The Chapel of Trinity College
Oxford

A guide to the restored chapel
AFTER a year’s closure, Trinity’s Grade I listed chapel was opened again in April 2016 and, after a great deal of painstaking work, is once again resplendent in its refurbished glory.

The present chapel was built in the 1690s under the guidance, design and funding of the then president of Trinity, Ralph Bathurst. It was built over three years, at that time a short period for such a project. Letters reveal that Bathurst had assistance from Sir Christopher Wren, who was consulted on the design at an intermediate stage, but in time to influence the external appearance and to give the parapets their wonderful, flaming urns.

The finest craftsmen of their day were employed to produce what diarist Celia Fiennes, a pioneering and enthusiastic seventeenth-century traveller, described as ‘a fine neate chapple new made finely painted...now it is a Beautifull Magnificcent Structure’. After one of the most comprehensive schemes of conservation and repair the chapel has undergone, it is once again looking at its very best.

RENOVATION OF THE CHAPEL

‘...now it is a Beautifull Magnificent Structure’
FOREWORD

I am delighted to welcome you to the restored chapel of Trinity College, whether you are visiting in person, or using this guide to see from afar what has been achieved in returning the chapel’s glorious interior to something closer to its original splendour.

It was one of my predecessors as president, Ralph Bathurst, who had the vision to replace Trinity’s former medieval chapel with a magnificent new structure in the latest style. His building has been Trinity’s most striking architectural feature and a focus of college life for over three hundred years.

Now, after a year of painstakingly-detailed work, the chapel interior is once again looking at its exquisite best. The carved woodwork, by the renowned Grinling Gibbons, was repaired, cleaned and, in places, lightened; the ornate plasterwork repainted in more sympathetic colours, and the windows thoroughly and carefully cleaned for the first time in decades. The pews are now more firmly fixed to strengthened flooring, the lighting and heating have been dramatically improved, and the organ has been dismantled and rebuilt.

None of this work would have been possible without the skill and attention to detail of many craftsmen and women, from several prestigious conservation bodies and from Trinity’s own workshop—their input has been a remarkable labour of love. The work was led by the chapel surveyor Martin Hall, who has written the account that follows, and buildings manager Steve Griffiths, with the support and guidance of the members of the college’s Chapel Committee.

President Bathurst’s chapel would not have taken the splendid form that it did were it not for his generosity—he personally paid for the construction of the building—and that of the many Old Members of the college who responded to his appeal to fund the creation of the magnificent interior. Now we are grateful not only to them but also to those who have responded to the appeal to help fund this significant restoration work, which has given Trinity a chapel which will once again delight members of college and visitors alike, and will help preserve this magnificent building for future generations.

Sir Ivor Roberts, KCMG
President
Trinity College
BACKGROUND TO THE PROJECT

Trinity College was founded by Sir Thomas Pope in 1555, using the buildings of the former Durham College, and the medieval chapel, consecrated in 1410, was central to the life of the new college. By the late seventeenth century it was in a poor state of repair, its condition exacerbated by lack of maintenance during the Civil War.

Ralph Bathurst became President in 1664 and devoted himself to the restoration of Trinity’s fortunes. He cherished the dream of a new chapel for three decades. With great generosity, he paid for the entire shell himself, while college records show that he wrote many letters to solicit funds to pay for the magnificent interior.

The result was the current chapel. Completed in 1694, it was built largely on the footprint of the original chapel. Radar analysis, carried out before the refurbishment work began, showed no significant signs of voids underneath the chapel, although the remains of three arched, subterranean structures were located just to the north, which could be signs of the original chapel’s crypt. When the choir stalls were removed to install their new foundations, Stonesfield roof slates, glass shards and other small objects which could only have come from an earlier building were found under the timber floor. These are now on display in the college archives.

General redecoration of the chapel appears to have taken place approximately every fifty years, with other significant developments having included the replacement of the original clear glass windows with stained glass in the nineteenth century, major repairs to the roof and ceiling in the 1930s, and the installation of the first of the chapel’s three organs.

Plans for this extensive project were conceived in 2010 after an overdue quinquennial survey; owing to the importance of the chapel many experts were asked to give their opinions on the main internal features, including the carvings and woodwork, plasterwork, ceiling painting and stained glass windows—all confirmed the need for urgent repairs and conservation.

To undertake much of the work, a complete ‘bird cage’ scaffold had to be erected inside the chapel. This provided a full-width upper floor level some 1.8 meters below the ceiling, from which the plaster conservation and redecoration could be undertaken. Intermediate levels gave access to the reredos, screen, walls and windows. Remarkably, the scaffolders completed this task without causing any damage.
THE PRINCIPAL FEATURES OF THE CHAPEL

On entering the chapel, the most striking feature is the magnificent screen which divides the antechapel from the main part of the chapel. It features fluted Corinthian columns and an arched pediment, topped with carvings of the Evangelists, and has two wonderful fretwork panels either side, with infant angels (or putti) at their centres.

Passing through the screen gives a clear view of the impressive reredos, with its central starburst panel and limewood carvings by Grinling Gibbons, regarded as amongst his best work.

The sumptuous ceiling is decorated with exquisitely carved and moulded plasterwork, believed to be heavily influenced by Gibbons and hand modelled by the best plasterers of the time, possibly by Bradbury and Pettifer, or perhaps Edward Goudge, proclaimed as ‘the beste master in England in his profession’. At its centre is a painting, ‘Christ in Glory’, by Pierre Berchet, about eight metres long and set between two smaller painted panels.

The series of seven stained glass windows, designed in the 1880s by J W Brown, replaced the original clear glass. On the north side of the antechapel, above the entrance doors, is the reinstated Isaac Williams window, which dates from 1873 but which had been stored in an attic since the Second World War.

All of these features have been part of twelve months of diligent and expert work, which the following pages describe in more detail.
THE EAST WALL AND THE REREDOS

The report on the important timber carvings, panelling and decorative works revealed that much of the oak panelling was in good order, but that the Grinling Gibbons carvings which form the pièce de résistance around the starburst panel above the altar were in need of careful conservation. There was concern also that the reredos panelling was set against a damp wall—the east wall was not refaced when, in the 1960s, the stonework of the other outer walls was replaced to make good deterioration caused by coal-fire pollution.

An environmental monitoring survey was carried out by Dr Brian Ridout of Ridout Associates (specialists in the assessment of timber decay and damp) to evaluate the level of damp and relative humidity. The evidence showed that the east wall was damp, and especially so at its base. Fortunately for the important woodwork, elsewhere in the chapel conditions were found to be relatively benign.

It was decided to repair and conserve the existing stonework. After knocking back flaking stonework, a lime mortar was used to fill in any voids, and a lime-mortar shelter coat was applied over the surface. At the same time, the ground level was lowered at the foot of the wall and a French drain created, to enable the damp base of the wall to dry out.

Removing one of the small panels in the lower part of the reredos yielded an interesting discovery: the main parquetry panels were set on a pine backing panel, made up of vertically-laid tongue-and-groove boards, with a layer of pitch coating the rear surface (which abuts the outer wall). This was an early precaution to protect the screen, made by the original carpenters and joiners, and it has been successful in keeping the woodwork in generally good condition.

Detail of the unrestored limewood carvings on the reredos
THE WOODWORK

A major part of the project involved conserving and restoring the important Grinling Gibbons carvings. Early on, the decision was taken to carry out detailed research to try to establish the original appearance of different woodwork features. The careful repair and conservation work undertaken by Alan Lamb, a leading restorer of wood carvings and sculpture, has established beyond all doubt that these carvings are by Grinling Gibbons and are some of his best work.

The limewood carvings

The richly-coloured central panel of the reredos is surrounded by contrasting, pale limewood carvings. On removing these, they were found to be fixed crudely with clout-cut, handmade nails struck directly into the backing boards. After some effort and extreme care, the carvings were removed by Alan Lamb and his team to their workshop, Swan Farm Studios in Northamptonshire, where their condition could be assessed.

Many areas had been so greatly eaten away by common furniture beetle that their structure was composed more of air than substance. These elements were consolidated using conservators’ resin. Using mid-nineteenth- and early twentieth-century photographs, Alan Lamb was able to see which elements had been lost over time and a number of these were replaced—the decision on what to replace was generally guided by the ‘six foot’ rule (or perhaps the two metre rule these days): if it can’t easily be seen from six feet away, don’t replace it.

After careful test cleaning and analysis of the layers of varnish and paint, the original finished layer was found. It was discovered that, for at least fifty years after its completion, the carved limewood had been left undecorated. Having become very dirty and dusty, it had then been given a ‘reviving’ coat of oil-based lead paint directly over the original surface finish (without even attempting to clean it—a layer of dirt was clearly seen under the first application of paint). This was an attempt to replicate the original appearance and colour of the limewood and since then it had been repainted several times.

Alan Lamb’s team cleaned off as much of this subsequent repainting as was possible without damaging the underlying wood, and recreated the most significant missing elements, leaving carvings that are now close to their original appearance.

The antechapel screen

The Evangelists, which rest on the pediment of the antechapel screen along with their symbols—a winged bull, an eagle, a winged lion and an angel—as well as the two Victories on the pediment of the reredos, are carved in oak and rare Bermudan cedar (Juniperus bermudiana). The process of cleaning them to remove the dark stain has revealed them to be of particularly high quality.
Bermudan cedar is no longer available, as the species is endangered, but fortunately one of the college’s most generous donors provided a small supply of old timber which enabled repairs to be carved from matching wood.

When the Evangelists were being re-installed, Alan Lamb’s team encountered difficulty in fitting the eagle to the figure at the north-east. A 1914 photograph showed that the Evangelists at the north-east and south-west had been swapped around sometime after this date. The beardless Evangelist (St John) is now correctly replaced with his eagle, facing into the chapel.

**The fretwork panels**

The two magnificent pierced panels in the antechapel screen are also carved in Bermudan cedar. Thorough cleaning to reveal the original finish has shown them to be undercut and carved to an exceptionally high standard and, like the limewood, to be some of Grinling Gibbons’ best work.

Late-Victorian photographs showed that these screens had previously faced the other way, which is how they have been reinstated: the putti now face west, into the antechapel, as originally intended.

Research by Alan Lamb also revealed that in the mid 1860s what was then referred to as a ‘black mastic’ was applied to these carvings and many of the others in the chapel. This was how these important elements appeared for 150 years and to ‘go back in time’ to before the Victorian intervention was a drastic proposal, but investigation showed that this is how Grinling Gibbons and Bathurst would have intended them to appear, and the change was supported by the college and by the Diocesan Advisory Committee. As much of the dark varnish was removed as it was safe to do, to reveal the Grinling Gibbons work in its original glory.

In the process of cleaning the woodwork, the conservers were able to discern the hands of the different carvers, adding to the understanding of how Grinling Gibbons’ workshop had carried out the work.
THE PEWS

The north and south walls are lined with oak panelling as a backdrop to the fixed stalls and pews which face towards the aisle. These too had been over-waxed, stained and polished. They were cleaned back to remove these layers of wax and at the same time repaired.

The joists of the raised floors beneath the pews had deteriorated over time and many were supported on pieces of brick and timber, and were in danger of collapse. The main oak bearers had disintegrated, mainly from dampness and death-watch beetle. The floor structure was removed entirely and was then carefully reconstructed by the college workshop. Any sound timbers were salvaged and re-used. European oak was used to form the new supporting joists and bearers, and the old wrought iron angle supports have been supplemented by stainless steel brackets. The void houses electrical cables and a combination of original and new floor boards were laid—a time-consuming task as they had to be cut to fit around the pews.
CEILING

Alongside the woodwork, the other major feature of the chapel is the superb painted ceiling by Pierre Berchet and the plasterwork panels that surround it. Berchet was a Huguenot, who had fled religious persecution in France to settle in England. As would be expected, Berchet was assisted by his workshop in this major commission, painting directly onto the plaster.

Catherine Hassall, an architectural paint analyst, found that the painting was in reasonable condition for its age, taking into account the history of the ceiling. Advised that some areas of paint might have deteriorated so badly that removing the varnish could cause permanent damage, it was decided to carry out a careful surface clean without undoing earlier retouchings.

DISASTER AVERTED

In the 1930s disaster nearly struck the ceiling and its supporting framework. The roof was found to be in serious danger of collapse. Death-watch beetle had attacked the large supporting oak timbers, their sub-timbers, and all the ceiling joists and battens supporting the plasterwork and painting.

The Ministry of Works, the forerunner to the Building Research Establishment, was asked to advise, and new formulae of preservative chemicals were used to deal with the infestation. However, the timbers were too far gone to preserve and new steel beams, concrete supports and a completely new roof had to be installed. Not only that, but the ceiling had to be saved as well. A large supporting metal frame was inserted, onto which was mounted chicken wire with metal hoops and other supports. This was then overlaid with plaster of Paris on the rear face of the ceiling, which fortunately saved the day. Minutes of college meetings at the time show that, at one stage, the Fellows were resigned to losing the ceiling. Thankfully the architect, John Coleridge, persevered and we can still enjoy the painting; all the more so now, thanks to the cleaning and installation of new, enhanced lighting which shows it off at its best.
THE PLASTERWORK

The magnificent, hand-modelled plasterwork, which makes up much of the rest of the ceiling, is in the finest Baroque style of the time. Panels of pomegranates, roses, other fruit and plants are surrounded by bolection mouldings and sit above a cornice decorated with heraldic shields on three sides, and scallop shells at the west end.

Cliveden Conservation was asked to inspect the plasterwork. After its survey, some 250 elements were identified as missing. Again the six foot rule was applied and only forty-two discernible missing pieces, mainly small, were remodelled in situ—where larger pieces were replaced, these were copied from other identical forms by taking casts.

A close inspection, possible for the first time since the last redecoration in the 1950s, found some interesting features. In addition to dogs' heads and fish, two of the main panels towards the east end contain hidden dragons, perhaps inspired by the crest (two dragon heads) of Sir Thomas Pope's coat of arms. Their still-discernible heads are disguised by very large pomegranates and other fruits 'mid-snout', the wings are hidden by vegetation, and the long, wiry tail, with a trifurcated tip, is disguised as a vine stem.

The panel depicting the Holy Trinity—comprising the dove of the Holy Spirit, emerging through gold of Glory, representing God the Father, and either side the instruments of Christ's passion—is positioned directly over the altar. As the central and most significant panel, it was the only one to undergo the lengthy process of being stripped back to its original plaster finish before repainting, which has enhanced its appearance and the depth of detail. The remaining plasterwork was more simply cleaned and painted, but the overall effect is still magnificent.
To complete the refurbishment, the rest of the ceiling and walls were repainted. Over fifty paint samples were taken, enabling a view to be built up of the original decor. The investigations showed that an original layer or two of lime wash or distemper, probably applied when the plaster was drying out, had been followed by schemes using cream- or stone-coloured oil-based paint. In the 1950s, an alkyd oil-based paint (modern for the time) was used. For this project, the redecoration was carried out with plant-based resin paints.

In the 1950s scheme, the most recent until this project, most of the plaster panel borders and frames were highlighted with gilding—or in many places, gold paint—and a yellow-green colour was used on the ceiling. The plasterwork in the cornice was backed with a slightly darker yellow-green paint, while the exuberant modelling of fruit, leaves and pomegranates, entwined on a think vine stem, which surrounds the ‘Christ in Glory, was backed by a darker green.

**The paint colour**

About five layers of paint were found in most samples, suggesting redecoration (involving a substantial degree of scaffolding) had taken place every sixty years or so, which ties in with the most recent work having taken place in the 1950s.

If the most-recent paint scheme had reflected the original appearance, it would have been cleaned and left as was. However, as the evidence showed it was not the original scheme and perhaps followed an earlier Victorian embellishment, it was decided, after taking advice, to redecorate in a style that was closer to the original intention.

The cream colour chosen was the nearest match to the first oil-based scheme. Gilding, in gold leaf, was restricted to the main frames and small borders of the Berchet paintings, together with the appropriate parts of the heraldic shields. The simpler scheme is visually more harmonious and less fussy, and better shows off the plasterwork. The College of Arms was consulted to establish if the shields were correctly painted and if not, to advise on redecoration. A deep blue background was chosen to enhance the dove of the Holy Spirit; although originally cream may have been the intention, the previous blue scheme was felt to be appropriate. Before the work the rays of Glory were silver and gold, but were refinished only in gold leaf.

**THE FLOOR**

The black and white marble floor was largely relaid in the 1970s. Some minor repair works have been carried out, resetting some loose panels and some re-pointing and refinishing. The limestone pavement in the antechapel with its wonderful inset memorials, including that of Ralph Bathurst, was very lightly cleaned and some stones replaced or re-glued as needed.
Another important element of the chapel is the tomb of Sir Thomas Pope, founder of the college—Trinity is the only college in Oxford or Cambridge to contain the tomb of its founder. The tomb, which would have been far more prominent in the old chapel, features effigies of Sir Thomas and one of his wives, either Margaret or, more probably, Elizabeth. It had suffered minor damage over the years and Cliveden Conservation carefully cleaned the recumbent figures to remove layers of wax and grime. Originally the figures would have been beautifully and brightly decorated, but now only small traces of colour remain. Minor elements of loose alabaster were glued into place and the area has been re-lit to show off the tomb. At one stage, consideration was given to opening the tomb to see if indeed it did contain Sir Thomas and one or both of his wives, but it was decided to let the ‘mystery’ remain and they have been left undisturbed.

The tomb is set in an unusual enclosure or alcove—largely concealing the medieval-style monument from the Baroque interior of the new chapel—which has a partner on the opposite side of the altar, sometimes referred to as the ‘Lady’s Chapel’. A significant feature is the sash windows—dating from 1694, they are some of the earliest examples of sash windows in the country. Beautifully inlaid on their outer surface, they complement the surrounding joinery. The lady’s alcove, which was accessible through a small doorway in the east wall (now used as a fire escape), was formed to allow the president’s wife to attend services, secluded from the Fellows and undergraduates.
LIGHTING

When the chapel was inspected in 2010, the main lighting was 500W halogen lamps sitting crudely above the timber cornices—constituting a fire hazard, they were temporarily replaced. To complement all the work that has been undertaken, a new lighting scheme was installed, designed by church-lighting specialist Mark Sutton Vane Associates.

For ease of maintenance, all the light fittings are located at or below timber cornice level, with modern LED lighting, much of which highlights particular features and has transformed the internal appearance of the chapel.

To give additional illumination to users of the pews, a subtle change to the existing candle holders was the fitting of LED light pads under the brass saucers. The lighting can be easily controlled and has a wide range of settings for different occasions.

Close to completion: with the new lighting installed, the final stages included refitting the flooring around the pews and the work on the organ

THE ORGAN

The current instrument was built by Harrison & Harrison in 1965 and replaced two earlier organs; it was the gift of J H Britton, an old member and Honorary Fellow of the college. The fine organ case was designed by Stephen Dykes Bower. The instrument was regularly and well maintained, and in 1993 the action was re-leathered. The only significant change had been made in 1972, when some additional stops were added.

In recent years it had become clear that the original 1965 electro-mechanical switching system was nearing the end of its useful life, although the soundboards and the other mechanical structures were still in good condition. Concerns had also been raised by outside advisors regarding poor and unsafe access for servicing and repair, which has been improved.

The refurbishment was entrusted to Peter Collins Organs Ltd. The pipework and actions were completely removed for renovation and modernisation of the action and switching system. The organ console was repositioned to face east, which has allowed improved service access and some changes were made to the range of stops and mixtures. Sadly, during the project Peter Collins died; the works were completed by his team.
Although a nineteenth-century addition, the stained glass windows are a significant feature of the chapel and they have been cleaned for the first time in sixty years. One of the joys of the refurbished chapel is to see the sun streaming through the windows, especially on a bright winter’s day when the sun is low in the sky.

The accumulated grime, dust and dirt were painstakingly removed by the team from York Glaziers Trust, using small cotton wool swabs. This alone, with hardly any other work, has shown off these windows to magnificent effect.

In the 1880s glass was not produced as uniformly as now, and differences can be seen in the texture of the cleaned plain glass. The cloudy appearance of some of the panes is not dirt, but reflects the original appearance and subtle changes over the last 140 years.

The windows were designed by J W Brown of Newcastle and made by J B Powell of Whitechapel. They were installed in 1886 under the direction of the then bursar, Henry Woods (elected president in 1887), to replace the original, plain glazing, and depict saints known to have been associated with the medieval chapel.

The window to St Leonard in the north wall—before cleaning the clear panes of glass were completely opaque. The windows in the chapel show, on the south side, the Blessed Virgin Mary; one of the dedicatees of Durham Cathedral; St Cuthbert, bishop of Lindisfarne, whose shrine is at Durham; St Benedict, founder of the Benedictine order followed by the monks of Durham, and the Venerable Bede, also buried at Durham. On the north side are St Catherine of Alexandria, to whom there was an altar in the medieval chapel; St Oswald, King of Northumbria, connected to both Lindisfarne and Durham; St Leonard, to whom there was a window in the medieval chapel, although he had no obvious connection to Durham College (and, as patron saint of prisoners and child-bearing women, seems an unlikely choice), and, finally, the newly-reinstated window to Isaac Williams, the first of the nineteenth-century windows to be installed.
The Isaac Williams window

A significant change is the re-installed Isaac Williams window. A Fellow of the college, Isaac Williams (1802-1865) was a leading figure in the Oxford Movement and this window in his memory was given by public subscription in 1873. It was crafted by the Königliche Glasmalereianstalt (The Royal Bavarian Stained Glass Establishment). The window had been stored in the attic of the chapel, in a wooden crate, since its removal in the 1940s, along with all the other windows, for protection from wartime damage. Fortune had been kind to the window: when it was taken out of its crate, only three small glass quarries, or panes, were damaged and these were easily repaired.

Although the window is in good condition, the painted surfaces of the coloured glass, which were produced in a similar way to a layered painting and then subsequently fired in a kiln, were felt to be too fragile to expose to the elements. Therefore, an innovative solution was found: to install it in its own sub-frame.

This method of ‘double glazing’ was developed by the York Glaziers Trust and has been used by it to similar effect in York Minster. The existing (plain) outer window has been retained, to act as a protective shield. This not only protects the glass, but, from outside, largely retains the appearance of the window as it was.

When illuminated by bright sunlight or the new lighting, the real splendour of the window emerges, with richly-coloured scenes of the Crucifixion and Moses striking the rock, surrounded by architectural iconography echoing the screen and reredos.
One of the two winged Victories from the top of the reredos, having been taken down for restoration and back in place after being cleaned and repaired.

The panels of the altar rail were cleaned and repaired in situ.

One of the fretwork panels being returned to the antechapel screen.
Completion of the Project

Over fifty craftsmen and women were involved in this major project, which is probably the most significant wide-ranging work to be undertaken on the chapel since its construction; it was completed on time and with few unexpected challenges. The project captured the imagination of all of those who worked on it and their contributions widened our understanding of Trinity’s best-known and most fascinating building.

Acknowledgments

Text by Martin Hall, chapel surveyor and contract administrator, and on the organ by Steve Griffiths, buildings and maintenance manager. Photography by Bruce Hammersley, with additional images by Tim Rawle, Russell Dominian, Sarah Beal and Thomas Knollys. Layout and printing by Seacourt Ltd.
The following individuals and organisations were involved in the project:

Apex Scaffolding
Peter Askew and Tobit Curtis
Ian Bell
Brian Ridout Associates
Edward Bulmer
Linda Bullock
CBG Consultants Ltd
Cliveden Conservation
Digipress
Lesley Dunlop, University of Northumbria
James Finlay
Jenny Granville
Martin Hall, Chapel Surveyor
Bruce Hammersley
Harris and Thompson
Catherine Hassall
Alan Lamb and Swan Farm Studios
Laser Surveys
Peter Brett Associates LLP
Peter Collins Organs Ltd
Tim Rawle
Phil Secker
SMY Electrical Ltd
Subsurface Geotechnical
Sutton Vane Associates
David White, College of Arms
York Glaziers Trust

For Trinity College
Steve Griffiths,
Buildings and Maintenance Manager
The Buildings and Maintenance team
The members of the Chapel Committee

Further reading:

The Chapel of Trinity College Oxford, by Martin Kemp (2013), copies available from Trinity College.

More images and links to additional articles and coverage of the restoration project can be found at www.trinity.ox.ac.uk/chapel-renovation

Funding the chapel restoration

The cost of this work was in excess of £1m, of which over half had been raised before the work was finished. If you would like to make a contribution, please contact the Director of Development, 01865 279889, development@trinity.ox.ac.uk, or go to https://alumni.trinity.ox.ac.uk/donatetochapel to donate