

## Historical instruments and their rôle

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Perhaps we should begin by defining our terms: what do we mean by historical? There is a firm distinction between historic and historical, nothing to get hysterical about, but real all the same. Historic instruments are indeed real, they are the heritage which has been left to us by past generations, it is they whose sound the composers and players heard and on which, or on others like them, they themselves must have played. The -al of historical, on the other hand, indicates an attempt at a simulacrum, an imitation, a reproduction, if such a thing were possible, or at least a reconstruction. It is a little more truthful than the term 'authentic', which so often appears on our concert programmes and record labels, and attempts to imply something that can seldom be achieved.

So what are historical instruments trying to achieve? and what would be their rôle if they were to achieve it?

There is, of course, a range of answers. It might be only cosmetic, something to look pretty – we have all seen films in which actors clutch something which attempts to look like an instrument of the period concerned, even if it would not actually work, and of course we all know that what we see on the screen is not what we hear off the soundtrack. Film studios and recording studios are two quite different places. These are, in a sense, 'historical', if only as an attempt at appearance.

Another, much more practical, approach is to build something that would do the same thing as an historic instrument did, but with all the conveniences of modern musical instrument technology. It was this approach that led to the plucking pianos. We would not call these historical today, but we could be wrong, for those magnificent machines that Pleyel produced, and which were played by Wanda Landowska, do fully deserve the term of historic, for they inspired a number of important twentieth-century compositions which cannot be played on any of the more acceptably 'historical' instruments we use today. In terms of the Poulenc, de Falla, and Honegger concertos and other works of that period, these instruments are indeed historic!

A third approach is to produce an instrument as nearly as possible identical with one that we would call historic.

Why should we do this? and why should we use such instruments? Here again reasons are diverse. For some again it is cosmetic. Bach used a harpsichord, so should we, and that's as near as it gets, and it doesn't much matter what sort of harpsichord, English, French, German, Flemish, Italian, they're all the same aren't they? For others it's because it's fashionable – for others it's because you can get a better grant if it's historical. And for yet others, and I have to say that this is very much my own position, it's to get a sound that the composer or the original performer might have recognised.

We see music as dots on paper, but what do those dots represent? They are as near as a composer can get to persuading us to reproduce something that he has imagined, a sound that he has heard in his inner ear. I do not believe that Beethoven could have imagined the sound of a modern piano – if he had, he would have written his bass lines differently. They sound clear enough on the pianos of his day and if he had been writing for a modern piano, he would never have allowed the confused jumble that we hear on the modern instrument. Equally, Chopin would have put in pedalling marks if he had ever dreamed that the notes of his singing, legato lines were going to be snapped off short by modern dampers. Both were writing for the sonorities of their own time because that's what they could hear in their aural imaginations. I'm not saying that Bach would not have liked the Albert Hall organ, nor Beethoven the Steinway, but they'd have written

music that suited those sonorities, so different from their own.

If the rôle of a historical instrument is to reproduce the sound which the composer heard, then one has to work within quite strict conditions and parameters, both as a maker and as a player. It was to encourage greater regard for and knowledge of those conditions and parameters that Ephraim Segerman, Djilda Abbot and I started FoMRHI, the Fellowship of Makers and Researchers of Historical Instruments, and it was this, and what we were aiming at, that I was asked to come and talk about today. Our name was marginally different when we began – we were Makers and Restorers until some of the conservators objected. For them, Restorers was a dirty word, synonymous with Destroyers – restorers try to put back instruments into some earlier state, which can only be done by stripping away later accretions, and often removing and replacing original parts which are no longer functional, and so destroying evidence of later use and sometimes original evidence as well, whereas conservators try to stop time and its effect and to preserve the instrument for ever, exactly as it stood in October 2002. A number of our members do restore, and one does quite often hear historic instruments playing with historical ones, and a number of our members do conserve, and some will do either, whichever the customer requires, for both approaches are valid and each has its own rôle. Unless some instruments are conserved, neither we nor future generations will have the evidence on which to base our historical instruments. And unless some are restored, we shan't have any idea of what the historic instruments sounded like and therefore we will not know what our historical instruments should sound like.

Which is it better to use, historic or historical? It's an interesting question. Nobody in the eighteenth century was playing on instruments two or three hundred years old, so why do we do so today? It is arguable that a brand-new, exact copy will sound more like the original did than the original does today. But can one make an exact copy? I'm not convinced that it's possible. You all know as well as I do that you can't take the measurements off a Strad, get some wood, carve it out and fit it up to those measurements, and expect it to sound like the Strad. You could, of course, if both were made of plastic, but not when they're made of wood from two different trees. Certainly you've got to have the measurements as a starting point, but then you've got to know how to adapt them to your material, and if you can do that as well as Strad did, then maybe you've got a decent fiddle.

What we tried to do in FoMRHI was to help to make this possible. We used to publish lists of plans, measured drawings, from all the museums we could get them from, and my own museum, the Bate Collection in Oxford where I was curator until I retired, published more plans than any other museum in the country, though I think that Edinburgh has beaten us now. We published Communications, or Comms, as we call them, from our members on all aspects of early instrument making to help other members. Sources of materials was always a subject, as was the technology of making, and because Eph ran NRI, Northern Renaissance Instruments, strings were always a major topic. Other subjects ranged widely, from how to cut down a tree to how to play various types of music and what pitch to play them at.

Our over-riding aim was "the promotion of authenticity in making and playing historical instruments" although we were not as hidebound as that might suggest. Some of it was horses for courses – we would not have been impressed by a professional using a plastic recorder in the Queen Elizabeth Hall, but we encouraged the manufacture and use of fibreglass or other synthetic backs for lutes and rebecs for schools and other beginners. We do still need such instruments, for few parents, and fewer schools, can afford fully handmade instruments, and a child's interests will wane over a two-year waiting list. What seems to me, and seemed to us, important is to use historical materials and dimensions where it counts, for example with strings, properly designed

soundboards, roses, and actions, historical dimensions on recorder windways or flute embouchures, rather than those grossly oversized holes and windways ‘that make it so much easier to play’ (and hoot revoltingly) and to use modern materials and technology in places which are not part of the soundchain, or only marginally so. Don’t be surprised that I included roses – we are only beginning to understand their importance in controlling the airbody pitch of the instrument. All such bodies are helmholtz resonators and, like any other helmholtz resonator, their pitch is controlled both by their volume and by the area of their open hole. This applies to the dimensions of fiddle f-holes and c-holes, too.

Sorry, I’ve been wandering a bit, and getting back to copies – to start with, how do you know whether you’ve got an exact copy? Because the Bate Collection is one mainly of wind instruments (though we’re pretty strong on early keyboards now, too), that’s where my own experience has mainly been. My own reconstructions were of early percussion instruments, but those had to be based on iconography, pictures, carvings, and so on, because no originals survive. Nobody else seemed to have bothered to look at what the angels were playing, and the general attitude for early music ensembles before we got going with *Musica Reservata* at the end of the 1950s was that any old drum would do. My own belief was that the right sort of percussion was just as important as the right sort of recorder, lute, or fiddle, and that what one played should be as close as possible to what little evidence we have, chiefly that of Thoinot Arbeau in his *Orchésographie* of 1588, rather than the pseudo-oriental rhythms that one so often hears. This was why I wrote a book on *Making Early Percussion Instruments* and Jimmy Blades and I wrote one on their history and use.

At the Bate, as I said, we provided a good many plans and measured drawings. However, these can seldom be used as blueprints for making a copy. For one thing, wood moves over time and most historic woodwind bores are now oval – makers need to know how different woods move to come up with a satisfactory cylindrical bore. For another, our modern so-called ‘historical pitch’ is pretty bogus. Historic pitches varied widely from place to place and time to time, and also within any place and time. Historic instruments were made for historic pitches, and it is only if one is very lucky that these correspond to anything used today. Stanesby junior did often build at 415, but his dad was more inclined to 409, and Bressan was rather lower, but not as low as those other French makers who remained in France. So useful ‘copies’ of Bressan (and we do have in the Bate the best of all the surviving Bressan treble recorders, as well as one of only two known Stanesby junior flûtes d’amour) have to be ‘adapted’ to bring them to a useful pitch.

People would sometimes bring the copies that they had made to compare them with the original, which was something that I used to encourage because we would all learn from it. Never did any of them sound exactly like the original. This brings me back to something I said much earlier. Nobody in 1700 played on instruments made in 1400. So which sounded more like Bressan, the Bressan or the new one? When a copy was really close to the original, we would mix the joints, Bressan head on modern body, and vice versa. Sometimes Bressan head on modern body did sound almost like Bressan, and then we could look closer and see that there were slight dimensional differences, perhaps slighter than would appear on a measured drawing. The same thing happened with the Galpin oboe of around 1680, the oldest in this country; the original top joint on the modern copy sounded quite different from the modern instrument – the maker wasn’t wholly pleased, but when he came back later, he’d got a lot nearer.

Ultimately this is the problem: how accurate does a copy have to be before it truly becomes a copy, and how does one achieve the accuracy that I believe is necessary? I believe that it could only be achieved where collections (not only museums – there are plenty of private collections) can provide both plans and access. A plan alone is no more reliable than a railway timetable. You

need to know what the instrument sounds like, before you start to make a copy, so that you have some idea in your ear of what you're aiming at, and then you need access again afterwards to see how close you got and what you can do to improve it. Unfortunately fewer and fewer museums are allowing such access, and the voices calling for more, such as mine and FoMRHI's, don't much get listened to.

There are other questions that arise in the practicality of making copies, especially that of technology. We know without any doubt that on brass instruments, and with the brass bells of woodwind instruments such as the oboe da caccia, hammered brass, as on the originals, sounds quite different from spun brass, and hammered and raised tubing from seamless tubing. Is there any analogy for woodwind? We do not know whether a reciprocating lathe, where one cuts and then the wood spins back, cuts and spins back, produces results any different from those of the motorised lathe which spins in the same direction all the time. Cutting on the lathe produces heat, of course, and spinning back cools and allows the heat to dissipate, whereas continuous cutting makes the heat build up. The bandsaw has the same effect. Does this affect the cellular structure of the wood? Nobody knows. The general feeling is that it can't make any difference, but sometimes I wonder.

Working speed is another question. Certainly this has an effect, wholly injurious, on the economics of instrument making. Have you ever seen a North African or Middle Eastern 'ud maker? have you ever read about the practices of seventeenth and eighteenth century harpsichord makers or looked inside their instruments? One would not like to use the term slapdash, but certainly instruments are and were slung together. None of those makers would have dreamed of taking the time that modern makers take, nor are or were their instruments finished to such perfection. When I raise this matter, I'm always told that modern customers would not accept such work. I find it odd that people will happily play the less perfect instruments of the past, often in preference to the finely finished instruments of today, but would not accept an instrument built to the same standard as the older one!

I keep wandering away from my title. What is the rôle of the historical instrument? Mainly to play historic music, of course. How historical should it be? Now, there's a good question. If you're playing Bach, presumably you should use a good North German instrument, unless you think you're Frederick the Great, in which case you'd choose something French. If we're playing a Haydn symphony, should we use Austrian instruments of the 1790s, or should we say 'but he was so popular in London' and therefore use a set of English instruments? This is an important question, because they sounded quite different. It doesn't stop at Haydn, either. Every instrument used in Paris in 1913 at the first performance of *The Rite of Spring* sounded very different from anything used in any orchestra today, including those now in Paris. So did anything Elgar conducted. There is one English orchestra today trying to sound like Elgar – I don't know any sounding like Stravinsky, and I'm pretty doubtful about Haydn, too. Every period orchestra today is something of a mish-mash, instruments of different dates and places playing together, and often some historic and some historical. Maybe they always were. Look at the personnel lists, some of which do survive, and certainly in this country they were a fair old mix; some German names, some French, some English, a few Italian, and presumably all the foreigners had brought their own instruments with them. This may be more typical of this country than others; this is probably why British collections of instruments have a much wider geographical range than most continental collections. You see as many French as English instruments here, whereas you don't see the converse in France, and of course collections are the detritus of what was used.

I said just now that the rôle of the historical instrument was mainly to play historic music, but what did I mean by mainly? More and more composers are writing for historical instruments,

including those harpsichord concertos I spoke of at the beginning. Now they had the right idea – they took historical instruments and expected them to be able to do things that no historic composer ever thought of. Nor were they alone – I remember a Brandenburg 5 broadcast where Enesco was cross at the presence of a harpsichord. It wouldn't be able to provide the crescendo he wanted through the long solo. George Malcolm proved him wrong; by careful use of the pedals he provided a smooth crescendo from beginning to end, and Enesco was converted to the 'historical' instrument. So why stop there? There are makers today producing recorders with flute-style keywork for modern music. Are these historical? Or do we need a new term? Of course, not many early instruments can be modified in such ways. If you put such keys on a flute or an oboe, then you are doing what makers did in older times, and you have a nineteenth-century flute instead of an eighteenth-century one, classical instead of baroque. Similarly if you put valves on a handhorn or trumpet. But you can dig holes in your trumpet and produce something wholly bogus – it may be easier to play than a natural trumpet but it's no more useful for a modern composer and it doesn't sound remotely like a real trumpet.

Which brings us on to the grounds of ethics. What distinguishes an historical instrument from an unhistorical one? How much does one tell the customer? What distinguishes a copy from a fake? Let's take these in order. The first, what distinguishes an historical instrument from an unhistorical one, is fairly easy. Certainly when it involves playing techniques that didn't exist in the ostensible period, for which fingerholes in trumpets is as obvious an example as valves would be. Materials is another obvious one, whether it's plastic recorders, the fibreglass backs I mentioned earlier, delrin quills, steel or nylon strings, or plastic drumheads. These all have their rôle to play, and they may turn up in quasi-historical instruments (and of course in pseudo-historical), but they're not historical. What do you tell the customers? Well, if they can't tell a plastic recorder from a wooden one, that's their worry. But can they be expected to tell spun brass bells from hammered? More difficult. So perhaps are iron from steel strings when both are new and shiny; even seeing brass at one end of the compass might not be a guarantee of iron at the other. I think that probably one does need to tell the customer such things.

What distinguishes a copy from a fake? It's not just intent on the part of the maker, though that's the most obvious criterion. It's not even appearance – the most reputable modern makers might not want their historical instruments to look too new and shiny, and certainly with woodwind one often tries to reproduce original stains. A clear legal point is the name on the instrument. I was very shocked at an exhibition of early keyboards a few years ago to see a piano with the name Walter on it, and others similarly marked. There was no intent to deceive; the maker was proud of his copy of a Walter, but give it fifty years and there would be a fake on the market. Anyway, Brian Harvey, with his book on *Violin Fraud*, which is essential reading for all makers of historical instruments, puts all the legal implications of such practices very clearly (in that case, a criminal record for certain). Even violins labelled 'Antonius Stradivarius fecit, Made in Czechoslovakia' are legally fraudulent. Even something as obvious as that can fool the uneducated – as someone once said, when this was gently pointed out, 'but perhaps he made it while he was on holiday there'. As for the woodwind maker who registered the name Stanesby Junior as his own, well we all laughed at him. Again he had no fraudulent intent but was trying to make his own instruments more respectable, something quite unnecessary in his case.

There are plenty of fakes around, of course, instruments which were made to deceive. Many within the historic period, deliberately made to deceive the customer, were genuine instruments but carried names which would sell better than those of the makers. There are fewer fakers of that sort today. There were many more in the great collecting period of the late nineteenth and early twentieth centuries, a number of which turn up in the auction rooms today, a depressing number

catalogued as though they were originals. I can think of two or three theorbos, a 'Bizey' racket, and several keyboards in recent years. Museum curators have always been suckers for a good fake, and indeed often perpetrated them or commissioned them when they needed to fill a gap in the collection – Mahillon of Brussels is an obvious example, and Canon Galpin, both for his own collection, much now in the museum of Fine Arts in Boston, and for Mrs Crosby-Brown, whose collection became that of the Metropolitan Museum in New York.

A maker's mark is an essential tool. The one essential for avoidance of fakes, now and more important in a generation or two when the newness will have worn off the surface, is the clear marking of the maker's name. Otherwise, the better the copy, the more accurate the reconstruction, the more likely that the future rôle of the historical instrument will be its 'recognition' as a historic one.

And if it has a maker's name? Then the rôle will be that for which we worked in FoMRHI, the performance of historic music in historical contexts (for these can never be historic until a time machine lets us visit Esterházy or the Hanover Square Rooms) so that we can as nearly as possible recreate the sounds that the composers of previous ages heard in their own day. When was that day? Any time from around 1300 (for lack of any significant surviving instrumental music any earlier) to around 1952, for every instrument in our orchestra has changed since that date, when I was the first person to play under a conductor in the Royal Festival Hall. Each of the London Music School orchestras played for an acoustic text while the hall was still being built. Ours, the Guildhall, was the first. What began concerts in those days? The National Anthem. What starts the King, as it was then? The side drum, and that was me. Not one of the instruments that played in that acoustic test would be acceptable in a professional orchestra today. All are historic instruments today, and to recreate their sound and the music they played, people will need, as many are, to build historical ones. The rôle for historical instruments will always be there, and because today will be historic by tomorrow, it will never vanish.