

THE GLASGOW SCHOOL OF ART

Jamieson, Bruce Nicolson (1996) The Glasgow School of Art Centenary: a history of its immediate context [dissertation]. The Glasgow School of Art, Glasgow.

<http://radar.gsa.ac.uk/5443>

Copyright and moral rights for this dissertation are retained by the author

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge

This dissertation cannot be reproduced or quoted extensively from without first obtaining permission in writing from the Author

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the Author

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the dissertation must be given



GLASGOW SCHOOL OF ART LIBRARY



069 762

**The Glasgow School of Art Centenary:
A History of its Immediate Context.**

**G S A
LIBRARY**

A Dissertation
Submitted to
The Mackintosh School of Architecture
For the Award of Diploma in Architecture.

Bruce Nicolson Jamieson 1996

G S A
LIBRARY

Dedicated to Sara and wee baby Amber.

April 1996

"In the midst of the rocks by the Ocean

Has the home of the Northman been set;

He has planned it with care and devotion

And has built it with toil and with sweat."

From Land of the Northman, by Vagaland.

Contents

iv	<i>Acknowledgments.</i>
v	<i>List of Loose Drawings.</i>
vii	<i>List of Plates.</i>
viii	<i>List of Figures.</i>
x	<i>Preface.</i>
xv	<i>Summary.</i>

1 Introduction to the Text**7 Two Commercial Types****19 The Lasting Typology of the Rotunda****49 A Masterwork****63 The Extension and its Extensions****86 Conclusions****89 Notes****92 Selected Bibliography.**

Acknowledgments

I would like to thank the staff of the Mitchell library Dean of Guilds as well as the Glasgow room for all their help with the drawings and general research, also David Collin of Keppie Architects for giving his permission to photograph drawings at the Mitchell.

I am also grateful for all the expert assistance given by Peter Trowles, the informative chats with George Rawson, the meticulous job done by Clare McGrade with the minutes of the Governors meetings, and all the Library assistants at the School of Art library. John Blair, Vivian Carvalho, and Craig Laurie were also extremely helpful at all times. Thank You Raid Hannah as well who provided the first batch of computer drawings of the campus (drawn by Marcel Ridyard.)

Final thanks go to Douglas Niven who shared some of his wonderful memorabilia , and to Dr. Macaulay for his guidance.

List of Loose Drawings

1. Elevation of Sauchiehall Street, 1899.

1855 The McLellan Galleries

by James Smith

1865 Grecian Chambers

by Alexander Greek Thomson

1888 The Scottish National Panorama building

by Rowand Anderson.

1899, Phase One of the Glasgow School of Art,

by Charles Rennie Mackintosh.

2. The Lasting Typology of the Rotunda.

Ground Floor Plans Drawn at 1:200

1888 The Scottish National Panorama building

by Sir Robert Rowand Anderson.

1895 The Glasgow Ice Skating Palace.

1902 The Hippodrome Zoo

1909 Hengler's Circus.

1927 The Waldorf Palais de Dance.

1967 ABC Shown at First and Second Floor Level.

3. A Masterwork.

Phase One, 1899

Phase Two, 1909.

By Charles Rennie Mackintosh

4. The Extension, and its Extensions.

Ground Level Plans at 1:200

1929 16 December 'The Extension Scheme.

1964 The Foulis Building.

1969 The Newbery Tower

1979 The Bourdon Building

1983 The Newbery Pavilion.

Historical Nolli Plans.

Shown at 1:400.

5. 1888, the site as it was when the Panorama was built..

6. 1899, Phase One, and the Ice Rink.

7. 1909, Phase Two and the Circus.

8. 1929, the Assembly building, and Waldorf Palais de Danse.

9. 1963, the Foulis, and new ABC Cinema.

10. 1969, the Newbery Tower.

11. 1996, the Bourdon and Newbery Pavilion.

List of Plates.

- Plate 1. Birds Eye view of Glasgow circa 1861, by Thomas Sullman, Reproduced
from the illustrated London News. p10
- Plate 2. Sections through the McLellan Galleries 1913-14. p11
- Plate 3. Section and Rear Elevation of the McLellan Galleries 1913-14. p12
- Plate 4. Plans and Elevation of the McEwan Hall, and Medical School, University
of Edinburgh, designed by Sir Robert Rowand Anderson. P 25.
- Plate 5. A view of the West Elevation of the MGM Cinema as it is today. p 27
- Plate 6. Detail of Exposed fragment of Sir Rowand Anderson's Panorama building
of 1888. p 28
- Plate 7. Section through the Glasgow Ice Skating Palace. p 31
- Plate 8. View of the Glasgow School of Art Phase One and Panorama Building,
by Alexander McGibbon, p 37
- Plate 9. The Glasgow School of Art- Completed building, 1925,
by Alexander McGibbon, p 38.
- Plate 10. Building the School of Art, Renfrew Street, 1908.
By Muirhead Bone, from his 'fifty buildings,' p 39.
- Plate 11. Photographs before and after demolition of the old Dutch Gabled
Insurance building, p 45.
- Plate 12. Photograph of the South Façade, p 56.
- Plate 13. Photographs of the South Façade, p 57.
- Plate 14. Photographs of the South Façade, p 58.
- Plate 15. Photographs of the South Façade, p 59.
- Plate 17. Elevation of the Annex by Graeham Henderson and John Keppie, p 67.
- Plate 18. The Campus as seen from the Air, circa. 1964, p 74.
- Plate 19. The extension Scheme, 1961, p75.

List of Figures

- Figure 1. Plans of Glasgow 1600 and 1815. p 3
- Figure 2. Elevation of the McLellan Galleries. p 9
- Figure 3. Elevation of Grecian Chambers. p16
- Figure 4. Plan of the Panorama. p 18
- Figure 5. Plan of the School of Art site as it looked in 1888. p19.
- Figure 6. Elevation of the Panorama as built, 1888. p 20.
- Figure 7. Side Elevation of the Panorama from Scott Street, and Section through Platform. p 26.
- Figure 8. Plan of the Glasgow Ice Skating Palace. p 30
- Figure 9. Plan of the Circus, 1909. p 35.
- Figure 10. Plan of Garage, and remaining Rotunda beneath the Palais de Danse, 1927, p 40.
- Figure 11. Two Sections through the Waldorf Palais de Danse, showing roof as it exists today, p 41.
- Figure 12. Plan of Accommodation of the Panorama today, p43.
- Figure 13. Section through New Cinema, Leslie Norton, 1965, p 44.
- Figure 14. Ground Level plans of Phase One 1899, and Phase Two 1909 of the School of Art, p 47.
- Figure 15. Plan of the Vicinity of the School of Art on completion of the first Phase, p 48.
- Figure 16. Plan of the Vicinity of the School of Art, 1909, p 49.
- Figure 17. Elevations of the School of Art, 1907 & 1910, p 60.
- Figure 18. Elevation of Phase One, 1899, and Plan of Sub-basement, 1907, p 61.
- Figure 19. The Vicinity of the School of Art, 1929, p 65.

(List of Figures continued..)

- Figure 20. Plans of the Annex 1929, p 66.
- Figure 21. The Vicinity of the Glasgow School of Art, 1963, p 71.
- Figure 22. The Extension, Foulis Addition, 1963, p 72.
- Figure 23. The Vicinity of Mackintosh's School of Art, 1969, p 76.
- Figure 24. The Addition of the Newbery Tower, 1969, p77.
- Figure 25. Elevations of the Campus Scheme, 1963, showing original brick finishes, p 78.
- Figure 26. The Temporary Structure of the Assembly Building, p 79.
- Figure 27. Stonelake's winning Scheme, 1985, p 83.
- Figure 28. Douglas Niven, Scheme for the Campus, p84.
- Figure 29. The Vicinity of the School of Art as it is Today, 1996, p 85.

Preface

A Way of Looking at cities.

At the beginning of his 'Architecture of the City,' Aldo Rossi writes that, "Aesthetic intention and the creation of better surroundings for life are the two permanent characteristics of architecture."

As architects we are entrusted with understanding with these two crucial factors whenever dealing with urban artifacts, whether designing new buildings, or simply looking at, and discovering the underlying form and memory of the city.

The attempt of this dissertation was to analyse the urban artifacts found specifically in the direct vicinity of the School of Art in order to find the locus solus, hitherto slightly elusive.

The city is made up from urban artifacts, but these do not exist solely as physical forms within the fabric of the city, since they also have an existence and memory shaped by historical, geographical, and Structural circumstances, which are intrinsically connected to the general life of the city.

Summary

The Vicinity of the Art School.

Mackintosh's Art School is one of Britain's most famous twentieth century buildings. Certainly it is an architectural icon immediately synonymous with its city, one which thousands of people come to Glasgow to see year in year out. Like any building it has to be viewed in the context of its surroundings, which at first glance shows the Southern half of its own block choked up with the large sheds of the MGM cinemas, and to the North, the School of Art Campus with its ramshackle collection of twentieth century buildings.

When Newbery initiated the competition for the School one hundred years ago in 1896, the area of Sauchiehall Street was one of the most vibrant in Britain, with the kind of profile which certainly ensured the prominent reputation of the Art School building. It is fascinating that scratching under the surface of the immediate vicinity reveals that this vibrant inheritance includes the services of some of Scotland's most eminent Architects not just Mackintosh with Honeyman and Keppie, and Greek Thomson, but Rowand Anderson, James Miller, James Smith, and latterly Graeham Henderson, and Gillespie Kidd and Coia.

This report shows that the buildings are all still standing today which is something of a miracle, bearing in mind the commercial aspect of Sauchiehall Street, and its relaxed laws of development which might easily have erased some of these buildings over time. The fact that such *prominent* Architects are here is something more than a miracle. Indeed is the only place where Mackintosh and Greek Thomson are

viewed together (though it could in theory happen in Mitchell Street) and it is also extremely intriguing that Rowand Anderson, who had led the second Scottish Revival which influenced Mackintosh so passionately, should be entangled in the foundations of his greatest building.

The object of the Drawings.

My aim has been to attempt to produce a clarified, and easily understood set of drawings which convey some of the developments which have occurred in this unique environment, showing two aspects; firstly the original context for Mackintosh's scheme and its subsequent changes; and secondly the evolution of the school of Art 'campus' buildings, which have had a direct connection to it and therefore a direct effect on its environment.

The drawings aim to do this by using 1:400 *Nolli Plans* to show the changing figure-ground diagram of the vicinity over selected years, and 1:200 *plans* to show the more individual typologies of the School of Art and the Rotunda. There is also an elevation from Sauchiehall Street showing the School of Art and its neighbours as they would have looked in 1899.

The object of the text

The text of this report not only gives information of my sources for drawings, but should be read as an integral part of the analysis, since typology develops from history, geography etc... This information is written in a way of giving historical substance to the drawings, as a chronology of the buildings and their evolution.

Introduction to the Context

To make a study of types, one first must look briefly at the larger historical context of the area.

Sauchiehall Street and its Origins.

Sauchiehall Street was instrumental in the growth of the entertainments and the modern culture of the latter part of the nineteenth century. As such it was a huge contributing factor to the success and prominence of the school of art, which sat above the premiere thoroughfare of Glasgow's centre, on its tallest drumlin at its most prominent moment. Sauchiehall Street can certainly be found as early as 1600 on the plan of Glasgow by James Bair, but is probably ancient in its origins, since it provided a natural sheltered track between the Drumlins. This is how it derives its name from the old Scots words, *sauch* which means 'willow tree', and *haugh* meaning 'hollow'.ⁱ From about 1796, the first villas began appearing to the North in Garnethill, one of the first of which belonging to Professor Garnett, first professor of the Andersonian university (forerunner to Strathclyde university), who is believed to have lent his name to the hill.ⁱⁱ It was here that he kept the astronomical society's telescope, and a camera obscura, shown on the plan of Glasgow by Findlay and Marshall of 1815ⁱⁱⁱ. One can see the Sauchiehall road was still fairly narrow, serving as a country link between the centre, and the expanding suburbs of the West end.

Between 1823-1830 Sauchiehall Street was widened to more than ten metres so commercial traffic could now pass along this natural thoroughfare. This led to the subsequent growth of buildings which could utilise this commercial potential.

Chapter One shows Grecian Chambers and the McLellan Galleries as this type of building, which could embrace the warehouse, the Commercial Street, the Dwelling and even the School of Art under one roof.

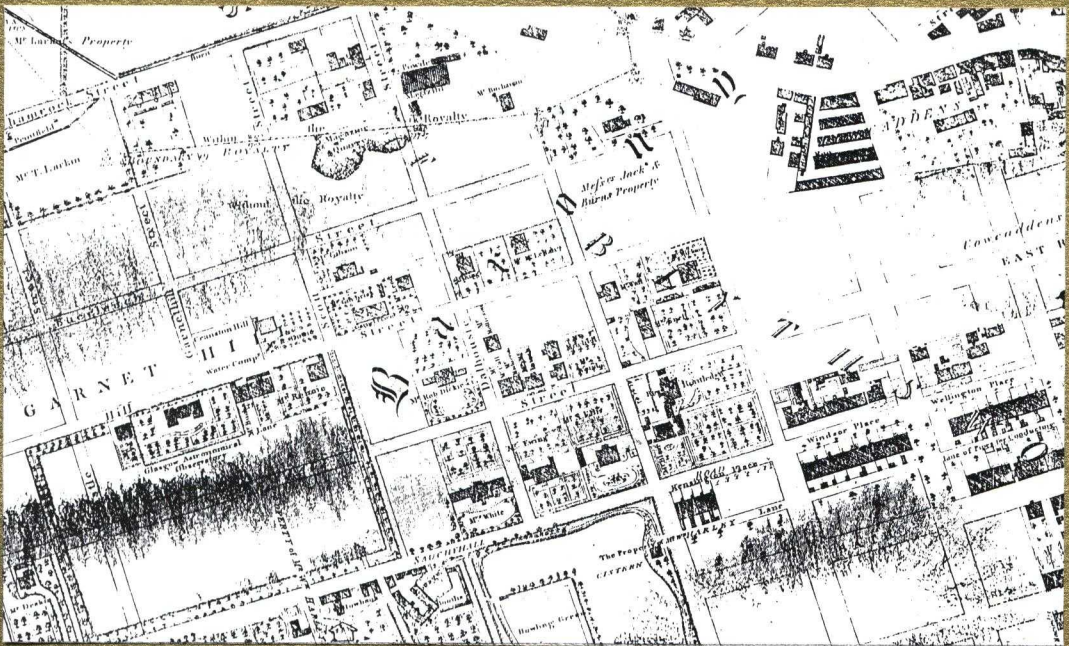
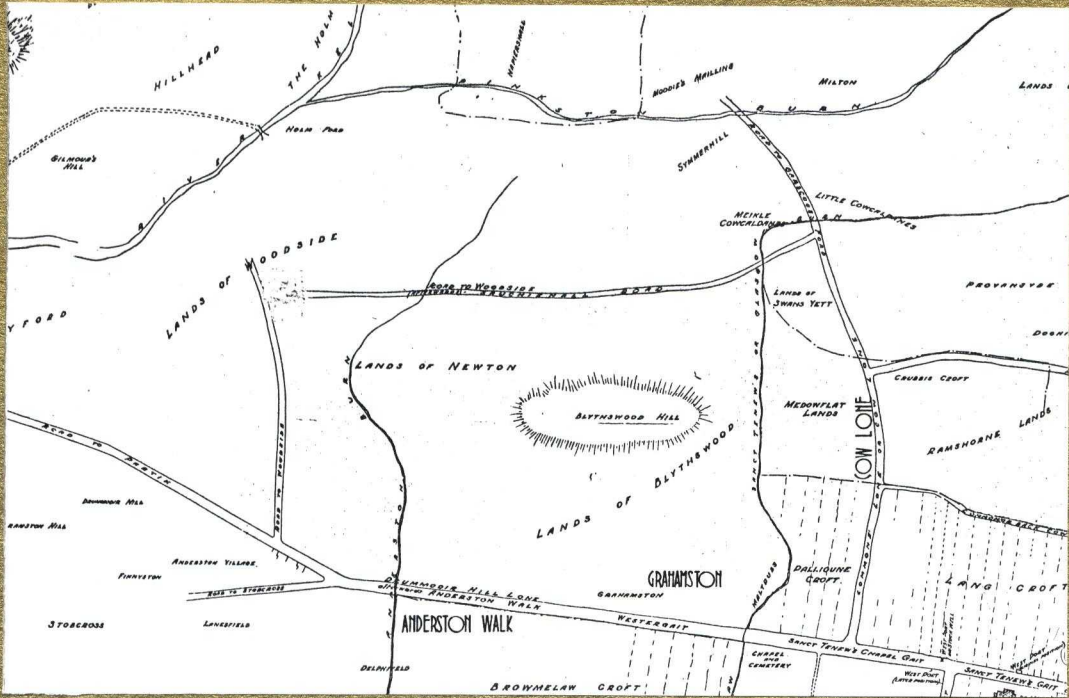


Figure 1.

Top: Plan of Glasgow 1600

Bottom : Plan of Glasgow for the Lord Provost, Magistrates and
Town Council by Findlay and Marshall 1815.

Under the Tramways Act of 1870, Sauchiehall Street underwent a Second Stage of development when it became the centre of Travel between the Centre, and the West-end. Trams ran regularly between Maryhill, Partick and Cowcaddens, which connected with trains coming into Queen's Street. By the time of the 1888 Great Exhibition, it was becoming an exciting cosmopolitan street, soon to be described as the Picaddily of Glasgow by J. Muir in 1901.

Chapter Two Shows the Panorama and its subsequent developments as an ice Rink, Cinema, Circus etc...., a Type of Building which embraced the entertainments, and the cultural side of Sauchiehall Street.

The Glasgow School of Art and its Origins.

The Glasgow School of Art had already arrived in Sauchiehall Street in 1869, when it received the bequest of Thomas Haldane and moved out of its original building at 16 Ingram Street. It had begun there as a Government school of design in 1845, legislated by the Board of Trade in response to the findings of a house of commons select committee, which had been set up in 1835-36 to investigate Arts and Manufacture. The main aim of this was to improve the design of Britain's industrial products, which were losing out to countries such as France whose exports had a more superior finish, due to the fact that they had art schools up and running throughout the country. Germany too had a comprehensive system of 'trade schools', and it was more along the lines of these which Britain sought to improve design standards, by concentrating specific design skills to given, specific industries, in contrast to the more classical form of artistic education provided by those in France.

It was not an entirely successful experiment at first, and the Board of Trade turned the schools over to the Committee of Council on Education, who changed the emphasis of Art Education under the 'South Kensington System' of Schools of Arts and Science in 1853. It became the School of Art and Haldane Academy in 1869, and became part of the Scotch Education Department in 1897, coinciding with the call for a new building..

Meanwhile the debate on the Arts and Crafts, outside the schools was taking Britain by storm. Pugin, Morris, Ruskin, Lethaby and many others attempted to establish a new moral order, by giving meaning to manufacture, in response to what Ruskin refers to as the degradation of man into a machine...and those prophetic words which seem to haunt us to this day;

'It is not that men are ill fed, but that they have no pleasure in the work by which they make their bread, and therefore look to wealth as the only means of pleasure.'

The South Kensington System was highly criticised, and in 1882 Arthur Macmurdo, friend to Ruskin, set up the century Guild, aiming to put the Arts and Crafts on a par with painting and sculpture. Following this were the Art-Workers guild and the Arts and Crafts Exhibition society, in 1884 and 1888 respectively. Although these were set up almost in opposition to the inadequacies of the Government schools, the overall effect was of Art education going through a process of intense growth by experiment whereby it was actually informing itself.

Also outside the schools of Art, the links between Art and Industry were being heavily promoted, and some of the most remarkable and exciting developments of

the century unfolded as rapidly expanding industrialism hit the public with its full force for the first time in 1851, at the great exhibition held inside Paxton's awe-inspiring Crystal Palace. Subsequently these grand industrial fairs made their way all around Britain, and eventually in 1888 the Glasgow International Exhibition was held in Kelvingrove Park, which, befitting the second city of the Empire and major European centre of industry, was the largest since that of 1851.

Chapter three shows Mackintosh's School of Art, a building which takes on board the broad implications of Arts and Crafts Education, and synthesises these with National pride in Industry, along with the thriving culture of Sauchiehall Street..

Looking at the past century of Modern Art you would think the frenetic changes in industry of the 19thC were nothing compared with the frenetic growth of Art in the 20thC. The school of Art has managed to evolve during this time, which certainly positively signifies the idea that the 'Arts and Crafts' have retained a lasting relevance throughout a turbulent century and indeed are a necessary and continually growing application to industry and society. However there is a sense of inevitability that looking at the history does reveal a tragedy of planning, one which undoubtedly lacks the richness of its inheritance. In fact none of the buildings exert any real finesse,(surely one of the great hallmarks of the Masterwork,) instead hanging hope on the future, and the next phase of building. Nothing can hide the defiance and unnecessary brutality of the last phases of construction.

Chapter four shows the extensions that have taken place to the School of Art, which embraced the need for expansion at all cost.

1

Two Commercial Types.

Chapter One shows Grecian Chambers and the McLellan Galleries as the type of building, which could embrace the warehouse, the Commercial Street, the Dwelling and even the School of Art under one roof.

1. The McLellan Galleries *Built by James Smith 1855*

In Thomas Sullman's beautifully drawn panorama of 1861 (see Plate 1) one can see in the central portion of Sauchiehall Street the remnants of Garnethill's leafy villas, and East from here the McLellan Galleries, built in 1855 by the Merchant and Balie, Archibald McLellan. He had built up a large collection of Art work over his distinguished career as a coach maker and Cathedral restorer, and left these and the Galleries as his bequest, which were bought by the Corporation Galleries on his death. The building embraces the urban block as one piece, sweeping from one end to the other in a long, three story range. The facade is restrained, simply divided into three portions, with the middle bay pushing out to contain a centralised entrance off Sauchiehall Street. (See figure 2.)

The building became home to the Art School from 1869 until 1899 which had moved Sauchiehall Street in 1969 from the site where it had opened on 6th January 1845, No. 16 Ingram Street, (a building designed by David Hamilton). The Glasgow School of Art had begun to enjoy a unique position in Britain, gaining more freedom from the restrictions of the Government curriculum, when it became the recipient of the Haldane Academy Trust Fund, bequeathed by James Haldane, a Glaswegian engraver of whom surprisingly little is known. As well as increasing the number of prizes and awards, and arranging Special lectures on Art and Architecture (known as *the Haldane Lectures*, famous especially for those given by Alexander 'Greek' Thomson,) the Trustees also negotiated with the Corporation Galleries to obtain new

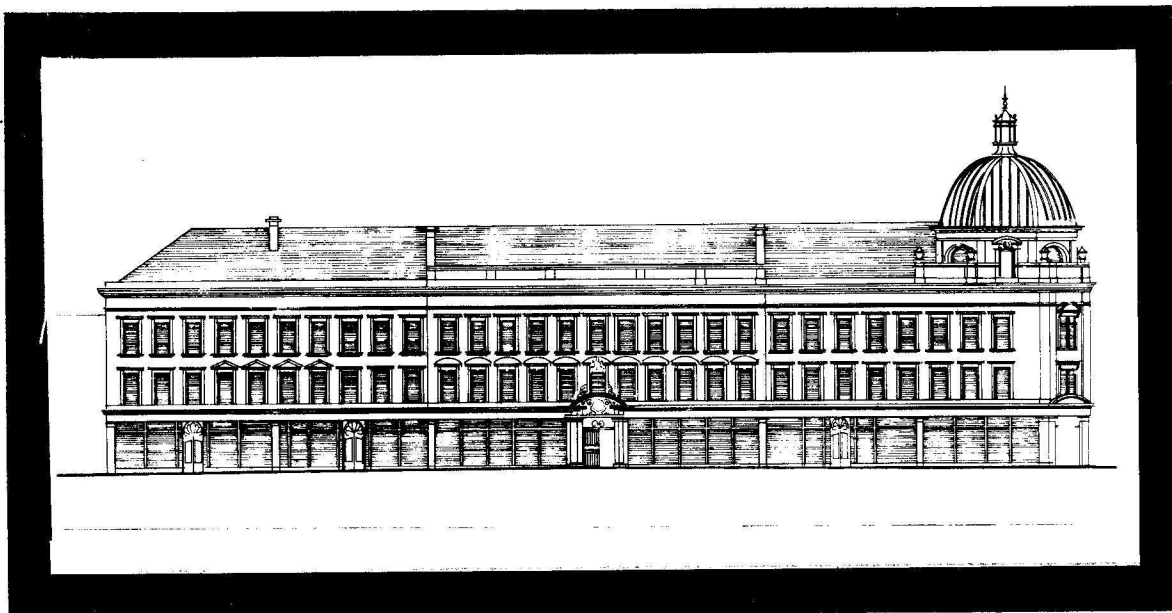


Figure 2.
Elevation of McLellan Galleries.
Bruce Jamieson 1996.

APPEARING IN THE ILLUSTRATED LONDON NEWS, MARCH 24, 1861.



Glasgow.

Plate 1.

Birds Eye View of Glasgow circa 1861, Thomas Sullman, Reproduced from the Illustrated London News. Mitchell Library.

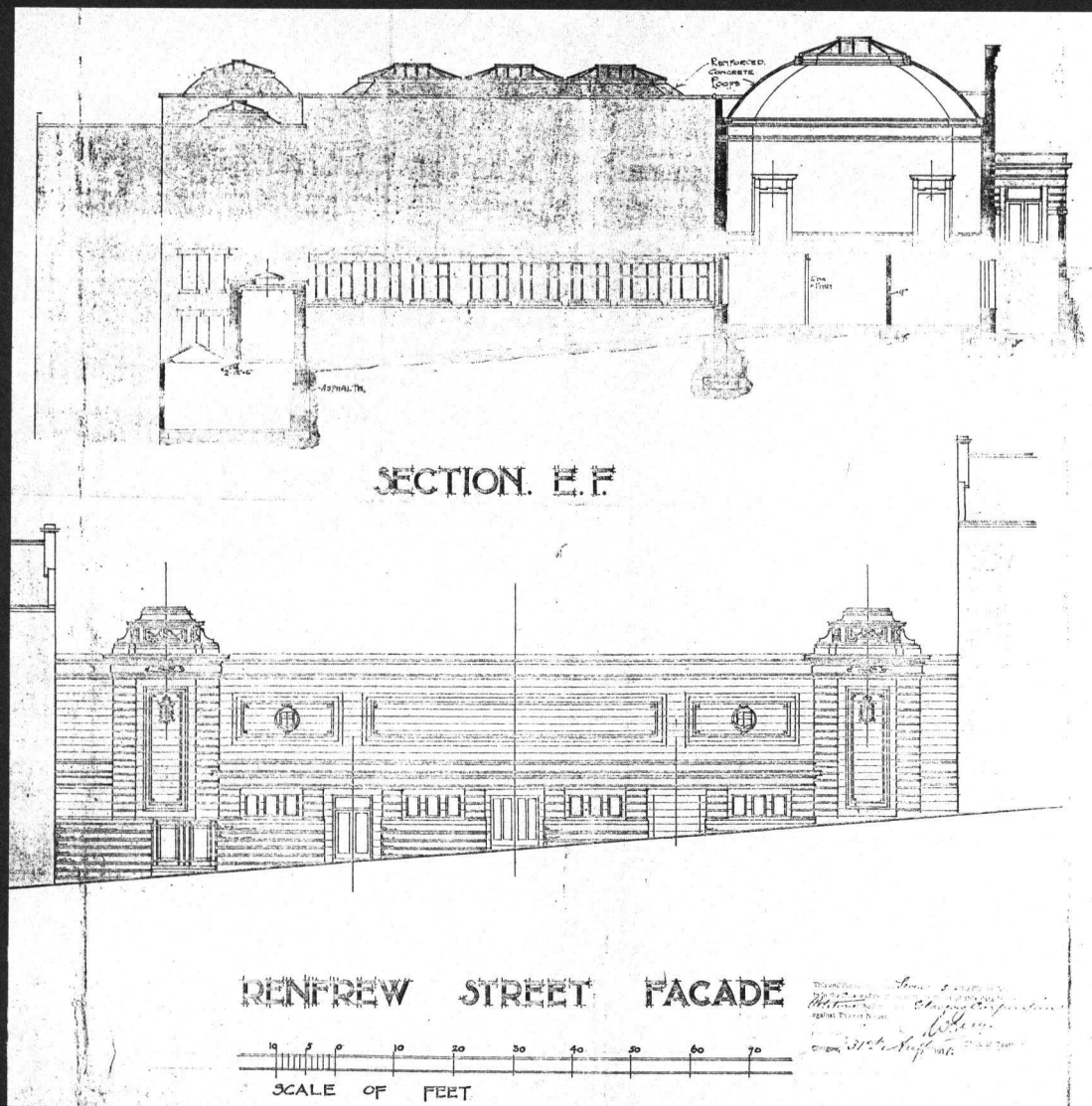


Plate 2.

Sections through the McLellan Galleries.

1913-14 by A B MacDonald's office of Public Works.

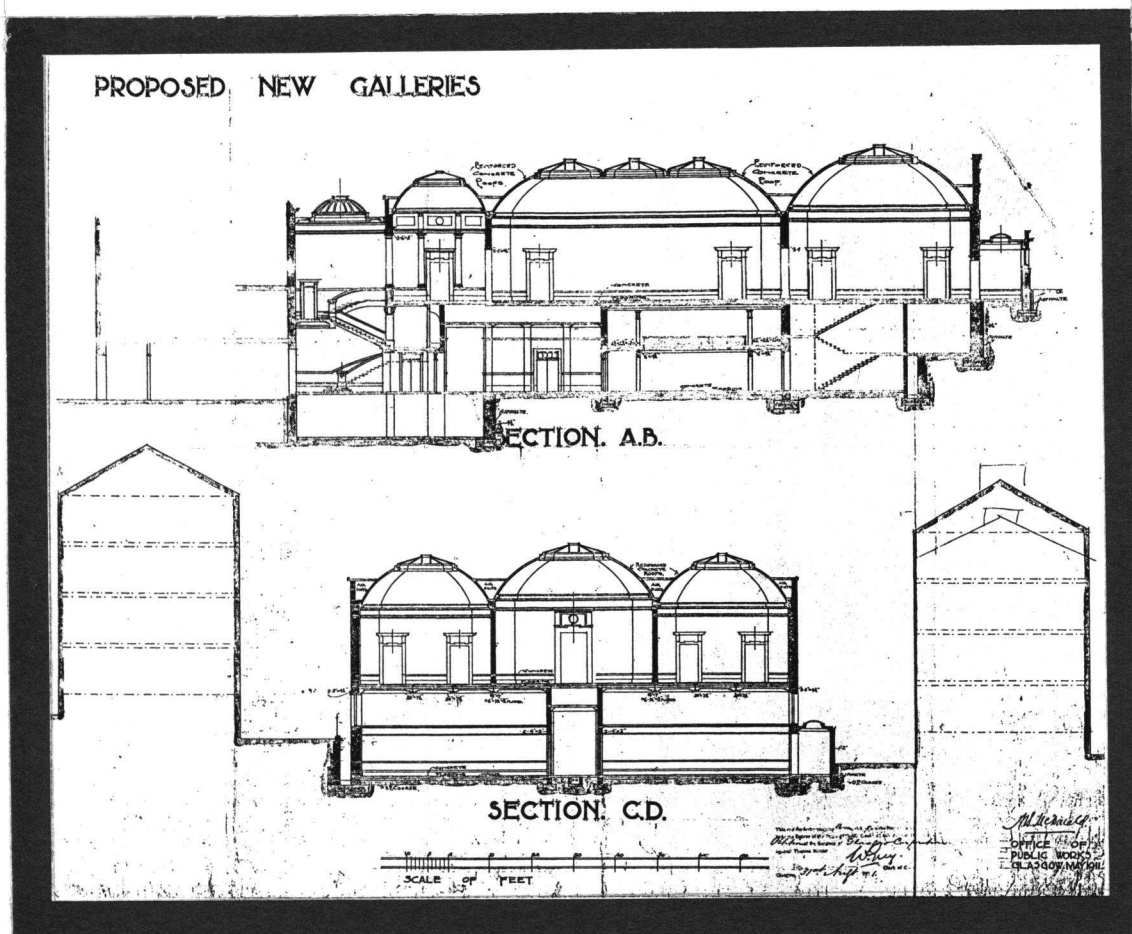


Plate 3.

Section and rear Elevation of the McLellan Galleries.
1913-14 by A B MacDonald's office of Public Works.

accommodation on the upper floors of the McLellan Galleries.

These were very makeshift studios however, created out of what would have previously been domestic apartments, and poor lighting as well as cramped conditions led to three consecutive annual reports by the headmaster Thomas Simmonds as to their unsatisfactory nature^{iv}. In addition, the deal worked out between the Trustees and the Corporation meant that the School had no tenure on the property, a position which the Governors felt was intolerable. The Art School began to look for new accommodation and in 1895 acquired the site above the Panorama.

When it finally moved out some four years later, to occupy phase one of Mackintosh's building, it was closely followed by the art collection itself, which was moved to the new Kelvingrove Galleries, constructed from the profits of the 1888 Great Exhibition. The Corporation Galleries were then partially reconstructed by *Burnet and Boston* in 1904 who added the dome on the corner, and provided French Rococo interiors on the ground floor for *Trerons's Magasine de Tuileries*, a fine example of carriage trade Glasgow. Alterations were also made at the rear, which contained three large halls.

The new developments at the rear were superseded by the Galleries currently occupying this space, built in 1913-14 by A B MacDonald's office of Public Works. These extended the concept of utilising the centre of the block by slotting in an entire new building stretching from the back of the front range of the Corporation Galleries, up a central staircase, through the Galleries at the core of the block, to present a tidy Neo-Classical facade to Renfrew Street, containing the shop. The domes of the Gallery spaces were constructed using reinforced concrete. (See Plates 2 and 3.)

1865 Grecian Chambers *Alexander Greek Thomson*

Like the McLellan Galleries, Grecian Chambers uses a simple arrangement of floors to divide the street from the Warehouses on the First Floor, and Residential above this. Greek Thomson deals with their vertical separation by using different entrances. On the ground the Mews is entered off centre, with the central staircase leading up to the Warehouse above. A door was provided at the side, presumably for the Flats above, intended to be slightly grander judging by his original perspective drawings of the building.

Greek Thomson is known for using 'the wall' to synthesis his ideas of the urban character of Glasgow, with his knowledge and passion for the architecture of antiquity.^v In the wall he was able to combine the various elements of his architectural repertoire into individual combinations, which could deal with the particular contextual and programmatic requirements for the building.

Grecian chambers is an unusual building for Greek Thomson, in that it occupies a corner (almost unique in his commercial work) and also in that he uses an Egyptian order dominant over his preferred Greek order^{vi}. In addition to this, the corner forms the terminus of an unusually long block running along the North side of Sauchiehall street from Garnet Street to Scott Street, legacy of the five or so villas that used to stand there. Normally he slotted his wall between the buildings either side, but here he has to create the two sides first, using solid looking end pavilions, intended to act as book ends. He then inserts a sophisticated two story wall between these, finally uniting the three into a whole by a continuous entablature. Secondary

entablatures and shallow pediments are set above this, over the two end bays, to maintain their presence and solidity against the sky line.

The most eye catching part of the composition is the toothy upper extremity of the wall, which has been whittled away to form stocky Egyptian columns, amply able to take the weight of the entablature, and perceivably capable of keeping it in a state of inertia for eternity!

The building responds to the topology of the site, which is very steep behind, by cutting the end bay facing Scott Street right back in to the hill behind. The Mews is serviced from Scott Street. There is also an anomaly in the plan since it seems to extend much further back into the hill on its Eastern flanked by some fair margin. This was a later addition by James Miller, in response to the to the immediate context, positioning the building between the villa to the West, and the smaller townhouse to the North along Scott Street both of which predate the building¹. It seems to form an additional protective wall along this eastern flank, maintained until the demolition of the villa, and the construction of the new Dental Hospital.

¹ Drawing by James Miller, alterations to the building 1903. Mitchell Library.

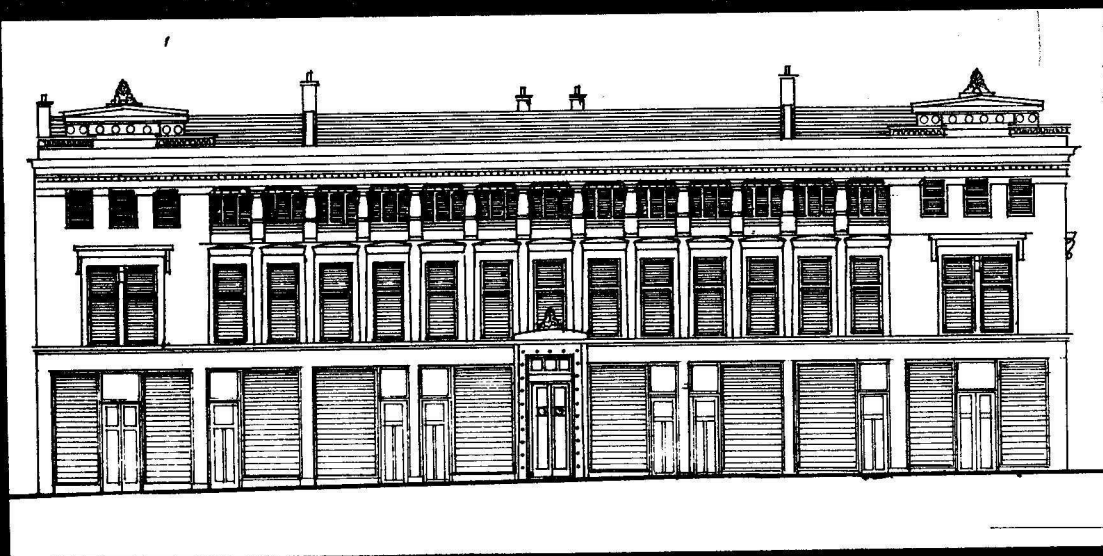


Figure 3.

Elevation of Grecian Chambers.

Bruce Nicolson Jamieson, 1996

2

The Lasting Typology of the Rotunda

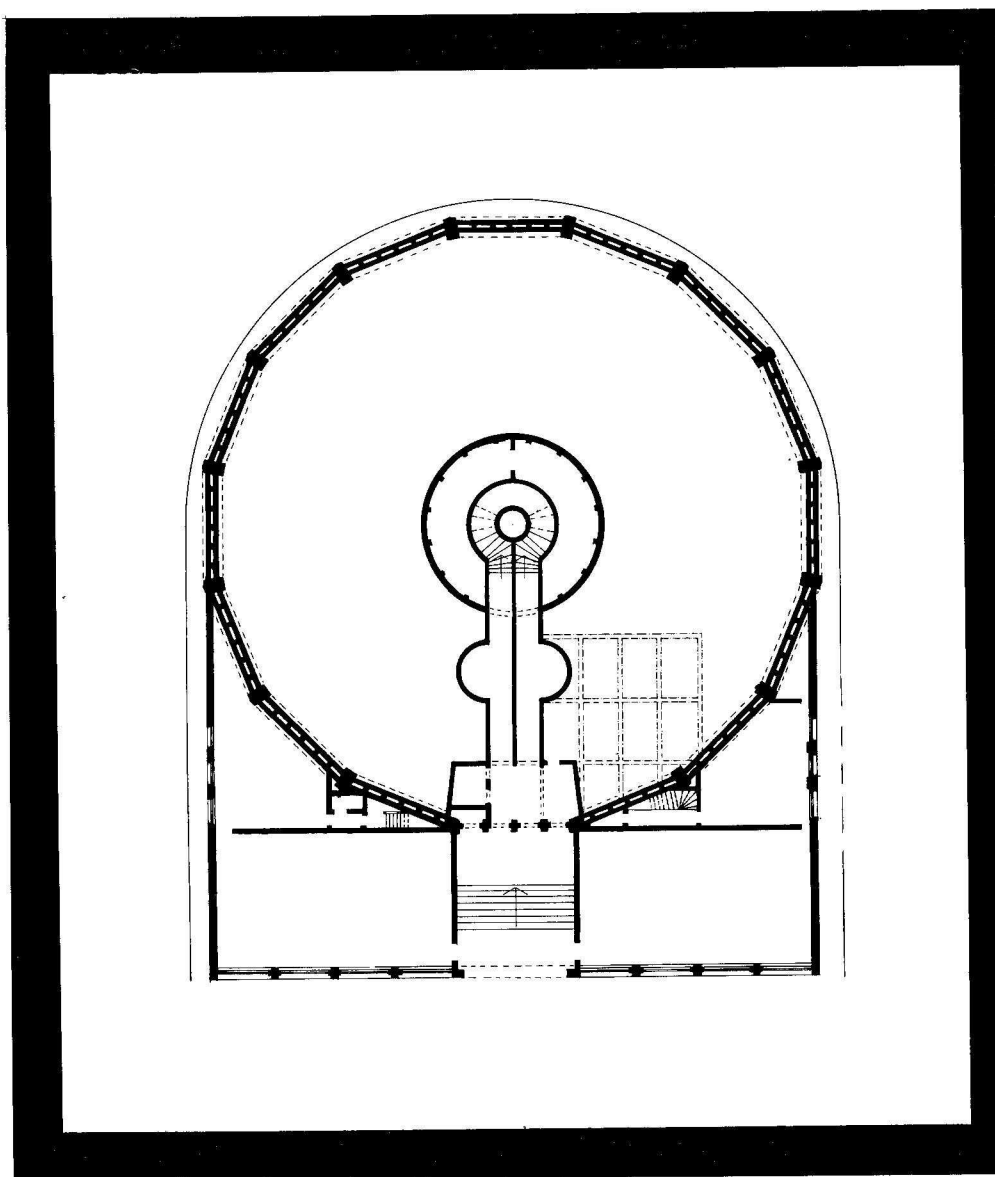


Figure 4.

Plan of the Panorama shown at 1:400

Bruce Nicolson Jamieson 1996

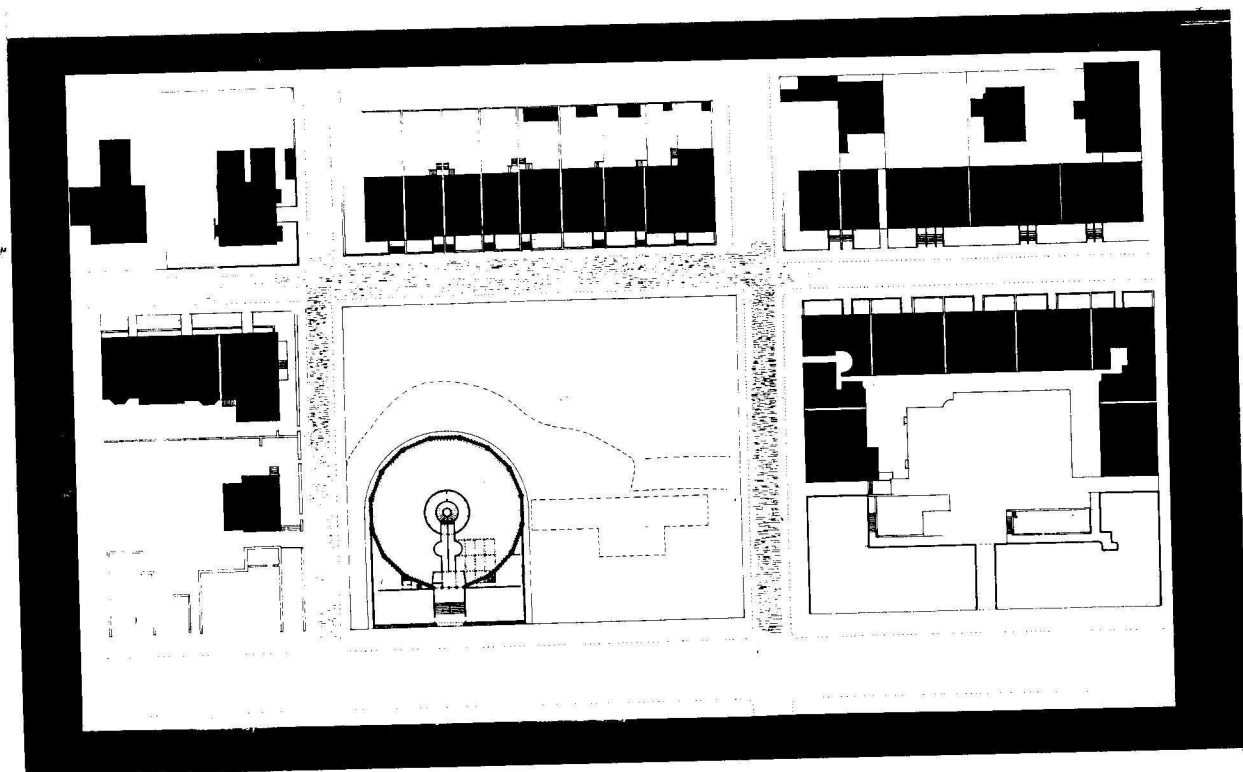


Figure 5.

Plan of the Site of the School of Art as it looked in 1888.

Bruce Nicolson Jamieson 1996.

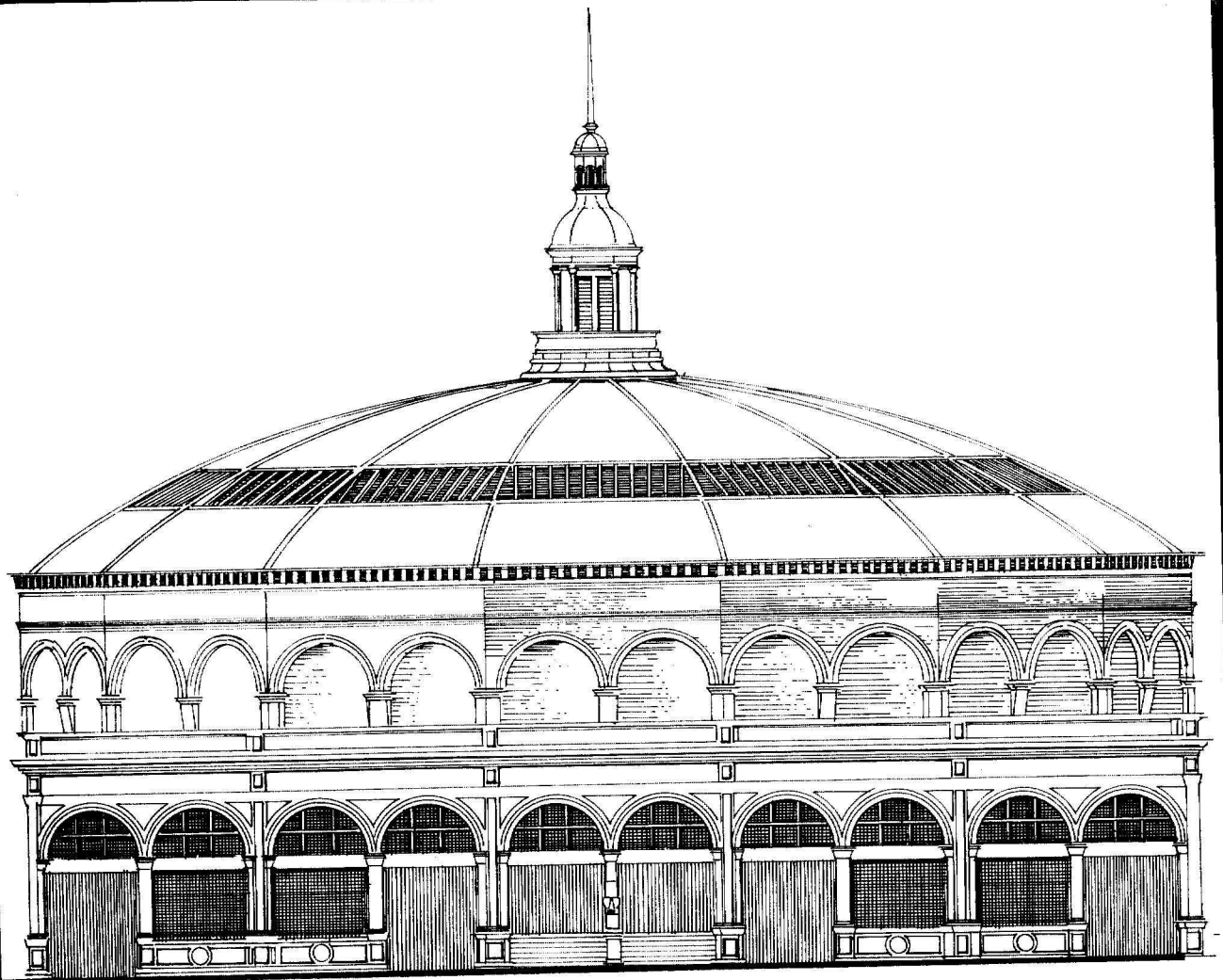


Figure 6.

Elevation of the Panorama as built, 1888

Bruce Nicolson Jamieson 1996.

Chapter Two Shows the Panorama and its subsequent developments as an ice Rink, Cinema, Circus etc...., a Type of Building which embraced the entertainment, and cultural side of Sauchiehall Street.

The Scottish National Panorama building by Sir Robert Rowand Anderson 1888.

The Panorama building was an important civic building, built by the famous Edinburgh Architect, Sir Robert Rowand Anderson. It is quite intriguing that Mackintosh should find his building butting up against one by the man very much at the heart of the nineteenth century Scottish National Revivals in Architecture. He was later founder of the RIAS and from Dr. Sam McKinstry's biography it is quite clear that the revival of the latter part of the nineteenth century, which so influenced Charles Rennie Mackintosh, was most definitely led by Anderson, who advocated '*a truly national architecture appropriate to a technology-driven Scotland*'¹¹.

A study of Anderson's work of the time produces even more astonishing facts, for in 1888 he was engaged in the design of the McEwan Hall, for Edinburgh University. This was semicircular in shape, based on the form of the ancient Greek Theatre. Together with the Medical School which it sits alongside, (see plate 4.), it was to become one of his most famous works. Indeed his obituary by the builder ranks the McEwan Hall as one of the 'Noblest in the country.'

Originally the scale of the McEwan Hall was to have been more modest, catering solely for the Medical School, but when William McEwan, (head of the famous brewers of the same name), decided to donate a large sum of money to

upgrade the scheme into one that would provide for the whole of Edinburgh University, the design had to change.

For such a large and important commission it would come as no surprise that he might have wished to try out some of his compositional ideas elsewhere. Looking at the elevation of the panorama it is striking how the roof, with its lantern, large supporting buttresses, and arches finds close comparison with the upper clerestory and roof of his McEwan Hall. (See elevation of the Panorama, plate 6.) There are also resonance's in the way the outer concentric ring of the McEwan Hall terminates at its apex with a balustrade, with the rotunda of the upper story set back behind, quite clearly a relationship established, admittedly on a smaller scale at the Panorama. The way he deals with the context of each building however is entirely different, in Edinburgh expressing the Rotunda to the city by wrapping the inner amphitheatre in an outer concentric ring, and in Glasgow adhering to the strong forces of Sauchiehall Street by Burying the Drum behind a Range of Shops.

The year of its construction, 1888 was a special year in Glasgow, the Great Exhibition was held in Kelvingrove Park. Sauchiehall Street stretched uninterrupted between the East and West end, sweeping past the enormous 1000ft. by 365ft Exhibition building, designed by *James Sellars* which was nicknamed '*Bagdad on the Kelvin*', due to its ornamental, Eastern detailing, and great size, (it would have dwarfed the current Kelvingrove Galleries.)^{viii} Lining Sauchiehall Street from end to end were all manner of entertainments, along with fine restaurants, and the hustle bustle of shops. The Panorama was built to become an integral part of Sauchiehall Street which was the entertainment street of the city, indeed the Piccadilly of Glasgow.

The Panorama opened Thursday 8th June 1888 under distinguished patronage, from the Right Hon. The Earl of Hopetoun, her majesty's Lord High

Commissioner, and the Right Hon. Sir James King, Lord Provost of Glasgow^x. It was custom built for a panorama of the Battle of Bannockburn, an enormous 300ft long drawing by Philip Fleischer of Munich, which weighed 13cwt, an extraordinary 3cwt of which was the weight of the paint and varnish alone! This is probably why Rowand Anderson had agreed to become involved in the Scheme which would evoke the ultimate triumph of the Scots over Edward II's army.

The first panorama was in fact designed by a Scotsman, Robert Barker, who exhibited in 1788, exactly one hundred years before, a view of Edinburgh, in Edinburgh, which then moved to London. He then designed scenes from the Napoleonic wars. The panorama grew quickly in popularity, and became widespread throughout Europe.

Many eminent Architects had connections with the panorama, Schinkel in particular who started as a Diorama and Panorama painter, executing forty five of these before going into theatre, where he designed over one hundred stage sets.^x He was interested in the opportunities opened up by the panorama in conveying Grand Urban schemes to the public developing many of his later ideas about urbanity from his experience of the panorama.²

The idea was that the viewer approached the centre of the drum along a passage, then climbing up onto a platform in the middle, where he found himself surrounded by a continuous narrative scene, or landscape painting. The intervening space between platform and painting could be filled in by 3-D objects, and incandescent lighting, along with smoke and other special effects, to heighten the drama of the experience. The Bannockburn Panorama had all of this, making it very

² Barry Bergdoll, Architectural historian, Columbia University, New York, lecture entitled *Karl Freidrich Schinkel* on February 23rd 1996, Gavin Stamp's Lecture series, Mackintosh School of Architecture based on the themes of *Autonomy and Theatre*, clearly backing up the seriousness of the panorama as an architectural tool.

realistic, although there were some complaints that the faces of the figures were perhaps not as well drawn as they might have been.

The planning is exactly as expected, possibly even expedient in the way it deals with the, albeit simple program. The viewer passes the ticket office on the inward passage, and on the way out is led past a small photographic stall. The platform inside could hold about 60 people at a time, and was reached via a dual semi-circular staircase, one side to alight, and the other flight to depart. About half-way down the passage on either side, are curious semi-circular spaces, which presumably would have eased congestion when the panorama was busy, or perhaps held recessed seats, for those waiting.

The Panorama also had the Continental Restaurant and Ladies' Cafe, on the first floor, which with its Luncheons, Afternoon Teas, and Dinners à la Carte, Patisserie and Cuisine Française, as well as Bavarian and Vienna Beer, received much acclaim³.

³ Advert from The Balie, Wednesday, June 6th, 1888.

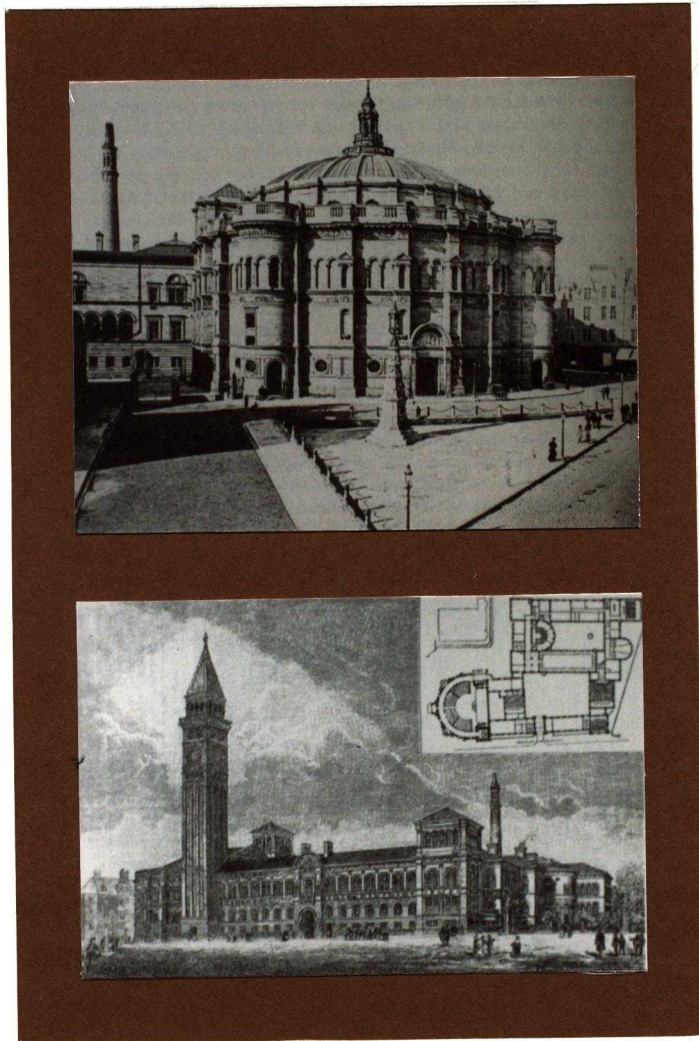


Plate 4.

Plans and Elevation of the McEwan Hall, and Medical School, University
of Edinburgh, designed by Sir Robert Rowand Anderson.

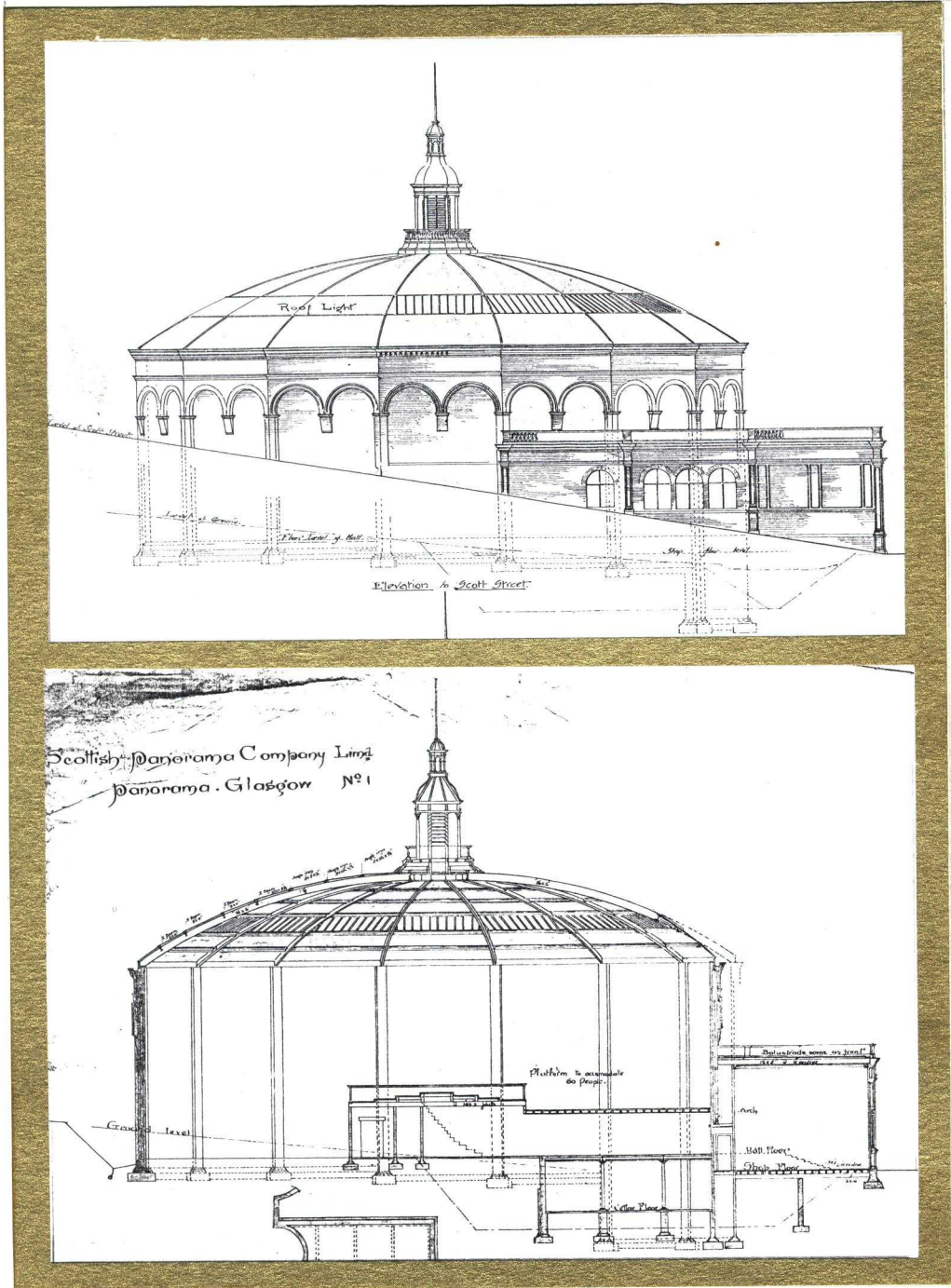


Figure 7.

Side Elevation of the Panorama seen from Scott Street,
and Section through Platform. Sir Robert Rowand Anderson.



Plate 5.

A view of the West elevation of the MGM Cinema as it is Today.



Plate 6.

Detail of Exposed Fragment of Sir Robert Rowand Anderson's Panorama Building of 1888.

The Panorama of Sauchiehall was on the large side of average (33m) since they generally had diameters ranging between 20-40m. The Drum was sixteen sided, each side being made up from a solid expanse of brick, held between two brick piers, which stand proud from the wall. These support a pair of arches which have an almost military look about them, perhaps owing something to Violet-Le-Duc, and certainly have some influence of the Italian Renaissance. A portion of one such arch can still be seen today, squeezed between subsequent extensions to the building (see Plate Nos.). A continuous entablature encircled the top of the drum, from which the shallow dome of the roof sprung, constructed from cast iron I beams about one-and-a-half feet deep. This was surprisingly squat considering the width of the drum, obviously exaggerating the horizontal rather than vertical dimension of the Rotunda. A strip of roof lighting runs round the entire circumference of the dome, about half way up. This presumably would have lit up any objects placed between the platform and the painting, as described earlier. The dome is finished off with a simple lantern.

It ran for seven years until 1895, but was in fact re-opened again for a second showing in 1898, a good description of which can be found in the Glasgow Herald, of 15th June 1898 p6.

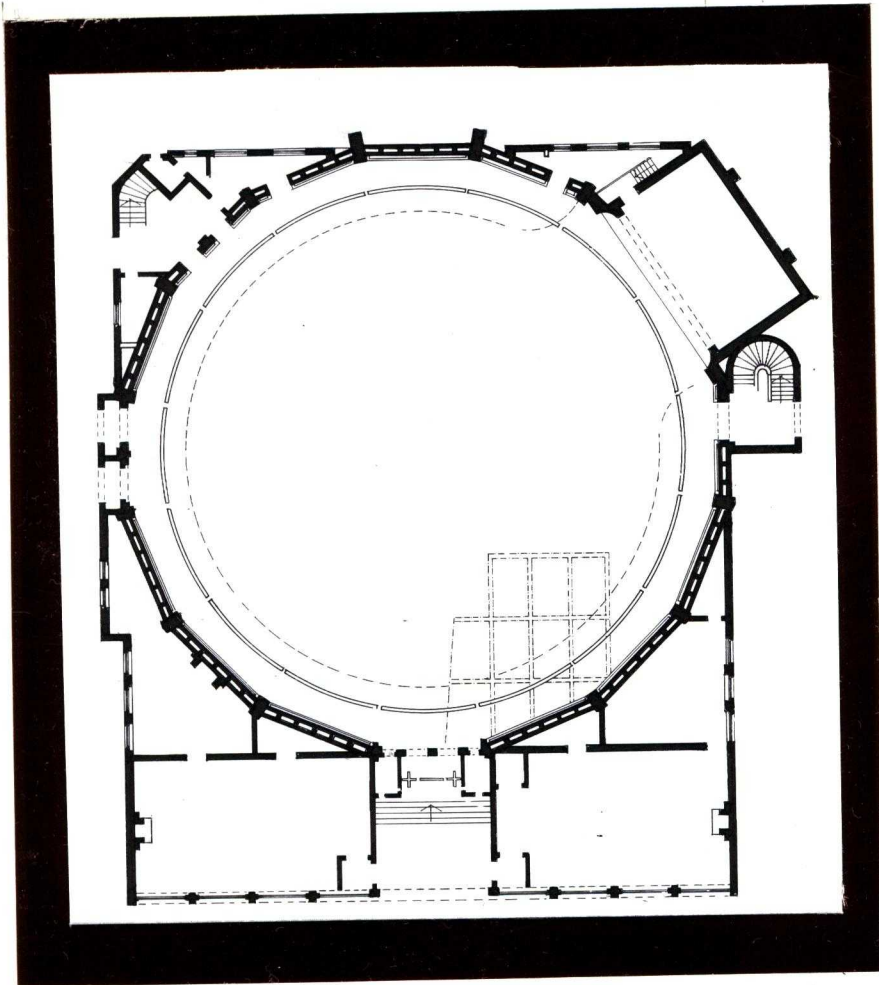


Figure 8.

Plan of The Glasgow Ice Skating Palace 1:400

Bruce Nicolson Jamieson 1996.

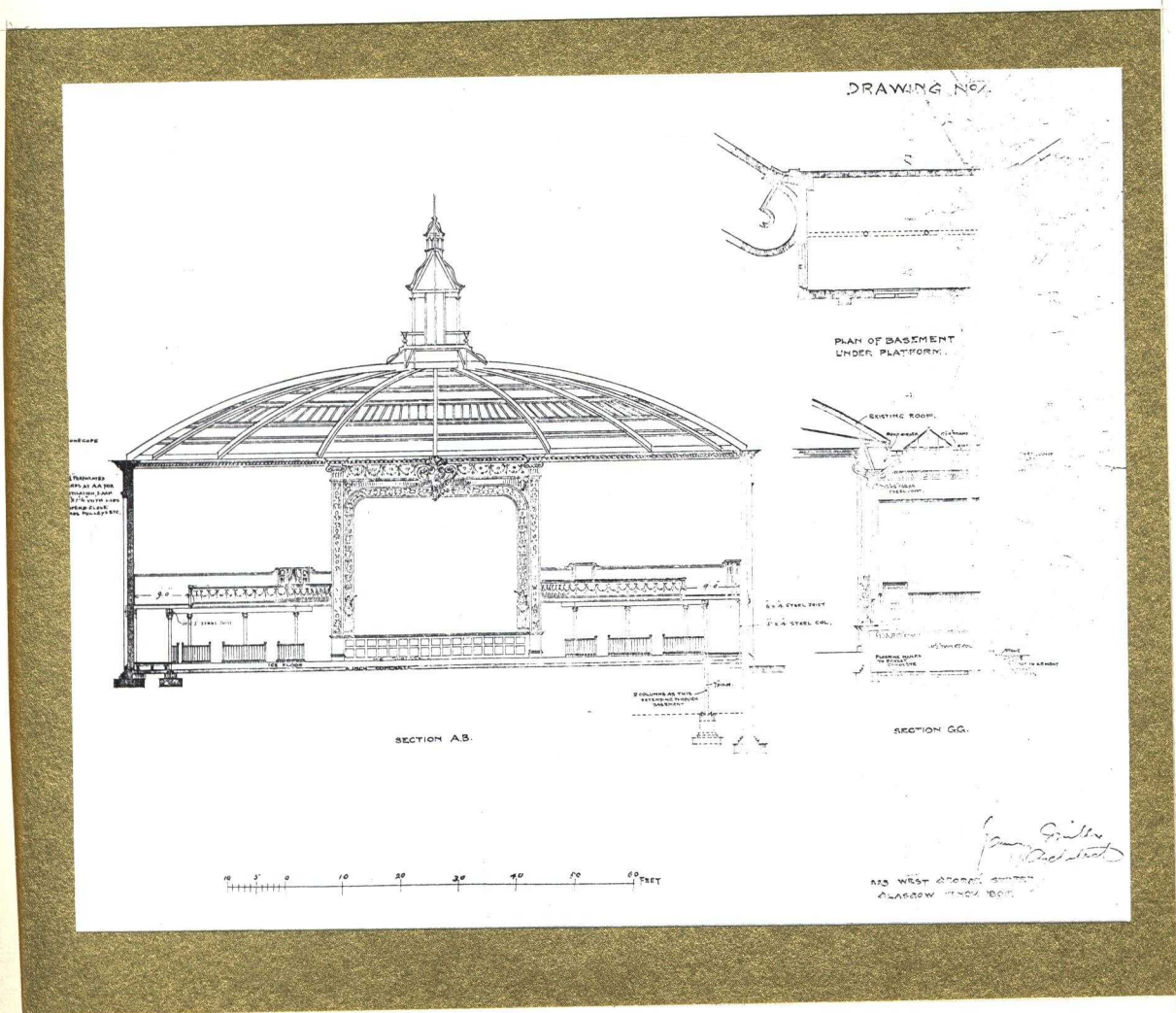


Plate 7.
Section Through the Glasgow Ice Skating Palace,
James Miller's drawings of 1895.

1895 The Glasgow Ice Skating Palace. *James Miller*

In 1895, the Rotunda underwent the first of its changes when it was bought by the entrepreneur Arthur Hubner. Added to the list of well known architects working in the vicinity of the School of Art is the young Glaswegian architect James Miller who Hubner commissioned to redesign the building into an ice rink.

James Miller was one of the most successful Glaswegian Architects of his generation, known principally for his design of stations, (receiving commissions from most of the major railway companies operating in the West of Scotland at the time,) and for Banks. He had set up practice in 1893, so this commission was at the start of his solo career. Interestingly enough, this is not the only time he found himself renovating work by Rowand Anderson, since he was commissioned later in 1901-1906 to extend Anderson's Central Station Hotel of 1883^{xi}.

In the Ice Rink the central part of the drum is kept free, for skating, with a promenade running around the perimeter. The rotunda, originally only hidden from Sauchiehall Street is now entirely buried all the way round with poché, used for staircases up to an upper gallery, a ladies cloakroom, and a platform for musical renditions and other routine hall acts, but more importantly, for events like the cinematographe (see next heading).The Gallery above was bolted in to the brick drum, cantilevered out to be supported on a ring of singular columns.

It is of some interest that the buttresses of the Real Ice Skating Palace are mentioned in condition no. 2 of the competition rules for the School of Art building.

It states:

The buttresses supporting the building, at present occupied by the Glasgow Real Ice Skating Company, limited, are shewn encroaching upon the southern building line of the site. Should any wall be built along the southern building line of the site, it must be done in a way as not to affect, prejudicially, these said buttresses.^{xii}

One can see the buttresses drawn quite clearly in Mackintosh's 1907 plans and elevations of the School of Art, when the Second Phase was being designed. (Fig. 18)

1896 'Le Cinematographe.'

The Ice Skating Palace opened in April of 1896, and the owner Arthur Hubner (later responsible for the Circus as well,) was keen to get the public interested in enjoying all manner of performances other than simply the skating itself. On a trip down to London he had seen the new invention cinematographe, and brought it back to Glasgow, with the first showing to the public on 26th of May 1896. This made it the first place in Glasgow to show films, and only the second place in Scotland, since the Empire Theatre on Nicholson Street, Edinburgh had first given a performance of this new art one month before in April of the same year.

Due to their popularity, these films were shown continuously every night at the Ice Rink, among the first would have been "The arrival of the Calais Express," and "A Blacksmith's shop," for example, but by September local scenes and events

were being featured in the program⁴. Unfortunately due to the extreme cold of the Ice Rink, film shows here became commercially poor to operate, especially as the novelty began to wear off and people could go elsewhere to more comfortable surroundings. Hubner moved his show to the Britannia Music Hall in Trongate, and later he completely transformed the drum once again into a Hippodrome.

1902 The Hippodrome Zoo & 1908 Hengler's Circus. *James Miller*

The Hippodrome Zoo, and later Hengler's Circus were the developments which most people seem to associate with the rotunda. In building terms, James Miller was commissioned to produce seating for some 1500 people, along with a new second tier of accommodation on the front range. These alterations to the elevations are still embedded in the present MGM cinema (see figure 10.) In addition he had to provide shelter for the animals.

It is interesting to note the appearance of the Panorama building, at different stages of its existence in various drawings of the School of Art at the time. Plates 8, 9 & 10 show drawings by Alexander McGibbon, and Muirhead Bone depicting the two buildings as they were at the time.

⁴ Some of this information was seen by chance in an exhibition cabinet outside the Glasgow Room at the Mitchell Library, commemorating the Centenary of the cinema. There is also a small pamphlet produced by Strathclyde Heritage, entitled Glasgow's Cinemas, also in the Glasgow Room.

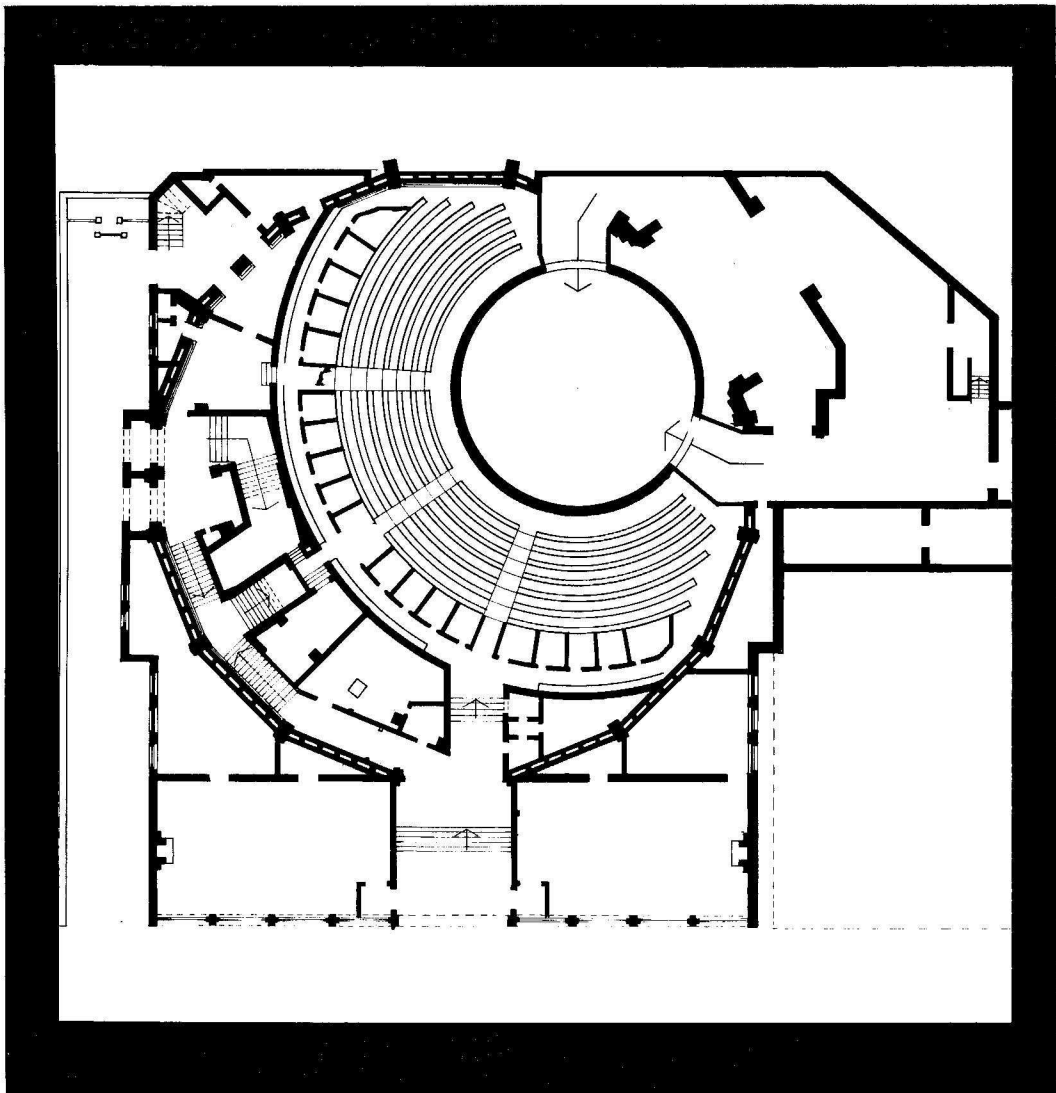


Figure 9.

Plan of the Circus, based on Gardner and Miller's drawings of 1909.

Drawn by Bruce Jamieson 1996

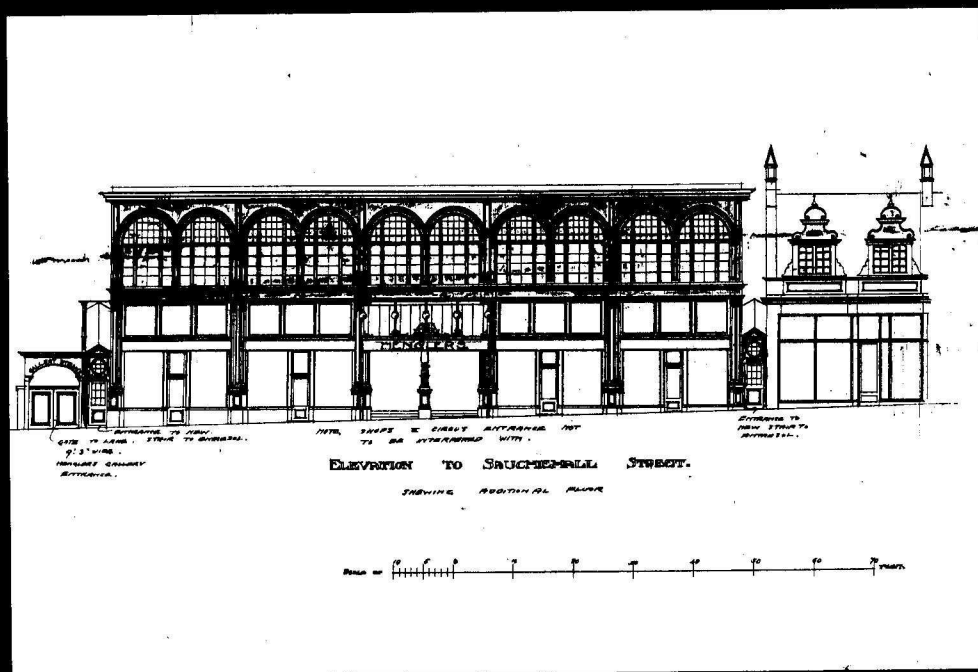


Figure 10.
Elevation of Circus, for James Miller 1909. Mitchell Library.

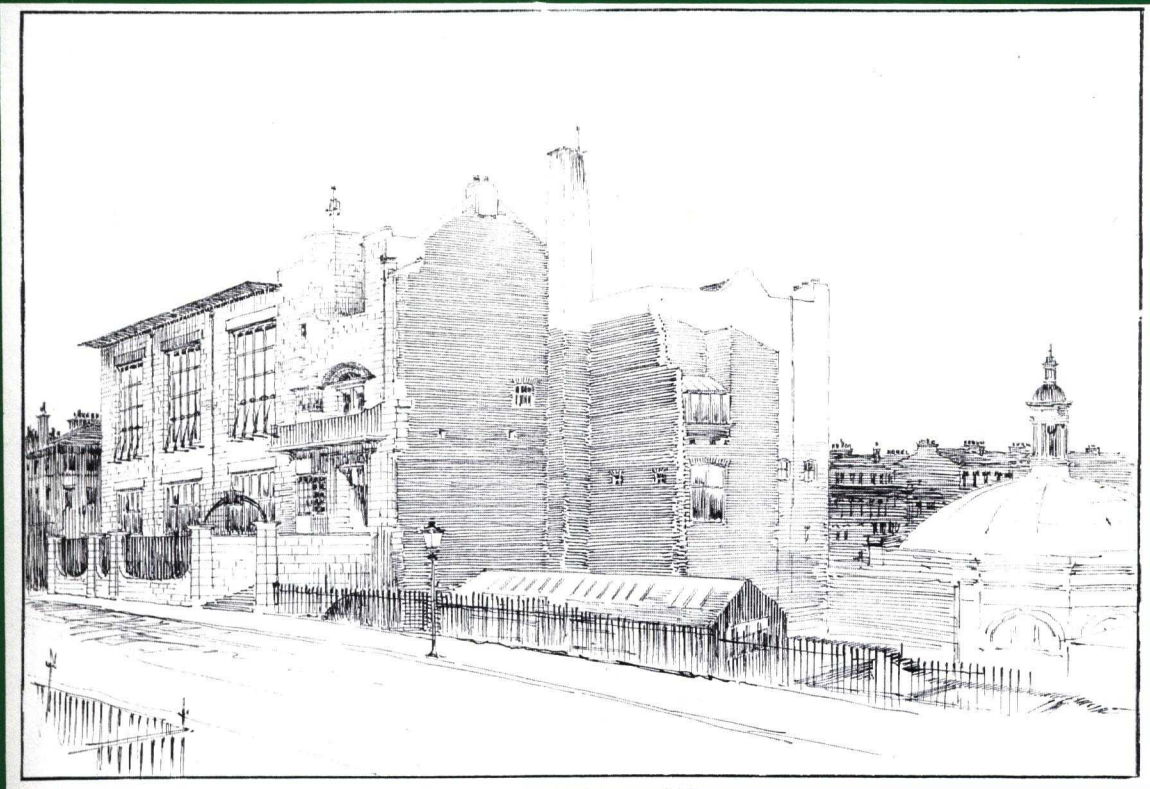


Plate 8.

View of the Glasgow School of Art phase one and Panorama Building.

Drawn by Alexander McGibbon. Glasgow School of Art Library

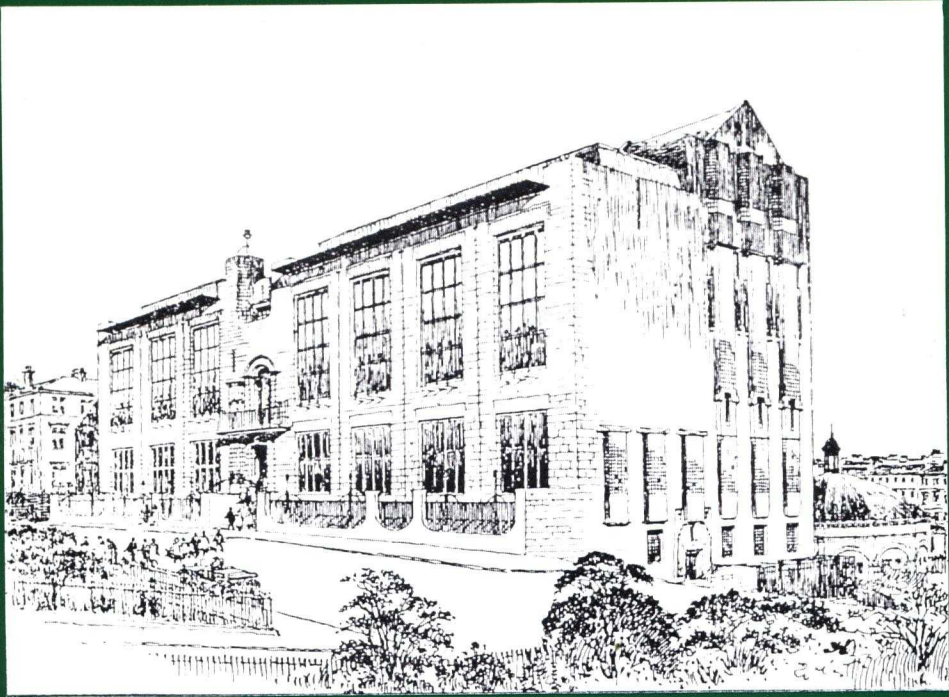


Plate 9

The Glasgow School of Art, 1925. Alexander McGibbon.

Glasgow School of Art Library.



Plate 10.

Building the School of Art, Renfrew Street, 1908.
Muirhead Bone, from Fifty Drawings, Macle hose.
Glasgow School of Art Library.

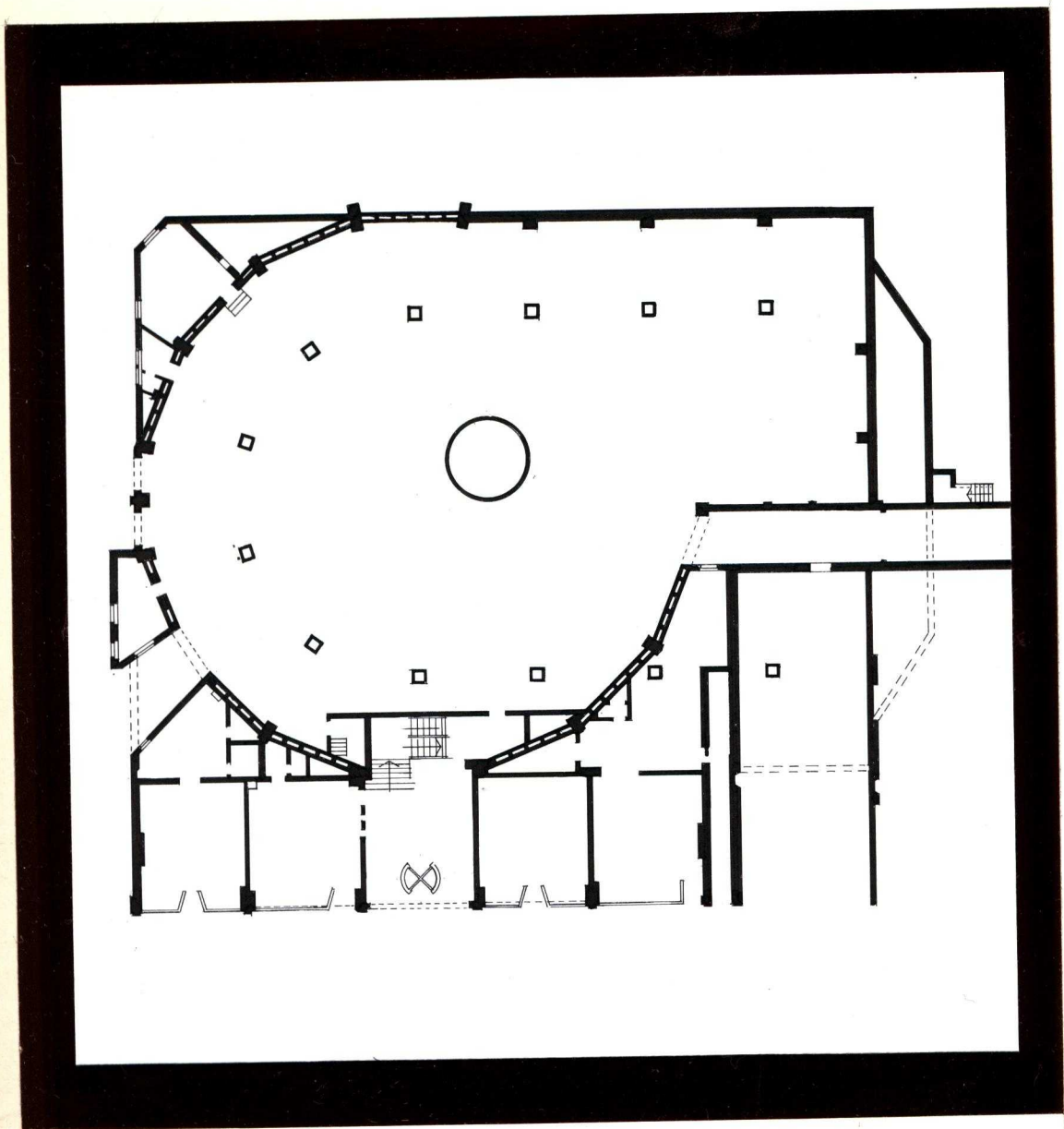
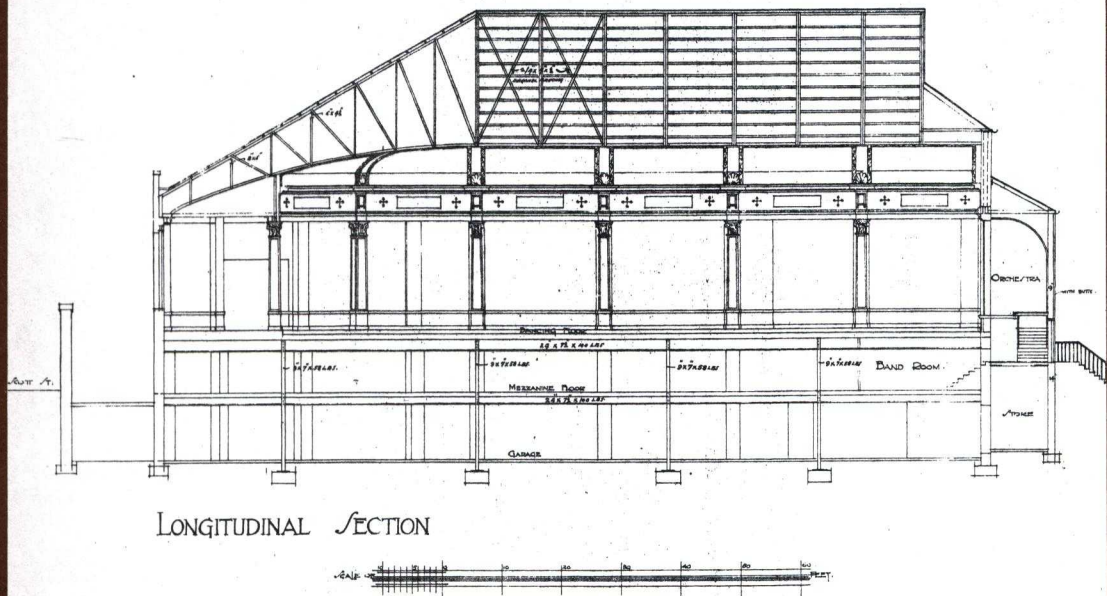


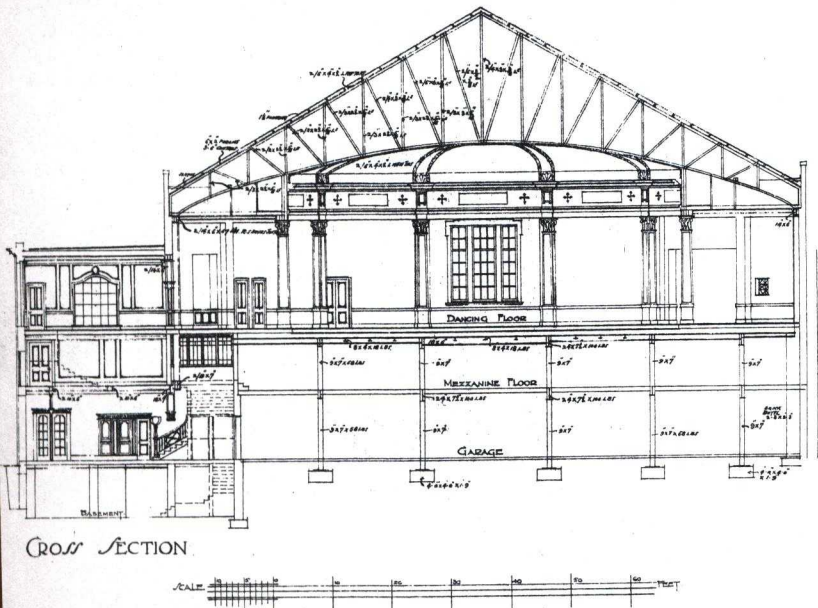
Figure 10.

Plan of Garage, and remaining Rotunda beneath the Palais de Danse 1927.

Drawn by Bruce Nicolson Jamieson 1996



LONGITUDINAL SECTION



CROSS SECTION

NEIL C. DUFF F.R.I.B.A.
 ARCHITECT
 BY W. GEORGE
 GLASGOW - MARCH 1928.

Figure 11.
 Two Sections through the Waldorf Palais de Danse,
 showing roof as it still exists today. Neil Duff.
 Mitchell Library.

1927 The Waldorf Palais de Dance.

The Circus was superseded in 1927 by the Waldorf Palais de Dance. Most books refer to the drum being demolished^{xiii}, or at least partly demolished, which would mean a departure from Sir Anderson's Rotunda, but close scrutiny of the drawings of 1927 by Neil C. Duff show that in fact it remains in tact up to the first floor mezzanine. The upper part of the drum, however was indeed removed, and stripped out on the inside.

The Dance hall was projected out over the drum, supported on columns to form a much larger space, which desecrates the original presence of the drum, and is the reason it required such a high roof. Buried beneath, the drum, was converted into a Garage, with access from Scott Street, and from the Lane off Dalhousie Street, which was considered as a bowling alley in the sixties.

1929 The Regal Cinema.

The Regal cinema took over the building in 1929 and has survived in one form or another as a cinema ever since. It was bought up at some point by the Associated British picture Corporation Ltd., (ABC), who in 1965 also bought the adjacent site, deciding to develop a new cinema, using the London based architect, Leslie C. Norton, with aesthetic assistance (!!!!) from Geoffrey Wimpenny of Keppie Henderson, working on the Foulis at the time. The Art School had themselves been looking at the site in 1963, intending to use it for a mixed use development. It is now reputedly the largest cinema in Scotland, holding just under a thousand people. MGM who now own the cinema, have divided up the Regal cinema into four screens, and are set to increase this number, meaning the original panorama, and its concept of total viewing is almost entirely lost and forgotten.

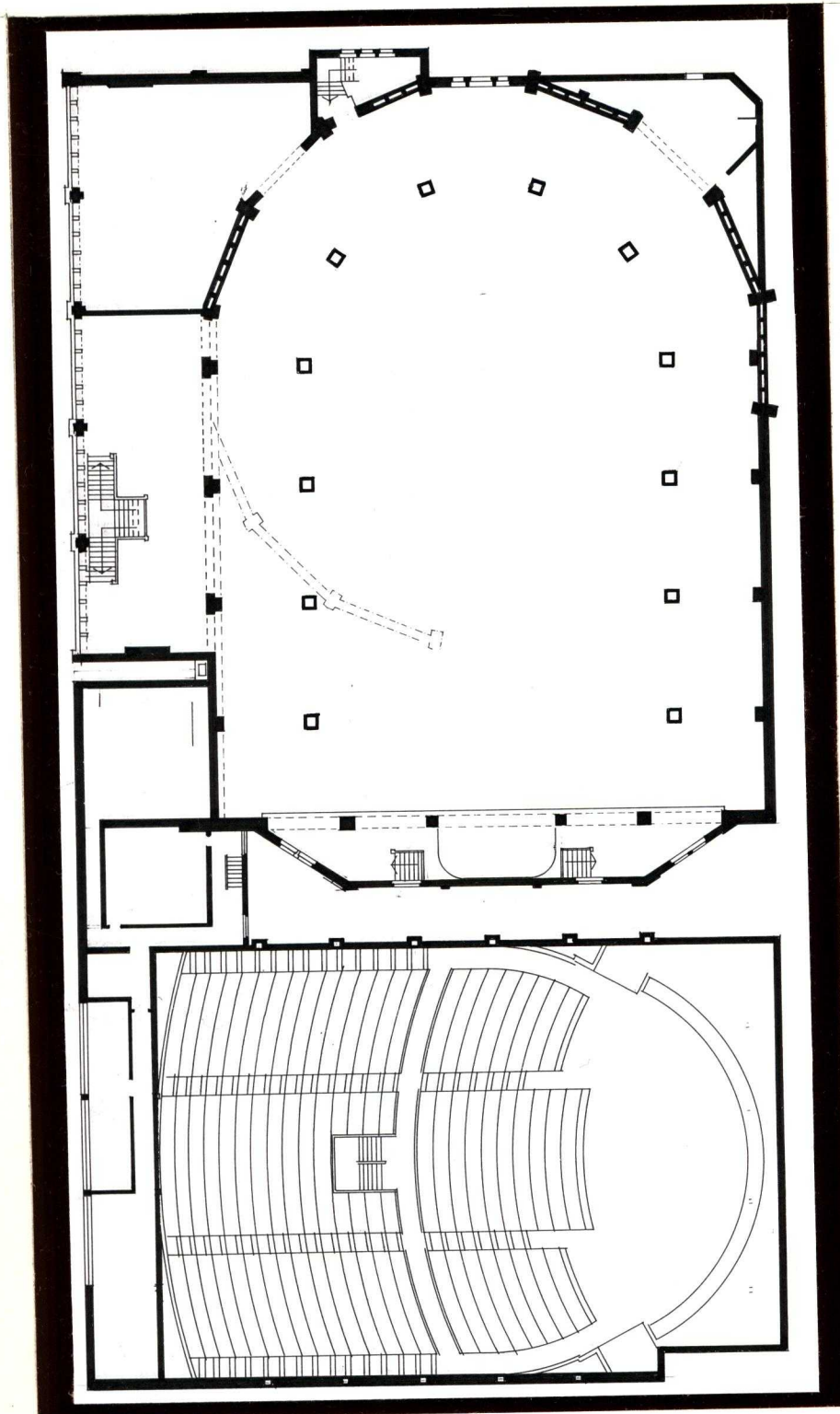


Figure 12.

Plan of Accommodation of site, as it exists today

This does not show the current arrangement of cinemas inside the Panorama buildings.

Bruce Nicolson Jamieson 1996.

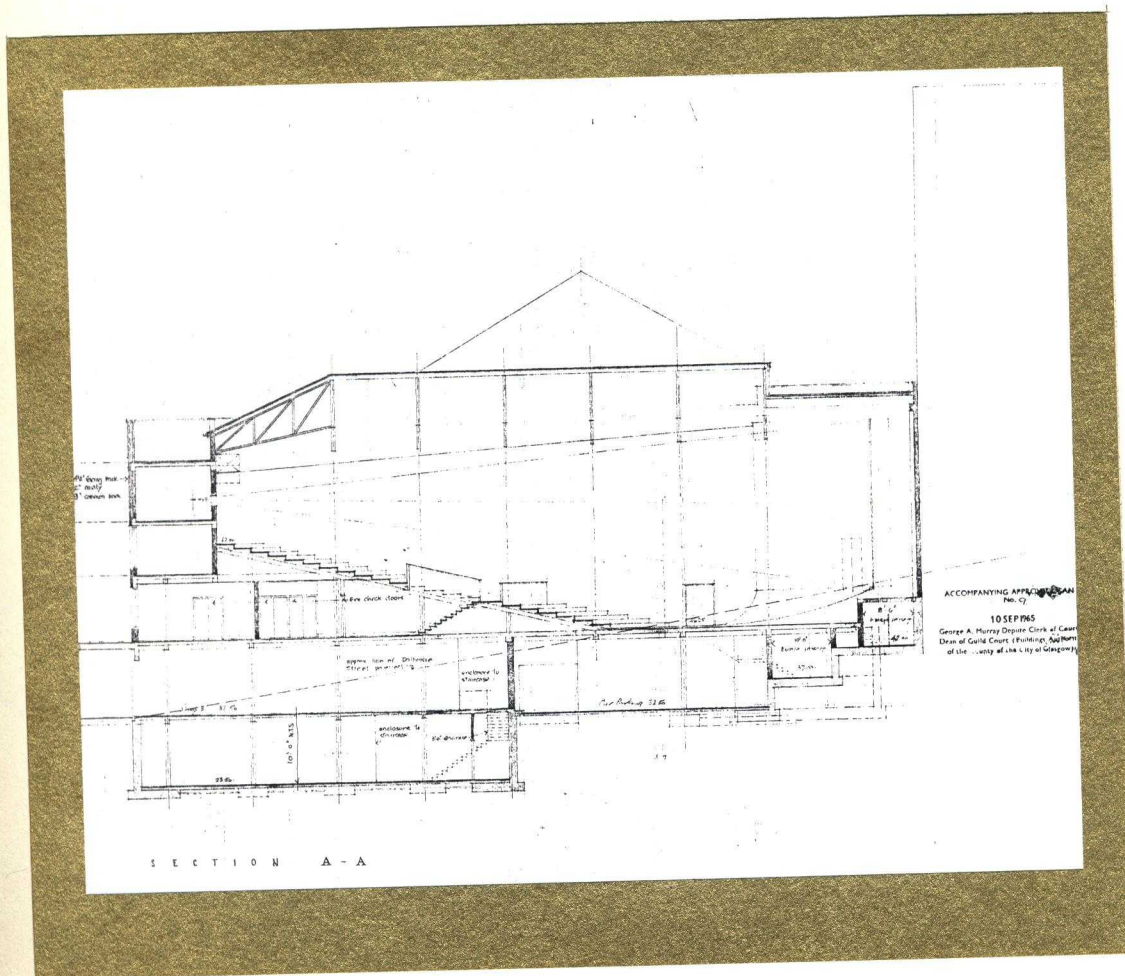


Figure 13.

Section Through New Cinema, Leslie Norton, 1965.

Mitchell Library.



Plate 11.

Photographs before and after demolition of the old Dutch Gabled Insurance building, to make way for the New Cinema. Glasgow School of Art Library.

3

A Masterwork.

1896 Competition.

1899 Opening Ceremony 20th December.

1906 Beginning of planning of second half

1909 Formal opening of Completed Masterpiece 15 December.

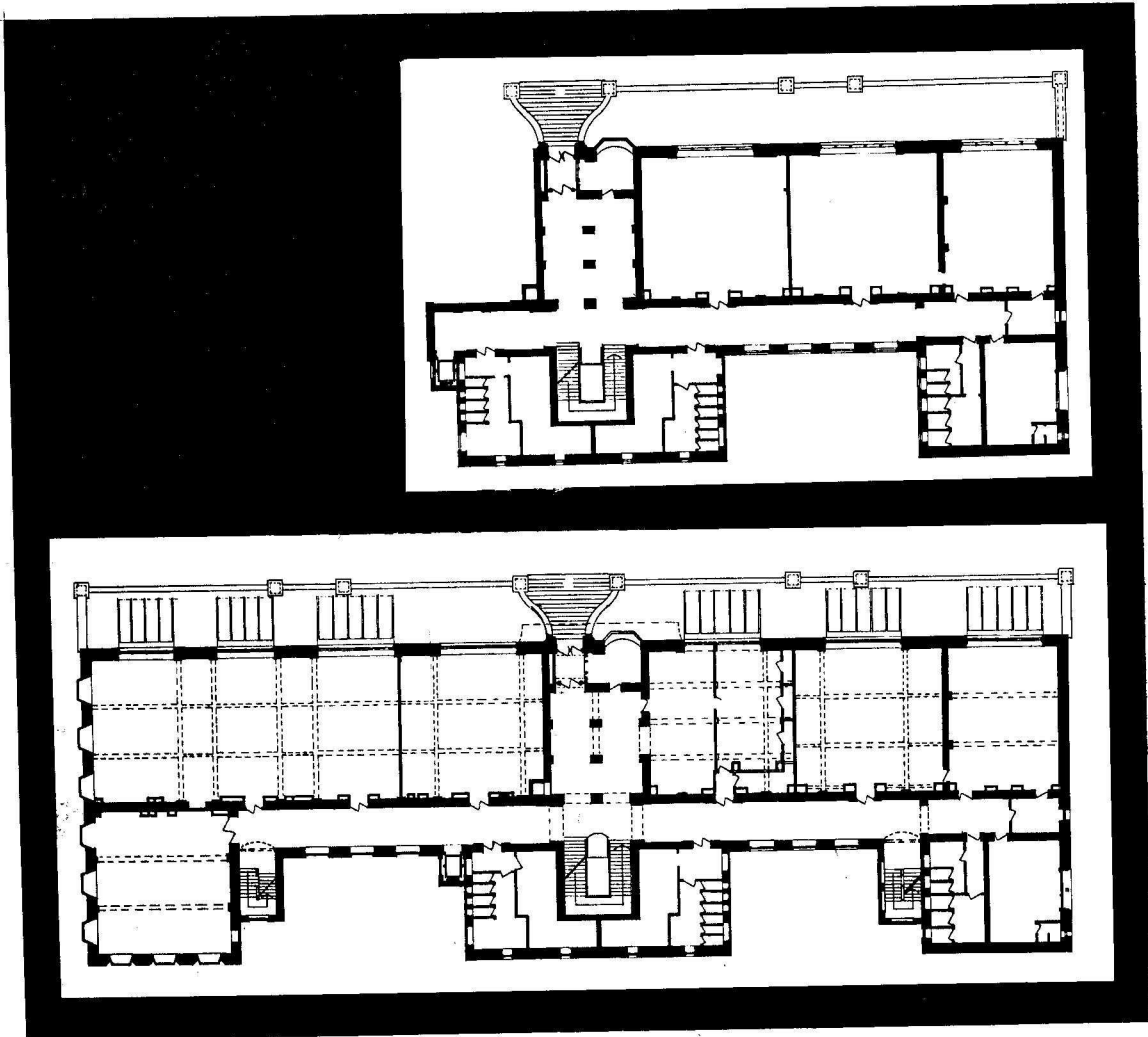


Figure 14.
Plans at ground level of Phase One 1899, and Phase Two 1909 of the School of Art.
Bruce Nicolson Jamieson, 1996.

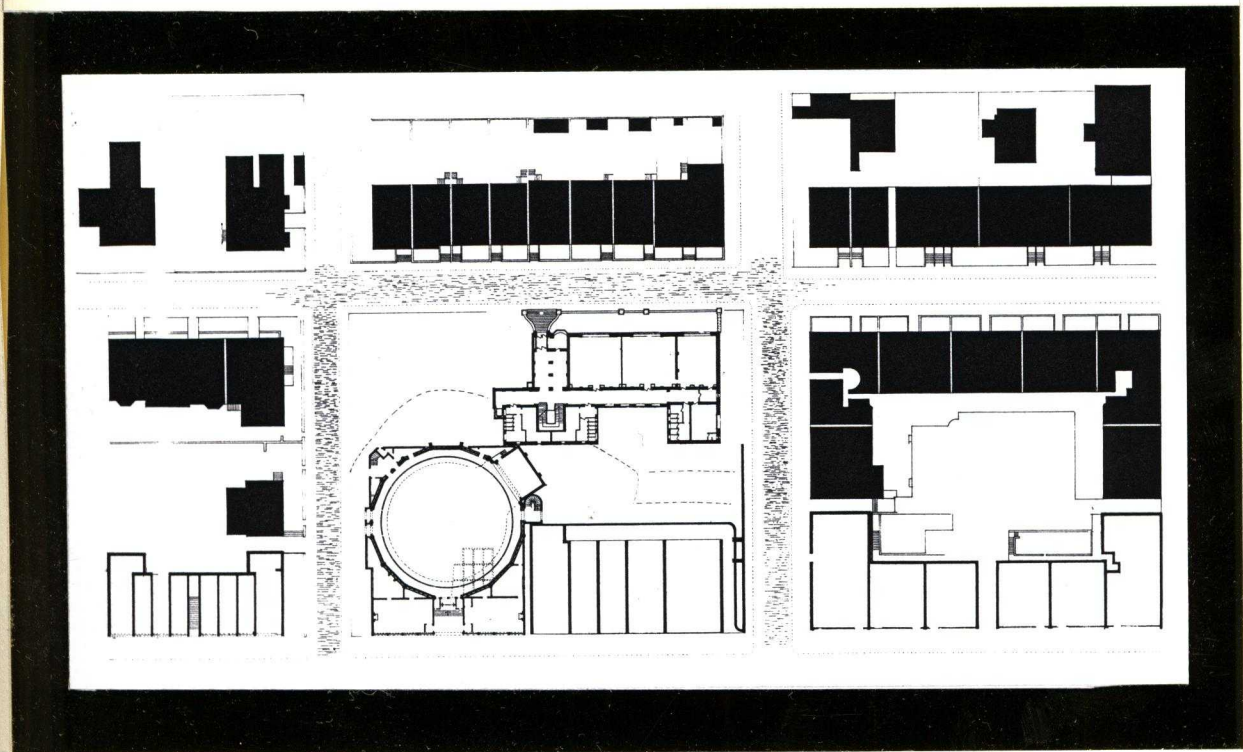


Figure 15.
Plan of the vicinity of the School of Art on completion of the First phase.
Bruce Nicolson Jamieson, 1996.

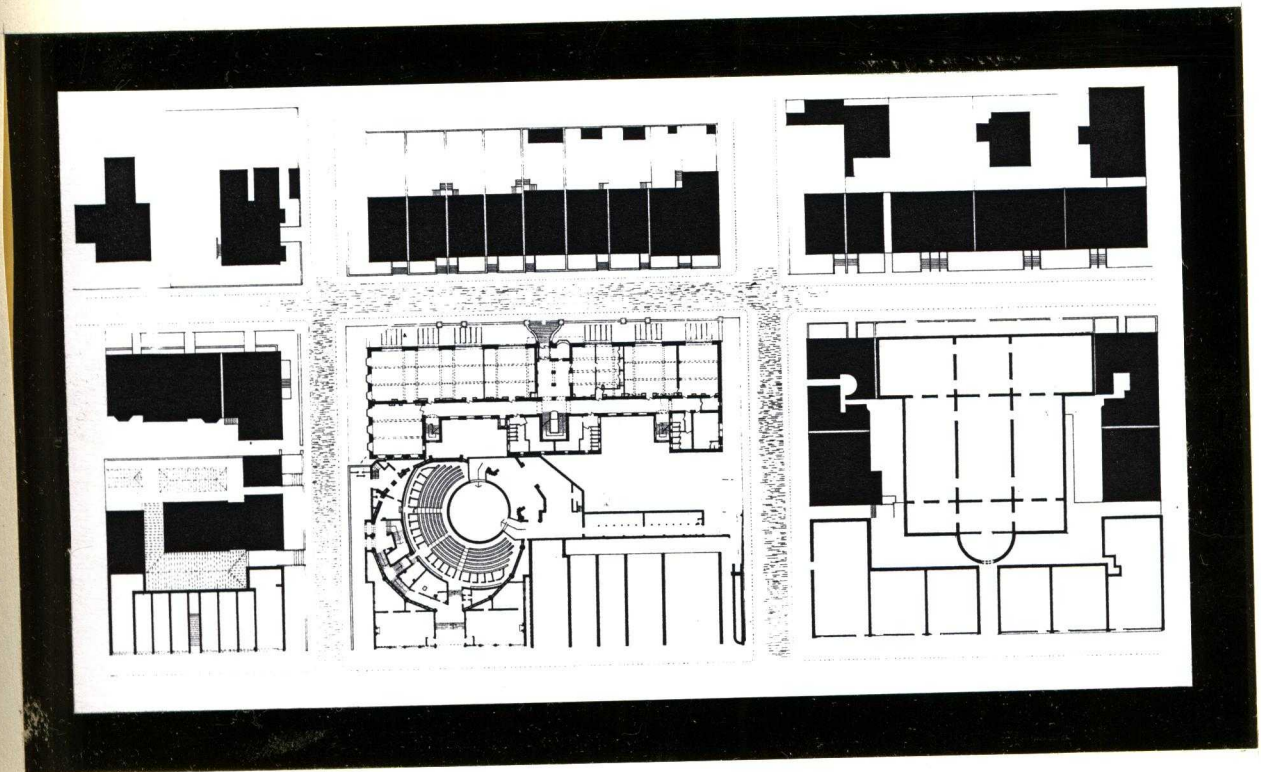


Figure 16.
Plan of the Vicinity of the school of Art 1909.
Bruce Nicolson Jamieson, 1996.

The Glasgow School of Art.

The Art School is a unique building in Glasgow, and indeed Britain as a whole and as such has been the cause of extensive research. The purpose of this report is not to analyse that which has been done by so many people already, the most complete bibliography of which can be found in Mackintosh's Masterwork, which was compiled by George Rawson²⁴. Instead I would like to examine the building in terms of its context, therefore examining briefly the south facade one of the components which stamp its unique typology onto the context of Sauchiehall Street, and the City.

In the introduction I gave a short explanation of the Growth of Sauchiehall Street as well as describing the brief history of Art education in Britain. It is quite clear that Newbery was aware of the potential of the new building. Only two months after the first showing of the *Cinematographe* Newbery had drawn up the competition rules, and the Glasgow School of Art was to have a modern building, in a modern city, in modern surroundings. The conditions for designing a new school of Art were ideal and in the event, it liberated the whole spirit of the Arts and Crafts movement, in its program right through to its detailing and overall symbolism.

The unique opportunity in itself would undoubtedly have provided Mackintosh a strong *raison d'être* for the design, which he combined with his strong vision and will, the basic ingredients for instigating any Architecture of true meaning. It also provided the scenario for

synthesising several powerful forces in Mackintosh's immediate personal agenda. Amongst some of these were his love for Scotch Baronial Architecture brought to the fore by people like Ross, and McGibbon as well as Sir Robert Rowand Anderson himself.^{xv} Mackintosh would have visited the Panorama building when it was first erected, and was, I am sure quite conscious of the close vicinity of Rowand Anderson and Greek Thomson.

In particular he was also well influenced by William Lethaby, who seems to have been the most powerful influence of the day. He had recently published "*Architecture Mysticism and Myth*" in 1891, rich in all manner of quotation and Metaphor that were to have fruit in the School of Art. At the beginning of his chapter on the four square; he quotes Tennyson; '*A Tower of strength, that stood foursquare to all the winds that blow*'. Not only does the School of Art seem to convey this on the outside, standing on Garnethill with exactly this sort of presence, but also on the inside, with foursquare symbols loaded on each of the East and West stair towers. This is a good example of why experts such as Andrew MacMillan constantly refer to the building as being *holistic* since the building itself was worked and reworked during its construction, regulated by the initial layout so the symbolism evident in the overall framework of the building is continued right through to the

smallest details. It seems that everywhere one looks at the building there is constant reference back to the complete picture of the whole and therefore more accuracy to the overall picture of its conception.^{xvi} This leads to the building having a tantalising complexity, which seems to keep the observer constantly looking at, and re-looking at the various parts, on every level, to find out some new truth.

The South Façade.

The South Façade is the main elevation to the city. Combined with the West elevation seen from Scott street it is this image which leaves us with a lasting impression, conveying tremendous power by its immense size and irregular outline. This is why, following the death of Mackintosh, the first published photographs of the building were not of the famous North elevation, but of the South and West. Presumably these conveyed more evidence of the Modernist aspect of Mackintosh's design since the photograph appeared with an article in *The Builder*, as an appreciation of Mackintosh as a forerunner of modernism^{xvii}. (see Plate 16.)

So although it is built as a back, it must rate as one of the most famous backs of all time. The treatment of the back differs from the other elevations in several regards. Firstly, the other facades are built from

'Giffnock and Whitespot sand stone, in a mixture of ashlar and squared and snecked masonry'^{xviii} whereas the south facade is by contrast 'Brick treated with roughcast .' This was partly to do with the restrictions of the budget, but it is also interesting that the Panorama Building which it butts up against was also of brick, albeit exposed.

Secondly it is the place where alterations occur between the two Phases which are visibly dovetailed together. The last point is that it responds to its context in an entirely different way to the other three elevations, anticipating the devastating construction to the south by sculpting out three sided lightwells, which reveal and illuminate the internal rhythm of circulation. Sitting in the corridors when it was first completed one would have an uninterrupted view of the city, until the Waldorf Palais de Danse heightened the roof of the Panorama building. The enormous size of this roof also means that the back elevation has been obscured, and can now only be viewed obliquely from the two ends in Scott Street and Dalhousie Street. This adds to the undoubted mystical quality that the elevation possesses, but in terms of the loss incurred is seriously detrimental to one of the great buildings of the Twentieth Century.

Should the elevation one day be revealed to Sauchiehall street, (something even recommended by Howarth^{xix}), it would still not be seen in its entirety, due to its scale, and the undulating recesses of the

light wells. These recesses begin one third of the way up the elevation, and articulate the elevation into an asymmetric composition of five facades. Each of these conform to a rigid local symmetry, which makes the building appear almost like a collective block of buildings, held together by the continuous datum line of the basement, in one dramatic ensemble. The composition changes dramatically as the vantage point moves, providing the bold complexity of a castle. The East 'tower' has no windows on the south side, except below the Basement datum (where there is a window to the caretakers flat, now covered up,) and this was originally to be repeated on the 'Tower' of the Western end. However, in the seven years between completion of the first phase and his drawings of 1907 the now famous library underwent a transformation, which required additional windows to complement the newly designed composition of the West façade. The massing of the building increases towards the West Tower, emphasising its importance, and counterbalancing the natural fall of the ground from East to West.

On his Drawings of 1907 Mackintosh is quite particular about carefully drawing in the Buttresses of the Panorama building (in adherence to condition 2. Of the brief, mentioned earlier,) which is keyed into the wall of the sub-basement almost effortlessly. In fact the structural

dimensions of the West tower are dependent on the position of the Panorama, which has to be placed underneath the lightwell above.

Mackintosh also looked at the possibility of punching in new windows at sub-basement level in order to exploit the relationship between his linear building and the curve of the rotunda. These were never executed although additional windows were definitely added in the central part of the basement, eventually bricked up by the back wall of the Waldorf Palais de Danse.

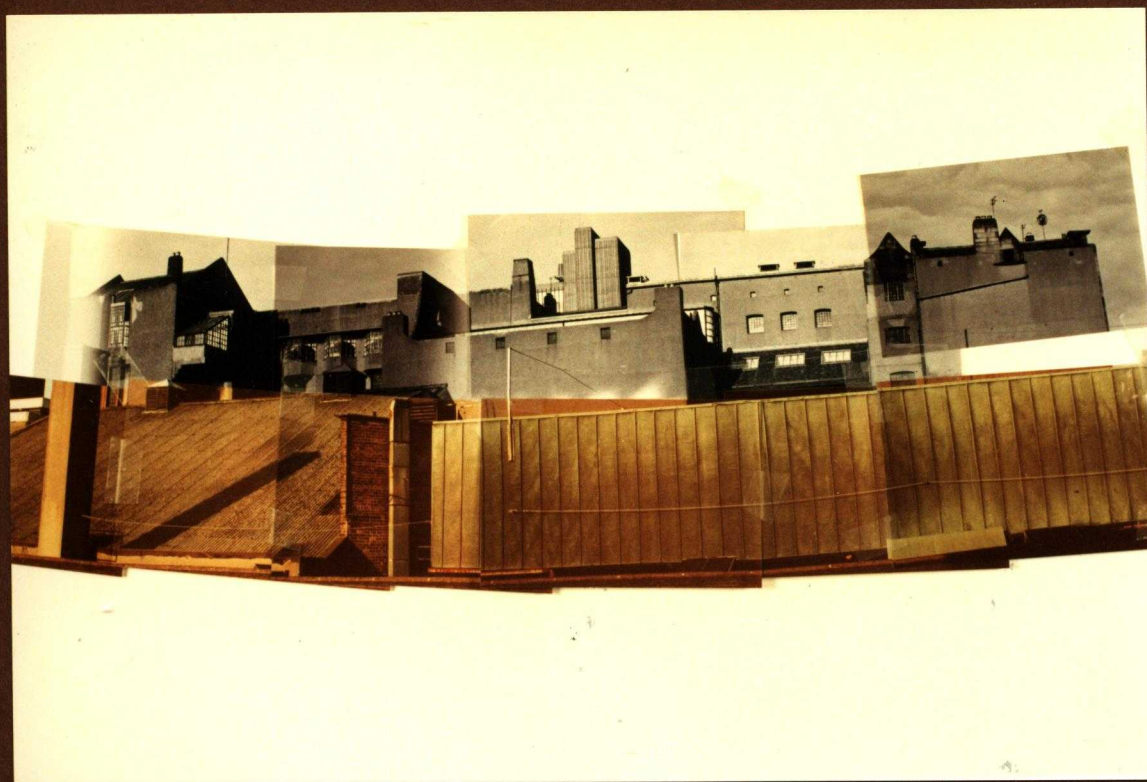


Plate 12.

Photograph of the South Façade.

Bruce Nicolson Jamieson.

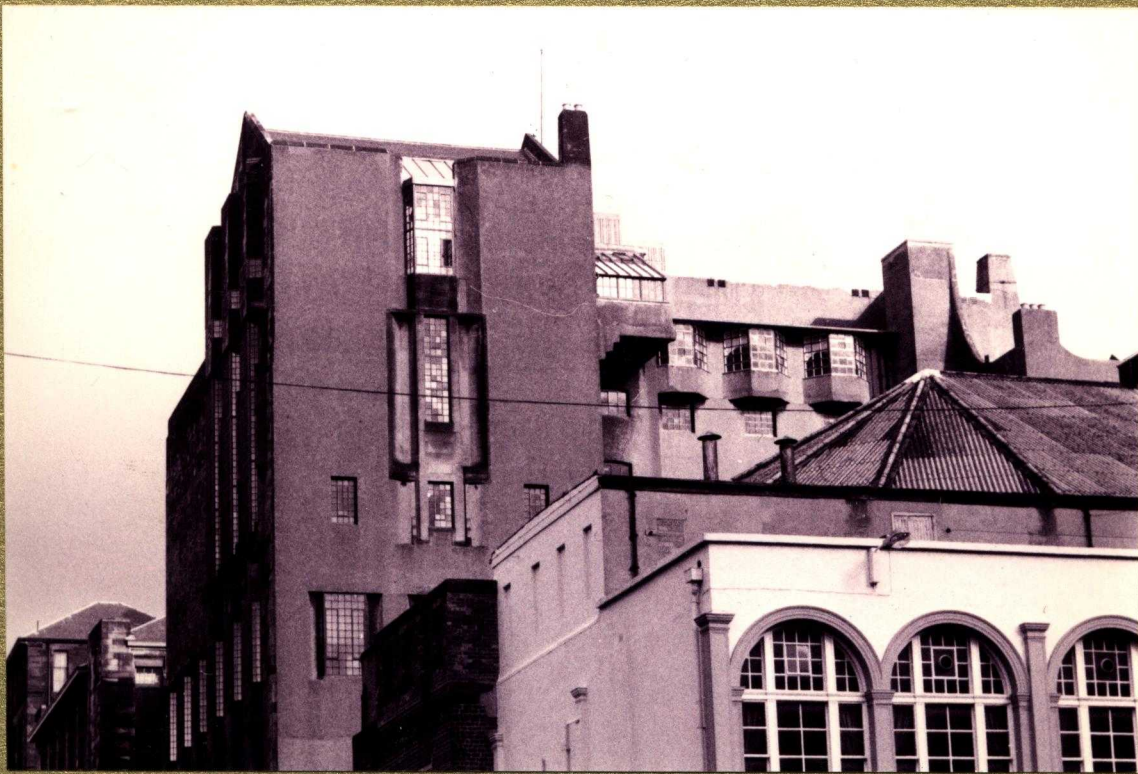
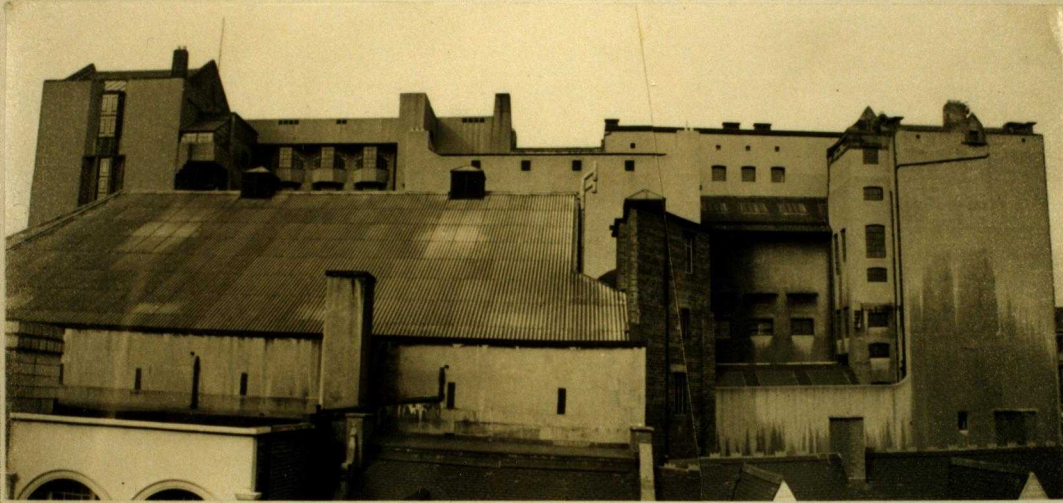


Plate 13.

Photographs of the South Façade.

Glasgow School of Art Library.

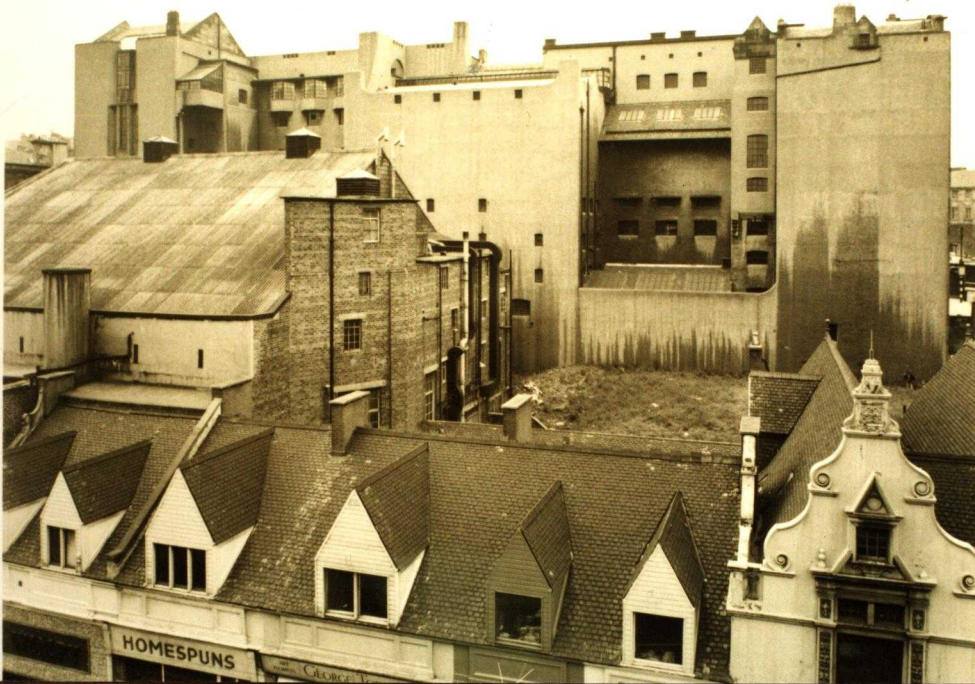


Plate 14.

Photographs of the South Façade.

Glasgow School of Art Library.

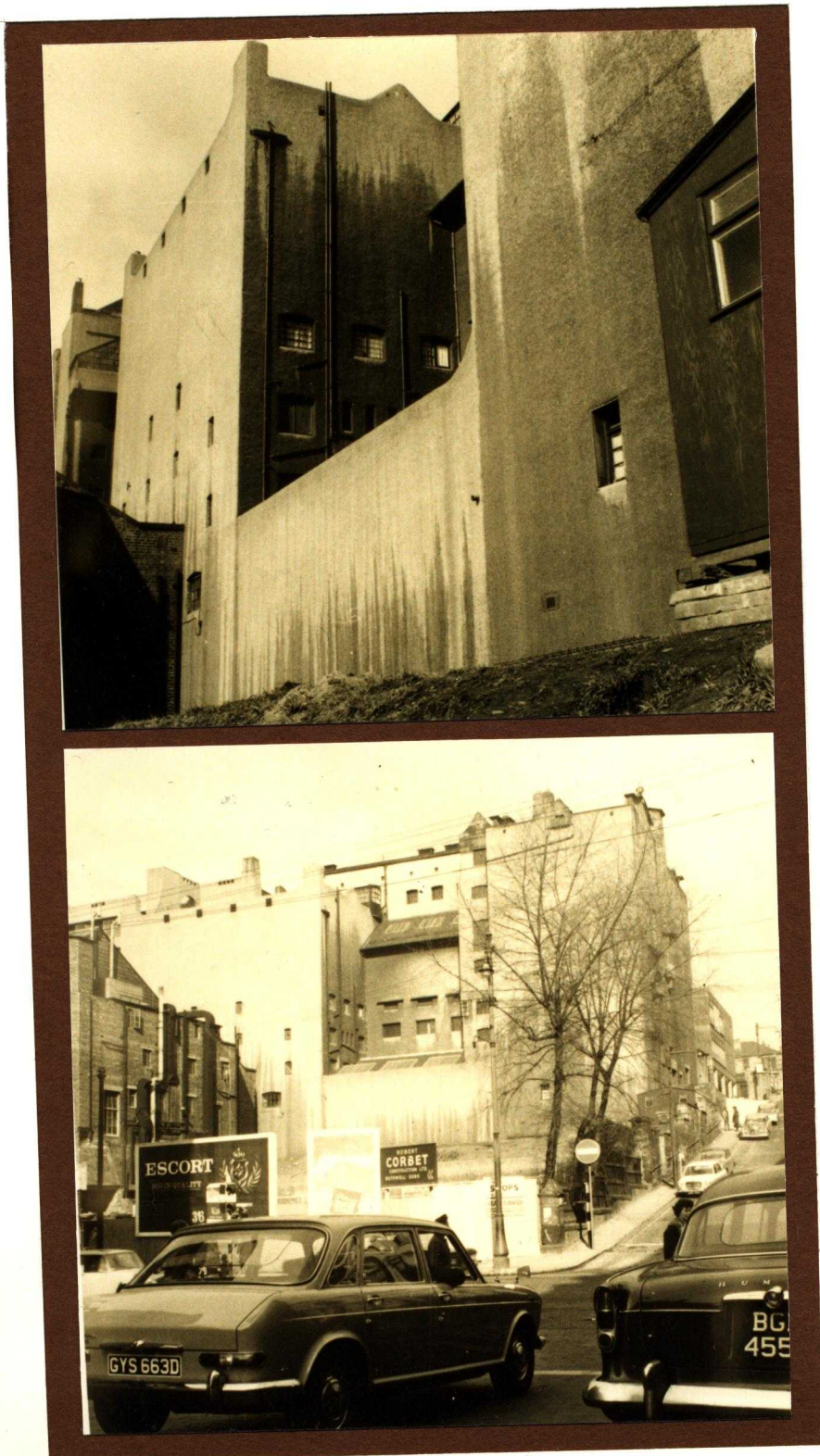


Plate 15.
Photographs of the South Façade.
Glasgow School of Art Library.

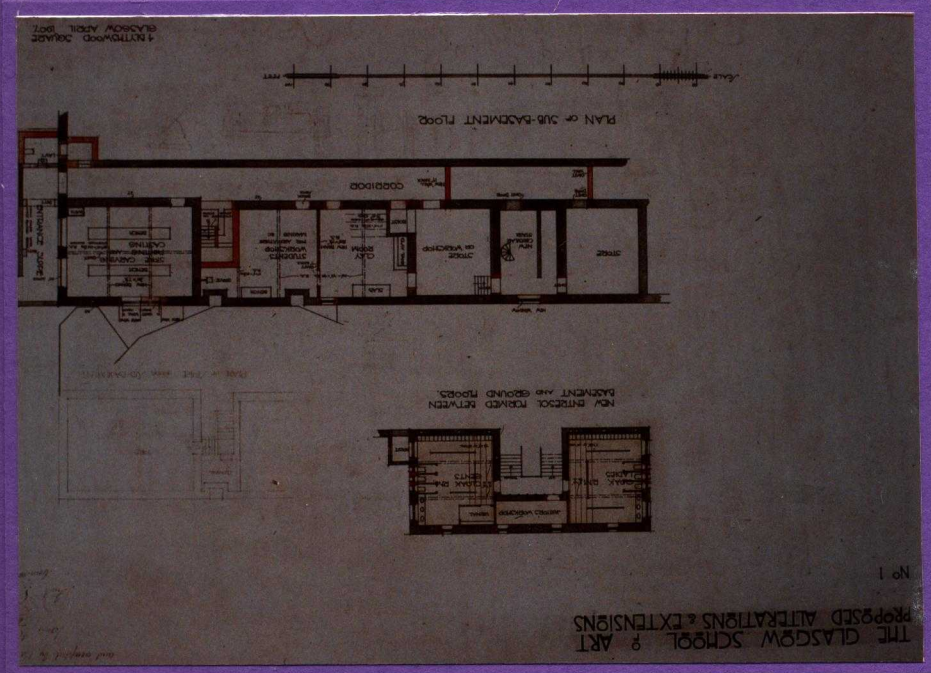
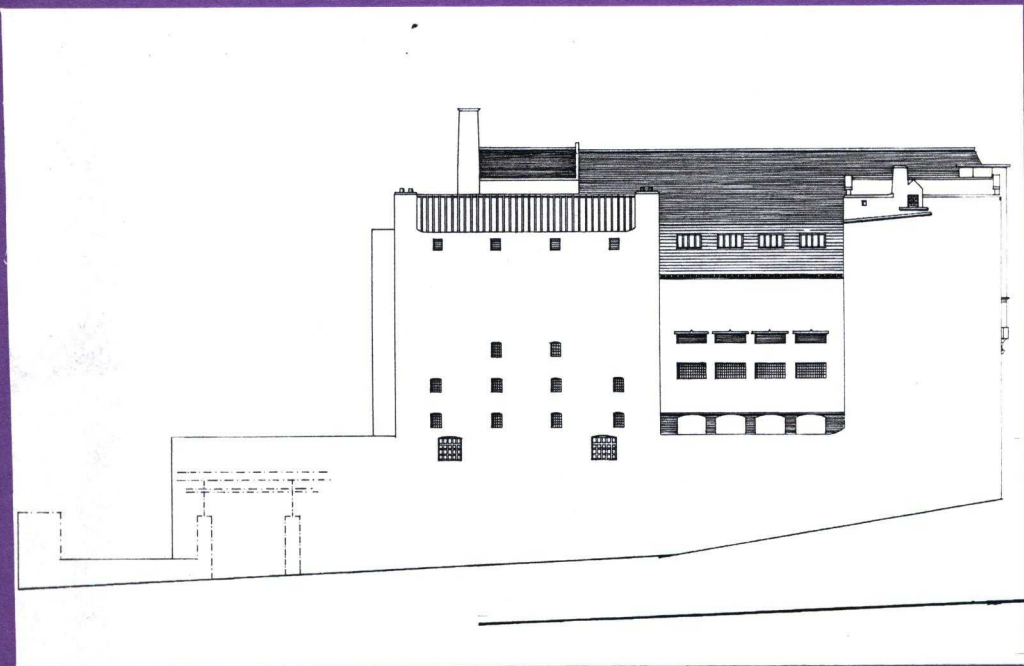


Figure 18.

Top: Elevation of Phase one, 1899 .

Bottom: Plan of sub-basement, 1907.

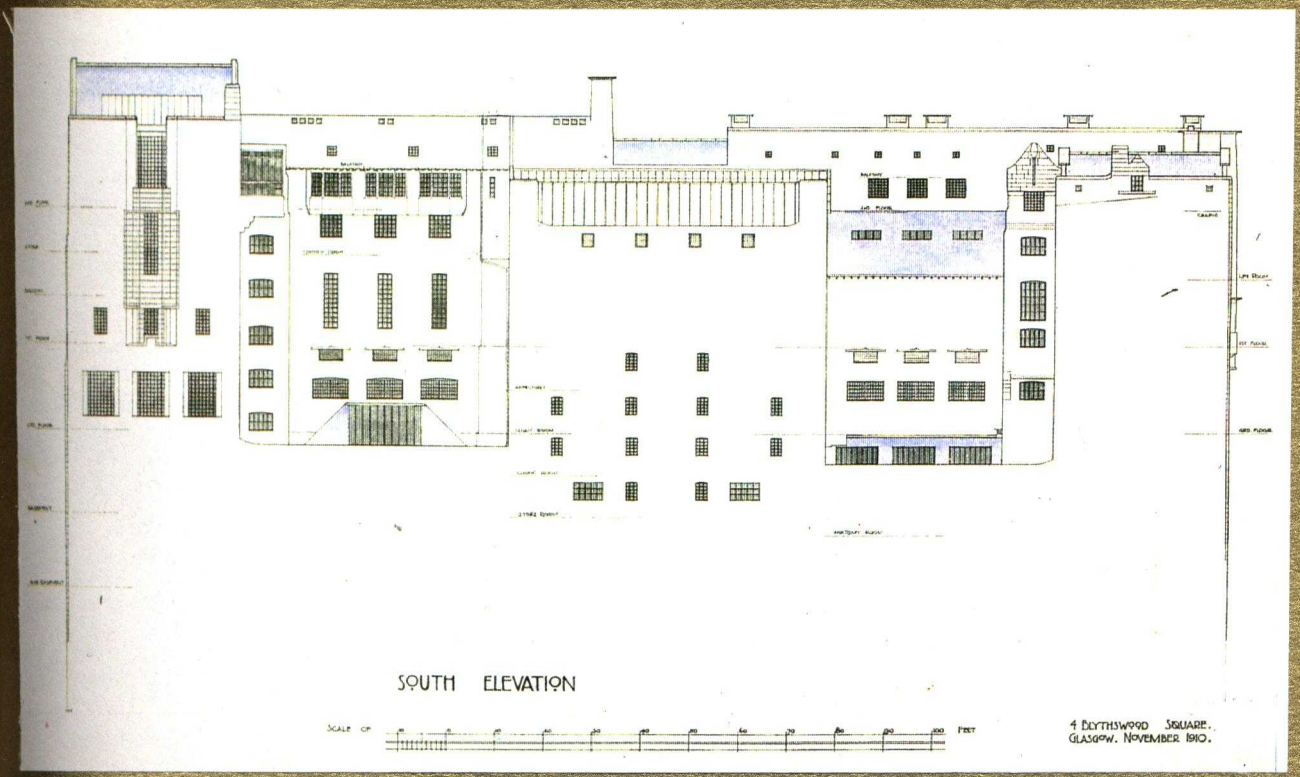
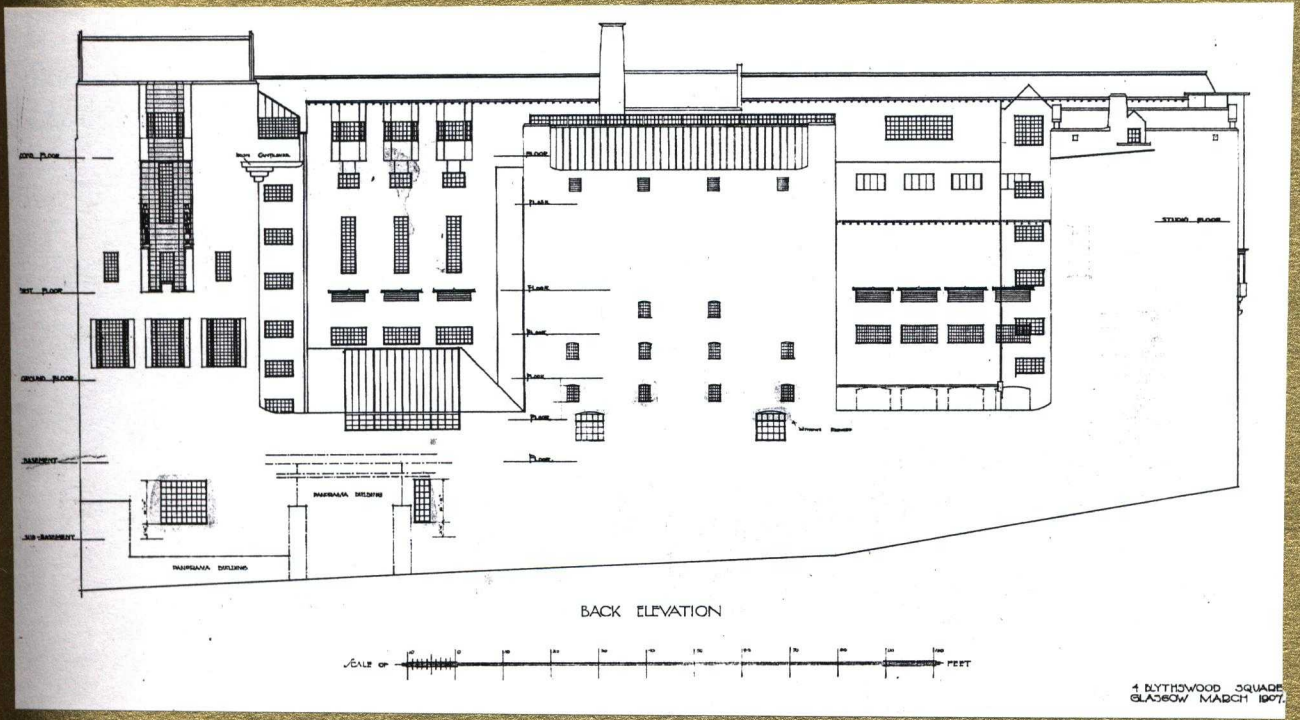


Figure 17.
Top: Elevation of 1907.
Bottom: Elevation of 1909.

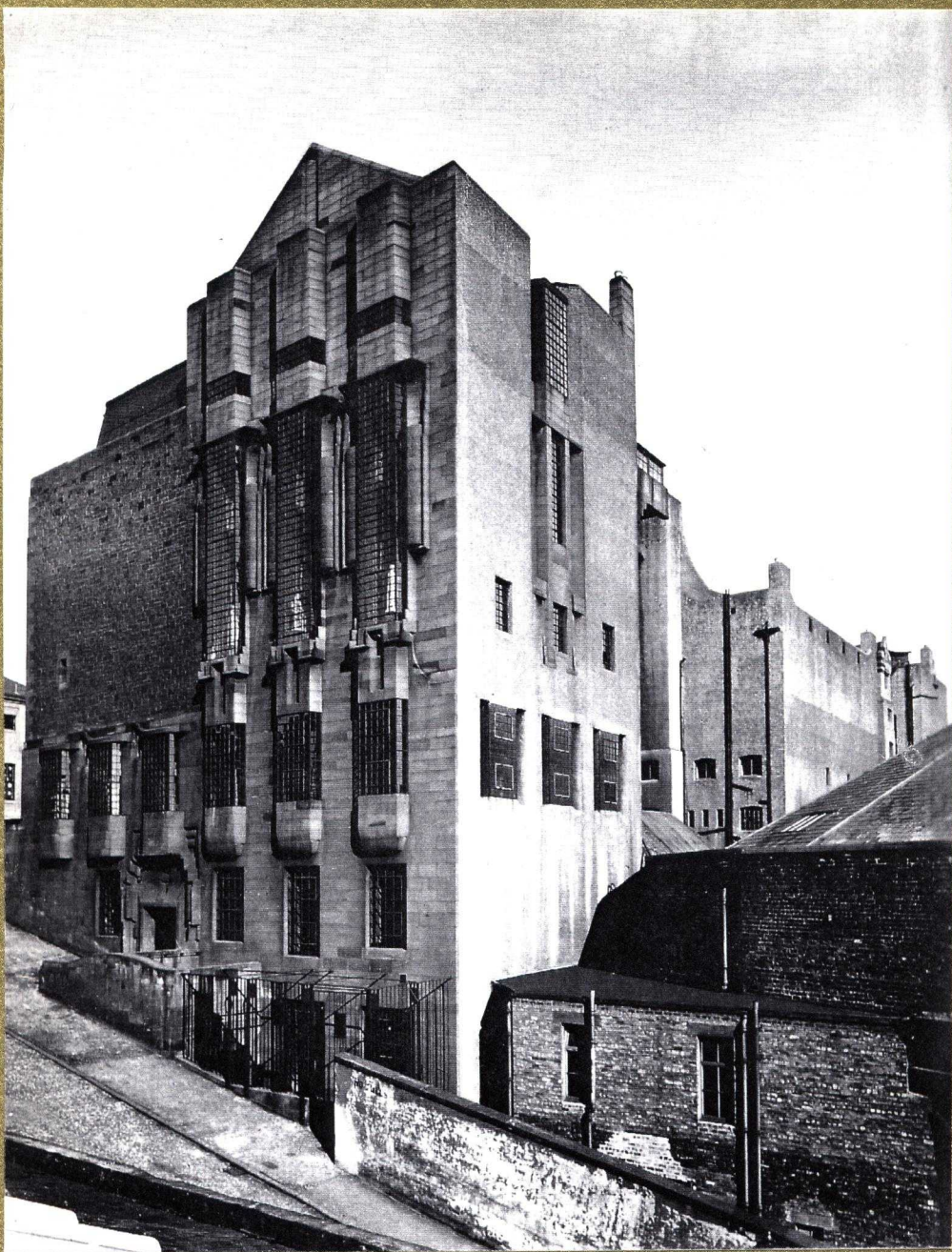


Plate 16.

First Published Picture of the School of Art in 1933, Annan.

Glasgow School of Art Library.

4

**The Extension
and its Extensions.**

The Evolution of the Extension.

I began this dissertation with the express desire to discover and uncover information regarding the direct physical locality of the school of Art. This search began by looking at the surrounding urban artifacts, then specifically at the School of Art, and now attempts to unravel a centenary of physical evolution on Garnethill, from the outset of the competition for a new building in June 1896 to the present day 1996 and the intention of the School to initiate a new competition to mark this centenary, and build a significant piece of Architecture for 1999.

The later developments of the campus are not convincing in their current physical form. Events have meant the School has been left with an incoherent 'collection' of twentieth century buildings, but it is still interesting to look at exactly how they developed this way.

The fact that the evolution has been able to occur certainly positively signifies the idea that the 'Arts and Crafts' have retained a lasting relevance throughout a turbulent century and indeed are a necessary and growing application to industry and society.

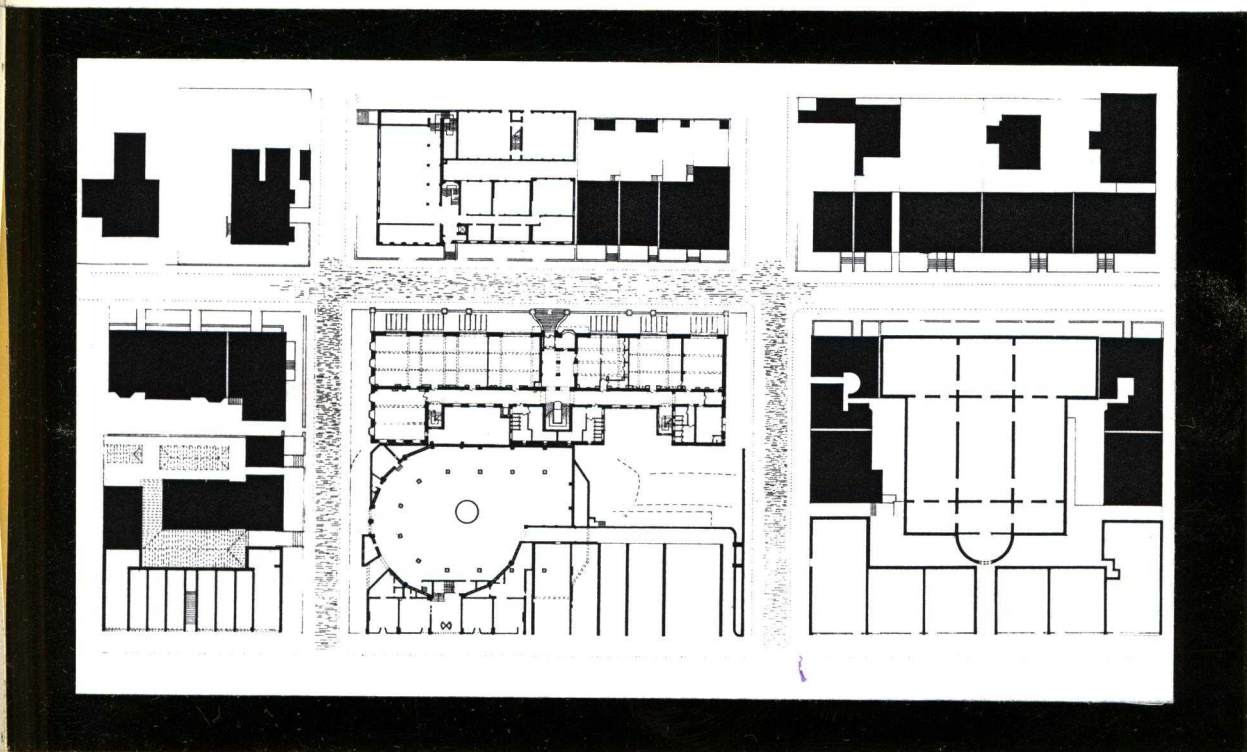


Figure 19.
The Vicinity of the School of Art, 1929.
Bruce Nicolson Jamieson, 1996

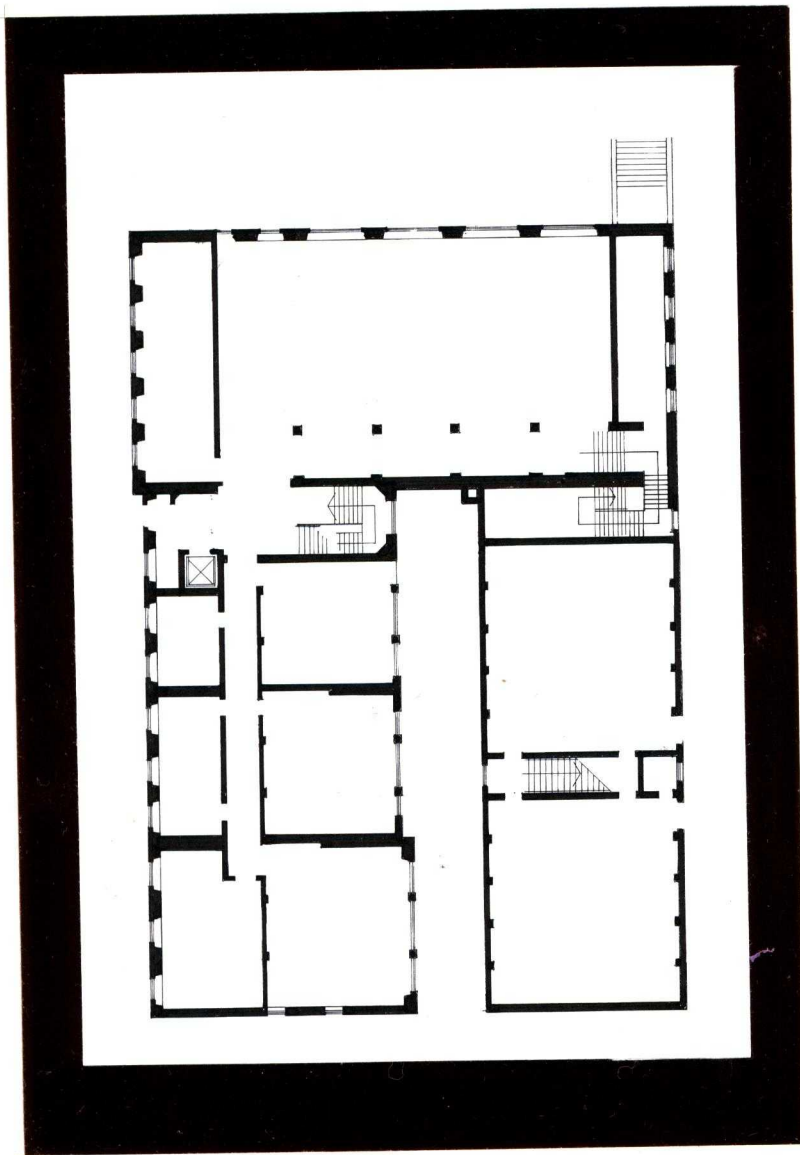


Figure 20.
Plan of the Annex 1929.
Bruce Nicolson Jamieson, 1996

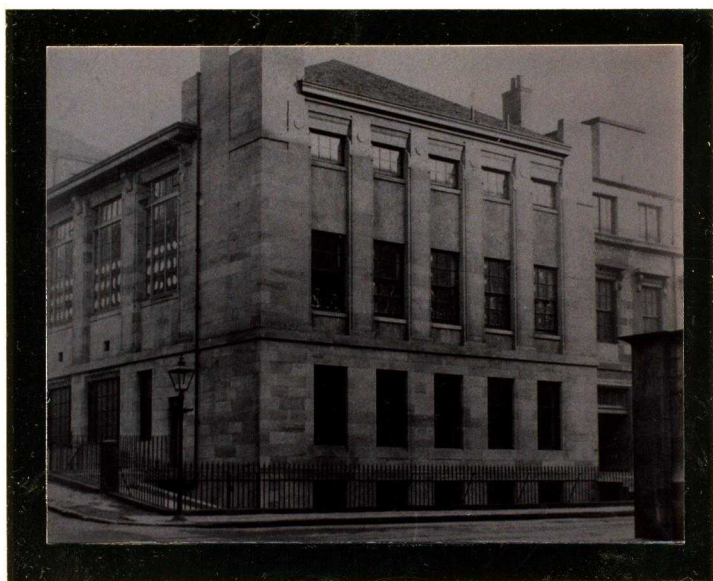


Plate 17.
Elevation of the Annex Graeham Henderson and John Keppie.
Mitchell Library.

'The Extension Scheme.' Graham Henderson & John Keppie

In 1915 the Governors had cast their eye on the St. Elizabeth Nursing home, directly opposite on Renfrew Street and the corner of Scott Street, and began considering it as a possible site for an extension of the school.^{xx}

Previously the Catholic nursing home had been four houses, one of which had been the family house of the writer Catherine Careswell, who had used one of the former professors of the school, Maurice Grieffenhagen, as a leading character in one of her novels^{xxi}. Each house had similar accommodation, with Kitchens and servants rooms in the basement, with public rooms, bedrooms and bathrooms on the floors above. In order to convert them, the four houses had been joined together by making a number of openings through the different Gables, even turning one of the rooms into an operating theatre.

By the time John D. Revel had become Director in 1925 a fifth house, previously a warehouse had also been purchased so the school now owned No's 172, 170, 168, 166, & 164 Renfrew Street. He had hopes for the improvements of the school, particularly in the Design and Crafts section, and had made visits to other schools of Art in England, notably Liverpool, Manchester, Birmingham, and the central School of Arts and Crafts in London, to observe standards.

The Architects, Keppie Henderson, were given a brief, firstly to convert No's 168, 166 & 164 as studios with the first floor of the later to be used for Reading and Club rooms, secondly to build new modeling studios in the rear portion of the site, up to the lane, and thirdly to demolish the two remaining houses on the corner,

leaving only the wall of the front elevation, in order to build a new hall with common rooms, as well as a heating chamber, lift and caretakers house.

It seems appropriate that one of the calls for the hall came from the inconvenience arising from School dances taking place on the premises of the main school building, but was also intended for Lectures and exhibitions.

During the course of construction. something very interesting happened . On the 12th of May, 1928, whilst cutting an opening through an internal Gable, the nine inch thick brick wall collapsed, knocking the front elevation of what was to be the new hall completely off plumb. Up until this point, the scheme had intended to retain the existing elevation of the street, but now it had been fractured, and the mortar badly perished.

After emergency correspondence between architects Graham Henderson and John Keppie and the Master of Works Mr. Sommers, it was decided that the old wall should be taken down to its foundation, and rebuilt as an entirely new elevation^{xxii}.

This then completely alters the impact of the extension scheme, which was now to have an elevation of its own, and therefore begin the changes to the environment of Mackintosh's building.

The elevation is that part which survives today, since the original central portions were demolished later on, when the Newbery Tower was built. Certainly it is a more interesting elevation than the one that collapsed even though it had to adhere closely to the original placement of windows in order to conform to its plan.

In fact the ground and basement floors are identical to the original house, and form a solid masonry base to the building set with regular windows. Above this on the piano nobile sits the main double height space of the hall, which is revealed on the exterior by paring away the wall into four masonry columns which rise through the two floors up to the eaves. There is then a second plane of mass, recessed behind these columns, with windows punched in at the bottom to light the hall, and smaller ones at the top to light the upper mezzanine. Are these somehow echoes of Greek Thomson? There is certainly resonance with Mackintosh's building the way the eaves are projected out from the building, whilst being contained at the ends by articulated masonry, reminding us that Mackintosh had indeed been part of the same practice, but the Assembly building in no way conveys the same integrity of the main School.

The annex was finally opened on 18th December 1929. Its completed schedule of accommodation contained the Advanced Life School, the School of Architecture, special studios for Craft and Post Graduate students, students' common rooms, a refectory, and a large hall for 700 people. It could have had a cinema on the ground floor, but building Regulations prevented this, since the building could not conform structurally.

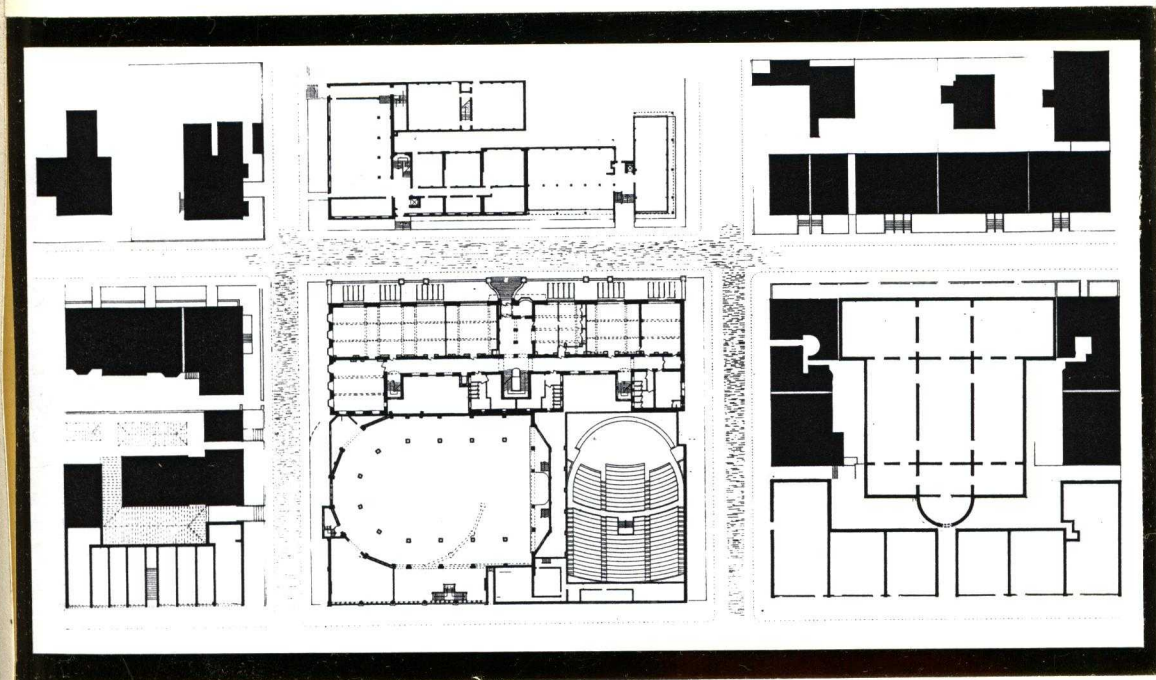


Figure 21.
The Vicinity of the Glasgow School of Art, 1963.
Bruce Nicolson Jamieson, 1996.

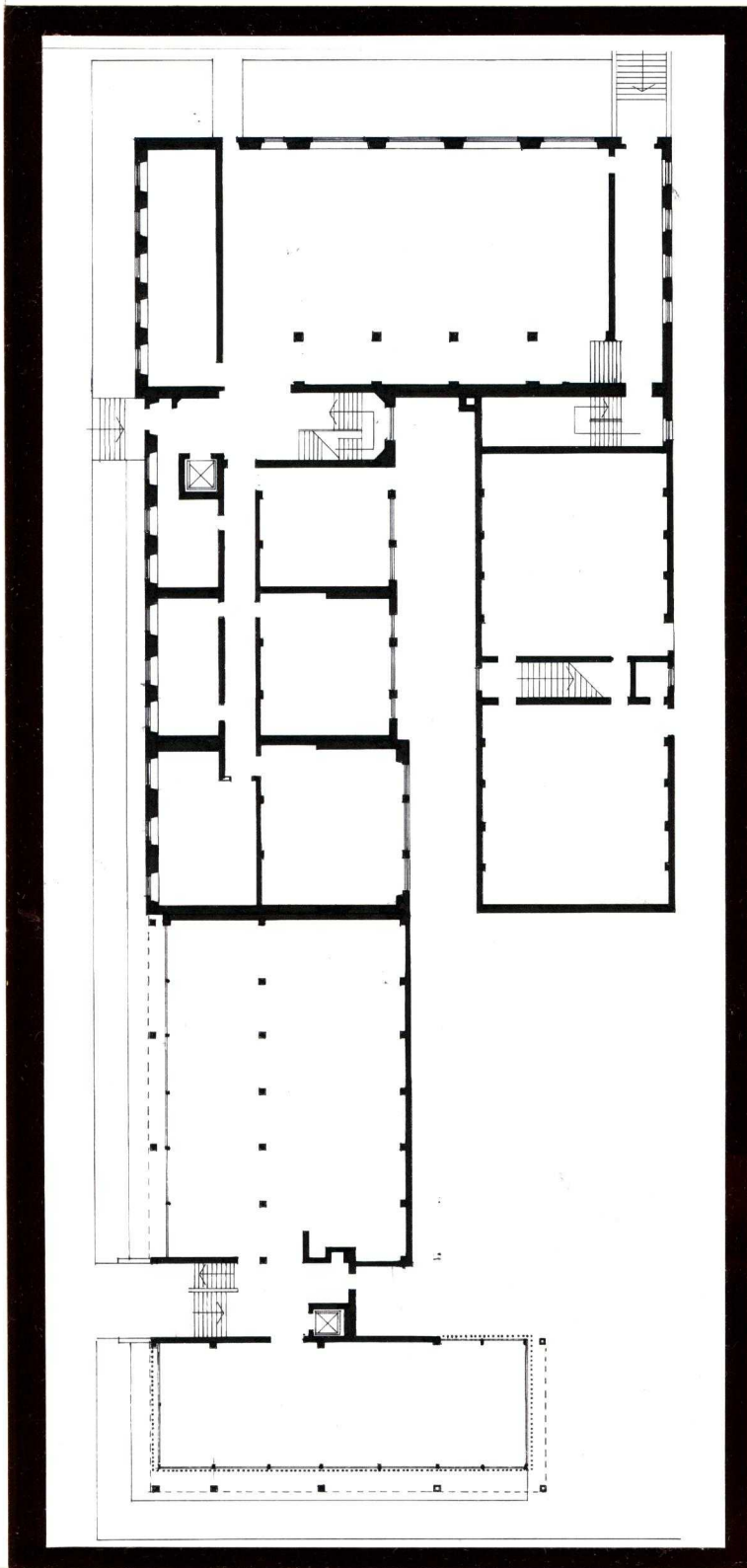


Figure 22.
The Extension.
The Foulis Addition, 1963
Bruce Nicolson Jamieson, 1996.

1957-63 The Foulis Building.

Even at the completion of the Extension building of 1929, the School was already looking to develop the school further by purchasing the remaining two houses on the block-No's 160 & 162, and also No. 158 -previously the site of the old Dental hospital. In 1931 the school had made the necessary alterations to No. 158, which by the end of the session was occupied by several of the crafts for post diploma students.^{xxiii}

By 1957 pressure on accommodation had become great enough to lead the Governors of the School to consider a new course of action. They decided that it was necessary to demolish the buildings on this site and erect a completely new building. Work did not start for another three years, in the session of 1960-61, and even then it progressed very slowly until its completion in 1963. The plan of 1963 shows the completed plan which accommodated Bookbinding, Graphic Design and printmaking; Industrial Design; Interior Design; and Mural Decoration and Stained Glass.

The building clearly responds in a traditional manner to the street, and to the height lines of the Annex building. Up to this point there was still continuity in the Extension scheme. The roads were still paved with split stones at this point, albeit now in serious disrepair, (and probably quite dangerous on the steep slopes of Scott and Dalhousie Street.) This would have contributed to making the streetscape a lot more tidy than it is today.



Plate 18.
The Campus seen from the Air circa. 1964

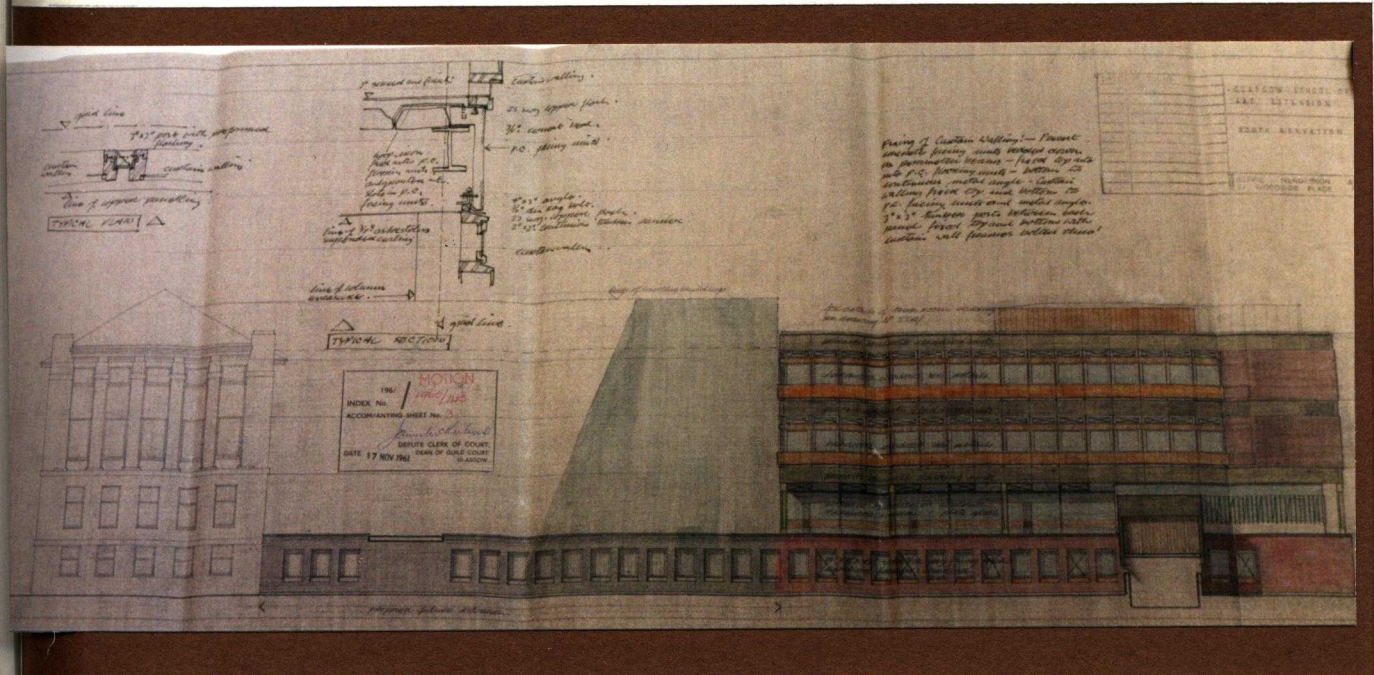


Plate 19.
The Extension Scheme 1961.

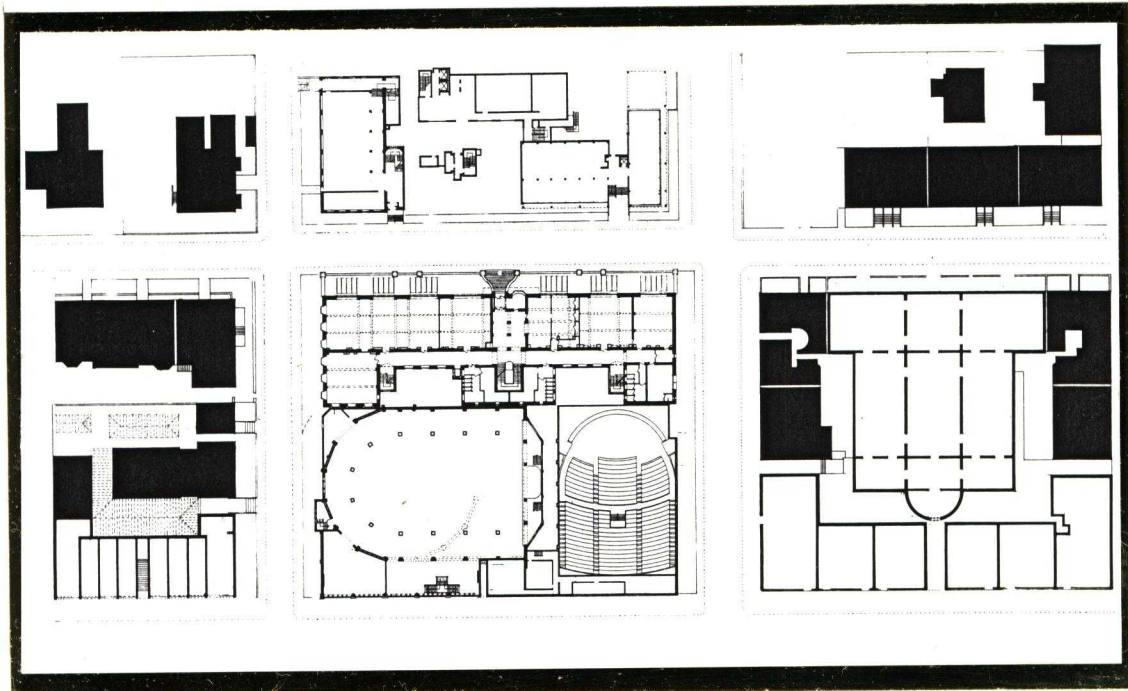


Figure 23.
The Vicinity of Mackintosh's School of Art, 1969.
Bruce Nicolson Jamieson, 1996

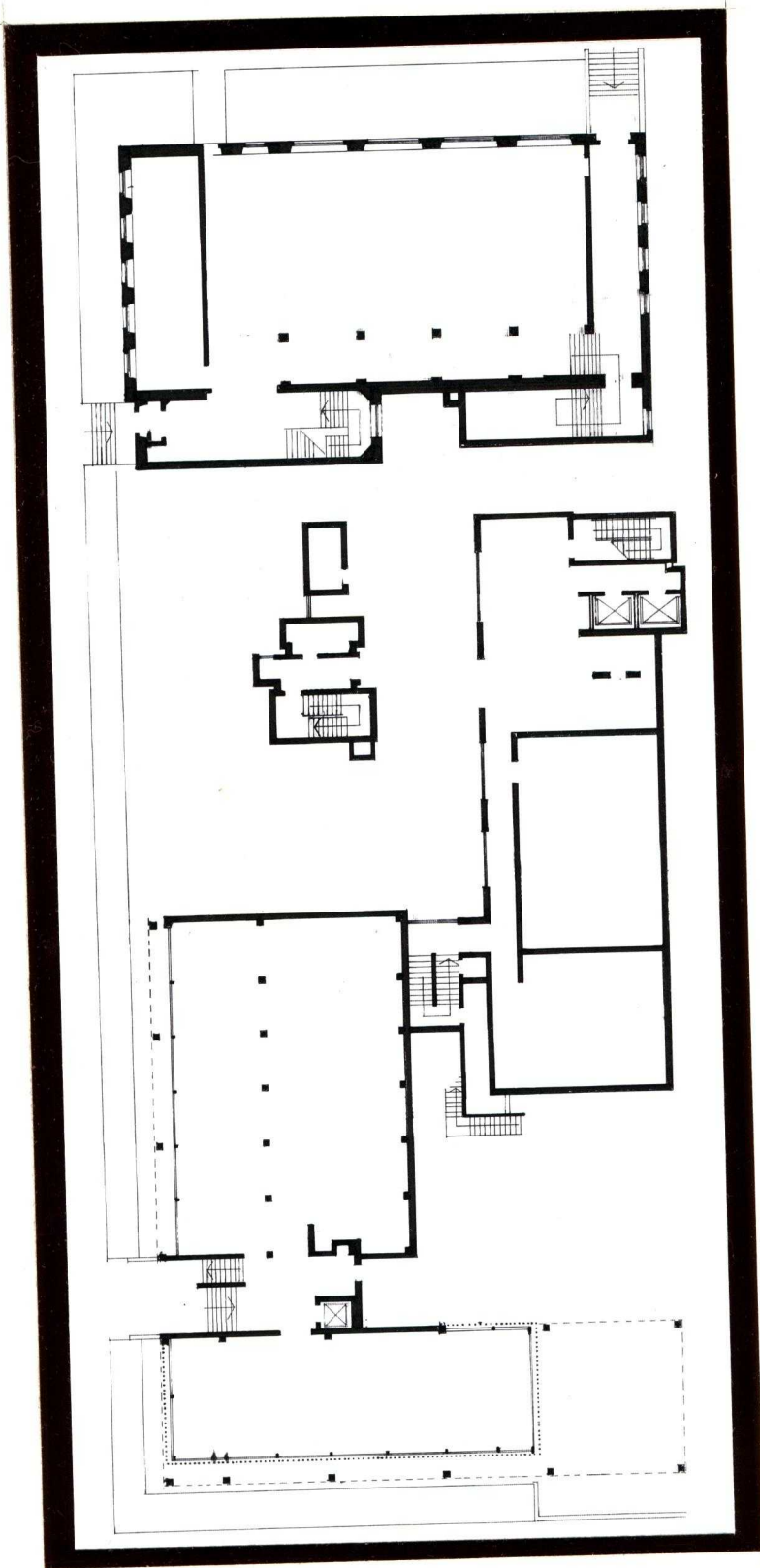


Figure 24.
The addition of the Newbery Tower, 1969.
Bruce Nicolson Jamieson, 1996

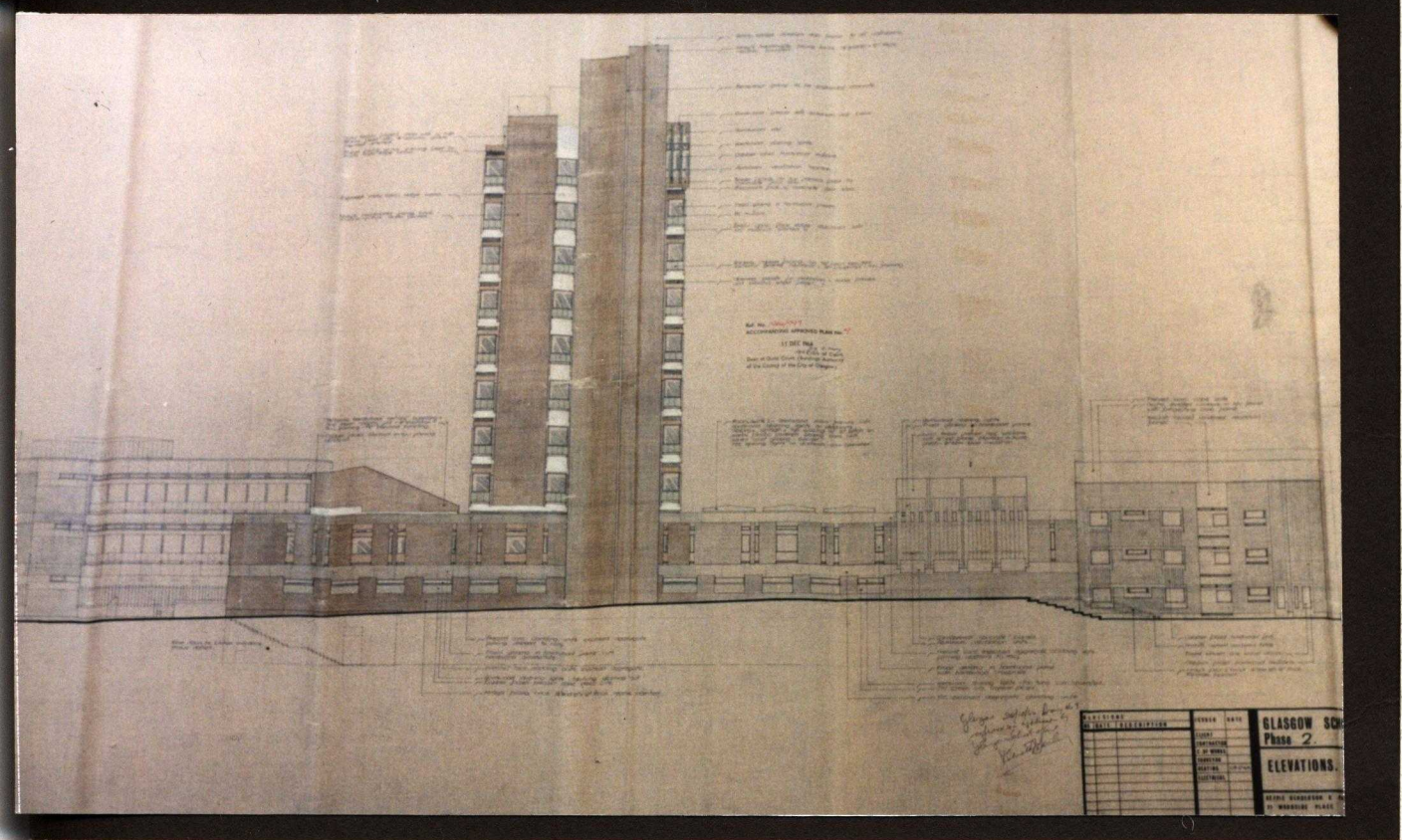
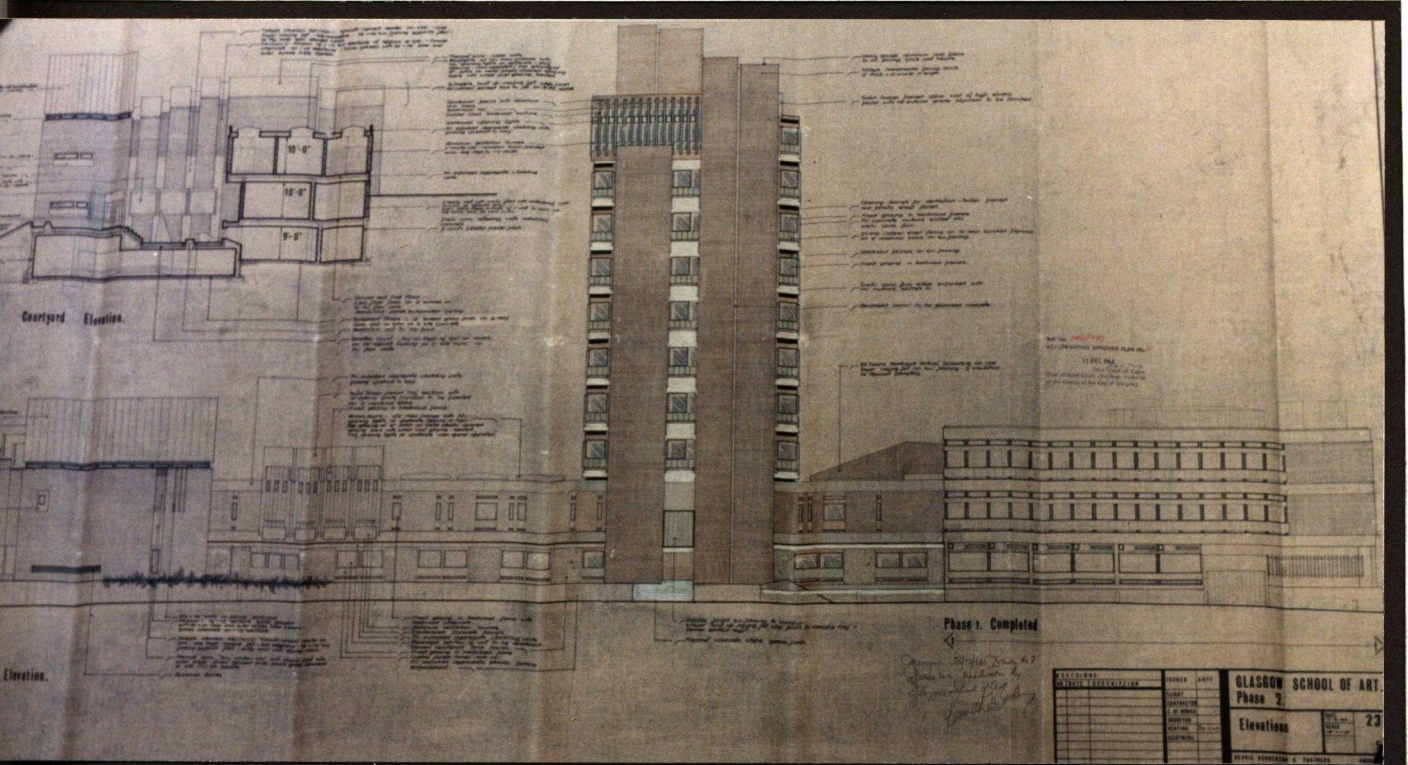


Figure 25
Elevations of the Campus Scheme, 1963. Note the Brick finishes.
Mitchell Library.

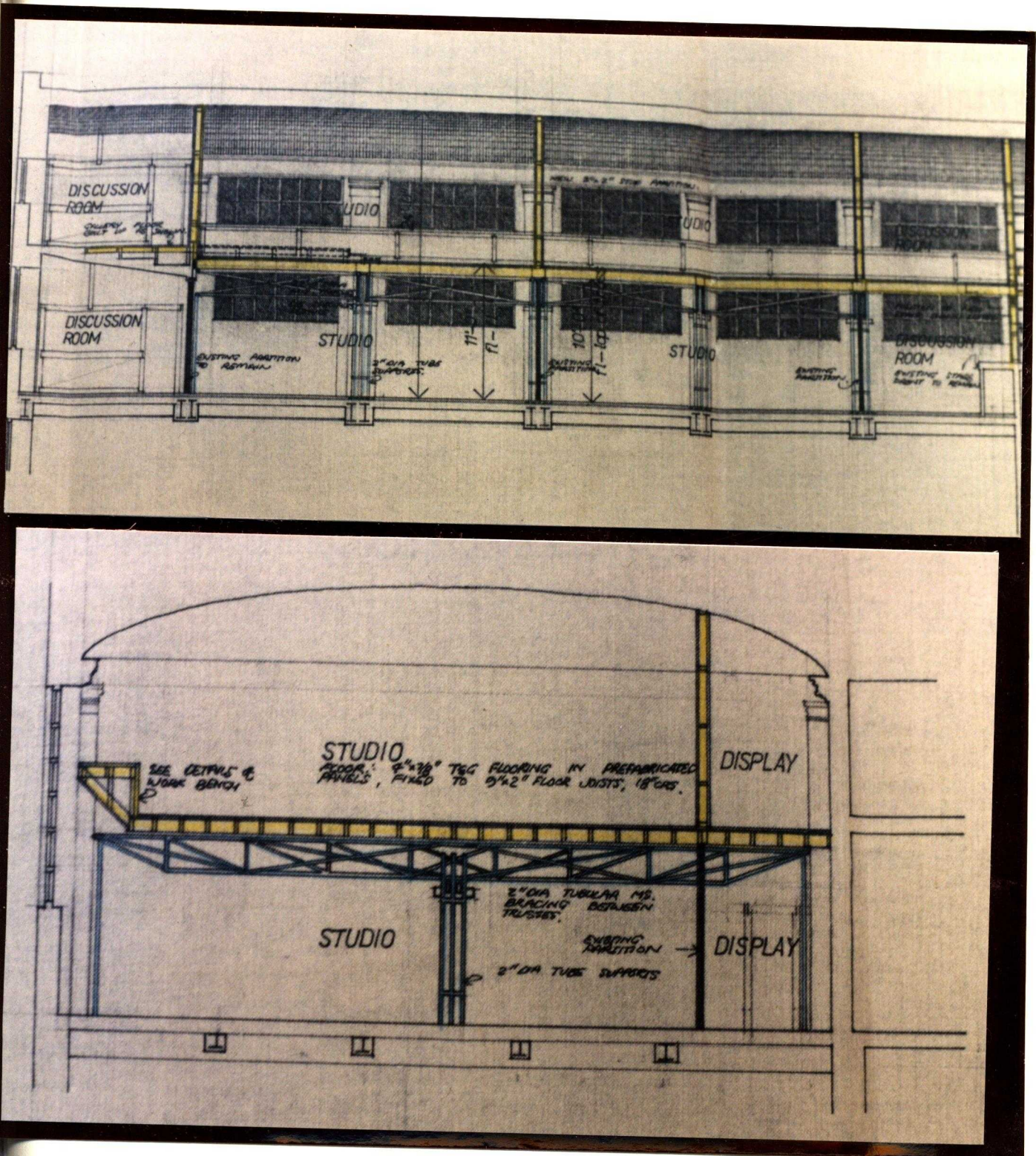


Figure 26.
The Temporary Structure of the Assembly Building.
Mitchell Library.

1969-79 The Newbery Tower and Bourdon Building

Geoffrey Wimpenny.

The slow completion of the Foulis building had stemmed from planning difficulties in the original Foulis Scheme. Firstly it had problems in making the new pottery department conform to board of trade requirements, which one would assume was to do with flue gases from the kiln, or from external raku firings, since the only way round was to put it on the roof. Secondly it had problems in following the town planning committee's instructions to provide car-parking accommodation.

Although these seem marginal points, in February 1961 they were enough for Geoffrey Wimpenny, the representative architect of Keppie Henderson, to persuade the Director Douglas Percy Bliss to consider a second phase of building, (which he had previously been completely opposed to, since it involved the demolition and rebuilding of the Eastern portion of the original extension scheme.)

In addition to now considering a second phase of building work, the school, constantly looking for sites in the vicinity of the main building, had become entwined in negotiations for the Villa at No. 17 Scott Street, and the tenements forming 9 Scott Street and 177-185 Renfrew Street, (as well as narrowly missing out on the site of the current MGM cinema.)

Aquiring this site provided the basic Template for the Newbery Tower and the Bourdon, which had that typical Machievellian spirit of the sixties. At first the scheme in 1963 involved not only the demolition of the assembly Building of 1929, but also expansion directly across Scott Street onto the site of the villa. Geoffrey

Wimpenny, the Architect had Louis Khan's Medical Laboratories in Philadelphia in mind for the Newbery tower, which were completed in 1962, just before his first draft of 1963. Originally the scheme was to be of brick (see figure 25,) but fashions changed and concrete became the order of the day. The techniques used were wholly inappropriate to the budget, and the Joiners complained bitterly, bringing construction to a standstill several times. The scheme broke traditions of building lines, of the city grid, and the street, in pursuit of creating a new urban space to encapsulate the School of Art Campus.

One of the main problems was also of Program, and the changing status of the School of Architecture, which only remained at the School of Art due to Final hour negotiations between Sir Harry Barnes who had become Director in 1964, and the University in 1966. There was much deliberation about whether the Newbery tower should have been for Architecture or the School of Design, the former eventually being housed temporarily in the Assembly building. (See figure 26.)

The project was dogged with problems over the next fifteen years to its completion, but none the less the Newbery Tower was completed in 1969, and the Bourdon ten years later in 1979, and is what we are left with today. There is a tragic article in the Macmag following the completion of the Bourdon, which seems to hail it as a work of genius, but this is far from the reality. The eventual scale of both buildings alters the environment of Mackintosh's Masterpiece beyond reason, and combined with the harsh micro climate of Garnethill, crushes all notions of comfort out of the Glasgow School of Art campus.

.....And Finally.

1982 The Newbery Pavilion. Gillespie Kidd and Coia.

A Temporary Post-Modern Structure full of all kinds of clues to the structure of the Campus Design, in terms of its entrances, program, composition, etc...Dovetailed into the Entrance of the Newbery tower, it has far outlasted its intended life span, probably due to its careful construction on a restricted budget.^{xxiv}

1985 Environmental Competition

The School of Art have for a long time been campaigning to pedestrianise that portion of Renfrew Street in front of Mackintosh's building. This concept manifested itself in a competition to improve the environment of the Campus. It was won by an Ayrshire Architect Doug Stonelake, but was never executed. (See fig. 27.)

1990 Staff Competition

As a follow up to the 1985 competition, a further competition was announced which invited staff only. Among the entrants was Douglas Niven, but again nothing came of this (see fig. 28.)

1995 Cleaning of the Building

The building was cleaned in 1995, revealing the Famous North facade in its stunning glory. This and other improvements were carried out by David Page, of Page and Park.

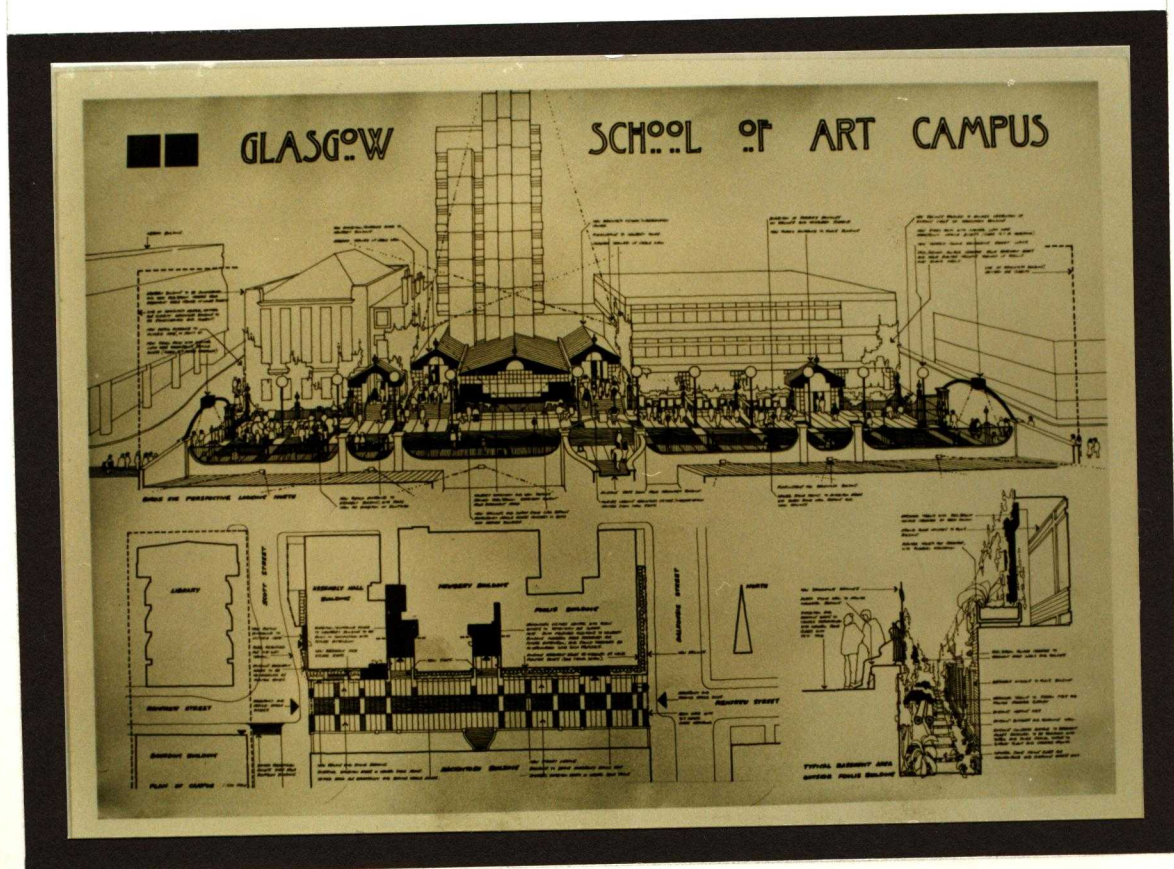


Figure 27.
 Stonelake's winning Scheme.1985.
 Glasgow School of Art.

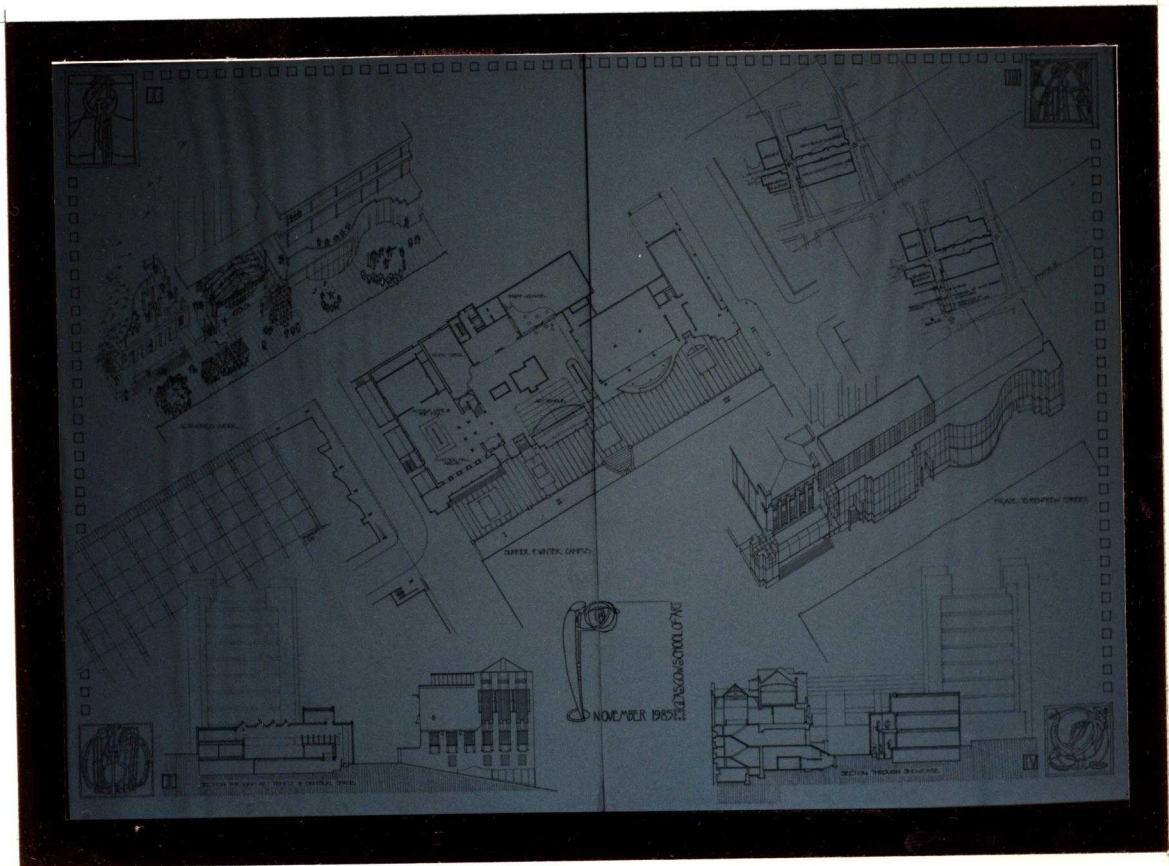


Figure 28.

Douglas Niven, development of his 1985 scheme.

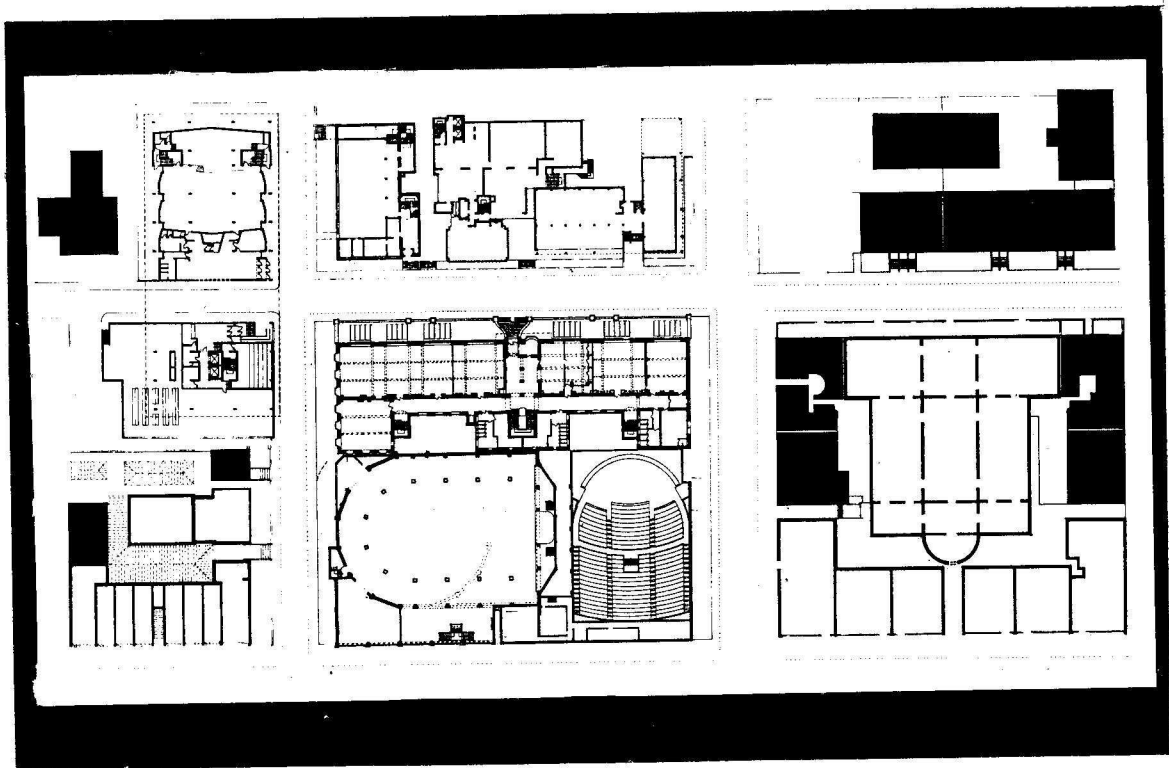


Figure 29.

The Vicinity of Mackintosh's School of Art, 1996.

Bruce Nicolson Jamieson, 1996.

Conclusions

The Millennium

The Millennium will mark the one hundredth anniversary of the front entrance of Mackintosh's creation being unlocked. Ten days before the Dawn of new century, the long key^{xxv5} was turned in its latch and the Arts and Crafts breathed life into the Garnethill soil.

The Centenary

During One Hundred years the Glasgow School of Art has shared its context in the city with some important architects, as well as some unusual building types. We find Alexander Greek Thomson setting off the hill behind with his stocky composition and crisp horizontal datum. Perhaps more fascinating still, we find Rowan Anderson's rotunda for the Great National Panorama, and subsequent interpretations of this artifact, (unique in Glasgow,) particularly by James Miller for the Ice Skating Rink, (the first public building to stage film showings in

⁵ This was presented on a white cushion to Sir James King by Newbery's youngest daughter.

Glasgow, one hundred years ago,) the Hippodrome, and Hengler's Circus.

Although references misleadingly claim the rotunda was mostly demolished and redesigned as the Waldorf Palais de Dance, closer inspection of Neil C. Duff's drawings of 1927 shows that the only demolition that took place was to the upper part of the brick drum, which remains intact up to the ceiling of the first floor mezzanine and is therefore preserved as a rare and interesting *urban artifact*.

1999

Glasgow has won the bid to host the 1999 year of Architecture + Design, which has pledged to build a Centenary building for the School of Art. This report has shown how much of the area is of serious architectural value, and at a time when it will be comparatively easily to raise funds to build something great, serious money should be invested in the direct vicinity of the School of Art in order to recognise its importance.

The Panorama Building (which was also a centenary building to a great Scottish invention,) was built to coincide with the 1888 Great Exhibition in Glasgow, by one of Scotland's most outspoken Architects of the

time, portraying a subject matter dear to the hearts of all Scotsmen-
'The Battle of Bannockburn'.

Perhaps the Rotunda, still existing as a relic of its former self, could be renovated into something modern to coincide with Glasgow's festival of Architecture + Design in 1999, and the Glasgow School of Art's Centenary building, in order to turn a disorganised area into one of the more visibly coordinated centres of Culture in the City.

Notes

-
- ⁱ Unpublished dissertation by James Cooke, GSA MSA, September 1978, lodged at A/Dis 1978 Co0 BM (44191) GSA library, p.8.
- ⁱⁱ **Glasgow School of Art, The History**, *Hugh Ferguson*, 1st 1995, published by the Foulis Press GSA, printed by Bath Press Colourbooks, pp.15
- ⁱⁱⁱ *ibid.*, pp.10
- ^{iv} **GSA Annual Reports-1882-84**, *Thomas Simmonds*, Mackintosh Library.
- ^v **'Greek' Thomson**, edited *Gavin Stamp and Sam McKinstry*, 1st 1994, published by the Edinburgh University Press, printed by the Alden Press Oxford; chapter nine, Exploring the Wall, by Mark Baines, pp116-117
- ^{vi} **The buildings of Glasgow**, 1st 1990, Edited *Colin McWilliam*, published by Penguin, printed MGB by Butler and Tanner Ltd., pp. 242-3.
- ^{vii} **Rowand Anderson: The Premiere Architect of Scotland**. *Sam McKinstry*, 1st 1991, published Edinburgh University Press, printed Cambridge University press. Foreword by Charles McKean, Secretary of the RIAS.
- ^{viii} **Glasgow's International Exhibition-1888 Centenary celebration**, 1988 published by Glasgow Museum and Art Galleries, Printed by Bell and Bain Ltd. Glasgow, p6
- ^{ix} Advert from The Bailie, Wednesday June 6th 1888, p15, Mitchell Library.
- ^x **German Architecture and the Classical Ideal 1740-1840**, *David Watkin and Tilman Mellinghoff*, 1st 1987, Thames and Hudson Ltd. London, printed and bound in Spain by Artes Graficas Toledo S.A. pp87
- ^{xi} **Glasgow Stations**, Johnstone, Colin & Hume, 1st, Newton Abbot, David and Charles, 1979, p153.

-
- ^{xii} **Mackintosh's Masterwork, The Glasgow School of Art**, edited by *William Buchanan*, 1st paperback edition, Chambers 1994, printed in Singapore by C.S. Graphics Pte Ltd, *Appendix A, Francis Newbery* pp.205-212
- ^{xiii} **The Buildings of Glasgow**, 1st 1990, Edited *Colin McWilliam*, published by Penguin, printed MGB by Butler and Tanner Ltd., pp. 242-3
- ^{xiv} Ibid., *Bibliography with annotations*, *George Rawson*, pp185-202.
- ^{xv} Ibid., *Mackintosh, Newbery and the building of the School, the Editor* pp. 12-50.
- ^{xvi} **Mackintosh's Masterwork, The Glasgow School of Art**, edited by *William Buchanan*, 1st paperback edition, Chambers 1994, printed in Singapore by C.S. Graphics Pte Ltd. *A Modern Enigma: A Paradox of Reduction and Enrichment*. *Andrew MacMillan*, p66
- ^{xvii} *The Builder*, vol. 145, no. 4718, 7 July 1933, p8
- ^{xviii} **Mackintosh's Masterwork, The Glasgow School of Art**, edited by *William Buchanan*, 1st paperback edition, Chambers 1994, printed in Singapore by C.S. Graphics Pte Ltd.; *A tour of the School*, p73.
- ^{xix} **Charles Rennie Mackintosh and the Modern Movement**, Howarth, 1st 1952, Glasgow University publications, p73.
- ^{xx} Report by Messers John Stuart and Gillies on the properties No.s 166, 168 170 and 172 Renfrew Street for the Board of Governors of the Glasgow School of Art. December 1915
- ^{xxi} **Glasgow School of Art, The History**, *Hugh Ferguson*, 1st 1995, published by the Foulis Press GSA , printed by Bath Press Colourbooks.p. 90
- ^{xxii} Ibid., 16 May, 1928.
- ^{xxiii} The GSA report of the Governors, session 1931-32. School of Art Library
- ^{xxiv} PROSPECT, Issue No.14, August 1982.

^{xxv} **Mackintosh's Masterwork, The Glasgow School of Art**, edited by *William Buchanan*, 1st paperback edition, Chambers 1994, printed in Singapore by C.S. Graphics Pte Ltd. Mackintosh, Newbery and the building of the School, William Buchanan, pp. 36-7

Bibliography (including Lists of Drawing References and Dates.)

1. Books.

For the best Sources of the Glasgow School of Art, look at George Rawson's Bibliography in 'Mackintosh's Masterpiece.'

For Rowand Anderson Sam Mckinstry's Bibliography should be consulted. Ironically it does not include the Panorama building in its list of Projects. In fact very little material does exist on the Panorama, all my sources of which are listed underneath.

For James Miller, Audrey Sloan's book, is a good reference, but again does not acknowledge his contributions to the panorama building.

'Greek' Thomson, edited by Gavin Stamp and Sam Mckinstry, and Ronald McFadzean's standard work on the same architect, form the best stepping stone to reading up on about Grecian Chambers.

Buchanan William, Mackintosh's Masterwork, The Glasgow School of Art, 1st paperback edition, Chambers 1994, printed in Singapore by C.S. Graphics Pte Ltd.

Glasgow's International Exhibition-1888 Centenary celebration, 1988 published by Glasgow Museum and Art Galleries, Printed by Bell and Bain Ltd. Glasgow.

Fadzean, Ronald, The Life and Work of Alexander Thomson. 1st, 1979, Routledge and Kegan Paul Ltd, Printed by BAS printers Ltd.

Ferguson, Hugh, **Glasgow School of Art, The History**, , 1st 1995, published by the Foulis Press GSA , printed by Bath Press Colourbooks.

Fletcher, Sir Banister, **A History of Architecture**. 18th,1975, Published by the Athlone Press, UCL, Printed by Jarrold and Son's Ltd, Norwich.

Howarth, **Charles Rennie Mackintosh and the Modern Movement**, 1st 1952,Glasgow University publications, p73.

Kruft, Hanno-Walter, **A History of Architectural Theory, From Vitruvius to the Present**. 1st, German, 1985, English 1994, Published by Philip Wilson Publishers Ltd, Printed at the Princeton Architectural Press.

Johnstone, Colin & Hume, **Glasgow Stations**, 1st, Newton Abbot, David and Charles, 1979.

Lethaby, William, **Architecture, Mysticism and Myth**, first published, 1891, Edition 1994, , Ashgrove Publishers, printed at the Solos Press.

Macaulay, James, **Architecture in Detail**. 1st, 1993, Phaidon Press Ltd, Printed in Singapore.

McGibbon, D and Ross, **The Castellated and Domestic Architecture of Scotland**. Facsimile of edition published by David Douglas in 1887-92, Published by James Thin, Printed by Unwin Brothers Ltd, The Gresham Press.

McKinstry, Sam, **Rowand Anderson: The Premiere Architect of Scotland.** 1st 1991, published Edinburgh University Press, printed Cambridge University press.

McWilliam, Colin, **The buildings of Glasgow**, 1st 1990, published by Penguin, printed MGB by Butler and Tanner Ltd.

Rossi, Aldo, **The Architecture of the City**, 7th 1992, published by the MIT Press, Cambridge, Massachusetts and London, England, printed by the Graham Foundation for Advanced Studies in the Fine Arts, Chicago Illinois.

Sloane, Audrey, **An introduction to James Miller ARSA FRIBA FRIAS 1860-1947.** *Edinburgh, RIAS exhibition Catalogue, 1987.*

Sloane, Audrey and Murray, Gordon, **James Miller 1860-1947.** *Edinburgh RIAS 1993.*

Stamp, Gavin and Sam McKinstry, **'Greek' Thomson**, 1st 1994, published by the Edinburgh University Press, printed by the Alden Press Oxford.

Steele, James, **Charles Rennie Mackintosh, Synthesis in form**, 1st, 1994, Published by Academy Aditions, Printed and bound in Singapore.

Watkin, David and Tilman Mellinghoff, **German Architecture and the Classical Ideal 1740-1840**, 1st 1987, Thames and Hudson Ltd. London, printed and bound in Spain by Artes Graficas Toledo S.A.

2. Unpublished Dissertations.

*Cooke, James, Sauchiehall Street its Origins and Development. September 1978,
Glasgow School of Art Library.*

*Frew, Brian J, The Commercial Architecture of James Miller: Influences from
Glasgow and Abroad, Glasgow School of Art Library.1988*

*Graham, Stuart J, The Ayreshire Work of James Miller FRSA, FRIBA, FRIAS,
Glasgow School of Art.1995*

*Hiroaki, Kimura, Charles Rennie Mackintosh: Architectural Drawings
Catalogue and Design analytical Catalogue. University of Glasgow PhD Thesis
1982.*

3. Unpublished Sources.

GSA Annual Reports Mackintosh Library.

GSA Minutes of the Board of Governors meetings.

Glasgow School of Art Library.

GSA Minutes of Building and Finance Committee.

Glasgow School of Art Library

GSA, Meetings of the Fabric Committee.

Glasgow School of Art Library.

Report by Messers John Stuart and Gillies on the properties No's 166, 168 170 and
172 Renfrew Street for the Board of Governors of the Glasgow School of Art.
December 1915

4. Periodicals and Newspapers.

Architectural Review, Vol. 50, July 1921, p32.

Architectural Review, Vol. 63, April 1928, pp124-9

Bailie, the, Wednesday June 6th 1888, p15, Mitchell Library.

Builder, the Vol. 120, 10 June 1921, p734, 739.

Builder, the vol. 145, no. 4718, 7 July 1933, p8

Glasgow Herald, the 15 June 1898, p6g

PROSPECT, Issue No.14, August 1982.

Glasgow's Cinemas, Strathclyde Educational Department. Mitchell Library

Macmag No's 1-20, Mackintosh Library.

4. Drawings

All Drawings from the Mitchell Library were obtained from the Dean of Guild Records and can be accessed from their computer log using the dates, and addresses provided below.

1. Two Commercial Types

1855 The McLellan Galleries by James Smith

254-290 Sauchiehall Street

1903 by Frank Burnet Boston and Carruthers Architects, Mitchell Library.

1911 By McDonald office of public works, Mitchell Library.

1865 Grecian Chambers by Alexander Greek Thomson

336-356 Sauchiehall Street

1905 by James Miller for alterations to the building. Mitchell library.

2. A lasting Typology of the Rotunda.

1888 The Scottish National Panorama building by Rowand Anderson

304-334 Sauchiehall Street

December 1887, Rowand Anderson Mitchell Library.

1895 The Glasgow Ice Skating Palace.

November 1895, James Miller, Mitchell Library.

1902 The Hippodrome Zoo

Feb. 1902 James Miller, Mitchell Library

1909 Hengler's Circus.

July 1909 Gardner and Miller Architects, Mitchell Library.

1927 The Waldorf Palais de Dance.

March 1927 Neil C. Duff, Mitchell Library.

1929 The Regal Cinema.

1928 C.J. McNair, Mitchell Library.

1967 ABC

March 1965 etc.. Leslie C. Norton & C. J. Foster, Mitchell Library.

A. A Masterwork**167 Renfrew Street****1896 Competition****1899 Opening Ceremony****1906 Beginning of planning of second half****1909 15 December Formal opening of Completed Masterpiece**

1897, 1907, 1910 Mackintosh Mitchell Library & School of Art.

Drawings, Architecture in detail, James Macaulay.

Alterations to these plans; elevations of 1907, Mackintosh., Mitchell library

Photographs from Peter Trowles, Curator Glasgow School of Art.

Computer Projections, Mike Strange, Mackintosh School of Architecture¹.

4. Extension of the Extension**1929 16 December 'The Extension Scheme.' Graham Henderson & John****Keppie**

1926 Drawings by John Keppie and Henderson, Chartered Architects

Also their drawings for Alterations due to the war. 1939, Mitchell Library,

Copy also kept by John Blair buildings officer of the Glasgow School of Art.

1964 The Foulis Building.

September 1961, Keppie Henderson & Partners, Mitchell Library.

Drawings, computer survey carried out by Raid Hannah, the Mackintosh
[School of Architecture, (drawn by Marcel Ridyard 1995.)

1969 The Newbery Tower

1963, March 1966 Geoffrey Wimpenny, Mitchell Library.

1979 The Bourdon Building

July 1975, Keppie Henderson & partners, Mitchell Library.

1982 The Newbery Pavilion.

September 1981, Gillespie, Kidd and Coia, Mitchell Library.

ⁱⁱ **Mackintosh's Masterwork, The Glasgow School of Art**, edited by *William Buchanan*, 1st paperback edition, Chambers 1994, printed in Singapore by C.S. Graphics Pte Ltd. 179-184.