The Rubio harpsichord in Churchill College

These notes were prepared in 1997 by David Chung, with an addendum from Douglas Hollick in 2005, and should be read carefully by anyone using or caring for the harpsichord.

Brief history and description:

The Churchill College Harpsichord Committee met in February 1982 to discuss the purchase of a double-manual harpsichord with a fund of £5000. This committee was chaired by Alan Findlay, and had the following members: Hugh Wood, Richard Hey, Edward Craig, Daniel Leech-Wilkinson, Martin Reed, Graham Waterhouse, Anna Jenkins, Chris Marwood and Penny Driver. Enquiries were made to makers recommended by various members of the committee as well as other experts (including Philip Ledger and Sir David Willcocks). These enquiries prompted various positive responses from some of the country's leading makers, including Robert Goble of Oxford, Mark Stevenson and David Rubio of Cambridge. The committee then proceeded to inspect examples of the instruments these makers offered to the College. David Rubio's copy of Blanchet's double-manual harpsichord was found to be most suitable for the College, for three main reasons:

1. Harpsichords are very temperamental, and there is every advantage to buy from a world-renowned local maker whose expert knowledge about the proper maintenance of the instrument could be readily consulted if needed;

2. David Rubio's harpsichord serves well as both a solo and accompanying instrument, and its five-octave range basically covers the entire repertoire written for the instrument; and

3. David Rubio generously donated £1500 off the cost of the instrument to enable the College to buy such an excellent harpsichord for so reasonable a price.

An order was placed for the above-mentioned instrument on 10 March 1982. In January 1983, the Rubio harpsichord was delivered to the College. On 8 May Ivor Bolton gave a brilliant recital in the Wolfson Hall to celebrate the instrument's inauguration (see Churchill Review 1983).

The Rubio harpsichord has the following features: two manuals, coupler, compass of FF- f3, registration: 2 x 8' + 1 x 4', buff to lower 8', single transposition, wooden jacks, delrin plectra, elegantly painted in black (outer case) and red (inner case), all resting on a solid and easily demountable stand.

The Rubio harpsichord was a copy of Blanchet 1733 'Chateau de Thoiry'. Nicholas Blanchet was generally recognized as the finest Parisian harpsichord maker of his time, and his surviving instruments are highly illustrative of the eighteenth-century Franco-Flemish school. During the seventeenth century many Flemish (both single- and double-manual) harpsichords were imported into France, in particular those by the renowned Ruckers family. The Ruckers instruments were so successful that they were frequently copied or even forged by French makers in order to increase the value of their instruments. The seventeenth-century prototype usually has a compass of four and a half octaves, with a short-octave bass (GG/BB-d3). During the eighteenth century, the majority of French makers were devoted to the renovation (ravalement) of these imported instruments, as well as to the building of new instruments in their
image. In refurbishing an old instrument, the range of the keyboard was often extended by adding more notes in both the treble and bass "registers. Sometimes, a single-manual instrument was converted into a double-manual one.

The Rubio harpsichord is typical of an instrument *a grand ravalement*, since it has two manuals and a full chromatic range of five octaves. There are three sets of strings: the upper manual has a fixed set of 8', the lower manual has one each of the 8' and 4' in which either can be engaged and disengaged by means of hand stops. The two 8' strings produce different timbres as a result of the differences in their plucking points; the upper 8' has a characteristically 'reedy' quality. In addition, the two manuals can be coupled or uncoupled by pushing or pulling the upper keyboard. In short, a player has at his/her disposal a myriad of tone colours by tastefully combining different strings through both handstops, and the coupler. The buff (or sometimes called the lute) stop is usually reserved as a special effect. The transposing device is a modern (i.e. twentieth-century) invention as a practical means to allow a harpsichord to be played in both the standard pitch (a=440 hz) and the so-called baroque pitch (a=415 hz). It is operated by (1) engaging all the stops (check that all three strings are being plucked when a key is depressed), (2) removing the block of wood at one end of the keyboard, and (3) sliding the keyboard quickly (but not heavily) by placing the thumb underneath the lower keyboard, and then (4) replacing the block of wood to the other end of the keyboard. As the keyboard is being slid, one has to make sure that the jacks have not been 'trapped' in the process, especially those at either end of the keyboard.

With older instruments, it may be necessary to temporarily remove some of the jacks before sliding the keyboard. After the keyboard has been slid, each key has to be depressed to verify that all the jacks are still firing smoothly. Note that the top note (f3) is lacking when the instrument is at the modern pitch, giving a compass of FF-e3.

**Restoration**

A split on the base-board of the harpsichord was discovered in early October of the Michaelmas term 1993 when the instrument was being moved back from the Chapel to the Recital Room. The harpsichord was moved to the Chapel in May/June for the end of term concert during May Week of the previous academic year. In the months that followed, there were a series of construction and renovation works at the Pavilion and the Music Block; as a result, the harpsichord had stayed in the Chapel. During this period (i.e. between June and October) the Chapel became extremely hot and dry. It has been proved that, unfortunately, the conditions had been more severe than the harpsichord could withstand, and the split developed accordingly.

After a close examination by Douglas Hollick, a harpsichord builder recommended by David Rubio, the split was diagnosed as a typical case of over-dryness over a prolonged period of time (more than two months). Fortunately, there were no splits in the soundboard and there were no structural damages discovered, the baseboard being a 'decorative' part of the instrument. Subsequent repair works were carried out on 3 March 1994 by Mr. Hollick after a detailed conversation with Mr. Rubio. Firstly, the keyboards and actions were removed. Secondly, small pieces of wood were glued along the split on the outside of the harpsichord perpendicularly in a way to prevent the split from further developing. Finally, the actions and keyboards were realigned and readjusted.

On 27 January 1997 Mr. Hollick replaced a few broken strings during one of his regular visits. The strings broke apparently because someone was trying to raise the
pitch of the harpsichord by one semi tone, not knowing that the instrument can be shifted between the standard pitch and the baroque pitch by means of the built-in transposing device. The tuning was interrupted halfway through the keyboard, and it appears that the person responsible for this action realized that damage has been done to the instrument, since strings were starting to break. As a result, half of the instrument was found to be one semi tone too high, and the other half at the lower (normal) baroque pitch. This incident was reported by Mr. Hollick in writing to the College. After a series of discussions, the Music Committee made the recommendation that a locking device should be fitted to the instrument. In this way, access to the harpsichord could be closely monitored.

Tips on the care of the instrument

Since 1994 Mr. Hollick has been coming to College to maintain the harpsichord on a regular basis (usually at the beginning of each term). The harpsichord is, however, very sensitive to fluctuations in temperature and humidity and, ideally, needs attention on a daily basis. I have attempted, in the following paragraphs, to give some tips about the caring of the instrument. It must be stressed that my advice covers only three basic areas:

1. location of the harpsichord;
2. moving the harpsichord; and
3. tuning and regulation.

I have not tried to go into specific details about voicing, replacing broken strings, etc. On the one hand, an experienced harpsichord player should be capable of carrying out all basic operations without reading my advice. On the other hand, an inexperienced player should never attempt to tune the instrument, nor tamper with the actions. Things can go wrong, even with the greatest care, such as when a quill, or more infrequently a string, breaks. When such things happen, the person who discovers the problem should notify the Music Sizar who would then decide the appropriate actions. I can usually take care of the commonest symptoms caused by tear and wear. (David Chung who wrote this has now left the College. ALRF) Other problems which cannot be easily rectified should be brought to the attention of Douglas Hollick. David Rubio (the maker) can usually be consulted for special advice. (David Rubio has died. ALRF)

(1) Location of the harpsichord and the environmental requirements

The harpsichord should be free from direct sunlight; it must always be covered when it is not in use. It must never be placed directly against a heater. It should not stand in a position that would easily interfere with other users of the Recital Room. The present location of the instrument seems to satisfy all these criteria.

A reliable hygrometer should be installed. Any substantial changes in humidity can then be noticed. The humidity should preferably be maintained between 50%-65%, and should not be anything below 40% or above 75%. The conditions in the Recital Room are normally apt for the harpsichord. The dampers may fail to work when the weather is too dry (this usually happens in winter when the heaters are on for the longest period of time). But they should return to function normally when the humidity creeps back to the ‘normal’ level. (Douglas Hollick has advised as follows: With regard to a suitable temperature range, anything which is OK for humans! - best not extremely hot, but it is extremes of humidity not temperature which causes problems, although of course the two things are related to some extent.)
No unauthorised persons should be allowed to move the harpsichord, even within the Recital Room. The legs of the harpsichord must be lifted when being moved within the room.

For temporary removal from the Recital Room, say to the Chapel, the harpsichord must be moved by qualified movers. In this case, the legs of the harpsichord must be unscrewed; the stand must be moved separately. The harpsichord should be brought back to the Recital Room as soon as possible.

No untrained individual should be allowed to tune the harpsichord or experiment with the actions. Never must the actions, especially jacks, be swapped (this has happened more than once before). Any indiscreet actions on the part of an individual may, directly or indirectly, cause damages that could be irreversible. If there is a faulty mechanism, such as a broken quill, the problem should be reported to the Music Sizar. If the problem is due to a sudden change (i.e. drop or rise) of temperature/humidity, it will probably go away itself when conditions are back to normal. As such, one should avoid adjusting the keyboard actions at all since the problem is a temporary one. For instance, if the humidity is very low (30%) for a prolonged period (more than one week), a humidifier would be the best cure for many symptoms (inefficient damping, tuning instability, sticky jacks, etc.).

The above may serve as a general guideline for the looking after of the harpsichord, which is a delicate instrument. The things to be done to keep it in order are, however, need not to be substantial and involve generally a care that is very affordable. The result will be a very beautiful instrument (from one of the best makers) in which the College may deservedly take pride for many years to come.

March 1997

David Chung

Advice from Douglas Hollick on moving the harpsichord (November, 2005)

With regard to moving the harpsichord, four people will be ample to do any lifting and carrying as long as it is not for too long or too awkward! It is quite acceptable to use some sort of trolley to move the instrument for short distances, but obviously if the weather is wet, then it cannot go out unprotected in the rain. A van of some sort into which the harpsichord can simply be slid flat would be best. Did the cover ever get the repairs to the straps etc? - I think it will still be fine as long as it is well fastened around the harpsichord so that it cannot slip when being carried.

It can be turned on its spine edge - the long straight side - without any problem, or carried flat. After being moved, it will almost certainly need tuning on the day of the concert, as the conditions are unlikely to be exactly the same as in the Recital Room. Best to move it at least a day early so that it has time to settle. Not sure who to suggest for tuning - Jonathan Hellyer-Jones of Cambridge Baroque Camerata has sometimes done tuning for Richard Marlow at Trinity.