philharmonic Orchestra/Karajan

1989 Dresden Staatskapelle/Davis

Weill arr. David Purser *Kleine Dreigoschenmusik*

1985 Philip Jones Brass Ensemble/Eric Crees