

Peterhouse Chapel Organ

Proposal

Section 1: General Information

Peterhouse is the oldest college of the University of Cambridge, founded by the Bishop of Ely in 1284. The college is home to around 250 undergraduates and 125 graduates, and has around 50 fellows. Although students are drawn from a range of backgrounds and have a diversity of religious belief, the college remains a Christian foundation and the chapel continues to play an important role in college life.

The chapel occupies a prominent position at the entrance to the college, dominating the first court and old court. It was built in 1628 during the Mastership of Matthew Wren; previously the college had shared Little St Mary's church with the local parish. An organ was installed as early as 1635, but the present Snetzler instrument dates from 1765. Further historical and technical information about this instrument is given in the Statement of Historical Significance.

Today, the chapel hosts services on Sundays and weekdays during full term:

- On Sunday morning, there is a service of Holy Communion with hymns and organ voluntary. This attracts approximately 20 people, almost all students.
- On Sunday evening, and on Wednesdays during Michaelmas and Lent, there is a service of Choral Evensong. The organ is used to accompany a choir of 18-20 singers during the psalm, canticles and anthem, together with three hymns. The congregation averages 55-65, and is made up of students, fellows and visitors.
- The other services (including BCP morning and evening prayer on weekdays) are said.
- The largest services of the year (Remembrance Day, Commemoration of Benefactors, Advent Carols, Christmas Carols and some weddings) have a larger congregation of up to 125.

The chapel is also used for singing lessons, organ practice, choir rehearsals and occasional concerts. It is used on major college occasions, such as the admission of a Master and the admission of scholars. It is open daily between morning and evening prayer as a space for quiet reflection, and is popular with tourists and other visitors to the college.

Section 2: Our Needs

The organ plays a vital role in the liturgical life of the chapel and the musical life of the college more widely. The organ is used in public performance to accompany congregational singing and choral music, and as a solo instrument (performing voluntaries) on at least three occasions each week during term time. It is also used daily by organ scholars for practice.

Historical Significance

We need to preserve and ensure the survival of the historically-significant features of the organ we have inherited, preserving them as a legacy for the future with a scheme that will complement and enhance the existing historic pipework and case.

- *The case:* we need to preserve the listed original case designed by John Snetzler, which has dominated the West end of the chapel since the installation of the organ in 1765. Successive rebuilds of the organ, with their inflated specifications (particularly the large pedal department installed in 1963), have steadily expanded the depth of the case westwards into the window recess, not only destroying the musical proportions of Snetzler's original scheme, but also blocking light entering the chapel and antechapel through the West window.
- *Pipework:* The Peterhouse organ retains 10 of Snetzler's original ranks of pipes (in whole or in part), and represents one of the largest collections of Snetzler pipework extant in an organ of this scale. We are extremely privileged to possess this historic material and need to be able to use this legacy in a historically-

sensitive way, incorporating this pipework into the new scheme and making it the foundation of the tonal scheme of the new instrument.

Liturgical needs

We need a versatile instrument that will serve the liturgical needs of a modern Cambridge college chapel, as well as one that will help to introduce a new generation of organists, choral singers, and congregations to the choral tradition of Anglican worship.

The instrument should be able to:

- accompany a wide range of choral repertoire, from the 16th Century to the present day
- support the congregation in the singing of hymns, including occasions when the chapel is at its fullest
- support the liturgical needs of worship, including accompaniment and improvisation
- offer organ scholars the opportunity to perform a wide range of solo repertoire as voluntaries.

Educational needs

We need an instrument that will serve as a training instrument for our organ scholars. The organ is used for daily practice by our organ scholars, in the preparation of music for services and for their wider development as organists and recitalists. We need an instrument that will enhance and aid their learning experience; on which they can play a wide variety of repertoire, and learn and hone skills of liturgical playing and accompanying. Bearing in mind the historic core of the instrument, we would also like our students to learn about and understand more about the history of the instrument and the music written for this type of instrument. In its current state the organ does not attract organ scholars: we need an instrument that will draw more applicants to Peterhouse to apply to the college for the organ scholarship.

Reliability and mechanical improvements

We need an instrument upon which we can rely. The present organ suffers from persistent mechanical issues (for more details, see below, section 4). In addition, certain decisions taken during the course of previous rebuilds damage the coherence of the organ and deleteriously affect the player's interaction with the instrument.

- *Action*: in 1963, Mander introduced a mixture of actions on the Choir, Swell and Great, which makes the experience of playing disconcerting; the action when coupled is also cumbersome. It is also subject to regular mechanical failures (see below, section 4). We need to improve the touch and make it consistent across the instrument. We need a mechanical action that is reliable, that will help the organ scholars as they learn, that will be a joy to play and will encourage good technique.
- *Wind supply*: we need to replace the blower, which is loud and distracts from both music-making and worship, and at times fails to turn on. Wind pressure is also problematic: the pressure is currently too high for the 1765 pipes, but the pipework introduced from 1894 onwards will not function on the lower wind pressure suitable for the pipes from 1765. We need to replace these later pipes with new pipework that complements Snetzler's scheme, allowing us to use wind pressure appropriate to this historic material across the instrument.
- *Tuning*: we need an instrument that can be tuned and maintained with more ease (for tuning difficulties, see section 4), and that will retain its pitch more consistently when tuning has taken place. For the demands of accompanying the choral repertoire that is the mainstay of the choir, in an ideal world, we need an instrument at modern concert pitch (A440), though final decisions on pitching and temperament will be taken in light of research.
- *Environment*: we need to ensure that the new organ will be installed in an appropriate and carefully monitored environment (humidity and temperature) to ensure the instrument's longevity.
- *Layout*: we need an instrument that can be accessed more easily for maintenance, and an internal design that allows the pipework to speak freely.

In short, we need an instrument that builds on the historic legacy of Snetzler's pipework and case, that responds to the needs of contemporary liturgical music-making; a versatile and carefully-proportioned instrument that will be a joy not only to hear but also to play and learn upon. We need an instrument that understands and respects Snetzler's legacy, and will serve the needs of the college chapel and community for the future.

3. Our Proposals

We propose to construct a new instrument within the existing Snetzler case, conceiving the new specification around the extant eighteenth-century pipework. The provision of a reliable, fine instrument will improve the beauty of our services and will serve as an aid to worship. Our main proposals are as follows:

Historical investigation

At every stage of the process, we propose to document the rebuilding of the organ. In the Summer of 2018, following DAC approval, we undertook a survey of the historic pipework in the current Peterhouse organ. The findings from this examination will help us to make decisions about the final specification of the new instrument, in order to ensure that the new scheme complements and enhances Snetzler's pipework in the best possible manner. At the end of the process, we will publish the results of our historical investigations, making this information available to those interested in the history and development of organ design and construction.

Historic significance and contemporary needs

Because the organ needs to be a versatile instrument, able to meet the demands of a wide-range of musical literatures and of contemporary liturgical accompaniment, we cannot simply propose a historic reconstruction (as far as possible) of Snetzler's instrument. However, we do want to do justice to the historic material that has come down to us. After extensive enquiries considering a wide-range of alternative schemes (for more information, see below, section 5), in order to balance these twin requirements we propose a unique and innovative two-console solution:

- East Console: At the front of the organ, in the original position of Snetzler's console, we propose a console close to the style and spirit of Snetzler's original. This will have three manuals (Great, Choir and short compass Echo) with pull-down pedals. The action throughout will be mechanical. The winding will be supplied by wedge bellows.
- North Console: On the North side, we propose a second console. This will have two manuals (Great and Swell) and pedals. The key action will be mechanical, with electric stop action, electronic setter and combination system. The wind will be supplied by a modern system using a weighted reservoir.

In making this proposal the College recognises that the pitch and temperament will be identical from both consoles, and available ranks will be nearly identical from both consoles (barring a couple of stops). The crucial element of this proposal is that this material will be presented in two distinctive ways with separate winding, different compass and selection of ranks available on the manuals (including a pedal division on the North console), so as to make not just the playing experience but also, we anticipate, the listening experience palpably different. The two consoles will provide organists with two distinct playing experiences, providing an instrument well-suited to the demands of the liturgical repertoire, while also offering an experience unique among the churches and chapels of Cambridge of playing a substantial instrument built in the spirit of Snetzler and his contemporaries.

This scheme will not only make for a flexible and versatile instrument, it will also provide organ scholars with an unparalleled educational experience. Students will be able to learn about the performance of early music on a historically-informed console, as well as being able to practise more modern music on an instrument with contemporary playing aids and a slightly expanded specification, well-suited to the needs of later repertoire.

Action

The current action is unreliable and steadily deteriorating (see below, section 4), and we propose to replace it with an entirely new mechanism. This mechanism will be built to the highest modern standards, and will be more accessible for regular maintenance than that of the current instrument.

Case

We propose to clean and restore the existing case. The case will be brought more in line with the original proportions of Snetzler's original design, and its depth reduced; this will have the added benefit of allowing more light into the chapel and antechapel. The case (and lower case in particular) will be carefully examined, for evidence of Snetzler's original design and placement, and this information will help formulate our final decisions as to the positioning of the case and its restoration. The wooden doors that originally hung from Snetzler's console were rediscovered during the examination of the Organ that took place in Summer 2018, and will be re-hung in their original position. We propose to replace the internal structure of the present organ with a simple structure and layout supporting the new soundboards. The layout we propose follows closely the original layout of Snetzler's scheme.

Pipework and specification

The historically-significant pipework we have inherited from Snetzler's organ lies at the heart of our proposal, and we intend to build the specification of the new organ around this core. All the pipework was examined during the summer of 2018, and this information will inform and shape our final decisions. Half-compass stops will be augmented (for the Swell of the North Console) and all new pipework will be made to match and complement the existing Snetzler material. Pedal pipes will be included for use at the North console, where a slightly wider range of stops will also be available on the manuals, making the instrument better-suited to the performance of its liturgical and educational roles and to the needs of music from the nineteenth-century onwards. In our discussions with Klais and Flentrop, the emphasis has been on exploring the soundworld of Snetzler's instrument: developing our specification around what we know of Snetzler's original. We will clearly only be able to make one decision about pitch and temperament for the entire instrument: our final decisions on these fronts will be guided by what we can discover about the original instrument in our historic investigations.

Wind supply

The current blower will be removed and a new electric blower will be installed; we also propose that the organ be equipped with a traditional wedge-bellows system. The wedge bellows will allow the organ to produce a distinctively breathy sound, essential for the performance of pre-romantic music; when the electric blower is in use, the sound will be more stable, better-suited to the performance of later repertoire.

Environment

Environmental factors affecting the action and tuning have been addressed in the first phase of works to the chapel (in the summer of 2018). We propose to monitor regularly the environmental conditions of the chapel to prevent damage to the woodwork and other materials used in the construction of the instrument.

4. Meeting our needs

Historical significance and contemporary needs

Over the course of successive rebuilds, the organ has grown in size and scale, a process that has destroyed the proportions of Snetzler's original scheme with few advantages for the modern player. Mander's 1963 scheme, though relatively conservative and enlightened for its day, develops Snetzler's specification in directions that diverge from modern practice. Consequently, Snetzler's work is not shown to its best advantage, and the current, rather eclectic tonal scheme of the organ corresponds to no particular historic repertoire.

The original Snetzler case is a fine example of an eighteenth-century case, beautifully proportioned for the architecture surrounding it, and is a historic and visual asset to the chapel. The later extensions to the case are not of the same value and damage the original proportions.

Without the dual console arrangement we propose, a much greater degree of compromise would be required. On the one hand, historic concerns could force us to turn the instrument into a historical curiosity, ill-suited to the demands of contemporary liturgy and the wider choral repertoire used by the choir. On the other hand, proposing only an approach that prioritises more contemporary concerns—the routine use of the instrument within the context

of the Anglican choral tradition, and the need for an instrument suited to the widest possible range of musical repertoire—we risk diluting and diminishing the distinctive and significant legacy we have inherited from Snetzler.

Education

The current instrument—unwieldy to play, unreliable and (despite the wonderful material at its core) presently lacking in distinction—does not attract undergraduate organ scholars. The new instrument, with its double console, will not only be a joy to play and listen to, but will provide students with an unparalleled educational opportunity. On the one hand, they will be able to learn and perform on an instrument that can come close to the soundworld and the experience of playing a historic eighteenth-century instrument. On the other hand, the North console will ensure that the instrument suits the needs of more modern organ literature, and provide undergraduate organ scholars with an instrument on which to learn a wider repertoire and the foundational skills of liturgical and choral accompaniment. It will be an exciting, stimulating and challenging instrument on which to train, giving students in Peterhouse (and more widely across the University) an entirely unique musical opportunity. Our double console solution also has the potential to offer uniquely inspiring challenges to our organists: it will be fascinating to explore how far the Snetzler console can accommodate later repertoire and contemporary liturgical needs.

Reliability

At present, the current organ is in poor working condition and is subject to a number of mechanical faults:

- *Action*: The mixture of actions is problematic, particularly on the Choir, which is very bouncy compared to the Great and Swell, and causes issues in coordinating the speech of pipes. When coupled, the Great and Swell are also heavy and cumbersome. Most importantly, however, mechanical failures are very common: couplers regularly malfunction, causing persistent sticking notes and tuning difficulties (when, for example, Swell couplers do not engage the key action firmly enough). These mechanical issues are increasingly affecting the regular use of the organ, and routine attention by the organ tuners is no longer adequate to maintain the organ in appropriate working order.
- *Wind supply*: the blower is unusually loud and distracts from worship and music-making. The instrument is also regularly subject to ‘runnings’ and cyphers, particularly in cold weather, and there is some unsteadiness in the wind pressure. At times the blower has failed to turn on. Wind pressure is currently problematic, and currently prevents us from hearing Snetzler’s pipework to its best advantage.
- *Tuning*: due in part to environmental factors and to the increased specification (introduced in successive rebuilds) which causes access issues, the organ is difficult to tune and does not maintain its tuning for very long.
- *Environment*: the environmental conditions of the chapel have aggravated mechanical issues in the organ.
- *Layout*: despite extensions to the case introduced by Hill and Mander, pipework is cramped within the space and some of it inaccessible. The sound does not radiate as it should from the instrument, and access for maintenance and tuning is difficult.

5. Justification

We are very conscious of the great historical value of the extant Snetzler material we have inherited, and the proposals we are putting forward are designed to avoid harm to this historically significant material. To arrive at this proposal, the college has made extensive enquiries, inviting proposals from seven internationally respected organ builders (based in the UK, Europe and the USA); this included proposals from both Flentrop and Klais working independently. The college has considered a wide range of proposals, including the extreme possibility of building two organs: removing the eighteenth-century pipework from the chapel in order to produce a historical reconstruction of Snetzler’s instrument on the gallery in the Hall of Peterhouse, and commissioning an entirely new instrument in the chapel. This scheme was rejected on the grounds that the Snetzler reconstruction in the Hall would not be played enough to justify the scheme, and so the great legacy we have inherited would not be used to its best advantage.

In assessing the proposals from the organ builders, the college working party (advised by two organ consultants) were concerned in particular to balance the tension between the desire to do justice to the historical pipes and the need to have an organ equipped for the performance of its duties both pedagogically and within the liturgical traditions of the chapel. Both Flentrop and Klais have been very receptive to the college's comments and suggestions, and in their collaboration have been enthusiastic and imaginative in their response to the particular challenges of this project. The double console scheme proposed in their collaboration is intended not only to preserve Snetzler's work, but also to enhance it: to make it sound once again as Snetzler intended it, and to incorporate it within the context of an instrument that is well-suited to the demands of the contemporary organist. We are confident that with the experience and skills brought to this project by both companies, that they will be able to build an instrument to the highest levels of craftsmanship, with an action that—despite the inherent complexity of the scheme—is reliable and durable.

It is worth restating that the core sound of the organ, although produced by the same pipework, will have a subtle yet distinctive difference when played from the two consoles, one that is all-important in our context. The playing experience at each console will be similarly diverse. The college is conscious of the special legacy that has been preserved for us in Snetzler's pipework, and nowhere in Cambridge is there the opportunity to play an instrument of this style. We are excited by the opportunity to be able to give students (and the wider community of organists) the opportunity to practise and perform on an instrument of this type, and *at the same time* to provide an instrument suited to the needs of the modern organ and choral repertoire.

This proposed organ represents, we believe, an exciting opportunity to engage richly with the historic legacy we have inherited here at Peterhouse while also producing an instrument that will enhance the beauty of our worship. It will be an instrument that will respect the past and prepare us well for the future, helping us to introduce students at Peterhouse to the choral tradition of Anglican worship. It will offer successive generations of undergraduate organ scholars an exciting and challenging instrument upon which to learn—an instrument that offers, with its double console, unparalleled opportunities to learn about the history and development of the organ, its repertoire, and playing styles. Above all, organ scholars and members of the congregation will benefit from an instrument of great beauty that will be both a delight to play and a pleasure to hear.

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