## The Changing Sound of Music

## Jeremy Montagu

I joined the Musicians' Union in 1950. I was still a student, then, but I was already being paid to stiffen amateur orchestras whose players were even less competent than I was. Since that date, the sound of every instrument in the orchestra has changed. I won't say 'beyond recognition' but in many cases very considerably and certainly recognisably to anyone who does not have cloth ears.

Let us look at each instrument in the order in which they appear in the score, starting at the top with the flutes.

All the top flautists of the 1950s played on wooden flutes, but Geoffrey Gilbert was already one of the coming flautists and he was already very influential as a teacher of the next generation. He played a silver flute, then a gold one, and then he even tried one made of platinum. It was that much heavier and not enough better than gold, so he had it melted down again. He insisted that all his students also went to metal (tin flutes we called them) and, playing in the French style on French flutes, they sounded very different from the wooden English ones. The sound was louder, certainly, and it seemed to us harder even though more brilliant. Today you will never hear a wooden flute in an orchestra other than a period one.

The acousticians will tell you that the material of which an instrument is made cannot affect the sound – I have never met a player who agreed with that. For one thing, there is a limit to the amount of energy that one can put in to create a sound, and the greater the mass of the body of the instrument, the less of that energy is wasted in vibrating that body and the more of that energy can then come out in sound. That is why gold is better than silver and silver better than plated brass, and why a gold head joint on a silver body is a good compromise. And for another thing, the acoustician tries to limit the variables by sounding the instrument mechanically, whereas instruments are played by human beings and we are all variables.

Oboes seem to have changed less in sound than most other instruments, though I've never heard anyone quite like Lee Goossens since his time.

There was greater variation with the clarinet. There were then two Jacks, one of them Thurston and the other Brymer (I am, in this article, mainly writing about the London and provincial British orchestras, those in which I played). Frederick Thurston, usually called Jack, made a narrower, clearer sound, typified more recently by his student and widow, Thea King. Jack Brymer, a decade later, had a wider, warmer sound, as did Gervase de Peyer, and it is that sound that we hear today.

The changes in bassoon sound were even more radical. Going back a bit, it was in the mid-1930s that the New York Phil came to London, with their bassoonists all playing on German bassoons whereas all English players (except Archie Camden in Manchester) were on French style instruments, made by Savary in Paris, or on English copies. There were still in the 1950s a few French bassoonists around: Joe Castaldini, Eddie Wilson who played beside Gwydion Brooke's German bassoon in the Royal Phil, and others. While Eddie and Gwyd blended well together, the two instruments were quite different, the French drier and more varied in tone quality across the range, the German much more even from top to bottom but somehow less bassoony. Today everyone plays on Heckels, Adlers, or other German makes.

Again going back to the mid-1930s, Beecham asked Alan Hyde to bring back four Alexander horns from Mainz, and between then and the 1950s a number of players had switched from the narrow-bore, piston-valve French horns to the wide-bore, rotary-valve German horns, but there were still French-style players around, especially Aubrey Brain and his students. Aubrey's recording of the Brahms Trio with Busch and Serkin is still a classic. Dennis Brain stayed on the French instrument till his father Aubrey died and then switched to the German, a Paxman rather than an Alexander. His first set of the Mozart concertos was on the French Raoux, as was the Beethoven Sonata with Denis Mathews; the second set, with Karajan, was on the German, and the sounds are quite different.

Narrow-bore French trumpets were also the norm in 1950, with players like George Eskdale whose silvery sound can still be heard in an old recording of the Haydn Concerto, but wider bore American trumpets then came into vogue. Oddly we in Britain seem never to have taken to the German model, where they distinguish between the cylinder-bore rotary-valve Orchestertrompete and the tapering lead-pipe and piston-valve Jazztrompete, of which the American version is what we use today.

The sound is even more different with trombones, where again we then used the narrow-bore French instruments, later known as pea-shooters. It was not really till the 1960s that the much wider-bored American trombones came in. The old pea-shooters had a snap that you can never hear today, but the American-bore instruments can far outweigh them in volume. However, we have lost a different sound, that of the bass trombone, for most trombones today can cover both tenor and bass ranges, due to a valve-controlled loop of tubing in the back bow. We used to have alto, tenor, and bass trombones; the alto died out, though it is making a come-back; the bass was killed by the tenor-bass, though a newer version of a real bass is now reappearing.

The E flat bass tuba was sometimes the biggest one saw in the early 1950s, but larger orchestras were already using CC and BB flats. However these last far outweighed the French C tuba, leading to a misconception of the tone quality required for the 'Promenade' in Ravel's orchestration of Pictures at an Exhibition – promenading on a CC tuba sounds more like an elephant walking than someone going round an art gallery.

There have been major changes in the percussion squad. Timpani usually now have plastic heads that cannot compare in sound quality with the older calf-skin heads – they bang without tone quality, and the resonances of some of the shells of the modern pedal timpani cannot compete with the old Hawkes-Cummings model, nor with the best Dresden shells. Cymbal sound has totally changed since the best firm, Zildjian, moved from Istanbul to Boston; the metal is not the same, nor is the sound. There was a majesty in a clash with 20-inch Istanbul K Zildians that is absent today (though they damn near killed me in Tschaikowsky 4 with the BBC Symphony once!). Triangle makers seem to have lost the skill of making triangles without an inherent pitch, which means carrying several to avoid a pitch clash with the orchestra. Gongs have increased in size, as have bass drums, both

an improvement, xylophones improved enormously with American imports in the 1960s but are in peril today, since the best bars are now prohibited – rosewood is now on the CITES banned list like ivory. We will have to wait and see what makers will come up with.

String sound has radically changed. In 1950 everyone used a wire E string (a few players such as Kreisler adhered to a gut E), gut A and D and wire-covered gut G, and proportionally down through violas, cellos, and basses. Then Thomastik steel strings came in – they held tuning better, they lasted longer, and they sounded terrible. Things have improved in quality since then, but by no means as much as to match the older sound quality; it is still far harsher than it was. And bows, like xylophones, are today in peril: pernambuco wood is not yet prohibited but it is on the danger list.

And finally, though as soloists rather than normal members of the orchestra, the piano. String tension has increased so much that strings are becoming like bars in their acoustical behaviour, with the result that their overtones are inharmonic, producing a jangle of overtones, and the upper strings sound like xylophones or glockenspiels, hurting the ears.

Of course all this has happened before, and not just once. Renaissance instruments gave way to the Baroque; Baroque gave way to the Classical. I've always wondered how J C Bach reacted. He was brought up in the Baroque sound world and he lived, and taught (Mozart among others) and played, in the Classical with every instrument changing around him. And then, a century earlier than my time, in the 1850s, the Boehm flutes, the Triébert oboes, the Savary bassoons, the valved brass, timpani beaters with soft heads, and so on.

If only other people had written an article like this one in each of those periods!

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