

UNIVERSITY OF NEWCASTLE UPON TYNE

Claremont Tower

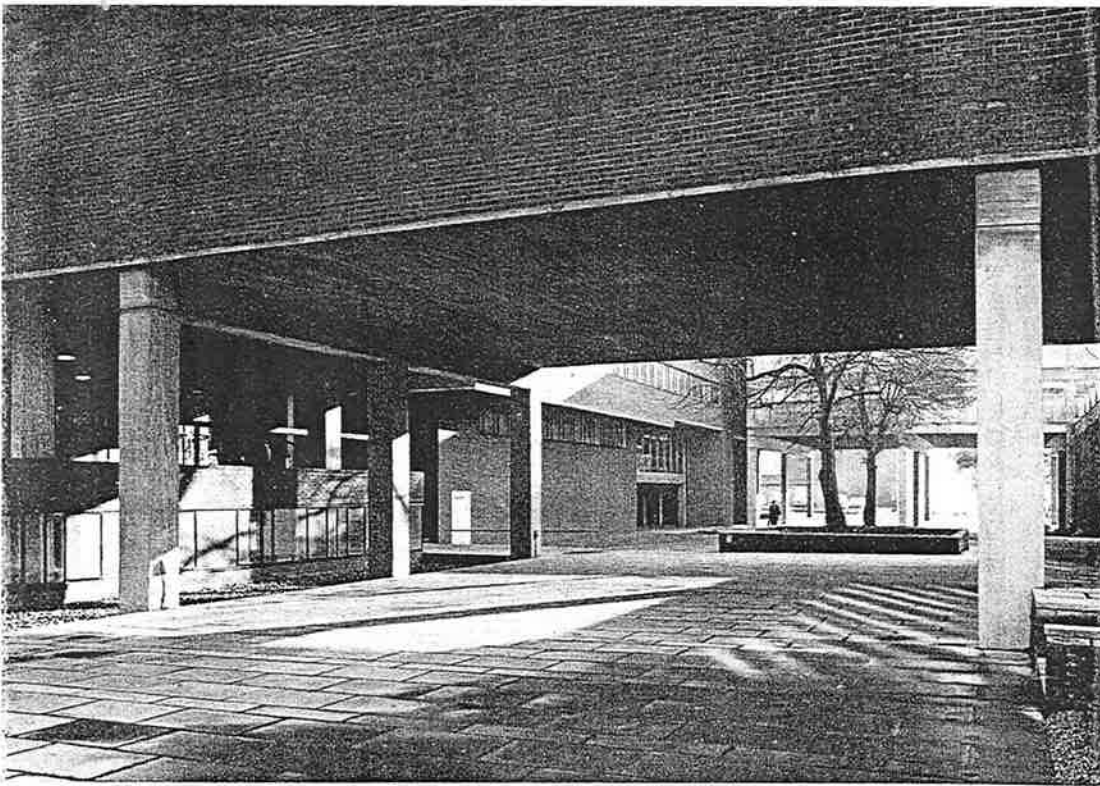
and associated buildings



M121109511X

378.42876 UNI

University of Newcastle upon Tyne



Claremont Tower

Claremont Bridge

Daysh Building

Fine Art Extension

overleaf front Claremont Tower

above Pedestrian way from Merz Court to Haymarket

Contents

- 3 Foreword by the Vice-Chancellor of the University,
Dr C. I. C. Bosanquet
- 6 The buildings – described by the Architects
- 10 Departmental contributions:
 - Civil Engineering – Division of Highway and Traffic Engineering
 - Computing Laboratory
 - Economics
 - Fine Art and extension to Hatton Gallery
 - French Studies
 - Geography
 - German and Scandinavian Studies
 - Law
 - Politics
 - Social Studies
 - Spanish and Latin American Studies
 - Surveying
 - Town and Country Planning
- 27 Architects, Quantity Surveyors and Consultants
- 28 Principal Contractors, Sub-Contractors
and Suppliers
- 31 Space
- 31 Costs

The buildings which compose the complex to be opened by the Lord High Chancellor on 18 April constitute the largest single-building enterprise undertaken by this University since its first beginnings in 1834. The University has sought by the construction of these buildings to relieve two distinct forms of pressure. The first has been the need to re-house the many departments which have hitherto occupied space in the dwellinghouses in the Sydenham Terrace, Devonshire Terrace and Kensington Terrace areas. The second has been the need to provide additional space for the expanding teaching and research work of the thirteen departments which will occupy accommodation in the new buildings.

In the years immediately after 1945 student and staff numbers increased rapidly and it was essential to make use of any accommodation that could be found within reasonable reach. For this reason a large number of private houses were taken over for University use and since the late 1940's many departments have had to make the best of the drawing-rooms, dining-rooms, bedrooms, kitchens and even bathrooms of former private houses. The plans of the City of Newcastle for the widening of the A1, the main road to Edinburgh, will involve the destruction of a great many of these houses, and the University's own needs to provide sites for new science buildings require the removal of other departments.

In anticipation of these developments, the University gradually acquired all the properties in the quiet tree-lined street known as Eldon Place, named after the great Lord Chancellor, John Scott, 1st Earl of Eldon (1751-1838). With the exception of the few houses immediately adjoining Barras Bridge these have been pulled down. In their place we now have Merz Court which houses Chemical Engineering, Electrical Engineering and Mathematics, the extension of the University Library, and the Claremont Tower complex of buildings. We regret the disturbance of so many houses with their attractive gardens, but have done our best to retain the essential amenity of a large tree-lined open space by limiting the floor area of the new buildings and providing for the careful landscaping of the resulting open spaces.

In order to ensure the most sympathetic treatment of the new buildings and at the same time to make full use of the experience already gained in constructing many University buildings, the design of the whole of the Claremont building

Foreword

by the Vice-Chancellor
of the University,
Dr C. I. C. Bosanquet

complex was entrusted to Messrs. Richard Sheppard, Robson and Partners, who had already been employed for the design of the Merz Court Building at the north end of the site. Their briefing invited them to provide space for thirteen separate departments together with their lecture rooms, computing and language laboratories, a large common room for students in the Faculty of Arts, and a specially designed store for the reserve material of the Museum of Antiquities. The original scheme contemplated the construction of a Tower building some twenty storeys high. This was not approved by the City Planning Authority because it would have dwarfed the new Civic Centre. They suggested as an alternative that the University should reduce the Tower building to a height of twelve storeys and construct a Bridge building crossing Claremont Road. This is what, in fact, has been done.

What is important from the point of view of University strategy is the care that has been taken in the grouping of departments to encourage close contacts between staff and students with similar interests. The arrangements of the whole complex are such that it will be natural for students of Economics and Law, Geography, Town and Country Planning and Surveying to associate and for the many language departments to make use of the Language Laboratory.

The complex will house some of the most valuable of the University's own possessions. I am thinking particularly of the collection of pictures and sculpture that has been built up in the Hatton Gallery, of the Brown Collection of Ethnographica from the South Seas in the Department of Social Studies, and of the resources in hardware and software of the Computing Laboratory.

In the design of such a building complex, very special facilities had to be provided for the needs of departments. Accordingly, there will be found large air-conditioned spaces in the basement of the Claremont Tower for the smooth operation of the giant Northumbrian Universities Multiple Access Computer Data Processing Unit with its multiple access units located in the Universities of Durham and Newcastle upon Tyne. We have provided both special studios and gallery space for the Department of Fine Art.

This group of buildings establishes yet more firmly the activities of the University of Newcastle upon Tyne in the heart of the Tyneside conurbation. The University therefore

gives expression to the policies which the Robbins Committee regarded as being so valuable. They took the view that there was a special case for fostering further development of universities within large cities. They argued that this was desirable both for the universities themselves and for the cities:

'It is most valuable for the teachers and students in academic institutions to have convenient access to national institutions such as libraries, museums, galleries and other cultural centres and to learned societies. It is also important for them to have easy access to centres of industry, commerce, medicine and law, to institutions of central and local government, and to research institutions. Two-way traffic between such centres and universities is of great benefit particularly in the natural sciences, technology, medicine and the social sciences . . . There is also a benefit to the cities themselves. The presence of a university can stimulate cultural activities; it can improve the standing of the professions, in subjects such as medicine and Education, and provide through its staff and students a rich addition to the variety and interests of the population.'

The buildings

DESCRIBED
BY THE ARCHITECTS

The initial brief for this group of buildings set out to provide an extension to the accommodation of the Department of Fine Art and the associated Hatton Gallery, additional accommodation for the School of Architecture (Building Science), and a new building for the Departments of Geography and Surveying. A scheme was approved in 1963 that took into account the possibility of extending the Geography Building upwards by two storeys, and providing in addition storage accommodation for the Museum of Antiquities, sited in the basement areas of the original properties in Eldon Place.

At this stage in the design it became clear to the University that development to the east of Claremont Road and eventually to the east of the Great North Road could not take place unless a considerable amount of accommodation could be provided on the west side of Claremont Road for various 'Arts' departments such as Languages and Law, to clear the way for future development on the other side of the road. The only space available was a rectangle of about 350 feet in height to provide the required floor area. This was not accepted by the City Planning Officer for Newcastle and in order to provide the floor area which the University required, the suggestion was made that the Tower should be reduced in height and that the remainder should be built in the form of a block bridging over Claremont Road. This, in effect, killed two birds with one stone: it provided the necessary floor area and formed a physical link between the existing University buildings and the future development. A scheme was presented to the City Planning Officer and in view of its importance was considered by their Consultants, Professor Arne Jacobsen and Sir Basil Spence, who approved the scheme without reservation.

The group of buildings covering the site of Eldon Place contains the Departments of Building Science (School of Architecture) and Fine Art.

Building Science (School of Architecture): this accommodation is directly connected with the main Architecture building and although constructed as part of the Phase I contract, it was completed and handed over in December 1965 and was officially opened by Sir Donald Gibson on 26 September 1966.

The Department of Fine Art: this was housed in Edwardian buildings and included the Hatton Gallery. Both the Department and the Gallery urgently required

more space. The new buildings provide new studios and lecture theatre and administrative rooms and at the same time retain the close link with the Gallery, which is, in a way, the heart of the Department. The Gallery has been extended and planned so that a variety of exhibitions, small or large, can be staged in it. It has been equipped with temperature and humidity control and a lighting system giving a wide range of control over the direction and intensity of light, both natural and artificial. During the course of construction the Schwitters mural, complete with twenty tons of Westmorland stone walling, was acquired by the University and successfully transported from the Lake District to Newcastle and is now housed in a specially constructed bay in one of the side galleries. An inaugural exhibition was opened by John Pope Hennessey on 22 November 1967.

The Department of Fine Art forms a link between the Edwardian buildings and the new Daysh Building, leaving a pedestrian way open beneath the studios on the line of the old Eldon Place. This building houses the Departments of Geography and Surveying and provides studio/laboratory teaching rooms, a demonstration theatre, two lecture rooms, research rooms for Polar Studies, storage areas for the Exploration Society, survey instruments and a small workshop. On the third floor there is a departmental map and book library and there is the usual accommodation for professors and lecturers with adjacent seminar rooms. The basement of the building is occupied by a large store area for the Museum of Antiquities and is equipped with sorting and washing areas.

The two upper floors of the Daysh Building have a direct internal link with the Tower and these two floors are laid out as studios for the Department of Town and Country Planning. Both floors are fitted with demountable partitions to give flexibility in room size and arrangement.

The Tower block is eighty feet square, has eleven floors above ground level and extends into a basement twenty feet below ground. It is served by a lift and a 'paternoster' which is in effect a vertical escalator, formed by an endless chain of lift cars.

The requirements of the departments above ground level in the Tower block were met by planning the central service core off centre, leaving the southern half of each block for the larger rooms, i.e. seminars, libraries, etc., and

DAYSH BUILDING

CLAREMONT TOWER

grouping the small staff rooms around the three remaining sides of the core. However, the Computing Laboratory, which required a great variety of spaces ranging from the main laboratory of some 5000 square feet, which houses the University's KDF9 computer and the Northumbrian Universities (Durham and Newcastle) Multiple Access Computer, an IBM 360, model 67, to the visitors' rooms of 100 square feet, presented especial difficulties. Many of these rooms required air conditioning or mechanical ventilation and the Laboratory had to be completely independent of others, yet accessible at all times. It was decided therefore to use the space available below the ground floor entrance level where the Laboratory could expand underground beyond the limits of the Tower block. Wherever possible, small rooms have been planned so that they look through windows into the larger spaces and the main laboratory can be seen below through a double-glazed screen at ground floor level.

Above ground the Tower contains common lecture rooms, the Departments of Town and Country Planning and the Traffic and Highway Engineering Division of the Department of Civil Engineering, an expansion floor of Computing, and the Departments of Law and Economics. The Claremont Bridge building contains three floors of various Arts and Social Science departments – French, Spanish, German, Social Studies, and Politics. The large rooms such as seminars, museums and libraries are in the central section, artificially ventilated, and the smaller rooms are along the external wall. Special consideration has been given to reducing the effect of the noise of the traffic below to prevent disturbance of work in these rooms.

At the second floor level there are two pedestrian ways through the Tower linking the older University buildings to the future developments on the east of Claremont Road, and giving access to a number of lecture rooms which will be common to all the Arts Departments. At the sixth floor level the Tower connects with Arts House, which is a large common room for all students in the Arts Departments, situated at the same roof level as the Daysh Building and Merz Court with magnificent views to the north and south. To the west the Tower is linked with the old buildings by another 'bridge' containing a large lecture hall, and the Building Science block.

Although the density of building on this restricted site is quite high, by raising several of the blocks on columns it

has been possible not only to preserve but to encourage pedestrian routes through the whole area, and to form interesting and exciting enclosures and vistas. Some of the existing trees in Eldon Place have been retained and the landscaping of the area between Merz Court and the new buildings has been moulded around them. The design of the buildings themselves has been controlled by the desire for consistency both in material and in proportion of window to wall so that it relates closely to the simple mass of Merz Court. The only exception is the Studio block of the Department of Fine Art, which was considered as a 'screen' linking the massive, horizontal blocks of the Daysh building with the Edwardian 'Tudor' of the Edward VII buildings and the University gateway, and having some affinity in material with the neighbouring buildings for the Students' Union.

Technically, the buildings are not revolutionary: they are all framed in reinforced concrete and clad in the same brick as Merz Court, which still appears to be the cheapest and most durable facing material. Most of the early problems arose from the fact that the site is split by the course of the old Pandon Burn, now culverted, which flooded the excavations during the winter of 1965–66. Apart from this, the problem of constructing the Bridge block over Claremont Road without dislocating traffic was solved by the use of large precast concrete beams to enable construction to proceed without closing this extremely busy road for more than a few hours. The emphasis has been placed on the relationship of the various blocks and the spaces between them rather than any spectacular *tour de force* in the individual buildings. Finishes throughout are simple but durable – vinyl floors, fairfaced block partition walls and natural timber. The area of glass has been kept down, to allow a reasonable outlook but to avoid excessive heat losses and, even more important, excessive heat gains in hot weather, and the standard of artificial lighting has been increased in accordance with current practice.

The entire group is heated by the central boiler house in Merz Court, but separate plant rooms deal with specialized requirements for ventilation and air conditioning in the Computing Laboratory and the various lecture theatres.

CLAREMONT BRIDGE

Departmental contributions

CIVIL ENGINEERING –
DIVISION OF HIGHWAY
AND TRAFFIC ENGINEERING

The Department consists of five divisions – Structural Engineering, Civil Engineering Materials, Public Health Engineering, Hydraulics and Hydrology and Highway and Traffic Engineering. These divisions act as semi-autonomous sub-departments and are particularly concerned with research and postgraduate teaching. The undergraduates undertake a three years honours course and in their first two years they cover all the various aspects of civil engineering. In their final year they choose one of the five divisions for further study in depth and also to see how civil engineering is related to the other professions.

The Highway and Traffic Engineering Division is located on the seventh floor of the Claremont Tower and this acts as the base for these final year undergraduates undertaking the Highway and Traffic Engineering option together with the postgraduate students. The accommodation on this floor consists of a 'lecture' room which is the centre of their activities. Each student is free to use this room for individual or group work from 8.0 a.m. to 9.30 p.m. on week-days. Adjoining this room is the traffic laboratory which is where the students can analyse results of surveys or examine plans, etc. The actual laboratory of the students is the traffic problems of the North-East Region. There is also a reading room which contains a large number of research reports from the U.S.A. and Europe.

The Division offers a full-time course of postgraduate studies in Highway and Traffic Engineering. This course, which occupies one academic Session, from October to June, has been developed over the period of time since its first year of operation in 1954. There are usually ten students attending this course each year. These students have experience in a variety of professions, for example, engineering, planning, geography and economics, the vast majority of them having been seconded by their employers on full salary. The course reflects these interests and it not only gives a thorough training in traffic engineering but also gives great emphasis on transportation planning.

At present, higher degrees (MSc, PhD) are only awarded for individual research work. The major fields of study are: prediction of future movements of people and goods, theory of traffic flow and control of vehicles in urban areas.

The present research programme is:

Journeys to work in commercial centres

A detailed analysis of the pattern and mode of journeys to work in various size commercial centres in the North-East of England.

Factors affecting choice of transport

An examination of the reasoning behind the choice of transport for people travelling to work from two residential areas within Tyneside.

Economic benefits to industry achieved by the construction of motorways

A survey of the benefits achieved by the motor industry from the completed sections of the British motorway system. As part of this work a survey of journey speeds on various types of roads has been published by the British Road Federation.

Simulation studies of traffic movements at intersections

Several programmes for an English Electric KDF 9 Computer have been written to simulate traffic signalled controlled intersections and roundabouts.

Area traffic control

A series of investigations have been made into the fundamental aspects of area traffic control.

Capacity restraint assignment and distribution

A detailed examination of factors affecting journey time and choice of route is being made.

The Computing Laboratory is housed in four floors of the new Claremont Tower building. It is equipped with the first large time-sharing multiple access computing system to be installed in a British University. The machine, an IBM 360, model 67, is as powerful as any University machine in the country. There are several typewriter terminals within the Computing Laboratory and in other departments at which users may simultaneously claim the facilities of the machine. The English Electric KDF 9 computer delivered in 1964 has been retained and there is a small computer, the IBM 1130 for elementary teaching and on-line applications. There is an optical mark reader, graph plotting and recording devices and a wide range of card and paper tape preparation equipment.

A large part of the activities of the Computing Laboratory is at postgraduate level. Graduates with an adequate preparation in Mathematics can be admitted to a one-year course in Numerical Analysis and Automatic Computing which leads to the MSc degree. This course, which has been approved by the Science Research Council so that eligible students may apply for S.R.C. Advanced Studentships, consists of lectures and practical work on the computer for nine months, followed by three months' work on an advanced topic under the supervision of a member of staff. Candidates with less high qualifications may proceed to a Diploma in Numerical Analysis and Automatic Computing after nine months' study. Those obtaining either of these qualifications are well fitted to enter any of the different avenues of computer application.

At present many more posts in the computing field are advertised than can be filled by qualified applicants. The Laboratory receives a regular notification of posts with the Scientific Civil Service and other Universities. Computer manufacturers, most of whom operate service bureaux, have a steady turnover of staff as their experienced employees leave to take responsible positions in companies recently installing computers. Many industrial organizations require people trained in automatic computing for both scientific and commercial data-processing applications.

Students wishing to do research in automatic computing and so to gain the PhD degree can be accepted. The Laboratory, established in 1957, is one of the largest in British Universities and the staff have wide research interests which include the numerical solution of ordinary and partial

differential equations, programming languages, Monte Carlo methods, information retrieval, document processing, linear programming and other topics in operations research. In addition to the lecturing staff of the laboratory, several workers are supported on research contracts. Research workers in many departments use the computing equipment and they may receive the necessary instruction in the Laboratory.

Economics has been taught at the University in Newcastle since 1908, when the first lecturer was appointed. In 1912, a Chair was established, partly financed from contributions from local industry and commerce and named after David Dale, formerly Chairman of Consett Iron Company and a nineteenth century pioneer in conciliation and arbitration in industrial disputes. The Faculty of Commerce was established in 1913 and candidates were prepared for the degrees of Bachelor and Master of Commerce. The Department of Economics also provided courses for students taking Honours degrees in Economics and in Politics and Economics in the Faculty of Arts.

After the second world war, the Faculty of Commerce was converted to the Faculty of Economic Studies and the degrees in commerce replaced by degrees in Economic Studies. The new Faculty also assumed responsibility for the Honours degrees in Economics previously controlled by the Faculty of Arts. As a result of further developments, there is now a Faculty of Economic and Social Studies, to which the Departments of Economics, Social Studies and Politics are primarily assigned.

The Department of Economics provides instruction not only in the various branches of Economics, but also in Accounting, Economic History and Economic Statistics. There are Honours degrees in Economic Studies, Economics and Accounting, Politics and Economics, Economics and Social Administration and Economics and Geography. There is also a General degree in Economic Studies, which offers the student a wide range of options based on a central core of Economics; on average, students taking this course receive about two-thirds of their instruction within the Department. Provided that Accounting and Law as well as Economics are studied throughout the course, the General degree is recognised under the scheme approved by the Universities and the Accountancy profession, and a substantial proportion of the students are being prepared for

ECONOMICS

the profession through this course. The Department also provides instruction for students reading for degrees in Social Studies, Applied Science, various Arts subjects and Town and Country Planning.

Higher degrees (the MA in Economic Studies and the PhD) are obtainable through supervised research. The University has not yet introduced any formal courses of postgraduate instruction.

The research interests of members of staff and of research students cover a wide range, but the Department has usually paid particular attention to the problems of the North-Eastern Region. This was exemplified by the Survey conducted for the Board of Trade in 1931-32, as one of several commissioned from Universities in the depressed areas of the time and leading to the Special Areas legislation of the pre-war years. This Survey was followed up at intervals by supplementary investigations until about 1950. This special interest has recently been revived, and there are now six projects being conducted in this field sponsored by or in collaboration with Government departments and other agencies. It is intended to extend further in this direction.

The staff of the Department consists of one professor and fifteen other staff. There are just over one hundred students reading for the various Honours degrees and about the same number reading for the General degree in Economic Studies. About two hundred students reading for other degrees in the University receive some instruction in Economics each year.

The new extension has greatly relieved pressures of accommodation under which we have suffered for some time. The foundation year, the sculpture school, the pottery workshop, the design school, the life rooms, some final year studios and the administration are now handsomely housed in rooms and studios specially designed for them. The new buildings also incorporate extensions to the Hatton Gallery and we regret, particularly, that the exigencies of preparation of a large exhibition make it impossible for us to make public most of the galleries at the time of this Opening. The new galleries will increase the possibilities of exhibitions, being designed to allow maximum changes of character and intent and we shall be able to show not only larger exhibitions but to show several exhibitions at one time.

The new lecture theatre seats many more people and its equipment, now emerging from technical growing pains,

will provide admirable aid, not only for the formal needs of the Department, but for the showing of sound films; it has full recording equipment and together with the new dark room could provide facilities for the extension of the existing courses in the form of research into photography and film-making some time in the future.

One of the most ingenious of Messrs. Sheppard and Robson's new ideas in the extension, is the method whereby the accommodation in the studios can be almost doubled should any future expansion in student numbers demand this. It is obviously not possible to add further floors to top-lit studios, but the height of the new studios and the concrete beams which, at present, traverse them will allow comparatively cheap flooring to be quickly fitted, the lower studios thus being lit by the existing side windows, and still by light from the roof-lights in the inner areas.

The new extension has not diminished our affection for the idiosyncrasies of the Old Building, but until Phase II of the building operations (the conversion of the interior of the Old Building) can be implemented, the Department, as a whole, cannot be said to be logically workable. There are many different separations of activity, of geographical divisions in need of re-organization which only Phase II will solve. We shall not all benefit properly from the new workshops until these alterations are possible, and the sculptors must wait for their foundry. But the new extension has already made possible increased library accommodation, a properly ventilated picture-store to the Hatton Gallery, and limited studio accommodation for post-graduates working for the new Master of Fine Art degree. And we have, at last, space to turn round in.

The Department of French Studies has about 110 Honours students and a similar number of students reading for a General degree. Students divide their time fairly equally between acquiring a thorough knowledge of the spoken and written language and being introduced to French literature through representative texts of various periods.

The first year of both the General and the Honours courses is devoted to the study of modern French literature, including some present day authors. In subsequent years students in both courses turn to earlier periods – the Special Honours course surveying the whole of French literature from the Middle Ages onwards, while the General degree students concentrate on the seventeenth and eighteenth centuries,

and join the Honours students in the course on nineteenth-century literature in their third year. Honours students in their final year have the choice of several special subjects, each consisting of an author or a literary theme, chosen from different periods from the Middle Ages to the twentieth century. Honours students also study the history of the French language, and are introduced to problems of linguistics. They follow a course in French history in the Department and are encouraged to attend a course in the Department of Fine Art concerned with the history of French art. The Department aims at presenting literature as part of the civilization of France and thus introduces the student to many aspects of European civilization. The teaching of literature is given in lectures and tutorials, these last held fortnightly in the first, and weekly in the subsequent, years of the Honours course. Tutorials are also provided for the third year students of the General degree course.

All students, at their different levels, have regular tuition in writing French and translating from and into the foreign language in groups never larger than twenty. They all have weekly conversation classes with French *lecteurs* and attend the language laboratory for additional oral practice.

A few students take Joint Honours degree courses, combining French with either German or Spanish. In addition the Department teaches French as a subsidiary subject to students reading for Honours in other departments. A small number of General degree students are permitted to follow an intensive course in their last year which comprises the prescribed General Honours course and one or other of the Honours courses, including the Special subject.

All students have some residence abroad; the Honours students usually intercalate a year as *assistants* in a French school and often combine this with attendance at some courses in a French university. General Honours students spend a month during the long vacation in a French speaking country. The Department hopes in future to exchange *lecteurs* with the University of Dijon.

The Department also teaches and supervises postgraduate students at various levels: some part-time and some full-time students, reading for the degree of MLitt or PhD. It is prepared to direct research in a wide variety of subjects. The Department has a special interest in seventeenth-century literature, and offers a postgraduate course (leading

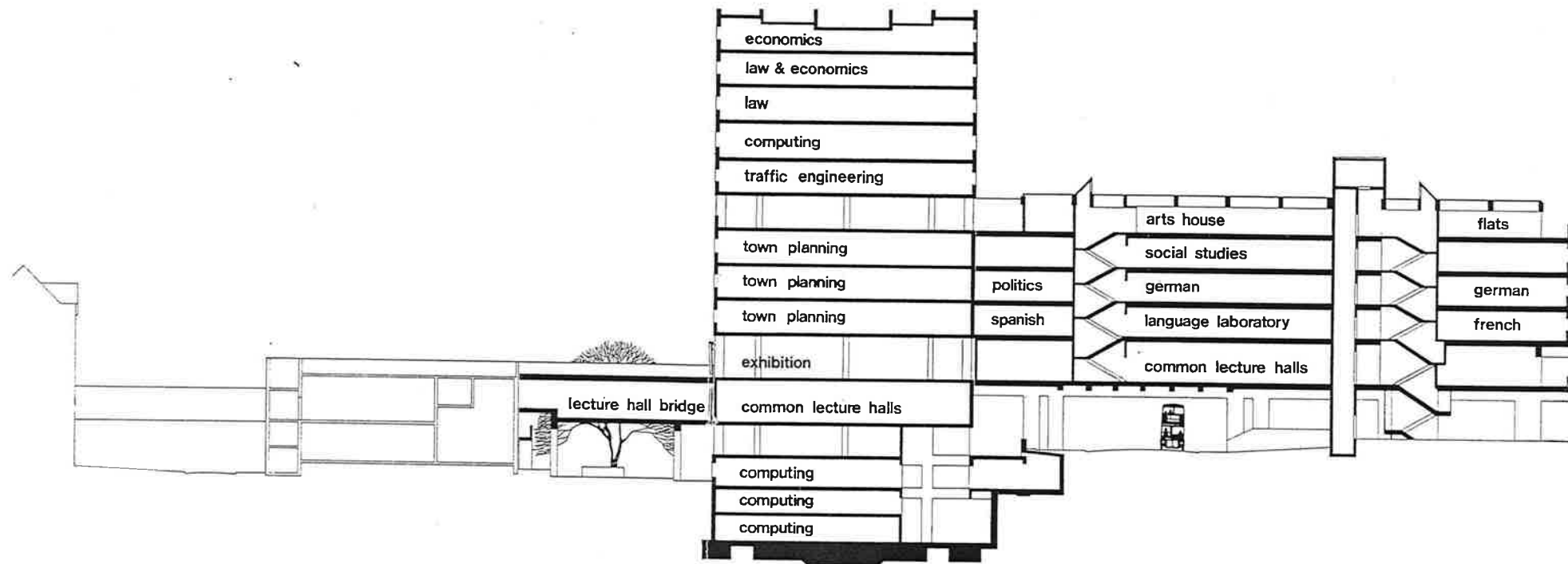


above Town and Country Planning. Students of landscape design examining measures for tree protection

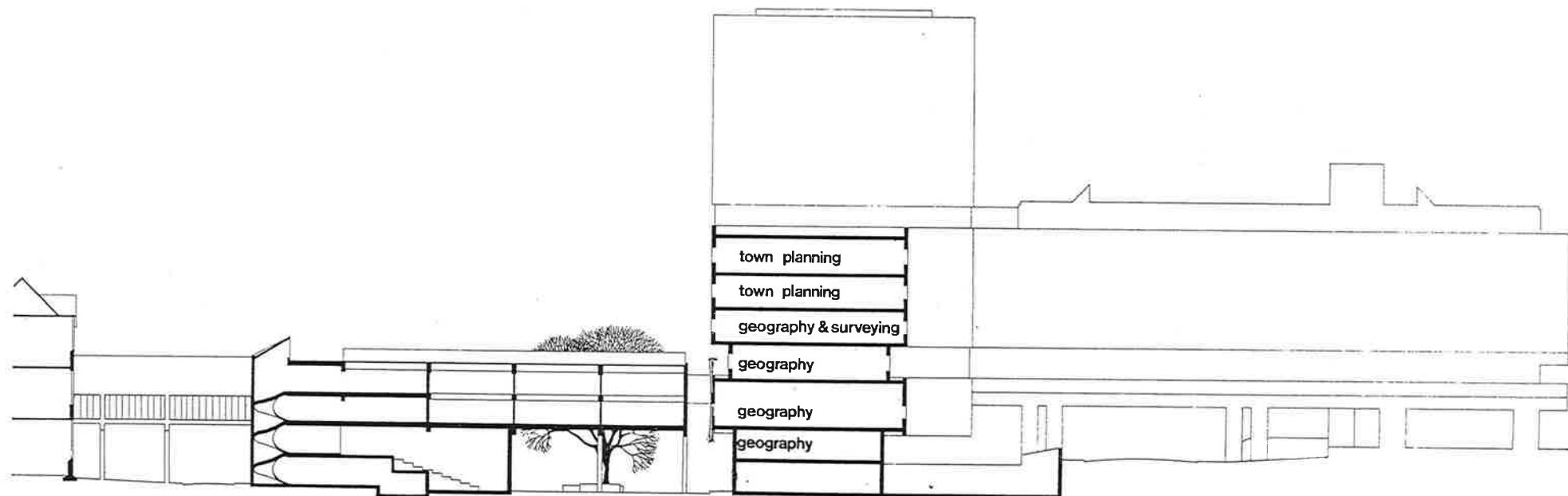
centre pages Sections through buildings

back page top Town and Country Planning. Assessing the effect of land form design

bottom Town and Country Planning. Part of a display of students' work on landscape design



SECTION THROUGH CLAREMONT TOWER & CLAREMONT BRIDGE



SECTION THROUGH FINE ART & DAYSH BUILDING



to the degrees of MA or MPhil) which comprises the study of the history of ideas and aspects of French literature not commonly dealt with at undergraduate level.

During any academic year the Department usually invites guest speakers, either through the French Institute in London or visitors to the country, thus providing the students with the opportunity of hearing specialists in particular fields or occasionally French writers. The student society also produces a French play every year.

In the Departmental library the students have at their disposal, in addition to the usual reference works and dictionaries, a fair selection of French novels and stories for general reading, and several weekly and monthly periodicals. Geography became established in the University in 1928, Honours teaching began the following year and the Chair was founded in 1943. From its inception until his retirement in 1966 Emeritus Professor G. H. J. Daysh, BLitt, DCL, was Head of the Department and became the first holder of the Chair of Geography. Under his direction and the stimulus of his research contribution in Northern England the Department has become widely known for its active participation in the life and problems of its region. This tradition is cherished in the Department and is being continued.

GEOGRAPHY

The traditional basis of the curriculum is the balanced and progressive development of teaching in physical, human, regional and practical geography, allied with study in greater depth of two specialized aspects of the subject. Geography is viewed as an integrated whole and the inter-relationships of work in the lecture room, the laboratory and in field investigation are consistently stressed. The grouping of the Seminar Library and Map Room (60,000 map-sheets) on Floor 5 was designed to facilitate the use of map or air photo with book or journal, as an integral part of the geographer's craft. A field-work archive on North-East England is in preparation.

Apart from an orthodox lecture programme teaching is progressively by seminar method and tutorials are fortnightly for all Honours students. Audio-visual methods include sound film equipment (16mm and 8mm), remote-control slide projectors and overhead projectors. There is a large and representative wall-map collection and the Department is technically equipped for advanced cartographical work.

Data processing in both physical and human geography is increasing rapidly in scope and complexity. For post-graduate and staff research a varied range of mechanical and electronic desk-calculating machines is provided, with facilities for producing a paper tape analogue of data for further processing on the University computer, a valued link which is increasingly used.

Research interests are diverse, with strong emphasis on applied geography, referring particularly to the Northern Region and the European Economic Community; physical geography, notably glaciology and heat and water balance studies; economic, urban and historical geography. Currently two major research programmes are in progress on Migration and Mobility in Northern England and Accessibility to work in Northern England. There is a one-year postgraduate course for the MA in Applied Geography.

The physiography laboratory is designed for measurement of the air layer in contact with the earth, the water (generally in channels) over the land surface and the resultant weathering of the rock. Since most of the world's fresh water is in the form of ice and more than half the land surface is exposed to low temperatures for part of the year a large refrigerator provides an essential cold laboratory, with access from an air-conditioned 'clean room' and adjacent to a 'weighing cubicle'. For experimental work in tropical climates a climatic cabinet is to be added. A light-room permits measurement of very small quantities, by light beam or electronic device, during investigation of natural processes in the transfer of heat, water and rock debris.

A dark room/print room, and workshop for wood and metal-work complete the Departmental facilities.

The Department is the biggest centre for Scandinavian Studies in Britain. It offers facilities unique in Northern England for the study of the life and literature of large parts of Northern and Central Europe, basing these facilities on a sound knowledge of the languages used there.

The Department also provides a large amount of 'service' teaching, especially for Science Departments.

The Department enters its new premises in an auspicious academic year in which two of its young postgraduate students have embarked on University teaching, Mr Anthony Williams at Belfast and Mr Charles Russ at Southampton, and two of its teaching members are having

books published, Mr H.-C. Sasse his *Theodor Fontane, An Introduction to the Novels* and Dr Anthony Stanforth his *Bezeichnungen für 'gross', 'klein', 'viel' und 'wenig' im Bereich der Germania*.

It sends its special greetings and thanks on this occasion to Emeritus Professor Walter H. Bruford who in Aberdeen, Edinburgh and Cambridge taught and inspired three of the senior members of its staff.

History

The Department developed out of the Department of Modern Languages of Armstrong College (later King's College) whose head in the first quarter of the century was one of the English translators of Goethe's *Faust*, the late Professor Albert Latham. When Professor Mennie joined the Department of Modern Languages in 1937 he was sole Lecturer in German; the Head of the Department was Emeritus Professor Cuthbert Girdlestone who is known not only as a French scholar but also as an authority on Mozart.

The Department became independent and the teaching of Scandinavian Studies began in 1945 on Professor Mennie's return from war-service with the B.B.C.

Teaching

The Department offers undergraduate and postgraduate teaching in German, Danish, Norwegian and Swedish.

The following are the main courses available:

German for Beginners (Geographers and students in the Faculty of Science);

BA (General Arts) and BA (Economics) courses in German, Danish, Norwegian and Swedish (attended also by students taking the subjects as subsidiaries in Special Honours Schools);

Special Honours BA courses in German;

Special Honours BA courses in Scandinavian Studies.

Postgraduate courses for the degrees of MA and MPhil and supervision for the degrees of MLitt and PhD.

Apart from those attending Beginners' courses in German, all students of that language are expected to have passed in it at Advanced level in the General Certificate of Education before coming up to University.

It is assumed that students coming up to read Scandinavian Studies do not know a Scandinavian language, though provision is made for the increasing number who have learned one as children or in their teens.

The Special Honours courses in German lay stress not

only on proficiency in the use of German and on the study of German language and literature but also on the geography, history and institutions of German-speaking Europe. Students may incorporate into them special subjects like: Germanic Philology, Modern Dutch, a modern Scandinavian language (if not already studied), a period of a modern Scandinavian literature (if the appropriate language has already been learned).

In Scandinavian Studies the first aim in the Special Honours courses is proficiency in the spoken and written language selected by the student. All students study the history and structure of their chosen language, the literature written in it, the geography, history and institutions of the country (countries in the case of Swedish) where it is spoken, and are introduced to the great classical language of Scandinavia, Old Icelandic. In addition they select two of the following themes: a detailed study of one author writing in the selected language, the literature of the last hundred years written in a second or a third Scandinavian language, Old Icelandic Literature.

Statistics

Some 200 students attend the Beginners' classes in German.

There are 160 students taking General BA (Arts) and BA (Economics) courses. Of these seventy-five are reading German, fifteen Danish, thirty Norwegian and forty Swedish.

There are 146 students reading Honours German (including thirty-five who are intercalating a year in Germany) and forty-three students reading Honours Scandinavian Studies (including ten who are intercalating a year in Scandinavia).

There are eight postgraduate students.

The Department is staffed by one professor, nine lecturers, four lectors and three language assistants.

LAW The Law Department has had many homes in the University since 1923. In 1958 it moved into newly built quarters in the Percy Building but in a very few years, such was its growth in numbers of students and staff, these proved quite inadequate. For the last few years, Law lecturers were scattered in rooms away from the main body of the Department and the intake of new undergraduate students was limited by the lecture room space available. The new accommodation on Floors 9 and 10 of the Claremont Tower allows the whole Department to be housed and do all its

teaching in one place, with space to spare for expansion up to the planned optimum size, which involves an annual intake of sixty undergraduates with an appropriate number of postgraduates. The seminar library, an institution of first importance to a law school, was vestigial in the Percy Building but now consists of over 2000 volumes housed in a fine room of 1000 square feet. A feature of this room is that it can be adapted to allow the holding of 'moots' – formal arguments of hypothetical legal cases – which thus take place among the very law reports and statutes which are cited in the argument.

The academic staff of the Department of Politics consists of one reader, four full-time lecturers, and one part-time lecturer. **POLITICS**

Although there is no Single Honours course in Politics at the present time, Politics can be taken with either Economics or Social Administration, as part of a Joint Honours degree. Forty-two undergraduates are this year reading Politics as part of a Joint Honours degree. In addition, the Department undertakes a very large volume of 'service' teaching for students taking Honours degrees – in History, in Philosophy, and in Economics for example – and also for students taking the General degree in Arts. Political institutions, political theory and political behaviour are all taught in the Department.

In the former accommodation the Department had its own seminar library, but in the new building this will be merged with the library of the Social Studies Department to form a new Social Science Seminar Library. The tendency for boundaries between disciplines in the Social Sciences to break down in recent years makes the provision of such a library especially valuable. Students will thus have access in one room to a wide range of books covering Sociology, Politics, Anthropology and Social Administration.

Research interests of members of the Department include factionalism in modern British parties, British electoral sociology, nineteenth century party organization in the House of Commons, administration in nineteenth century France, the press and local government, and nineteenth century English political thought. There are also three research students (full-time and part-time included) attached to the Department, working in the field of political theory.

The main University Library has a complete run of

parliamentary papers since 1945, a considerable range of nineteenth and twentieth century official papers, and reports of parliamentary debates from the nineteenth century to the present day.

Much of the research work undertaken by members of the Department involves the compilation and use of statistics, and it is hoped that an electronic calculating machine will be available in the new building for the use of members of the Department.

Accommodation in the new building includes two substantial seminar rooms.

The teaching commitments of the Department have expanded very rapidly in the last few years, and we may expect this tendency to continue with the growing popularity of the Social Sciences amongst school leavers and undergraduates.

SOCIAL STUDIES

The Department of Social Studies is concerned with two main areas of scholarship: social administration and sociology. These two fields are broadly conceived and the former includes social economics and a large section concerned with the postgraduate training of professional social workers and the latter, social anthropology, statistics and social psychology. Currently the Department has 100 students reading for undergraduate degrees and a further twenty-five reading for the postgraduate diploma in social work or preparing for higher degrees through research. Given the new accommodation we expect substantially to increase student numbers in the near future. Close relationships are maintained with the other two Departments – Economics and Politics – principally concerned with the social sciences and to some extent the teaching of all undergraduate social scientists is shared by all the three departments concerned. Currently the staff in Social Studies consists of a professor and eleven full-time lecturers. In addition there are five research workers supported by funds from research councils or foundations. The Home Office also provides financial support for the Department's training programme for social workers.

The direction of research is determined by the particular interests of individual members of staff although the Department has occasionally undertaken projects at the request of outside bodies. Projects are also undertaken in collaboration with other departments where interests overlap or where Social Studies needs, or can supply, special

knowledge and skills. One such project recently set in hand is into the social and medical aspects of high parity. This is being undertaken in collaboration with the Department of Obstetrics and Gynaecology.

Given the diversity which necessarily and properly arises from different individual initiatives it is possible to describe certain salient features of the Department's research activities. Much of the work, for instance, is empirical and oriented chiefly, although not exclusively, to problems of social policy. Three current researches, for example, deal with problems of housing, or more broadly, urban renewal. One is examining Sunderland's housing needs and is generally evaluating the policies pursued in Sunderland in respect of housing. Another has studied the attempts made by Newcastle to improve the material and social well-being of citizens living in what most people regard as a slum area. A third is examining the position of the universities as urban and social features taking three specially selected university towns for intensive investigation.

Another field in which the Department is heavily engaged is that of income distribution and family expenditure. One large field study has been completed and another is about to be launched. These studies are concerned with, among other things, the incidence and distribution of poverty.

Linked with these studies are a number of other investigations into the working of the social services. One such is a case study of a 'problem' family. It is hoped to find out how effective the social services prove themselves to be in this particular case.

The Department however is not concerned exclusively with 'social problems'. One member of staff is directing a number of investigations into the role of the clergy in modern society and the Department also attempts to maintain in all its work a 'comparative' approach both in its teaching and by encouraging research into other societies. The other societies in which we have a particular interest are those of Africa and Oceania and we have current research projects underway in both these areas. In connection with Oceania the Department has also a large collection of ethnographica which is displayed in a museum specially provided in the new premises. This is used for teaching purposes in the undergraduate Sociology/Anthropology courses and will also shortly be the subject of a research programme financed by the Social Science Research Council.

The Department, in its new quarters, has a departmental library, a small phonetics room, two seminar rooms and two store rooms, in addition to the normal private rooms for members of staff and for research students. There are two language laboratories, shared with other Departments on the same floor. The Honours School of Spanish and Latin American Studies offers courses in both Spanish and Portuguese language and literature, in Spanish history, and in various aspects of Latin American civilization. Honours students have some compulsory courses, but choose the remainder from a list of options according to the direction in which they wish to specialize. Spanish and Portuguese are also subjects in the General degree of BA with Honours, and Intensive Courses in Spanish may be taken in the final year. These General BA courses (though not the Intensive ones) are also open to students from other Honours Schools who wish to take Spanish as a subsidiary subject, and to students from the Faculty of Economic and Social Studies. Numbers are at present thirty-seven (Honours students) plus 110 (total for other categories mentioned). Courses are also offered in Latin American Studies at the postgraduate level, leading to the degrees of MA and MPhil, and MLitt and PhD students can be admitted in appropriate fields. The research interests of the staff over recent years have included the Spanish Drama of the Golden Age and the philosophical and ideological background to Spanish literature of the late nineteenth and early twentieth centuries. The Spanish Circle, run by the students, arranges lectures by Hispanists from other Universities, and has many other activities: the production of plays (attended by sixth-formers and members of the general public as well as by students), the showing of films, and some purely social meetings. The Department also provides assistance, advice and a meeting place for the recently formed North Eastern Association of Teachers of Spanish and Portuguese.

SURVEYING

The Department of Surveying is one of the very few departments in the country which are devoted solely to the teaching of surveying. Much of this teaching is service teaching for students in other departments of which the most important are Civil Engineering and Geography, but a small but increasing number of students study the subject as part of their General degree with Honours in the Faculty of Science. For the Civil Engineering students the syllabus is primarily concerned with the theory and practice of field

surveying but for the General degree students much of the course deals with geodetic surveying, geodesy and photogrammetry.

The Department has a large and comprehensive collection of field equipment housed in two stores on Floor 2 of the building. The larger of these two stores also functions as a workshop and as a centre for the issue and collection of instruments. The equipment consists of the usual surveying instruments and also includes geodetic theodolites and levels, and instruments for the measurement of distance by means of electromagnetic waves.

The remainder of the Department is on Floor 5 of the building. The accommodation comprises staff rooms, an office, a small lecture room/drawing office, a seminar room/library and a photogrammetric laboratory. The photogrammetric laboratory is excellently equipped with a range of stereographic instruments of which the most important is a stereoplotting instrument capable of very precise plotting from pairs of air photographs. This instrument is equipped with a digital output which increases its range of usefulness.

Most of the current research activity of the Department centres around the stereoplotting instruments which can be used for mapping work or for a wide range of non-topographic tasks. When used on non-topographic tasks special photographs have to be taken and the Department has a pair of cameras for this purpose. Projects ranging from quality control in manufacture – work carried out on behalf of the British Ship Research Association—to studies of changes in facial contours resulting from removal of teeth – this work carried out with the Dental Hospital – have recently been undertaken.

The Department of Town and Country Planning (which includes a special section concerned with Landscape Design) occupies three floors of the Claremont Tower and two floors of the Daysh Building. This accommodation has been specially designed for teaching and research in these subjects and comprises one of the largest units of its kind in a British university.

The planned maximum capacity is for some 300 students.

The main accommodation in the Daysh Building consists of two floors of teaching studios for practical work (a principal feature of our courses) which can be sub-divided in any desired form by means of moveable partitions. Study and draughting facilities are provided here for each student.

TOWN AND COUNTRY
PLANNING

The Claremont Tower section contains three seminar rooms, the main research rooms, workshops, staff and office accommodation and the departmental library. The library houses one of the major collections of planning material in this region and is widely used. Sufficient space is now available for the storage of some ten to twelve thousand volumes.

Other special features of this portion of the building include a landscape laboratory (the first of its kind in this country), statistical and photographic laboratories, large scale map and plan storage facilities and an exhibition area. Three full-time research units are currently in operation within the Department under the direction of staff. The landscape laboratory provides opportunities for research, particularly in the provision of methods for measuring the environmental characteristics of landscape proposals and will be invaluable for teaching/demonstration purposes.

The Department has been in the forefront in the development of the teaching and study of Town and Country Planning on the one hand and Landscape Design on the other.

The Department offers several courses in the general field of Town and Country Planning. These include the undergraduate course leading to the degree of BA with Honours in Town and Country Planning and the Diploma in Town Planning which is open to candidates already holding other qualifications. Two courses of postgraduate work in Town and Country Planning are offered for the degree of Master of Philosophy; these are the Planning of Urban Regions and Urban Planning Design. The Department also offers a Diploma in Landscape Design which is open to candidates with suitable preliminary qualifications, and facilities are available in both Planning and Landscape Design for candidates who wish to undertake research leading to higher degrees.

The staff of the Department have been engaged in teaching and advisory work on many occasions during the last twenty years in various foreign countries, including Ghana, Turkey, Egypt, United States of America, West Germany, Holland and Sweden.

Claremont Tower

AND ASSOCIATED BUILDINGS

ARCHITECTS

Richard Sheppard, Robson
& Partners
46-47 Russell Square
London WC1

QUANTITY SURVEYORS

Messrs E. C. Harris
& Partners
Lynton House
7-12 Tavistock Square
London WC1

CONSULTANTS

Messrs
Andrews-Weatherfoil Ltd
Bath Road
Slough
Bucks

*Heating, hot and cold water
services, ventilation and
mechanical services*

Messrs Barlow, Leslie
& Partners
Wrencote House
High Street
Croydon
Surrey

Electrical consultants

Messrs Hajnal & Myers
& Partners
Northway House
High Road
Whetstone
London N20

Structural consultants

PRINCIPAL CONTRACTORS	John Laing Construction Ltd	
SUB-CONTRACTORS AND SUPPLIERS	Andrews-Weatherfoil Ltd	<i>Heating, hot and cold water services, ventilation and mechanical services</i>
	Rashleigh Phipps & Co. Ltd	<i>Electrical installation</i>
	Swan Hunter & Tyne Shipbuilders Ltd	<i>Fitted furniture (Phase I: Geography and Fine Art. Phase II)</i>
	John Curtis & Son Ltd	<i>Fitted furniture (Phase I: Building Science)</i>
	H. H. Robertson (U.K.) Ltd	<i>Computing laboratory raised floor</i>
	F. H. Thomson & Sons Ltd	<i>Woodblock and strip flooring</i>
	Norman Jack & Co. Ltd	<i>Linoleum and cork flooring</i>
	Amalgamated Asphalte Companies Ltd	<i>Rubber flooring and asphalt roofing</i>
	D. Anderson & Son Ltd	<i>Roof decking and felt roof finishes</i>
	Isocrete Co. Ltd	<i>Lightweight roof screeds</i>
	Limmer & Trinidad Ltd	<i>Decorating vinyl and floor tiling</i>
	Syd Long (Stockton) Ltd	<i>Wall and floor tiling</i>
	Economic Foundations Ltd	<i>Bored piling</i>
	The Cementation Co. Ltd	<i>Piling</i>
	Tidmarsh & Sons	<i>Projection screens, blinds, curtains, chalkboards, map hoists and map magazines</i>
	J. Avery & Co. Ltd	<i>Venetian blinds</i>
	Venetian Vogue Ltd	<i>Rooflight blinds</i>
	Faulkner Greene & Co. Ltd	<i>Rooflights</i>
	Electronic Projects & Appliances Ltd	<i>Projection equipment</i>
	Rank Audio Visual	<i>Projection screens</i>
	British Challenge Glazing Co. Ltd	<i>Patent glazing for rooflights</i>
	G. M. Dryden Ltd	<i>Glazing</i>
	James Gibbons Ltd	<i>Windows, ironmongery</i>
	Alumin Building Components Ltd	<i>Windows</i>

Otis Elevator Co. Ltd	<i>Passenger lifts</i>
J. & E. Hall Ltd	<i>Paternoster lift</i>
Darlington Structural Linings Ltd	<i>Suspended ceilings</i>
Samuel Tyzack & Co. Ltd	<i>Precast concrete mullions</i>
Wright Anderson & Co. Ltd	<i>Structural steelwork</i>
Robert Frazer & Sons Ltd	<i>Structural steelwork</i>
Concrete (Northern) Ltd	<i>Precast concrete plank units</i>
Kingsbury Concrete Co. Ltd	<i>Precast concrete beams</i>
Richard Parton Ltd	<i>Facing bricks</i>
Bolton Gate Co. Ltd	<i>Folding gates</i>
Donald Ireland Ltd	<i>Landscaping, planting and turfing</i>
Kenneth Breese, Esq	<i>Signwriting</i>
W. Dowson Ltd	<i>Catwalks</i>
Herbert Morris Ltd	<i>Cranes, hoist blocks</i>
British Monorail Ltd	<i>Monorails</i>
The Alstone Limestone Co. Ltd	<i>Road surfacing</i>
John Fletcher Dixons Ltd	<i>Slate coping</i>
J. T. Dove Ltd	<i>General building materials</i>
Dunford Fire Protection Services Ltd	<i>Firefighting equipment</i>
William E. Farrer Ltd	<i>Sewage pumps</i>
Robert Batey & Co. Ltd	<i>Plumbing</i>
Adamsez Ltd	<i>Sanitary goods</i>
Lenscrete Ltd	<i>Lenscrete panels</i>
Redpath Brown & Co. Ltd	<i>Steel trusses</i>
John Sadd & Sons Ltd	<i>Flush doors</i>
E. Hill Aldam & Co. Ltd	<i>Sliding doors</i>
G. Brady & Co. Ltd	<i>Sliding shutter doors</i>
John Porter Newcastle Ltd	<i>General joinery</i>
G. W. Dixon (Gateshead) Ltd	<i>Plastering and screeding</i>
Toffolo Jackson & Co. Ltd	<i>Terrazzo work</i>
Tenon Contracts Ltd	<i>Demountable partitions</i>

Spembly Ltd	<i>Service hatch</i>
Westland Engineers Ltd	<i>Chalkboards</i>
F. E. Beaumont Ltd	<i>Kiln chimney flue</i>
Bernard W. E. Webber (S.O.T.) Ltd	<i>Pottery kilns</i>
Bernard W. E. Webber	<i>Pottery kilns</i>
Applied Heating Co. Ltd	<i>Kiln</i>
British Ceramic Service Co. Ltd	<i>Kiln</i>
William Boulton Ltd	<i>Pugmills</i>
Simmonds Bros. & Sons Ltd	<i>Photographic units</i>
Terrapin Reska Ltd	<i>Library shelving</i>
Inductive Appliances Ltd	<i>Lighting control units</i>
Alfred G. Roberts (Exports) Ltd	<i>Name plates and card holders</i>
Ilford Ltd	<i>Ilford stainless steel syphon washer</i>
Macclesfield Engineering Co. Ltd	<i>Steamer for Fine Art Department</i>
Handy Angle Ltd	<i>Steel framing and shelves</i>
Acrow (Automation) Ltd	<i>Sliding storage racks</i>
H. C. Trolldahl Ltd	<i>Cold room installations</i>
Screeton Paintmaker Ltd	<i>Paint</i>
D. R. Maxwell & Co. Ltd	<i>Painting and decoration</i>
Selborne Engineering Co. Ltd	<i>Metalwork, balustrading</i>
W. Dowson Ltd	<i>Balustrading</i>
South Dock Ironworks Ltd	<i>Metalwork</i>

The net usable areas of the Departments occupying the buildings are as follows:

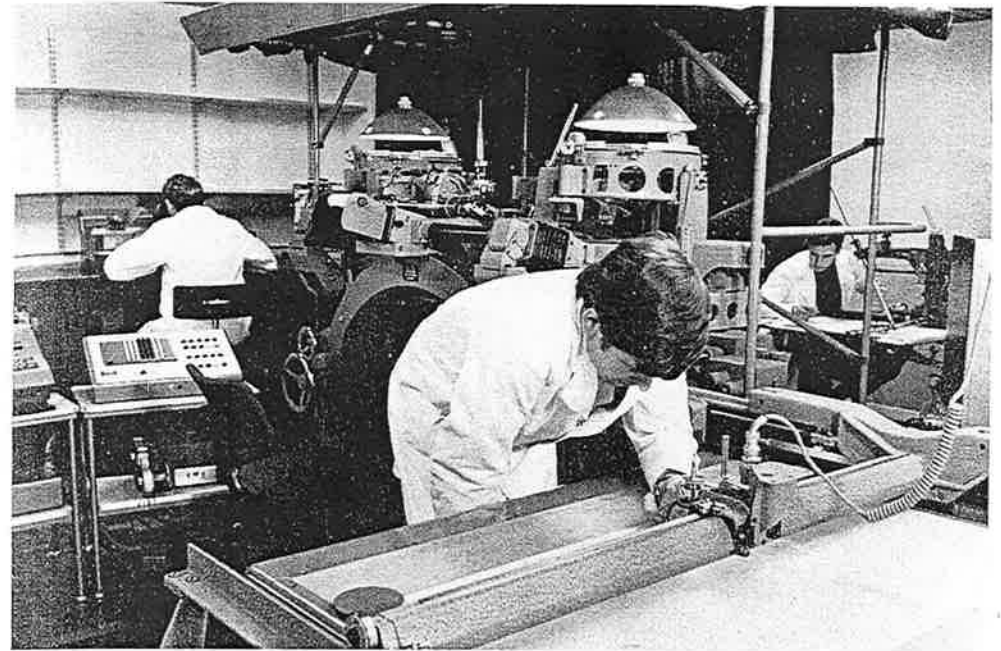
	<i>sq. ft.</i>
Building Science	5,913
Fine Art and Hatton Gallery Extension	18,338
Daysh Building:	
Geography	23,687
Surveying	2,044
Store for Museum of Antiquities	1,929
Claremont Tower:	
Computing Laboratory	18,942
Highway and Traffic Engineering Division (Department of Civil Engineering)	4,280
Town and Country Planning	30,506
Economics	6,370
Law	6,130
Claremont Bridge:	
Social Studies	8,640
Politics	2,192
German and Scandinavian Studies	6,747
French Studies	3,915
Spanish and Latin American Studies	3,278
Language Laboratories	1,480

Space

	<i>Building work</i>		<i>Fixed furniture & equipment within the building</i>		TOTAL	
	<i>per sq. ft.</i>		<i>per sq. ft.</i>		<i>per sq. ft.</i>	
<i>Phase I</i>	s.	d.	s.	d.	s.	d.
Building Science Building	112	2	61	3	173	5
Fine Art Building (including Hatton Gallery extension)	121	6	32	4	153	10
Daysh Building	90	0	26	5	116	5
<i>Phase II</i>						
Claremont Tower	122	4	20	0	142	4
Claremont Bridge	138	8	19	10	158	6

Costs

RELATED TO GROSS AREAS

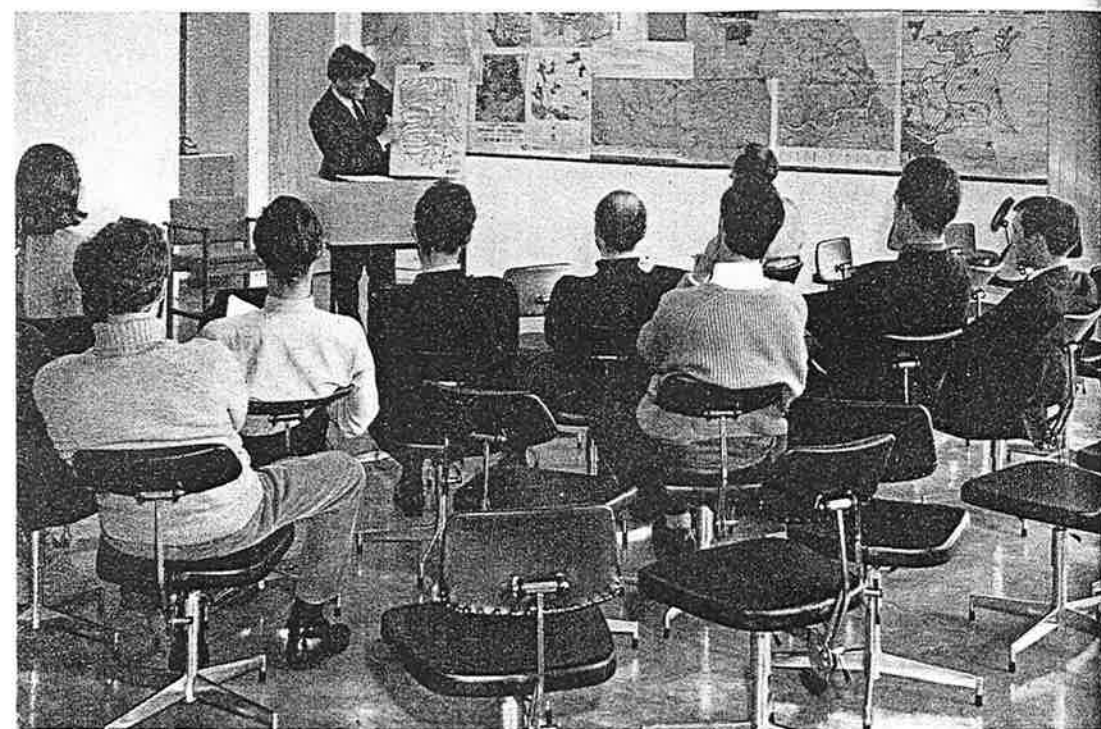
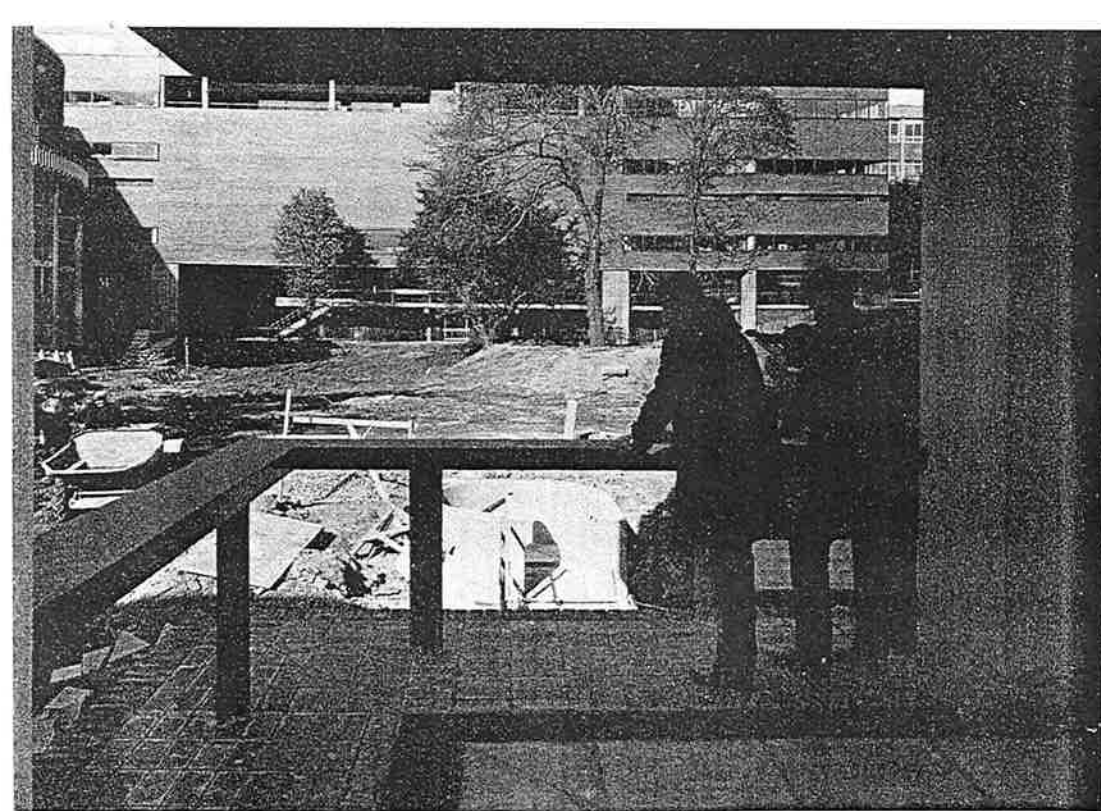


facing page top Department of Surveying

facing page bottom Town and Country Planning. Landscape Design Studio

overleaf top Town and Country Planning. Study of landscape construction on a building site

overleaf bottom Town and Country Planning. Lecture on land form design



Published by the
University of Newcastle
upon Tyne on the occasion
of the Official Opening of
the Claremont Tower and
associated buildings by The
Visitor to the University,
Lord Gardiner, P.C., Q.C.,
Lord High Chancellor, on
Thursday, 18 April 1968.

Designed by
Ruari McLean Associates,
London.

Printed by
Hindson & Andrew Reid Ltd
Newcastle upon Tyne

