

Building an Elizabethan Viol

In search of the sound Byrd might have heard

Tim Soar and Siriol Jones, Summer 2010



This article is an account of the research and building of a somewhat experimental tenor viol which my partner asked me to build for her for playing English consort music.

There is a certain amount of evidence to suggest that English Elizabethan viols were modernized during the first 50 years or so of their lives so that they came to resemble the later English viols typified by the work of Richard Meares and Barak Norman. However as there is little agreement on exactly what the original condition of these early English viols might have been, we decided that building a viol incorporating some of our theories might add usefully to the knowledge of this important period of viol building.

In an effort simply to “return to the source”, we visited the (at that time still open) musical instrument gallery at the Victoria and Albert Museum in London. There we were allowed to examine the beautiful – and unusually complete – bass viol by John Rose¹. However, while this was informative, the viol is certainly not unaltered, and trying to spot a 350 year old modification on a 400 year old instrument with any degree of certainty, particularly without taking it apart, is virtually impossible.

Simply because of the preferences of the player, the appearance of the viol that we made is quite distinctive. The ribs, back, neck and head are made from cherry wood; the front is of course spruce, while the fingerboard, tailpiece, pegs, nut, hookbar, purfling, and even the bridge are plum wood. The varnish is clear and colourless, so the blonde colour of the spruce and the bold grain patterns of the cherry are very striking.



The whimsical pelican (complete with amber eyes) who stands on the pegbox is based on the much larger stone carving by Alexander Carrick from William Burges’ “animal wall” which surrounds Cardiff Castle.

In spite of its superficially unusual appearance, acoustically we wanted to try to make a “hypothetically original” Elizabethan viol. For example the use of fruitwood is not unlikely, the ubiquity of figured maple seems to have been a later fashion; the Henry Jaye 1624 bass² in the Musée de la Musique in Paris, for example, has plum wood ribs and back.

Following what are now conventional procedures for the construction of English viols, we built our body very lightly with no corner blocks or linings and with a seven piece bentfront. The outline shape of the body is that of the very well known Rose tenor in the

Ashmolean Museum in Oxford³. The Ashmolean viol was slightly too large for our purposes, so the body was scaled to 95% of its original size. Combined with a newly designed neck, which I judged to be in good proportion, this gave a string length of 575mm.



One of the main 17th century “improvements” which we chose to omit was the soundpost. Italian Renaissance viols of course have no soundpost and it is unclear when the viol soundpost was first “borrowed” from the violin family. Famously, the first reference to the soundpost in English is in *Romeo and Juliet* (written in the 1590s, and even this may predate its use in the viol). Perhaps more significantly there is at least one surviving Elizabethan viol with its original bentfront (the festoon-shaped bass in the Ashmolean⁴) where the absence of a soundpost in the original design seems very likely. The bentfront of this instrument is significant, because, although much has been written about the greater strength of the arch of a bentfront, compared to a carved front, as far as we can tell, our viol is the

first in recent times to exploit this strength by using a thin bentfront with no soundpost. Some readers will have come across Hume’s suggestion of having double strings (like a lute) for the lowest strings of a bass viol – presumably to make them louder; I wonder if this is a further suggestion that viols of that period in England did not have soundposts, as a soundpost certainly focuses the bass response of a viol.

The construction, arching and thickening of our front was based on a tenor viol by Richard Blunt⁵, an instrument broadly similar to the Rose tenor, but which retains its original front. The C holes of the Blunt however are so carelessly made, and those of the late 19th century replacement (carved) front now on the Rose being – to our eyes at least – “all wrong”, we based our C holes on those of the V&A Rose bass.

While some early viols (for example those of Ciciliano⁶) do not have bassbars at all, others do, or have a rudimentary version of that component. At any rate, the bassbar predates the soundpost in viols. We considered omitting the bassbar, but eventually opted for a fairly slim bar fitted to the underside of the joint between the soundboard staves which runs under the bass foot of the bridge.

Surviving Elizabethan viols invariably have their original necks missing or modified, so we needed to settle on a justifiable design for our neck.

A requirement for viols without soundposts is to moderate the pressure downwards onto the arch of the soundboard made by the strings as they pass over the bridge. The most successful way of doing this is to slope the neck not backwards – as we are used to with later Baroque viols – but forwards, as is seen in some Italian Renaissance viols (such as the Linarol tenor viol⁷ in the Kunsthistorisches Museum in Vienna). This geometry raises the nut well above the level of the front and significantly reduces the angle made by the

strings as they pass over the bridge. However, English viols appear always to have had backward sloping necks, though the angle became steeper during the 17th century.

After much consideration we copied the fairly shallow backward leaning angle of the neck/body joint of the (unaltered) 1619 Jaye bass⁸ in the Kessler collection. On our viol this positioned the nut just ABOVE the plane of the top of the ribs resulting in a lowish bridge. Another feature of the 1619 Jaye which we copied was to make the hookbar a little taller than would at first seem necessary. All these details of the string geometry combine to reduce the angle in the strings as they pass over the bridge to about half of that on my Bertrand bass, significantly reducing the stress on the relatively unsupported arch of the soundboard.

We fitted Aquila strings, the lowest two being of the loaded gut type. Stringing a new viol and drawing the bow across the strings for the first time is always exciting, but with an experimental viol such as this the anticipation is doubled. We were not disappointed, right from the start the instrument has been extremely resonant, with no wolfs. The overall weight is 1160g incidentally. The sound, not surprisingly, is similar to that of some other viols without soundposts – reedy, sweet and transparent. We have played it in consort in a church, and found that the sound is also penetrating and carries well. The surprise has been the power of the bass response of the instrument – the open bottom G has as focused a sound as the G string of many a soundposted bass viol.

In consort (inevitably in company with soundposted viols for the moment) the viol blends well, but speaks its part clearly. In fact I rather like its reedy sound playing the “alto” part in a consort; it seems to me to pick out that line in the same way that a countertenor voice can in vocal music.

Amateur tenor players are notorious for not fine tuning their lowest strings, on the grounds that they “never use them anyway” but we have found that the overall resonance of our viol is more than usually improved when all the strings are well in tune. In planning this viol, the unknown quality of the bass response was an acceptable risk (because of the scarcity of the use of the tenor’s lowest strings consort music), but the unexpected clarity of its bass notes has led me to consider building a large consort bass (my instinct is that these viols need to be large by modern standards – the 575mm string length for the tenor is equivalent to a whopping 767mm for a bass) based on the V&A Rose bass.

I suspect we shall never know for sure, but perhaps the unique sound of this viol offers us a glimpse of the sound that Byrd and his contemporaries were familiar with and for which their music was written.

- 1 Bass viol by John Rose, circa 1600, Victoria and Albert Museum, London. Museum number 803-1877.
- 2 Bass viol by Henry Jaye, 1624, Musée de la Musique in Paris, Numéro d'inventaire E.73, Jaye project number 13
- 3 Tenor viol by John Rose, 1598(?), Ashmolean Museum, Oxford. Boyden catalogue number 5.
- 4 Bass viol by John Rose (?), circa 1600, Ashmolean Museum, Oxford. Boyden catalogue number 4.
- 5 Tenor viol by Richard Blunt, circa 1600, Ashmolean Museum, Oxford. Boyden catalogue number 6.
- 6 For example, bass viol by Ciciliano, Kunsthistorisches Museum, Vienna, inventory number SAM_72
- 7 Tenor viol by Linarol, circa 1540, Kunsthistorisches Museum, Vienna, inventory number SAM_66
- 8 Bass viol by Henry Jaye, 1619, Kessler Collection, Royal College of Music Museum, London, Jaye project number 21