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QUEEN'S CROSS CHURCH, GLASGOW

Designed by

CHARLES RENNIE MACKINTOSH

Internal Elevation Measured Study

A dissertation submitted by

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to the Mackintosh School of Architecture
University of Glasgow
for the degree of B. ARCH Hons.

April 2003
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PREFACE

This Special Subject Dissertation forms part of the Honours course in Architecture at the Mackintosh School of Architecture.

The study is to demonstrate an ability to research and investigate information relating to a chosen topic, architectural or design based, and to successfully organize and communicate the findings in an appropriate and skillful manner.

A measured study of the Church has already been undertaken by students at the Mackintosh School of Architecture, though it is confined to exterior elevations and plans of the church. Therefore the main emphasis of this dissertation is towards the production of a measured internal elevation study. To provide a complete set, along with the previous measured study, of recorded drawings of Queen's Cross Church, with the intention of providing the Charles Rennie Mackintosh Society with a set of drawings.
ACKNOWLEDGMENT

Thank you very much to:

The Staff of the Mackintosh School of Architecture, especially Dr. Gavin Stamp and Mr. Mark Baines.

Stuart Robertson of the Charles Rennie Mackintosh Society and all Staff, for their help and allowing me access to Queen’s Cross Church.

The Staff of the Glasgow School of Art Library, the Mitchell Library Archives Department and the National Monuments of Scotland, for their assistance.

Tanya, for helping me survey the church.
AUTHOR'S DECLARATION

All material used in the production of this dissertation is listed in the Bibliography and any direct reference made to these texts or sources is included in the List of Reference at the end of this dissertation.

The drawings accompanying this essay were produced from survey information gathered solely by the author, see Appendix 7.
INTRODUCTION

The aim of this essay is twofold. Firstly, it explains how I searched for data relating to Queen's Cross Church, lists the results I achieved and describes some of the practicalities of carrying out the survey and producing the drawings.

Secondly, it discusses Queen's Cross Church, the design and recent changes to the building so that this volume could be used as a reference for anyone wishing to find out about this building.
CHAPTER 1 - RESEARCH AND THE MEASURED STUDY

Research

The initial step was to establish the existence and extent of any information relating to Queen's Cross Church.

Queen's Cross Church is the home of the Charles Rennie Mackintosh Society and was approached first. Stuart Robertson, Director of the Charles Rennie Mackintosh Society was very willing to allow permission to survey the Church and he was very helpful with finding out information.

Below is a list of sources I checked and the information I gathered from them.

The Archives and Special Collection Department, the Mitchell Library, Glasgow, has a copy of original drawings signed 'John Honeyman, Keppie', 1897. The drawings are titled 'Proposed Church, Garscube Road'. Although these are original drawings they are not of the Church as built. (see App. 1).

Contact: 0141 287 2999.

Hunterian Art Gallery, Glasgow, has only Charles Rennie Mackintosh's perspective drawing. (see App. 2) and his sketch of Merriot Church, Somerset (see Pl. 1)

Contact Pamela Robertson @ 0141 330 4547.

Charles Rennie Mackintosh Society, Glasgow, has a copy of the original 'John Honeyman, Keppie', 1897 drawings that the Mitchell Library has. Stuart Robertson did have a sketch detail of a proposal of the rood beam. (see App. 3)

Contact: Stuart Robertson @ 0141 946 6600.
The National Monuments Record of Scotland, Edinburgh, did have some documents relating to Queen’s Cross Church:
Photographs of Garscube Road, showing the south elevation of Queen’s Cross Church, dated 1950. Though no interior photographs.
A photograph of a copy of a measured survey, dated 1975, by students at the University of Strathclyde. (see App. 4) The documents are very poor quality as they are photographs of a pencil drawing, have no scale and show little detail.
Contact: 0131 662 1456

Historic Scotland has no relevant drawings or photographs but, as Queen’s Cross Church is A listed, they did give me a copy of the information Supplementary to the Statutory List. (see App.5)
Contact: Lee Johnston @ 0131 668 8744.

The Scottish Record Office, Edinburgh, has no references to Queen’s Cross Church.
Contact: 0131 535 1413

Survey

The equipment I used to survey included a 3 metre steel tape, a 20 metre fabric tape a camera with a zoom lens and a step ladder.

The procedure undertaken was to take each internal elevation in turn and measure the door/window details, cills, pilasters step heights/widths, pew heights/widths and all other depths and heights. Each motif and detail was measured and recorded too. The height of the arch above the chancel was calculated by measuring the block work and stone details and the total number of stone
courses up to the arch.

The measurements were taken to a very high degree of accuracy, i.e. to the nearest millimeter. This was due to the detailed nature of the work and also because I knew that the final drawings would be to a detailed scale.

The camera was used firstly to take general views to augment the survey sketches and jog my memory when I was producing the final drawings. Secondly it was used to record specific details, such as the motives and details. (see App.6)

The measurements, which were not obtainable either through sheer height differences or inaccessibility, were estimated according to the best of my ability.

**Drawing**

The main emphasis of the survey was to concentrate on a study of the interior detail, as there is no record of this to date. This would provide a set of true measured drawings of the internal elevations of the Church and complement the set of measured drawings previously undertook of the exterior elevations and plans.

Though, There are changes to the interior since the Church was built. First, the removal of the organ from the organ chamber and Secondly the installation of a screen to the rear of the naive.(see Chapter 3). These are shown in the final drawings as they are relevant to recording the interior of the Church.

A hand-drawn line study in ink was the preferred route to the production of the final drawings, at a 1:25 scale to ensure that the drawings shown detail significantly.
CHAPTER 2 - QUEEN'S CROSS CHURCH

The commission came to Honeyman & Keppie in 1897 for the design of a new Church in the Maryhill district of Glasgow. Entries relating to the Church in Honeyman & Keppie's record are under the name of St. Mathew's Free Church, the same title is added to the original perspective drawing by Charles Rennie Mackintosh (see App 2) This is due to the commission coming from the Springburn Mission of St. Mathew's Church. The initial budget for the Church was £9,500 and it was probable that Honeyman & Keppie were chosen because of John Honeyman's experience in ecclesiastical design. Mackintosh was employed by them as an architect and the design has since been attributed to him.

Mackintosh undertook the Queen's Cross Church project soon after finishing the competition for the Glasgow School of Art. A large donation by Mr David Maclean, one of the original office bearers of the original St. Mathew’s Church, meant that the commission could be undertook.

The brief was to design a galleried church to seat 700 people. In addition there was to be a separate church hall to the north-east, which would be linked internally but accessed separately from the street outside.

The Church was opened for worship on the 10th of September 1899 after a delay in construction, this may have been due to the difficulties of the site as it is situated in a tight but very prominent one, on the corner of Gardsube Road, Maryhill Road and Springbank Street. (Fig. 1) The approximity to the junction of the busy roads which created access problems to the site, aswell as the scale of an impending warehouse to the north, now demolished, and tall tenements causing scale problems and a restriction of light on the east and north side, meant that the site was of a difficult nature.
Fig 1. Location Plan, scale 1:1250. Queen's Cross Church is highlighted.
Although the church is quite small it is given presence by the placement of a sturdy tower to the south west corner where the roads converge. Here Mackintosh attempts harmony with the scale of the surrounding structures. The tapering tower allows Mackintosh with a focus of the building and acts as an end stop when viewed from approach routes and positioned to maximise a corner location. The apparent source was the medieval Merriot Church in Somerset, which Mackintosh had sketched two years previously in 1895. (Pl. 1). The features of Queen’s Cross Church tower are to be found in this source, the octagonal staircase turret, the sturdy proportions, the angled buttresses, the door way and traceried window.

The facade to Garscube Road which is irregular and unsure, appears to be conceived in two parts when viewed from the south. The flying buttresses, secondary entrance doorway and recessed portion at the east being at unease with the twin gables and tower at the west end. The south elevation lacks a sense of clarity which can be seen in other Mackintosh work.

The windows could be regarded as Perpendicular Gothic in character, though Mackintosh has brought his own style and the use of floral motifs can be seen, more so in the large western window. The southern doorway with heavy flanking buttresses and careful carving is well conceived and carried out. The tracery used in Queen’s Cross Church enabled Mackintosh to inject his own interpretation and are the starting point to find his touch. Robert Macleod says the design that “with little further convolution and abstraction it could become an entirely typical Art Nouveau design”. (1)

Mackintosh designed a relatively plain church in accordance with the request of St. Mathews Free Church who did not want any superfluous decoration. His approach was formal though asymmetrical. In an initial look the building is Modern Gothic which is relying neither on academic purism nor on eclecticism. The late Gothic Perpendicular style, which had just become the current style owes somewhat to Mackintosh’s influences. It is arguable just how Scottish
Merriot Church, Somerset, 1895
University of Glasgow, Mackintosh Collection
Queen's Cross Church is an example of what is owed to the English Arts and Crafts movement.

Internally the church is more exuberant in details and features. The soaring arched timber ceiling, stained almost black creates a feeling of spaciousness which is certainly felt can be the influence of Norman Shaw's Harrow Mission Church, Holy Trinity Church, London, 1887, also it could be derived from the Basilica of Vicenza, which Mackintosh visited on his tour of Italy in 1891.

Exposed steel tie-beams span the width of the ceiling and show an interesting change for Mackintosh which is unlike his other buildings. Space flows between and beyond them and they become very insignificant against the dark background of the vaulted ceiling.

Though the design of Queen's Cross Church may not be overwhelming it is the energy involved with the details upon closer inspection that make this building intriguing to the viewer.
CHAPTER 3 INTERIOR OF QUEEN'S CROSS CHURCH

The building is now the Headquaters of the Charles Rennie Mackintosh Society since 1977, a year after being vacated by the Church of Scotland due to a diminishing congregation which amalgamated with Ruchill Church and in March 1999 the Charles Rennie Mackintosh Society became the owner and long term custodian of the church.

The importance of Charles Rennie Mackintosh as a Glasgow Architect can not be underestimated. He is one of the leading architects originating from the city, and Queens Cross Church is one of the relatively few examples of his work that survives intact.

Whilst agreeing with Thomas Howarth, Queen's Cross Church may not be one of Mackintosh's best buildings but it does do more than intrigue the reader, "Neverthe less, the building possesses a warmth and charm conspicuously absent from many churches of the period due largely to the traditional simplicity of Mackintosh's architectural forms, and to the mysticism and spirituality of his decorative motives" (4).

The communion table, housed in the chancel, is decorated minimally, though the front does display carvings of stems and leaves which is continued in the wooden paneling of the chancel (see Pl.9). Mackintosh does not, though, want the communion table to be overly decorated so that it would distract from the flowers, bread and wine which are placed there.

The two galleries, one at the east end of the church, and the other adjacent to the chancel are constructed of heavy joists which are clearly visible. The detailing of the balcony front (see Pl.7) is interesting in that the paneling made up with occasional boards which hang down as pendants is perforated in a manner of those in the library of the Art School, dated ten years later, The south balcony is supported by a heavy stone pier, which along with two others forms an aisle directly linking the two entrances on the south facade. The three robust stone piers each display floral motifs (see Pls. 2-4) carved in the capital, these are in keeping with Mackintosh's themes throughout the church.
The tracery of the west chancel window displays floral motifs and contains delightful pattern of deep blue coloured stained glass. The inverted heart motif involved in the window tracery may be Arts and Crafts influenced, Mackintosh admired Voysey how favoured this motif.

The pulpit too (see Pls. 5), with it's paneled back decorated with floral motifs, mainly tulip forms. The circular front (see Pl. 6) is also detailed with decorative motifs that show characteristic dove-like forms, with rings in their mouths, which could be influenced by the Glasgow City Coat of Arms.

The detail and motifs used in the paneling of the doorways is typical throughout the church of Mackintosh's in it's elongated flowing shapes.

The way that iron is used throughout the rest of the church, such as in the railings (which have now been removed), emphasises the ambitions, As David Brett says: '...ironwork can be seen setting forth its own craft: in the railings of Queen's Cross Church there is a form, that reminiscent of the 'head' of the immured figure in The Tree of Influence (see Pl. 10), emblemizes the blacksmith's tongs. Here it is as if the iron has become conscious of itself as having been wrought. Ironwork becomes the bearer of wit; it is the most playful and self-allusive element.' (2)
CHAPTER 4 - CHANGES FROM THE ORIGINAL DESIGN

The rood beam being an important component of the composition of the internal west elevation has been recreated and as the process has taken place since the previous dissertation by David Crawford (1986) on the restoration of Queen's Cross Church, which does not record it, then I feel it important to now record this process.

The rood beam was removed from the chancel around 1950's as the singing of the choir was being affected by the sound reflected off the beam. This caused irritation and the beam was taken down and destroyed in the yard by the church, this was never recorded though. A replica was undertaken to be reconstructed in 1988. This task was undertaken by Chris Flether of Keppie Henderson Architects, who was initially asked to give impressions of what the rood beam may have looked like.

Using information taken from Thomas Howarth's, Charles Rennie Mackintosh and the Modern Movement, especially recorded photographs, some sketches were produced (see App. 3). After a discussion with the Charles Rennie Mackintosh Society in 1986, a project was established for the replacement of the rood beam. It was agreed that the replacement should be as near as possible to the original design.

Sizes of the corbels and slots where the beam had rested were taken and using Tom Howarth's information, scale drawings were produced by Chris Fletcher and Mr. Norman Mack of Keppie Henderson Architects obtained probable costs. These costs and scale drawings were presented to the Charles Rennie Mackintosh Society for approval.

Further information became available from Patricia Douglas, then of Charles Rennie Mackintosh Society, which included photographs and so updated drawings of the beam were produced accordingly.

This information did give a better idea of the central feature of the beam though, there were still unanswered questions on the fine detail which was not evident from photographs studied.

Engineering studies on the possible structural make-up of the beam, by Mr. Tom Douglas, were produced as it was thought at this stage in the project that there was a
*hole* in the beam as part of the design. It was agreed that this "hole" was in fact not a "hole" but a detailed "characteristic" produced by the sculptured carving of the central feature of the design of the beam from discussions held.

Tenders for the construction of the beam were obtained and became the topic of discussion and deliberation as to which contractor was to be chosen. It was stated that whoever was awarded the contract would have a wood carver with the expertise to carry out the detailed precision of the carving of the central feature. The contract was awarded to John Cochrane and Company on the 16th of August 1988.

Part of the central detail, a "bird's" head, proved to be complex to carve. After an initial carving of the "bird's" head proved to be unacceptable to the Charles Rennie Mackintosh Society, a series of models were undertaken to examine how this detail would be made up. This included a full-size basswood detail made by Chris Fletcher. After being submitted to the society a decision was made that these were used as templates for the carving.

After further examination of the central feature from photographs provided by Thomas Howarth, it appeared to be in the form of a "medallion" with a sculptured comb giving the highlight that was previously thought to be a hole in the beam. Above the bird's head. Unfortunately, at this stage in the project, April 1989, the contractor's premises were destroyed in a fire. The almost completed beam, templates, drawings and photographs were all destroyed.

Even still it was decided by the Charles Rennie Mackintosh Society, Keppie Henderson Architects and John Cochrane & Company that the project to replace the rood beam should continue. A final full-size detail was produced and Chris Fletcher's initial models, which were not destroyed in the fire, were used to allow John Cochrane and the wood carver to instigate a manufacture of the final beam.

Tom Howarth met the Society and Architect to discuss the detail on the beam, and after discussion it was agreed that there would always be an element of conjecture in the design as no contemporary drawings or original photographs now exist.

The replica of the rood beam was initially intended to be in place before Christmas 1989,
but it was discovered that the chancel arch was structurally unsound and remedial works were instructed to be undertaken, this delayed the erection of the beam until the 5th of June 1990. When the final recarved rood beam (see Pl. 8) was put in place, the completion was celebrated prior to the annual general meeting of the Charles Rennie Mackintosh Society on the 7th of June 1990.

During the Second World War extra accommodation was required to hold Sunday School Classes. It was decided that the space underneath the east gallery would be used and a partition should be constructed to separate this space from the rest of the church. Thomas Howarth was approached to design a screen which would be erected. The screen was constructed from the removed pews which would have ran to the rear wall. Though no exact date for this is recorded it was in the 1940's according to David Robertson.

Early photographs of the chancel show a door connecting the Vestry to the chancel. This was due to the fact that Queen's Cross' new minister, the Rev. John Hunter was unfortunately badly injured and lost a leg when he was called to serve as an army chaplain in the First World War. This door was created to give direct access to the chancel from the vestry as it was difficult for him, upon his return, to use the steps on the route from the vestry to the chancel. As the door was not part of the original design then its construction obviously considered the details used by Mackintosh as to not arouse suspicion. In the 1980's the door was removed and returned to its original position in the vestry.

The space above the chancel cupboard was created by Mackintosh to house the organ pipes. However, an organ was not installed until 1920's. The organ was removed when the congregation vacated the church in 1976 and the organ was installed within Eaglesham Parish Church.

In 1960 Mr. Gordon Webster inserted three coloured glass panels into the west window. These were removed in 1977 by the Charles Rennie Mackintosh Society in a programme to return the church to its original condition.
CONCLUSION

The main reason for doing this study was to produce a measured drawing study of the interior of Queen's Cross Church from the information recorded from the survey. I feel that this study was very valuable as it enabled an area of Mackintosh’s work to be recorded and subsequently be used as a reference when any inquiry about Queen’s Cross Church is undertaken. The drawings will be presented to the Charles Rennie Mackintosh Society.
APPENDIX 1.
Mitchell Library Drawings.
APPENDIX 2.
Charles Rennie Mackintosh's Perspective Sketch.
Hunterian Gallery, University of Glasgow
APPENDIX 3.

Sketch of proposal for rood beam.
APPENDIX 4.

Copies of the Measured Study, carried out by University of Strathclyde Students, 1975

The National Monuments of Scotland
APPENDIX 5.

Statutory list. Historic Scotland.
DESCRIPTION:
1896-99, C R Mackintosh of Honeyman and Keppie. Built as Free Church, since 1977 the home of the Charles Rennie Mackintosh Society. Built in red sandstone ashlar with slate roof and red ridge tiles and occupying an imposing position. An original interpretation owing much to Richard Norman Shaw's Harrow Mission Church in Latimer Road, Hammersmith, London. Rectangular plan with transepts and porch given emphasis by rising above low aisle; bold tapering tower with attached stair turret and entrance at base with perpendicular window above and louvred window in upper stage, derived from medieval tower of Merriott Church, Somerset, at SW angle. The prominent S elevation has 2 full-height gabled bays with large perpendicular gallery windows, adjoining tower, 2 low aisle bays spanned by a bold flying buttress; at the E a 2-storey porch with very original Art Nouveau details. W gable has a large perpendicular window. INTERIOR: wide timber barrel-vaulted hall spanned by rolled steel tie beams. Passage aisle at S linking 2 entrances. Galleries at E and in SW projection, boldly cantilevered with pendant details. Screen below E gallery 1939-45 by Thomas Howarth. Furnishings designed by Mackintosh, rood beam reinstated 1990. W window with 3 coloured lights designed by Gordon Webster 1960. THE HALL: reached by link to N from E end. Rectangular-plan with typical Mackintosh open-trussed roof and top lighting. Tall dado panelling with deep cornice.

REFERENCES:

NOTES:
No longer in ecclesiastical use.
APPENDIX 6.
Photographic record of Queens Cross Church.
Plate 8. Rood Beam

Plate 7. Interior showing balcony

Plate 12. Queen's Cross Church
Plate 9. Chancel Detail. Floral Motifs

Plate 10. 'Tree of Influence'
Painting by Charles Rennie Mackintosh.
Plate 11. Railings of Queen's Cross Church, now removed.

Plate 13. Chancel including communion table and chairs

Plate 14. Door Panel detail
Plate 15. Door detail
APPENDIX 7.

Copy of Survey Notes.
Black Line

Grille 10x AC

Bottom of joint's of

Warehouse

0.6cm

This model size

3.5cm

GALLERY

ALL WINDING

SQUARE NO
CURVES
APPENDIX 8.
Reduced set of Measured Drawings.
INTERNAL WEST ELEVATION

QUEEN'S CROSS CHURCH
INTERNAL SOUTH ELEVATION

QUEEN'S CROSS CHURCH
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