

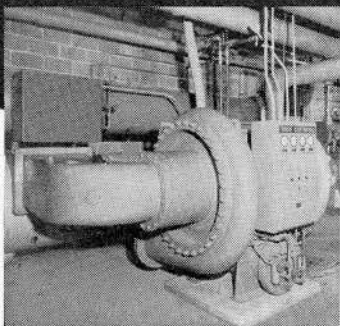
RAIC JOURNAL

JUNE 1959



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RAIC JOURNAL

Serial No 406, Vol. 36, No 6 EDITORIAL

ARTICLES

The University of Saskatchewan Plan, by Gordon Arnott	178
The University of Manitoba Plan, by John Russell	191
The Campus Landscape, by Lois Lister	198
Frank Lloyd Wright 1869-1959, An Appreciation	202
Wells Coates 1895-1958	205

ILLUSTRATIONS

The University of Saskatchewan:	
Saskatchewan Research Council Laboratory, Architects, Izumi, Arnott & Sugiyama	184
Saskatchewan Cancer and Medical Research Institute, Architects, Izumi, Arnott & Sugiyama	187
Memorial Union Building, Architects, Shore & Moffat	188
University Arts Faculty Building, Architects, Shore & Moffat	189
Biology Building, Architects, Izumi, Arnott & Sugiyama	190
The University of Manitoba:	
St Paul's College and Chapel of Christ The King, Architects, Gardiner, Thornton, Gathe & Associates Associate Architects, Green, Blankstein, Russell & Associates	194

PROJECT

Jesuit Seminary, Toronto, Architects, Peter Dickinson Associates	212
--	-----

FROM THE EXECUTIVE DIRECTOR'S DESK

213

VIEWPOINT

214

INSTITUTE NEWS

215

Pilkington Awards	216
Contributors to the Issue	216

BOOK REVIEWS

217

THE INDUSTRY

218

INDEX TO JOURNAL ADVERTISERS

76

COVER:

General plan of the University
of Saskatchewan Campus, 1959

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CAMPUS PLANNING

IN ALL PARTS OF THE WORLD, established universities are growing at a rapid pace and new universities are being founded. It is an exciting, and some would say, dangerous time in the history of higher education. A continuous challenge is offered, not only to societies of many kinds, but also to architects and planners.

The student population in the larger Canadian universities is going to double within the next fifteen years. The academic and administrative problems inherent in growth of this kind are considerable, but they will be solved within a framework of tradition reaching back to the middle ages. The design problems are more difficult to solve. There are questions of size, scale, function, and not least, atmosphere or character. It is in attempting to achieve "character" that many false notes have been struck in the past.

A university may be compared with a city, in the sense that it stops growing only if it is about to enter a decline, eventually to die. It is also an amalgam of many large and small elements, of which most must grow as separate parts and some few die with the passage of time.

As a community of succeeding generations of scholars, a university cannot reflect the personality of any particular group or period. It must not only march with the times but be ahead of them. Only senility, sterility, or domination by forces outside the campus could cause it to decay.

In their buildings, the ancient universities of the world reflect the spirit of successive ages. If governing bodies, scholars and architects have faltered it has been mainly in the last forty years. It would now seem that lost ground is being recovered. The true architectural tradition is for each generation to build well, according to the principles, technology and taste of its own time. This is apparent at Oxford and Cambridge where buildings of the past four centuries sit happily in juxtaposition. Until this century imitation, a most undesirable form of subservience, was conspicuous by its absence.

The ancient universities, growing as a series of colleges, developed as several building groups, with each one containing quiet quadrangles and courts from which vehicular traffic was vigorously excluded. The architects of the new Arts Building on the campus of the University of British Columbia have extended this concept. The open end of the inner quadrangle frames a magnificent seascape with mountains in the background.

Whatever else it might be, a university in its physical form should be a series of buildings arranged about quiet spaces. Each building should be part of a functional group, close to other functional groups with which it has a direct academic relationship. Each group should be designed so that change might take place, either through extensions or internal reorganisation.

The campus as a whole should be knit together by major spaces of various dimensions. Whether the campus be on an extensive new site, or on a more tightly arranged downtown site, there should be a strict separation of vehicular and pedestrian circulations. There are far too many campuses overrun by motor cars. Parked in unsightly fashion they dominate the scene throughout the day and night, and arrest the free movement of students and teachers. Vehicles should be kept on the side of building groups which is away from the ebb and flow of the community of scholars. The heart of every campus should be an oasis, a place for quiet contemplation and reflection, for discussion and argument free of city distractions.

Gordon Stephenson

EDITORIAL

L'AMENAGEMENT DES UNIVERSITES

DANS TOUS LES COINS DU MONDE de nouvelles universités se fondent et les universités déjà existantes se développent à un rythme croissant. L'histoire de l'éducation supérieure connaît à notre époque des années d'un intérêt passionnant, mais certains diront aussi des années dangereuses. Non seulement des sociétés diverses, mais encore les architectes et les urbanistes ont à surmonter des difficultés constantes dans ce domaine.

Le nombre des étudiants dans les grandes universités canadiennes va doubler au cours des quinze prochaines années. Les problèmes scolaires et administratifs que suscite une croissance de cet ordre sont immenses, mais ils seront résolus dans le cadre de traditions qui remontent au moyen âge. Les problèmes d'organisation matérielle seront plus difficiles à résoudre. Ils ont trait aux dimensions, à la disposition et à la destination des immeubles, mais surtout à leur atmosphère et à leur cachet. C'est dans leur tentative pour donner un "cachet" à leur oeuvre, que plusieurs ont fait faux pas dans le passé.

On peut comparer une université à une ville en ce sens qu'elle ne cesse de croître qui si elle arrive à son déclin, si elle est en voie de mourir. Toutes deux forment une ensemble de nombreux éléments, grands et petits, dont la plupart croissent séparément et dont quelques uns disparaissent avec l'écoulement du temps.

Communauté d'hommes d'étude qui se succèdent de génération en génération, l'université ne peut refléter la personnalité d'un groupe ni d'une époque particulière. Elle doit non seulement être à la page, mais il lui faut devancer son temps. Seules la sénilité, la stérilité ou la domination par des éléments extérieurs peuvent entraîner sa déchéance.

Par leurs bâtiments, les vieilles universités du monde rappellent l'esprit des âges écoulés. C'est surtout au cours des quarante dernières années que les administrateurs, les savants et les architectes ne se sont pas montrés à la hauteur de la tâche. On semble depuis peu rattrapper le temps perdu. La véritable tradition en architecture consiste, pour chaque génération, à bien construire, en conformité des principes, de la technique et du goût de l'époque. Cet idéal se trouve réalisé à Oxford et à Cambridge où se trouvent juxtaposés avec bonheur des bâtiments des quatre derniers siècles. Jusqu'au siècle actuel, l'imitation, ce détestable asservissement, brillait par son absence.

Les anciennes universités, réunissant plusieurs collèges, se sont développées en groupes de plusieurs bâtiments, formant des cours paisibles où la circulation des véhicules était rigoureusement interdite. Les architectes du nouvel édifice de la Faculté des Arts à l'Université de la Colombie-Britannique, ont élargi cette conception. L'un des côtés de la cour intérieure s'ouvre sur un magnifique panorama où s'étend la mer avec, à l'arrière-plan, des montagnes.

Pour bien remplir son rôle, une université doit être, physiquement, un ensemble de bâtiments aménagés dans des espaces paisibles. Chaque bâtiment devrait faire partie d'un groupe ayant une même destination, situé près d'autres groupes du même genre avec lesquels il a des relations scolaires directes. Chaque groupe devrait être conçu de façon à permettre des modifications, soit au moyen de rajouts, soit par réorganisation interne.

L'ensemble des bâtiments universitaires devrait être uni par des espaces libres, de dimensions variées. Qu'ils s'étendent sur de vastes terrains neufs, ou qu'ils soient disposés à l'étroit au coeur de la ville, les bâtiments devraient être conçus de façon à séparer nettement la circulation des véhicules et celle des piétons. Il y a beaucoup trop d'universités dont les terrains sont envahis par les véhicules automobiles. Mis en stationnement d'une façon désagréable à la vue, ils dominent toute la scène jour et nuit, et nuisent à la libre circulation des étudiants et des professeurs. Les véhicules devraient être gardés du côté des immeubles qui est le plus éloigné du va et vient des universitaires. Le coeur de chaque université devrait être un oasis, un lieu de contemplation et de réflexion paisible, où il est possible d'étudier et de discuter, à l'abri des distractions de la ville.

Gordon Stephenson

THE
UNIVERSITY



Figure one

OF SASKATCHEWAN

Some Observations on Campus Planning

BY GORDON ARNOTT

of Izumi, Arnott and Sugiyama, Regina

INTRODUCTION

In December 1956, the office of Izumi, Arnott and Sugiyama was commissioned to undertake planning studies that would establish site locations for three major buildings:

1. Humanities Building.
2. Biology Building.
3. Animal Husbandry Building.

In addition, three other buildings of a non-educational nature had to be located:

4. Service building for the Buildings and Grounds Department.
5. A Soils Mechanics and Materials Laboratory for the Prairie Farm Rehabilitation Administration.
6. A small building to house research animals.

To arrive at the suggested locations for the above, it was essential to formulate preliminary development proposals that took into account all the current needs for an eight year building program and expansion possibilities even beyond this point. The University had previously established a Forward Planning Committee that had submitted an interim report for the Board of Governors in November 1956, which report contained a memorandum outlining the program for new buildings and alterations to existing buildings. Owing to the need for early decisions on the sites for the immediate buildings outlined above, the planners proceeded on the basis of general direction and information received from the Assistant to the President and the Superintendent of Buildings supplemented by interviews with the Faculty and Department Heads. The City Planning Department of Saskatoon and the Provincial Department of Highways both furnished information on the City's preliminary road proposals in the vicinity of the University and the Highway proposals along the main avenue separating the University lands from the City.

The interim report submitted to the University on June 17, 1957, did not include any material on historical background or enrolment estimates owing to limitations of time. However, memoranda were prepared on the early history of the University from a monograph entitled "The University of Saskatchewan" by Walter C. Murray, the University's first President, published in the transactions of the Royal Society of Canada¹. The past proved to be an important key to the understanding of the present. From study of the early origins of the University, the policies established by its founders and the nature and scope of the early planning, valuable insights were gained into the nature of the intangible spirit of the University Campus. A brief outline of the historical background that has proven significant to the planning of the University may illustrate this point.

HISTORICAL

From the beginning, it is apparent that the University has benefited from sound decisions of an administrative and constitutional nature which in turn have had a most salutary effect on the initial planning policies leading up to the matter of site selection, the initial planning and building program and

eventual creation of the university into "stone and mortar". Prior to the creation of the new Province of Saskatchewan in 1905, the Church had played an important role in providing college education in the Northwest Territories. However, the Provincial Authorities in 1907, in framing the University Act, retained university powers exclusively for the Provincial University. The powers included authority to grant degrees except in theology. Another important feature of the University Act incorporated a recommendation with respect to the separation of the business affairs from the educational affairs of the University. Business matters were entrusted to a Board of Governors appointed by the Government; educational matters to a Senate comprising a Chancellor, certain members elected by Convocation and other *ex officio* members. Although the University of Saskatchewan was to be a Provincial or "State" University, Government appointees to the Board of Governors were set at a minority under the Act.

The Act provided for the affiliation of the University with other Colleges and Societies. This system enabled the University to be non-denominational although the affiliated Colleges may provide for religious worship and the theological colleges grant degrees in theology. Thus the bitter sectarian controversies that marred the early beginning of the University of Toronto were avoided at the outset. Organization of the University got under way in 1907 at the first meeting of Convocation wherein the Chancellor and the Senate were elected. In August of 1908 Professor Murray of Dalhousie University was appointed President. The following April, the Board of Governors made two important decisions:

- (1) *To locate the College of Agriculture at the same place as the University, and to centre all departments of the University work in the same locale.*
- (2) *To locate the University at Saskatoon provided a suitable site could be secured at reasonable cost.*

These decisions were made in light of the President's earlier report dated November 19th, 1908 to the Senate. The scope and breadth of vision exhibited by the requirements of the program for education is remarkable:²

"Before purchasing the land for the site of the University and before any plans are prepared for the location of buildings, the Board of Governors should have a fairly definite idea of the work which the University is expected to undertake both immediately and in the more distant future . . .

It seems to me that we may quite properly expect our University in time to embrace:

- (1) A College of Liberal Arts and Science, with schools of Music, Art, Domestic Science and Commerce.
- (2) A College of Agriculture with the Experimental Farm, School of Forestry and Department of Veterinary Science.
- (3) A College of Education with its Practice Schools.
- (4) A College of Law.
- (5) A College of Medicine and School of Pharmacy.
- (6) A College of Dentistry.
- (7) A College of Engineering.
- (8) An Extension Department making provision for local technical schools, correspondence classes and lecture courses in local centres.

Further we may expect these colleges to require for the work of the more important departments, separate buildings which

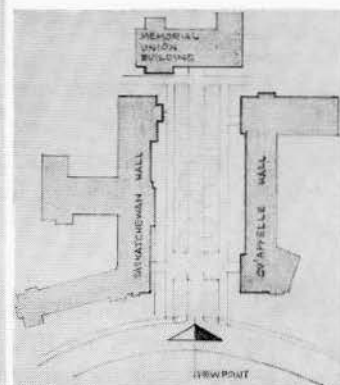


Figure two

should make ample provision for lecture rooms, laboratories and opportunities for research by graduates and staff.

We should expect our University to require a group of buildings for general purposes, such as a library, museum, convocation hall, a union, YMCA, YWCA, a chapel, a gymnasium and boat house.

We should expect to provide a system of college residences for men and women similar to the English colleges. We should expect to be asked to provide accommodation for groups of colleges and institutions closely allied to the University, such as the theological colleges.

The unique decision to combine the College of Agriculture with the University while of far-reaching significance in terms of educational policy, did not result in the public interest that was evident in the matter of site selection.

This decision was not arrived at lightly. Other universities were visited and advice of leading educationists of the day sought. The report of the President on this matter contained the following conclusions:

1. That the locality in which the University is to be placed should be easy of access, a large centre of population, and at a point of strategic advantage with regard to the services to be rendered to the state and the students and to the support to be received.
2. That the University should be located where a suitable site could be secured. A site suitable for a single institution should be large with at least 200 or 300 acres for a campus and at least a section of land, preferably much more, for a college farm. The site should be attractive, with a good water supply and drainage, convenient of access and with suitable soil conditions.
3. That it is an advantage for the University to be at the seat of government.

In Saskatoon two sites were seriously considered, one where St Paul's Hospital now stands on the west side, and the present site on the east side of the river. Property purchased at the time had a half mile frontage on the river and extended two and a half miles eastward. Acreage was as follows:

Campus 292 acres; Farm 880 acres; Experimental plot 160 acres; Total 1,332 acres.

Acquisitions of additional lands in the last few years has brought the total site area to 3,200 acres.

EARLY PLANNING AND CONSTRUCTION

Rather than incur the additional expense and time delay of holding a competition for the selection of an architect, the Board of Governors engaged Brown and Vallance, Montreal, as architects, an engagement which was maintained until 1937. The principals of the firm were young Canadians who had studied at Harvard and at L'Ecole des Beaux Arts in Paris.

The campus plan prepared by the architects is in the Beaux Arts tradition in that it is laid out in axial lines. Study of the architects' original plan reveals the early decision to orient the University toward the river. (See Figure 1. Original Master Plan.) Thus one axis is at right angles to the river and terminates in the College of Agriculture Building, now called the Administration Building. The other major axis is parallel to the river and begins at the University entrance, where the Memorial Gates now stand and was to have terminated in a building group on the north campus side. The intersection of these axes was to be the focus of a central plaza and multi-sided Convocation Hall. The existence of the draw which penetrates the campus in an easterly direction from the river, and which more or less cuts off the northern section of the campus for about a quarter of a mile, appears to have been recognized in the plan. However, considerable fill would have been necessary to execute the plan in the areas affected by its topography.

Consideration was given either to start the main building for Arts and Science at the river front or to erect buildings at the other end of the campus near the college farm which would be used jointly for the University purposes and ultimately for agriculture only. This latter course was chosen and the initial group of buildings consisted of a college building and students' residence, followed by an agricultural engineering building, a stock pavilion and power house. It was found that the physics and chemistry laboratories had to have a central location to provide for joint uses by the various colleges.

STYLE

The style of architecture chosen is known as collegiate gothic, a style evidently introduced into university architecture by Cope and Stewardson. The buildings of Washington University in this style at St Louis, one of the sites visited by the com-

mittee, influenced the recommendation of this style for Saskatchewan. The major buildings were evidently designed in undressed Tyndall (Manitoba) stone and in brick, stone being chosen in favor of brick for the main buildings. Subsequently a local fieldstone was found within a two or three mile radius of the University, a glacial drift from somewhere near The Pas. This harder stone was felt to be superior in weathering properties and colorations and was therefore used instead of the Tyndall. This same fieldstone is in use to the present day for University buildings in the "stone" area. From this early decision stems the now traditional view that certain sections of the campus must continue to be built in stone. Brick is acceptable for those buildings in the vicinity of the original agricultural and farm grouping.

Knowing these early decisions, we were led to make the following observations in our interim report:

The parts of the campus that are universally admired by visitors, staff and students alike are those directly attributable to the early plans and designs of the original architects, Messrs. Brown and Vallance. The most attractive part of the campus, in terms of architectural unity, landscaping and composition is still the original group of college buildings and student residences (See Fig. 2). The later addition of the physics buildings completed the composition, closing the view across the oval green and opposite the residence courtyard. Groupings of this kind are essentially for the pedestrian's eyes and must resist the intrusion of the motor car to preserve their beauty. This conception of courtyard and landscape squares has its roots in medieval Gothic informality combined in a sense with the grand planning of France with long axial vistas and formal curving promenades. In our opinion, the stone buildings themselves do not create these effects. Perhaps what is required is a modern counterpart adapted to both the needs of the pedestrian and the automobile.

ENROLMENT

For the term 1956-57, during which the interim report was prepared, full time enrolment was 3,044 at Saskatoon. The Forward Planning Committee estimated that by 1964-65 enrolment would approximate 4,015. There is no doubt that considerable impetus to enrolment projections for universities across Canada was given by a statistical paper prepared by the Director of the Education Division, Dominion Bureau of Statistics, for a Symposium on the Expansion of Enrolment 1955-65 at the National Conference of Canadian Universities held at Toronto in 1955³. Projections made in 1955 suggested university enrolment would double by 1964. Comparison of actual enrolment in 1957 with projected enrolments showed that the high range of projected figures was being exceeded in Canadian universities. That this trend is still continuing is borne out by a recent address by the President of the University of Saskatchewan. Dr W. P. Thompson reported to the Alumni in May 8, 1959 that enrolment had doubled in six years and that Saskatchewan has passed Ontario and Alberta in the percentage of population attending university. With the large high school increase yet to surge through to university level, the pressure of this student population will tax facilities even more in the future.

THE INTERIM PLAN

To return to the resolution of the site locations for the immediate program, it was decided that the validity of the interim proposals would have to be tested against a long range land use plan. Development Plan A (Fig. 3) illustrates the preliminary nature of the type of studies required.

Detailed formulation of the program for building groups which would be large users of land was not available for:

1. College of Education with practice high school.
2. Additional hospital and adjunct facilities.
3. Physical education.
4. Future research facilities.

In spite of this, approximations of the size and bulk of the proposed buildings were made from very preliminary inform-

ation on space requirements. Detailed programs for each building, would of course have to be developed as a basis for refinements and further study on the part of either the planners or the architect eventually appointed. From the approximations schematic block solutions were worked out. These shapes although considered feasible are not to be construed as the recommended form the buildings should take. The eventual designs should be the resolution of all factors, as:

1. The detailed program of requirements.
2. Relationship to other existing and proposed future buildings.
3. Requirements for access on foot, by car, and by service trucks.
4. Detailed site and other engineering considerations.

SUMMARY OF ACCEPTED SITE PROPOSALS

The studies favoured the following general locations for the buildings noted: (See Fig. 4)

1. **Humanities Buildings (Arts)** – on the west side of King George Drive, located to form first of an eventual building group, complete with landscaped internal greens and pathways.
2. **Biology Building** – on the north side of the oval in the block containing the existing Physics and Chemistry Buildings.
3. **Animal Husbandry Building** – due east of the gymnasium where the first exercise paddock occurs adjacent to the existing access road.
4. **Buildings and Grounds** – just north of the new powerhouse, with access off a proposed road between the powerhouse and the Saskatchewan Research Council Building, now under construction.
5. **PFRA Building** – and
6. **Animal Holdings Building** – in the same row as the building for the Buildings and Grounds Department.

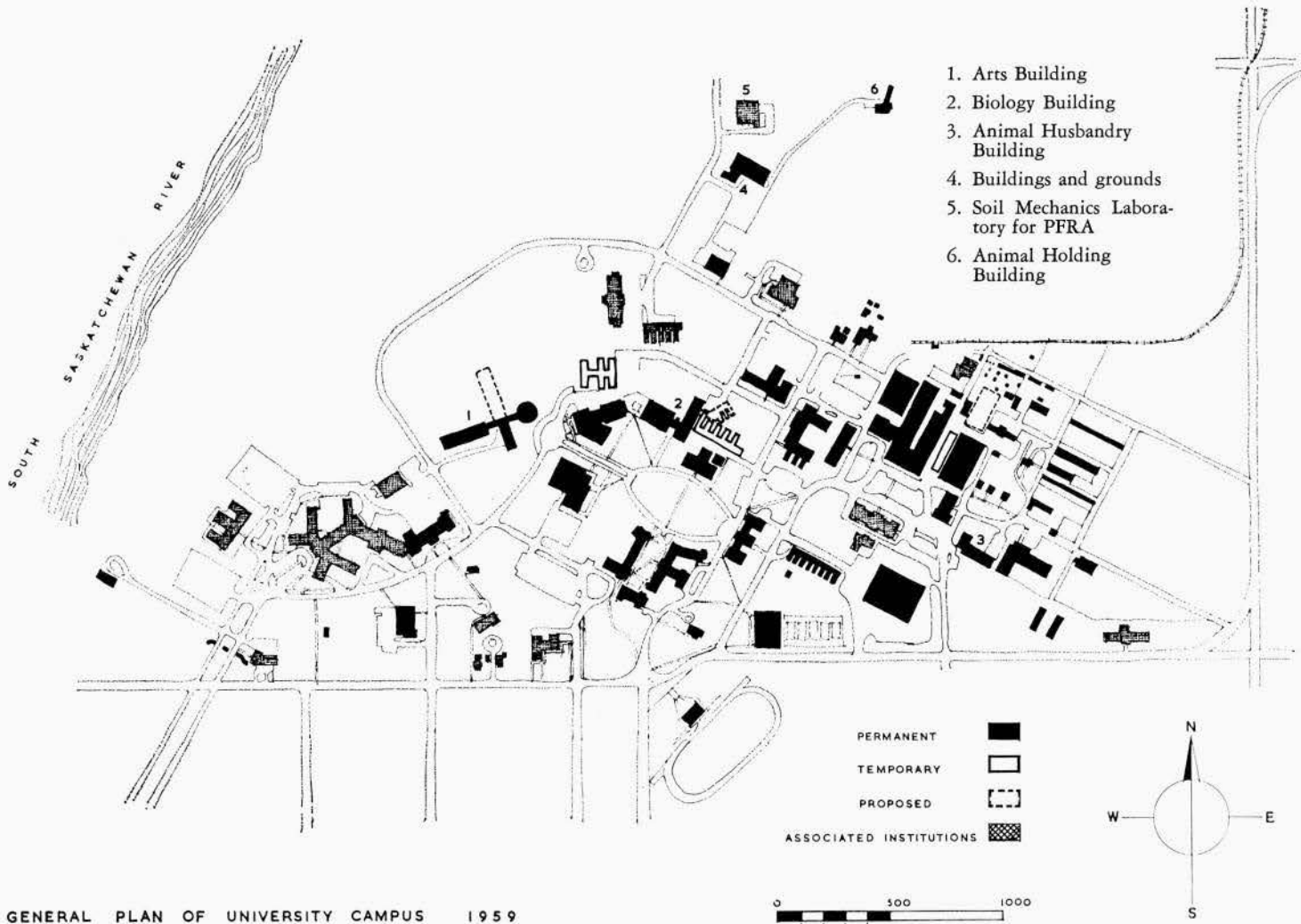
Locations for immediate buildings proved to be not contingent upon acceptance of long range proposed development plans. Scheme A was thought to be far reaching in scope and most likely to solve more of the future land use problems of the University. The essential elements of Scheme A may be summarised as follows:

1. Fine Arts and Theatre Hall adjacent to Humanities Building.
2. Residence on north campus.
3. Physical educational facilities on north campus.
4. Main kitchen and dining on north campus.
5. Expanded medical facilities.
 - (a) South of the highway on site of existing stadium with additional space to the south.
 - (b) Area south of the school for deaf.
6. College of Education with Teacher's College.
 - (a) North of highway where existing physical education facilities are located.
 - (b) South of highway on site of existing stadium.
 - (c) Area to the south of School for Deaf.

The elements of proposed land use of Scheme A that seemed to be singularly appropriate as a plan expression of University objectives are:

1. *Prominent position given to the plan of what could be a humanities group, in that not only so called humanities buildings (now arts building) would be located there but also a combined theatre, music and fine arts building in close relationship to the rest of the campus.*
2. *With the potential need for additional buildings for other colleges such as commerce, law, home economics to this group and other buildings to the north, the proposed grouping of library, humanities and fine arts would become in time both what is in the eyes of many the real centre as well as the geographic centre of the university.*

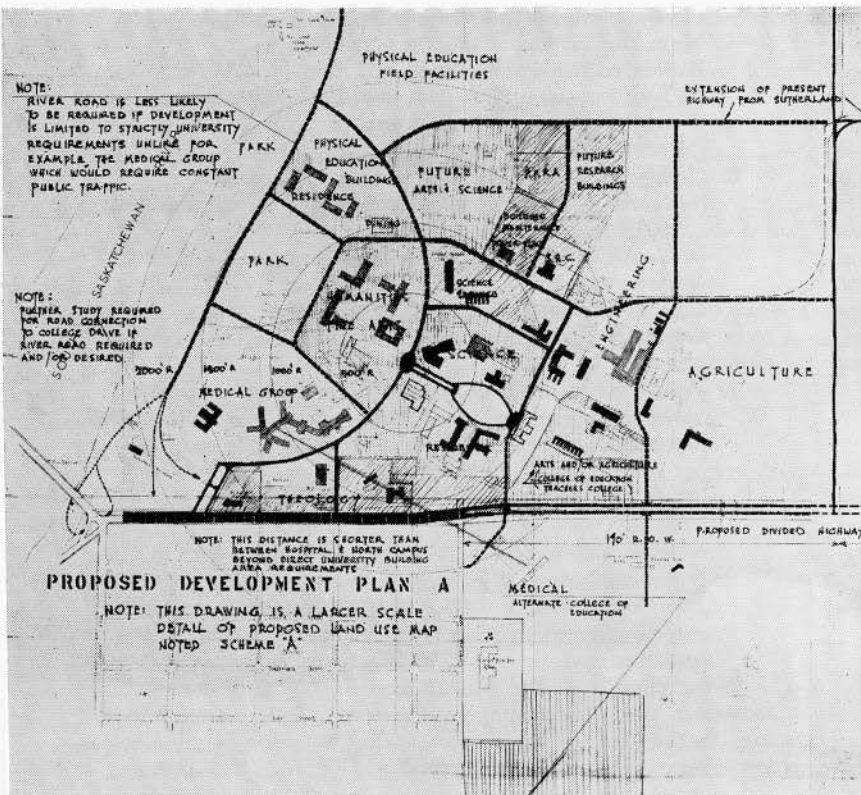
As the plan called for the Arts and Biology Buildings to be located in close relationship to important existing stone buildings, in the time available to us studies at larger detail showing several possibilities were prepared (Fig. 5). These sketches did not by any means exhaust the possibilities but merely



GENERAL PLAN OF UNIVERSITY CAMPUS 1959

Figure four

Figure three



served to illustrate the direction further detailed studies should take.

THE SEARCH FOR METHOD

All the three major educational buildings under immediate consideration in the 1957 report are now under construction. The Soils Mechanics and Materials Laboratory of the PFRA is nearing completion and the other two non-educational buildings are now in use. During this contact with the real planning problems of university expansion, we have been concerned about form and method.

Some premises on form have been suggested by Joseph Hudnut of the Harvard Graduate School of Design.⁴

1. Form in buildings is idea made visible. There should be a functional basis for form. University buildings should exhibit contemporary technique in planning and construction. They should be fitted to the living idea which they contain.
2. The task to be performed in university buildings and the methods by which they are built constantly change. Their nature tomorrow cannot be predicted. No program is possible which extends beyond a dozen years.
3. No plan can be fitted to an unpredictable growth. If the first two premises are true, what hope is there for form in a university plan?

Dean Hudnut's views have considerable appeal. He suggests that a master plan should be in such general terms to admit of new interpretations and unexpected development. As general principles, reserve as much land as possible for development, provide for expansion and contraction, don't hesitate to use temporary construction in doubtful situations. All this is, of course, common sense.

SASKATCHEWAN RESEARCH COUNCIL LABORATORY

University of Saskatchewan, Saskatoon

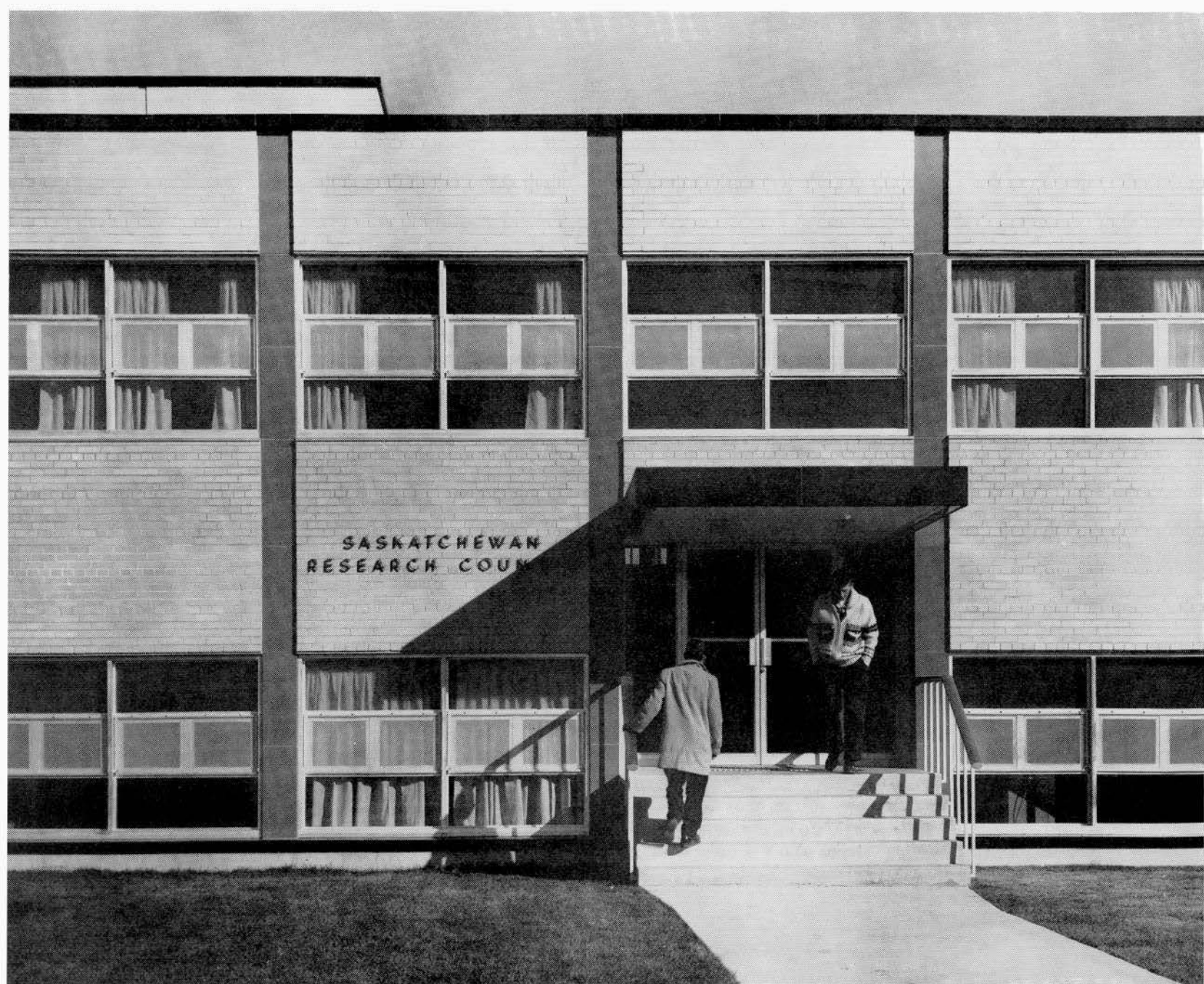
Built by the Government of Saskatchewan for the Saskatchewan Research Council

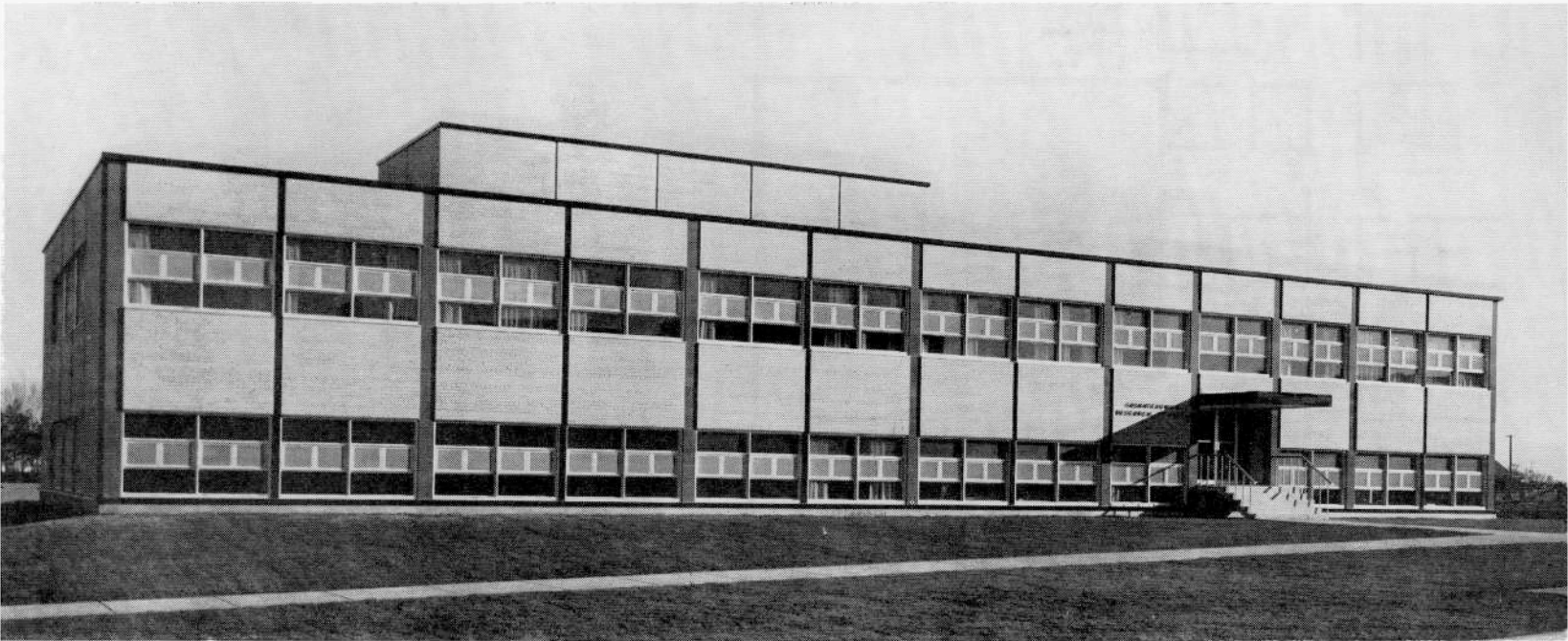
Architects and Engineers: Izumi, Arnott and Sugiyama, Regina

General Contractor: W. C. Wells Construction Company Ltd, Saskatoon

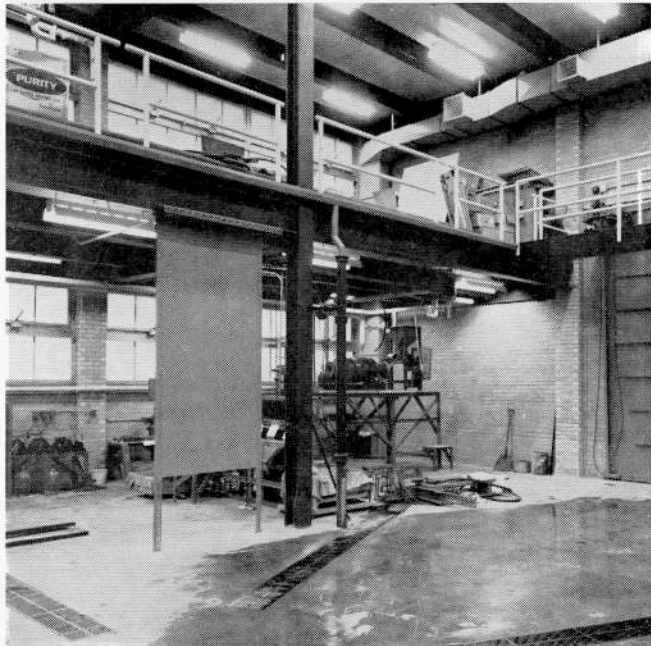
Consulting Mechanical Engineers: Underwood McLellan & Associates, Saskatoon

Consulting Electrical Engineers: Douglas Michalenko & Dupuis, Saskatoon

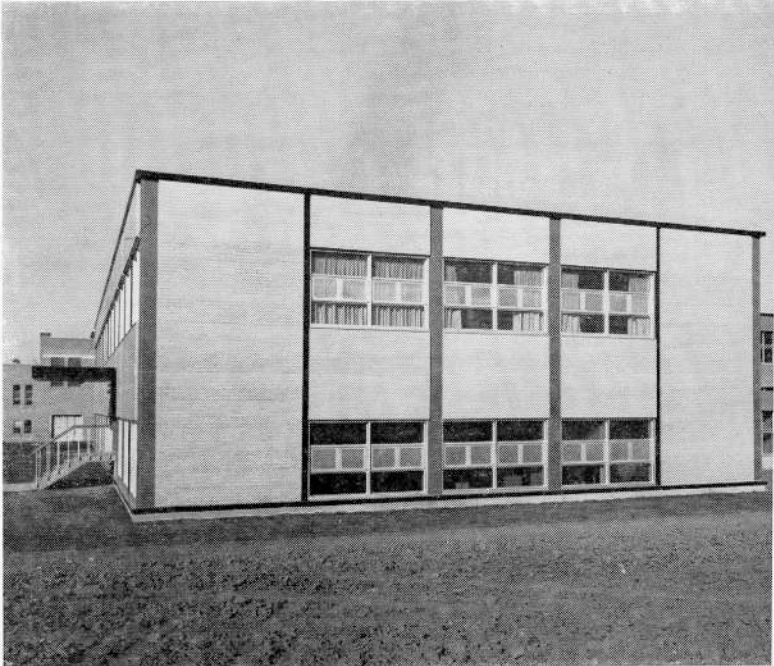




Saskatchewan Research Council Laboratory



Pilot Plant, interior



Library and Conference Room wing



*Saskatchewan Research
Council Laboratory*

To provide the kind of flexibility that the Saskatchewan Research Council demands, the laboratories have been designed to suit their immediate needs and yet are susceptible of change. These specific laboratories would be used for small scale experiments conducted by various divisions, for analysis and for ceramics. The pilot plant serves as an area in which large scale equipment can be assembled, such as the flotation plant for uranium ores, with mechanical work shop and grinding room close by. Future expansion is possible by means of additional third floor as well as extension to the pilot plant and the main block.



SASKATCHEWAN CANCER AND MEDICAL RESEARCH INSTITUTE

University of Saskatchewan,
Saskatoon

Architects and Engineers:
Izumi, Arnott and Sugiyama, Regina

General Contractor:
Smith Bros & Wilson Ltd, Saskatoon

Consulting Mechanical Engineers:
Underwood McLellan & Associates, Saskatoon

Consulting Electrical Engineers:
Douglas Michalenko & Dupuis, Saskatoon

Cost \$625,774.30

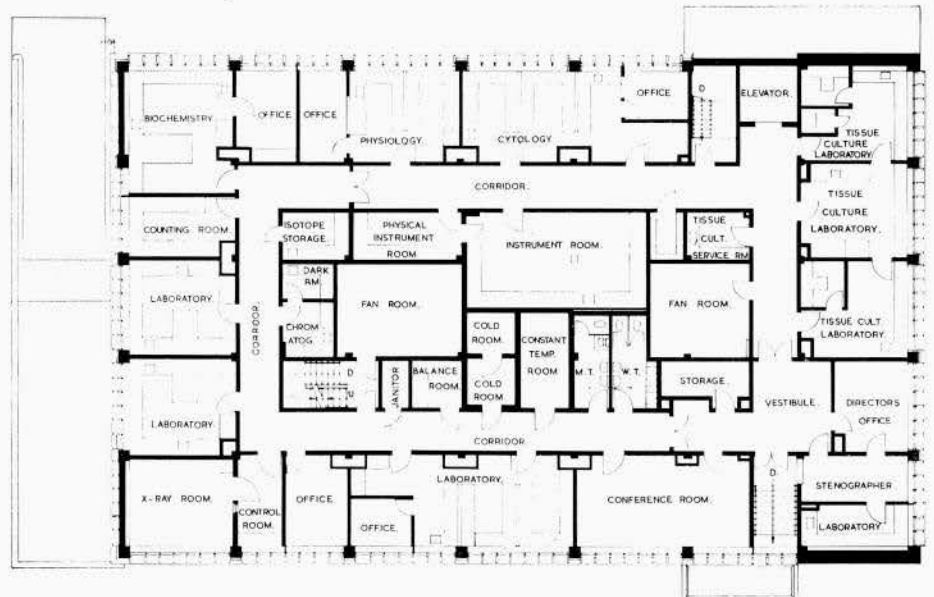
Built from an initial grant
of \$250,000 furnished by the
Canadian Cancer Society and
the Government of Saskatchewan.

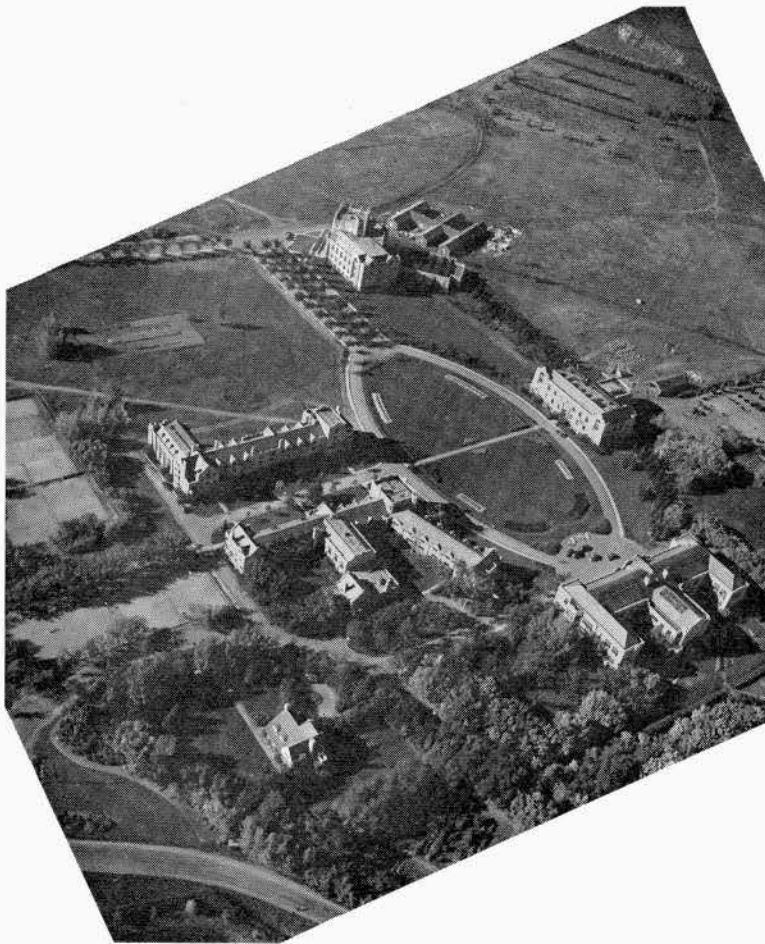


Lower floor plan



Main floor plan





MEMORIAL UNION BUILDING University of Saskatchewan, Saskatoon

Architects: Shore and Moffat, Toronto

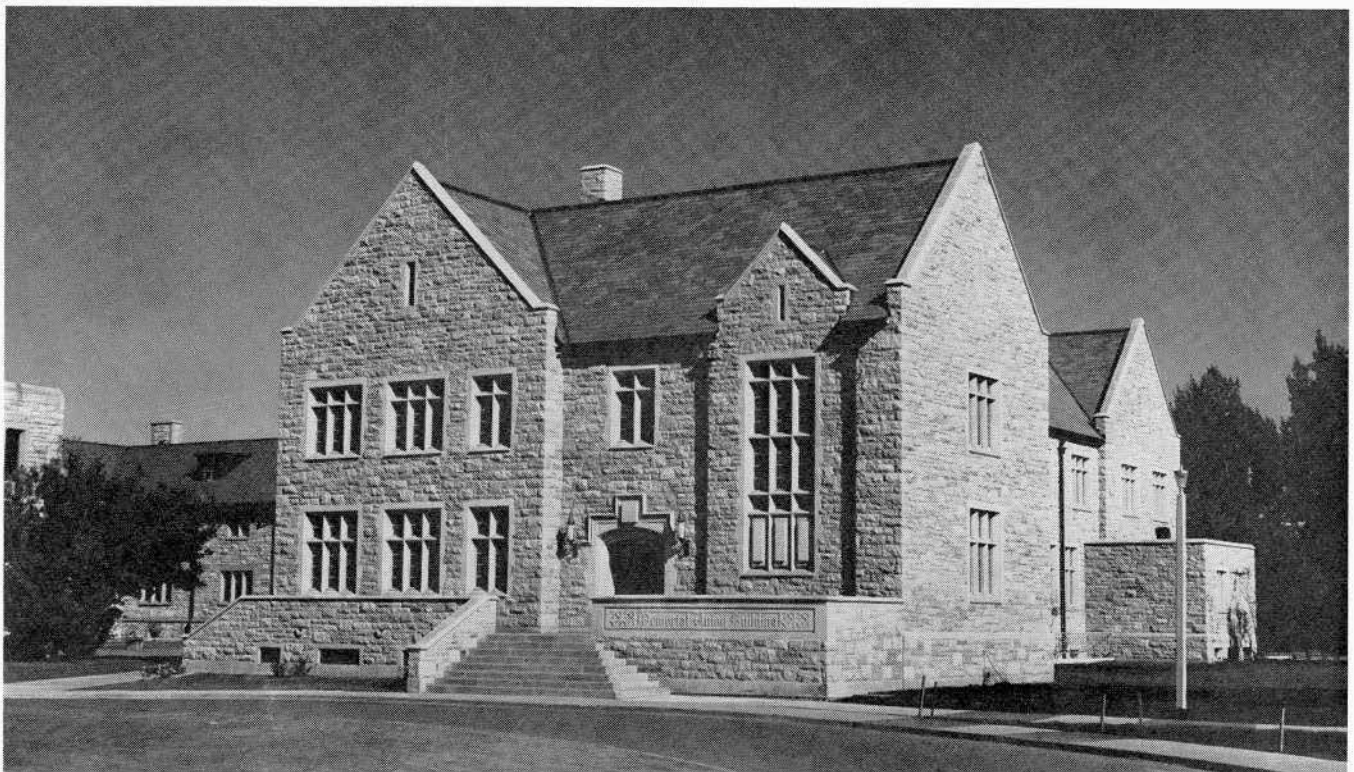
*General Contractors: Smith Bros. and Wilson Co. Ltd,
Saskatoon*

The Memorial Union Building was designed as a student centre on the campus. The main floor contains cafeteria and kitchens, the upper floor a very large lounge, and the basement a games room, lavatories and the necessary storage and maintenance spaces. There are, in addition, a small number of administrative offices and rooms for committee meetings.

The site chosen enables the building to form a court which is flanked by two residential halls, Qu'Appelle and Saskatchewan, built forty years ago in the Gothic style. Careful attention was paid to the cornice level, roof silhouette, scale of windows of the existing buildings.

*Aerial view of section of campus shown
in lower part of figure five, page 183.
Memorial Union Building now terminates a
Gothic perspective seen from a Beaux-Arts mall*

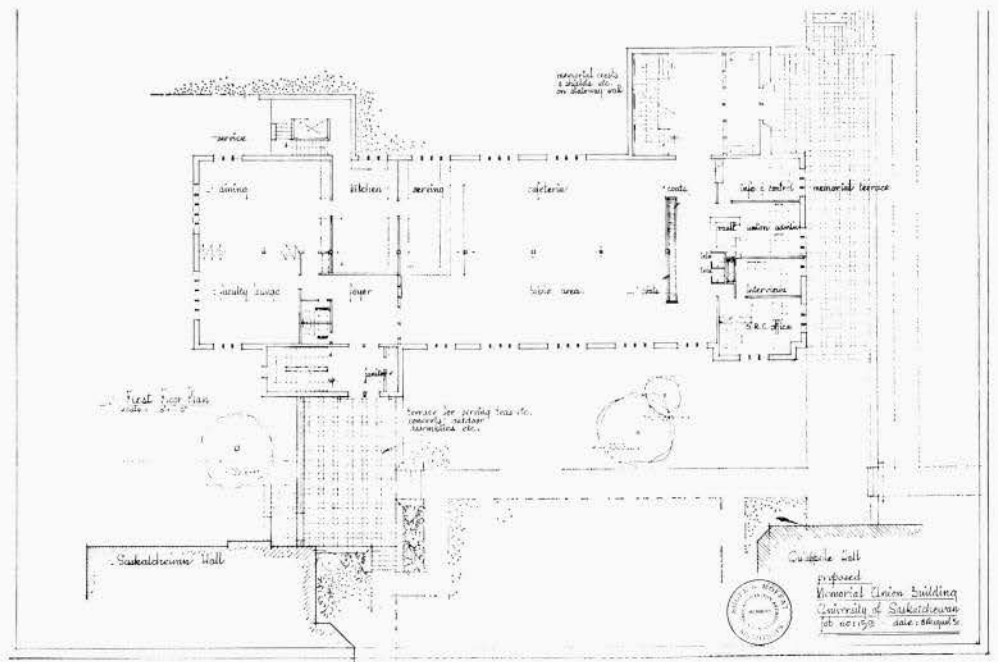
*West entry and terrace from driveway. Pedestrian access to Union from most other
campus buildings comes through court at left to north entry*



Memorial Union Building

Right, first floor plan

Below, students' lounge



Below:

UNIVERSITY ARTS FACULTY BUILDING

Office and lecture theatre wings

University of Saskatchewan Campus

Architects: Shore and Moffat, Toronto

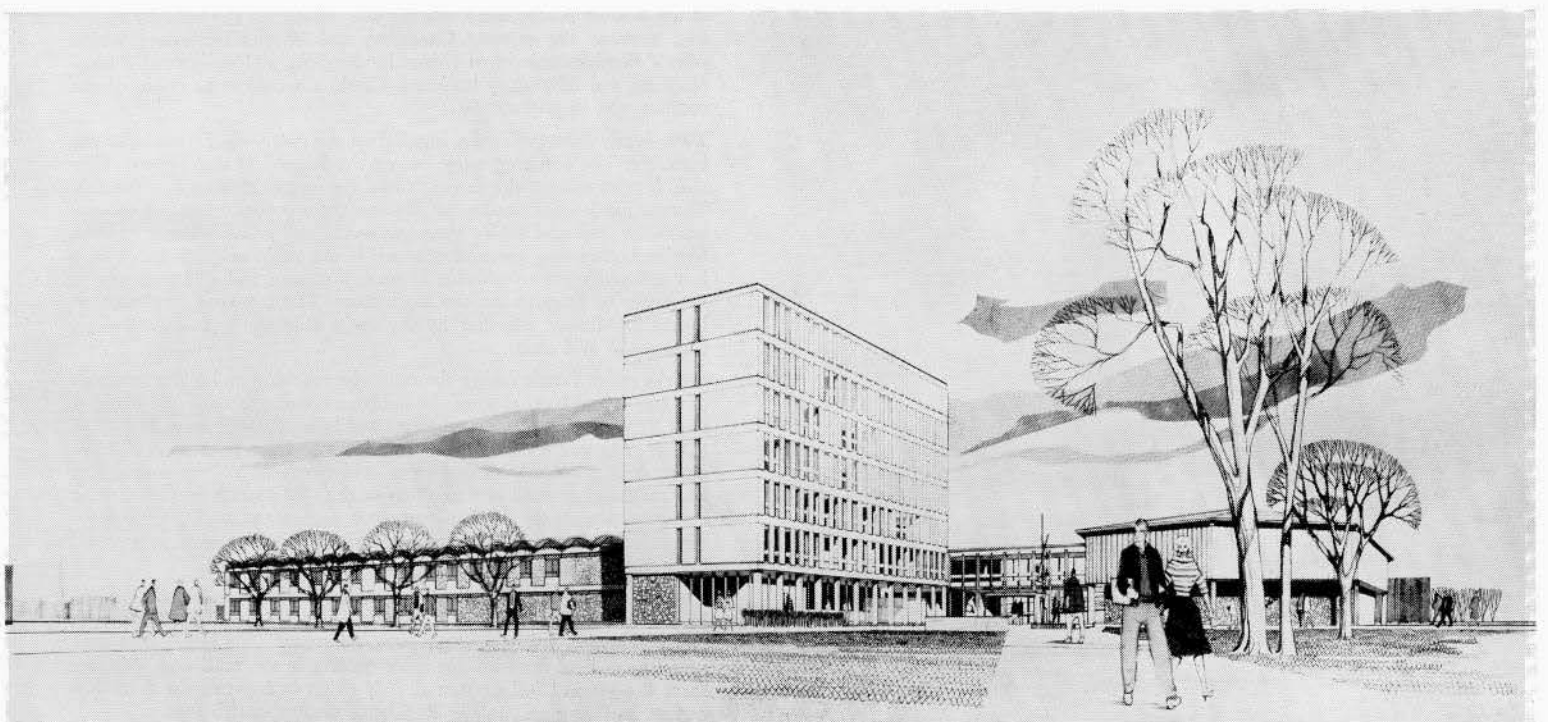
*General Contractors: W. C. Wells Construction Co. Ltd
and Bird Construction Co. Ltd*

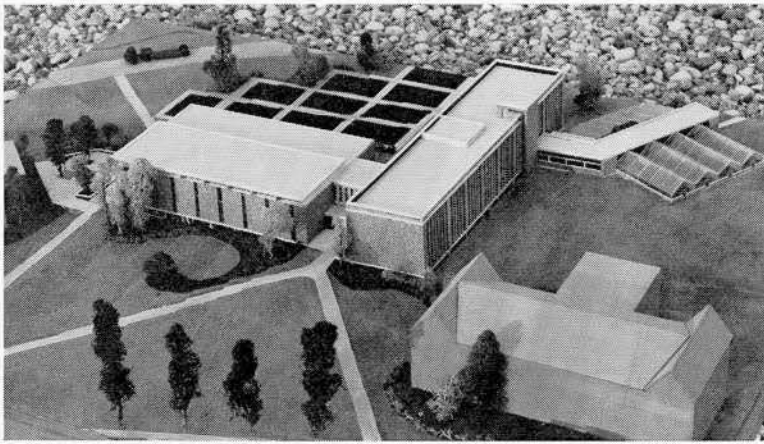
Mechanical Engineers: M. E. Cook & Co. Ltd

*Structural Engineers: Precast Concrete Ltd and
C. W. Curry Limited*

*Electrical Engineers: Wheaton Electric and Industrial
Engineering*

*Office wing in seven floors and two-storey lecture
theatre wing*



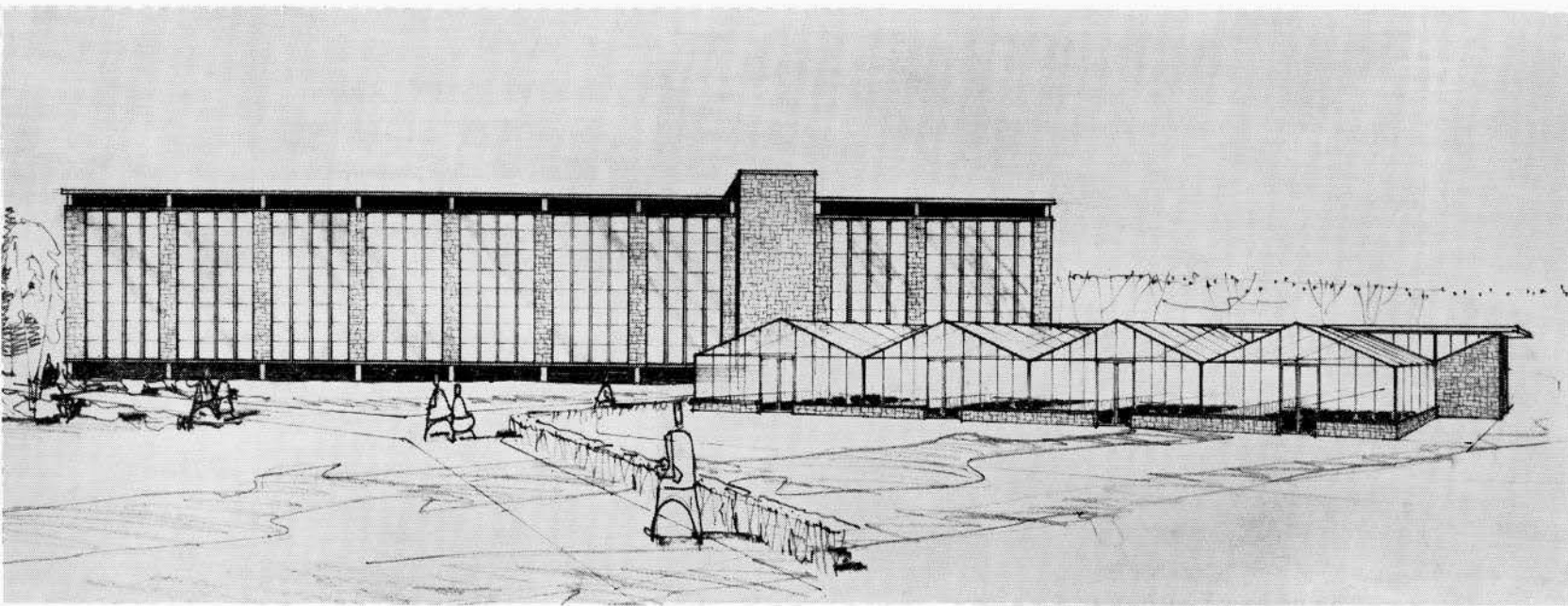


BIOLOGY BUILDING

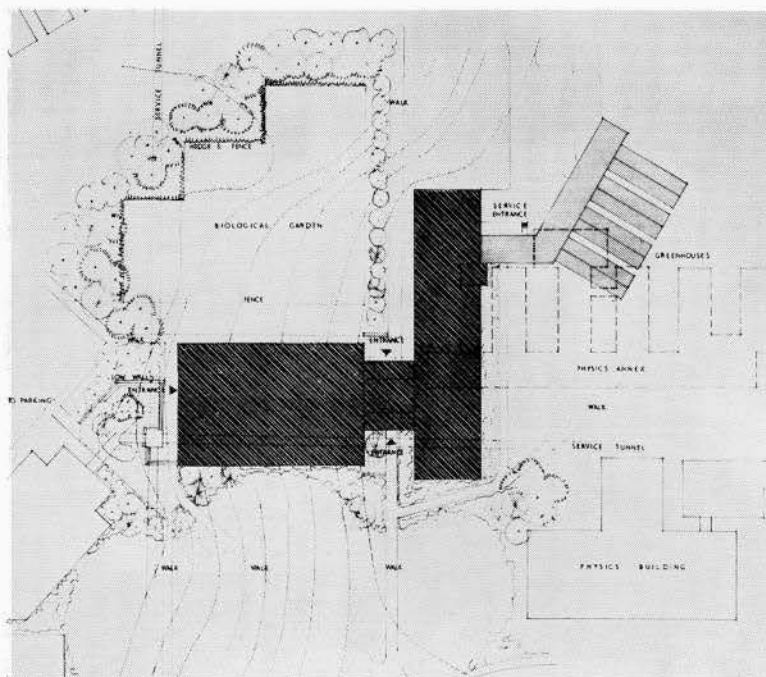
University of Saskatchewan, Saskatoon

Architects and Engineers: Izumi, Arnott and Sugiyama, Regina

*Model of Biology Building now nearing completion
It is located between the Physics and Chemistry buildings
facing the mall*



Perspective of south east elevation



Plot plan

It was known before hand that the site chosen for the Biology Building, between the existing Chemistry and Physics Buildings, would offer difficult problems of siting, landscaping and design for a large teaching and laboratory building. Could a synthesis be made of the conflicts and requirements?

Two clearly differentiated wings define the two main functions of the building. The teaching wing houses the large 250 seat Lecture Theatre, lecture rooms, the museum and the large teaching laboratories. The Research wing houses the department offices and research laboratories for staff and senior graduate work, and adjunct facilities. The header houses and greenhouses join to the main research block in a low splayed wing to provide south orientation and relate closely to the fields of research on the main floor. The teaching and research blocks are linked together by the main entrance equally accessible from north and south.

On the south facade facing the mall, the teaching and research wings declare themselves, clothed in fieldstone and yet with the skeletal steel structure suggested at the recessed base of dark stone. The large higher-ceilinged teaching laboratories are lit from both sides by high continuous windows, shaded by a bold overhang on the south. The low mass and general horizontality of the roof lines is intended to be in contrast with the high picturesque gables and vertical finials of the adjacent buildings. At the same time, the dominant note in all elevations is a vertical handling of the glassed areas.

The Building is set back from the mall. The resulting space defined by the Biology Building and flanked on both sides by the Physics and Chemistry, forms a visually closed court. This landscaped area will thus extend the pleasant space quality in the mall area and preserve the general feeling that already exists in front of the Administration Building and in the Residence Group in this area.

THE UNIVERSITY OF MANITOBA

A Proposed Master Plan

BY JOHN A. RUSSELL

Director, School of Architecture

In January 1958, the Board of Governors of The University of Manitoba established a Campus Design and Planning Committee whose terms of reference were: (1) to develop a master plan for the approval of the Board by engaging a design team to do the exploratory and developmental work on same and by working with this team in a consultive and advisory capacity; and (2) to serve as a continuing committee to advise the Board on all matters pertaining to the planned development of the Campus in the future — new buildings and their locations, roads, utilities, landscape, parking, etc.

In view of the fact that the main concern of this Committee was to be the physical development of the University, while that of another committee would be the planning and guidance of academic policy, the personnel of the Campus Design and Planning Committee included the President, the Comptroller, Eric W. Thrift (Director of Metropolitan Planning, as consultant; and the following professors: V. J. Kostka (Community Planning), W. F. Riddell (Civil Engineering), A. C. Ferguson (Plant Science), A. J. Donahue (Architecture), R. D. Gillmor (Architecture), R. Sellors (Architecture), with J. A. Russell as Chairman. Recently, Professor W. L. Morton, Chairman of the Academic Planning Committee has been added.

As the result of an intensive study by the appointed design team, J. C. Stovel and A. J. Mudry, both of the School of Architecture, a first stage or preliminary scheme has been produced in the form of a model and drawings, all of which have been so presented that changes can easily be made therein. It was felt that such a definite statement should be made early in the development of a master plan so that the planners, the committee, and the other members of staff consulted would have concrete proposals to discuss, accept or reject. Recent reviews of the concept to date have now defined further lines of investigation and development for the summer. It is the hope of the Committee that, by fall, a master plan together with a report embodying proposals and recommendations will be ready for submission to the Board of Governors. Meantime, it should be emphasized that what is shown here is merely a developmental stage for a Master Plan for The University of Manitoba.

From the very beginning, it was recognized that the development of such a master plan for Manitoba must be predicated upon certain existing conditions and basic concepts:

1. Its location within the Winnipeg Metropolitan Area, — its expanding residential areas and traffic arteries as well as its inner and outer circumferential routes. At present only about 18% of the student population is accommodated in residences on the campus, and the rest, therefore, must come to the campus by bus or car.
2. Campus development to date, without reconsideration of the plan as a whole since it was first conceived in 1912, has resulted in (a) a somewhat rigid axial pattern; (b) the establishment of long term experiments in the agricul-

tural use of land immediately to the east as well as to the west of the central built-up area of the campus thus preventing expansion into these areas without costly delays through relocation of such areas; (c) a number of well-constructed buildings whose replacement would be economically unsound; (d) an apparent disregard of the developmental possibilities of the river bank and views thereof.

3. The creation of a circulation pattern for the campus which would provide for vehicular and bus traffic, adequate parking for staff and student cars, appropriate service access to each building.
4. The establishment of zoned development of the campus in terms of academic areas (humanities and social sciences, the sciences, technical or professional schools, post graduate studies and research, the library); residential areas; residential colleges; athletic facilities, student union facilities, convocation hall. Zoning regulations would also establish building set backs and alignments, building heights with respect to open space, etc.
5. The development of several five-year stages which in succeeding one another will make it possible to use certain existing buildings until such time as their life expectancy is reached and ultimately to provide a grouping of buildings and open spaces which will result in a well integrated campus which is both efficient in its functioning and aesthetically effective in its visual appearance.

After detailed analysis of existing physical conditions and exploratory discussions with deans and other administrative officers, the design team investigated several possible patterns of skeletal development for the plan before settling upon the present one. Its core or spine is a long, treed pedestrian mall terminating in major open spaces at its east and west extremities, with several cross malls or pedestrian ways leading to smaller open spaces created within building groupings. Although large expanses of open space may be desirable, especially for a university on the open prairie, it was recognized that the major wintertime use of the campus underscores the desirability of more compact grouping to provide greater economy in heating and other services, as well as greater comfort in inter-building circulation.

It is hoped that the immediate result of the work done to date will be to bring about major decisions re policy in the expansion and growth of the University, both in its academic pattern and in its student population. Such decisions will result in more definitive studies of the master plan both in its overall concept and in its detailed stages of development.

From these studies will emerge the master plan which will direct and regulate, but not restrict, the growth of The University of Manitoba Campus into a physical entity which will serve as the educational and cultural centre of both Winnipeg and the Province.

Below:

1. Science Buildings complex
2. Plan showing proposed buildings (white) presently in drawing stage by architects
3. Engineering building addition
4. St John's College
5. Liberal Arts College &
6. Arts Building addition
7. Library addition
8. Agriculture addition
8. Animal Barns complex (major move)
9. Federal Department of Agriculture

Right, top:

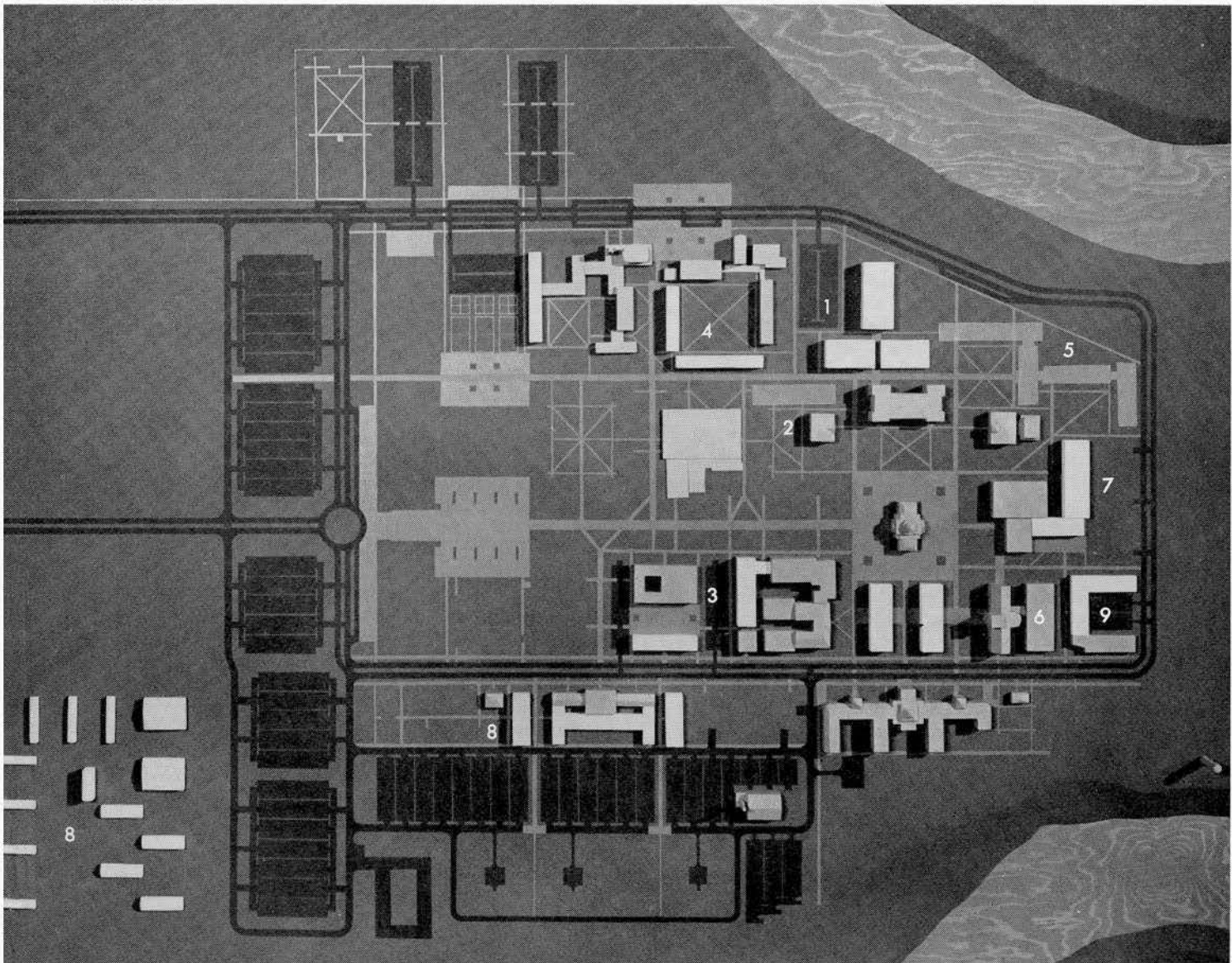
Master plan shows diagrammatic indication of future siting. Exact building dispositions must obviously be determined by future policy and architects, but the essence of the master plan is the pedestrian spine connecting two major plazas. The east plaza is the zone of humanities and social sciences, while the west plaza is the zone of technical and professional courses as well as a social centre. (Convocation Hall, etc.)

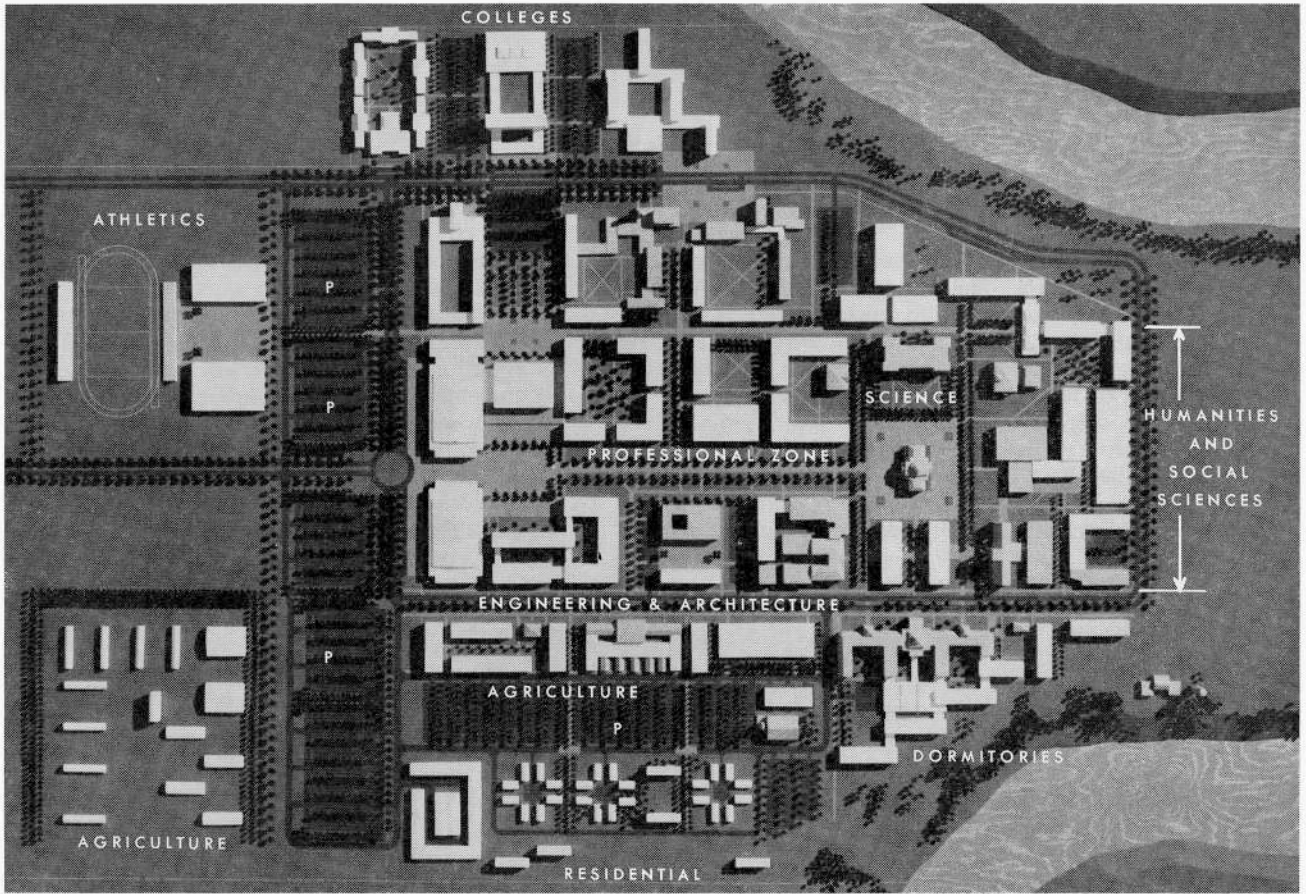
Academic activities are inside the ring road, introverted to the main pedestrian mall and squares, as well as a series of courts, cross-walks and quadrangles. Residential colleges are outside the ring road, extroverted to the beautiful natural features of the Red River and an adjoining golf course.

Right, bottom:

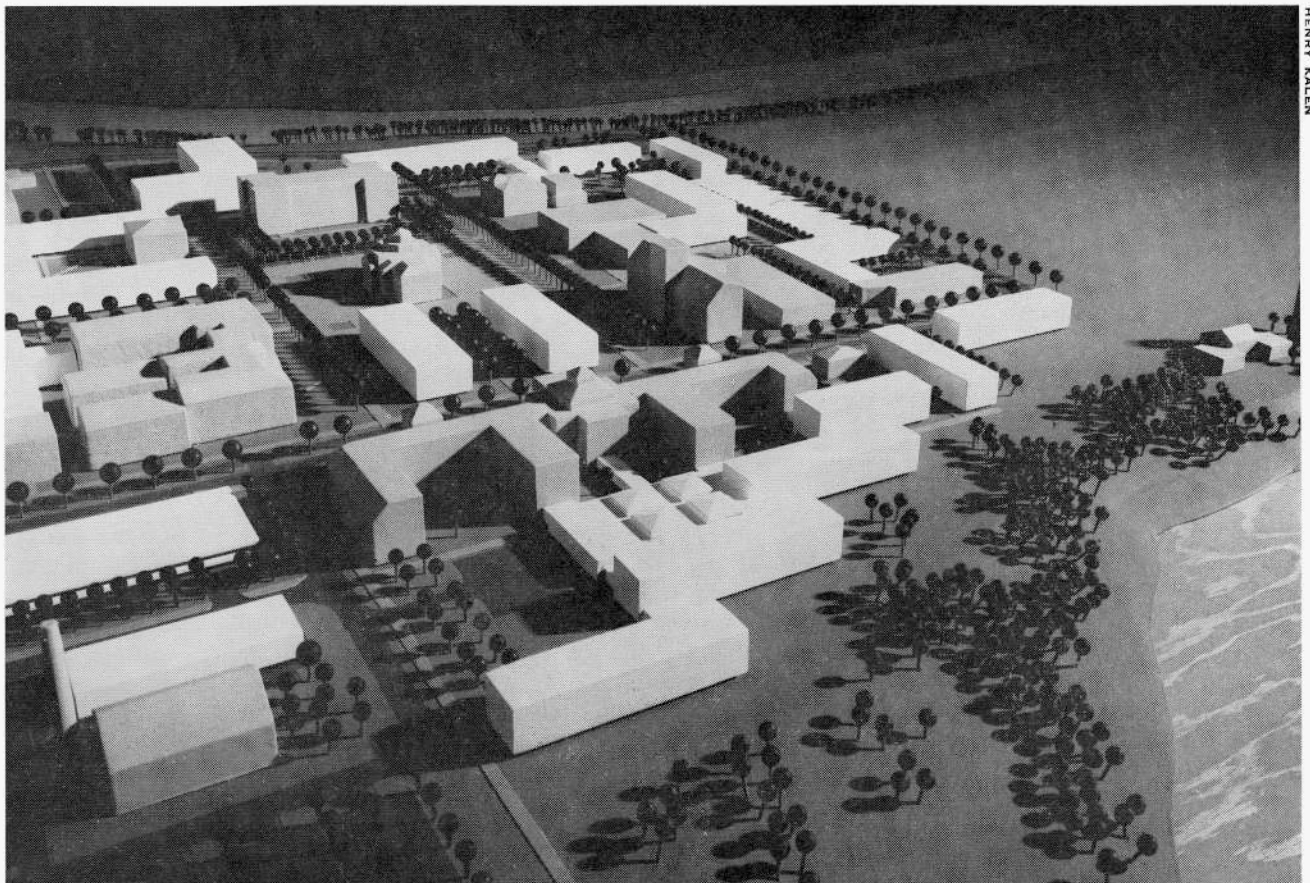
Close up view of dormitories overlooking the banks of the Red River. The existing Administration Building is seen beyond, in the centre of a main plaza.

HENRY KALEN





HENRY KALEN



HENRY KALEN

ST PAUL'S COLLEGE AND CHAPEL OF CHRIST THE KING

University of Manitoba Campus, Winnipeg

Architects: Gardiner, Thornton, Gathe & Associates, Vancouver

Associate Architects: Green, Blankstein, Russell & Associates, Winnipeg

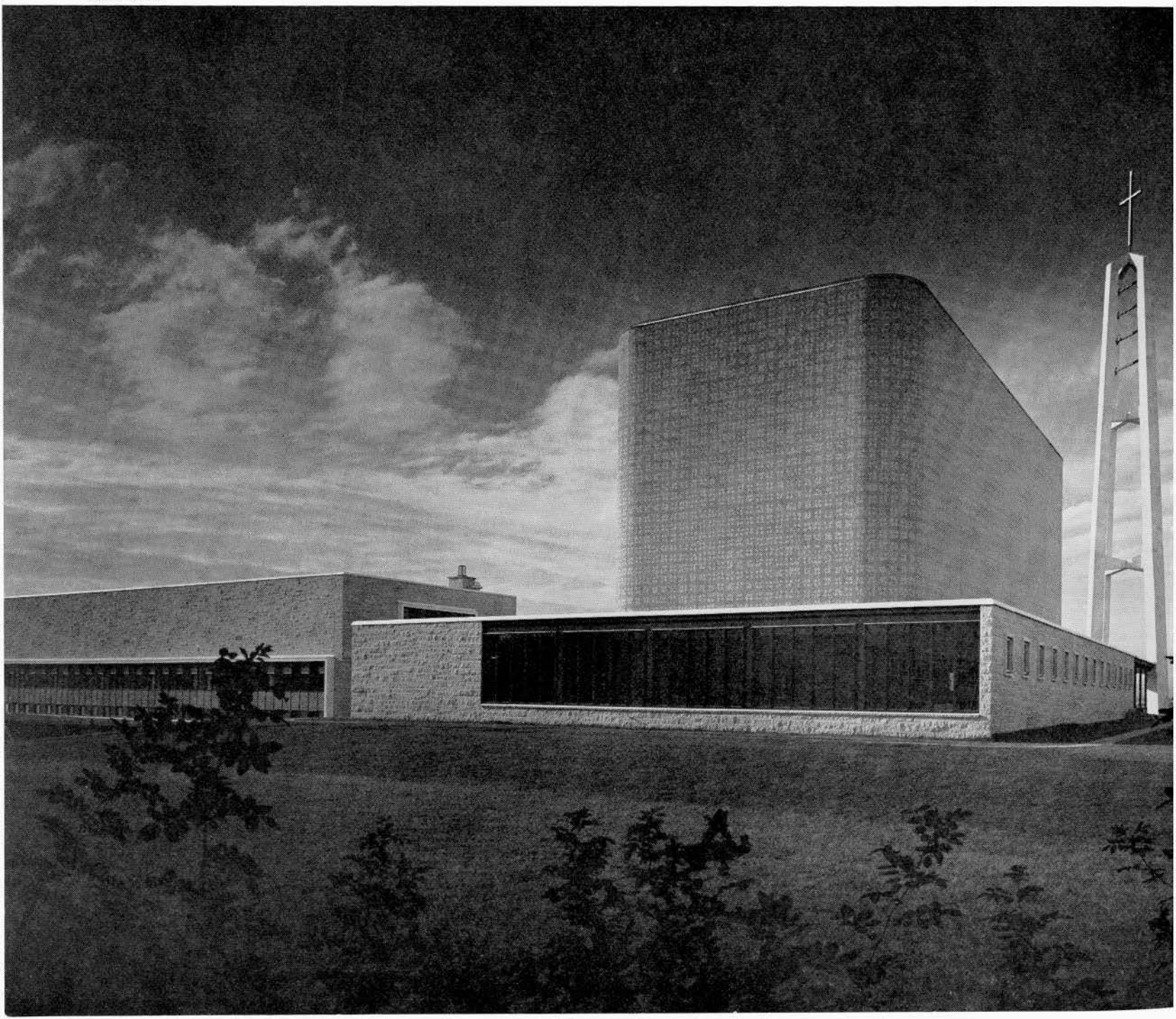
A Catholic University College to be erected in stages as needs and conditions determine. The first section was completed in 1957 and comprises two instruction units, a university Catholic Centre, an administration unit and a chapel seating 500. Yet to be built are residences for staff, graduates, and students, further instruction accommodation and a student lounge.

The design concept is based on a chapel, which although not large in bulk, must dominate the group because it is the spiritual centre of the college, and a tower, which marks the main college entrance from a distance.

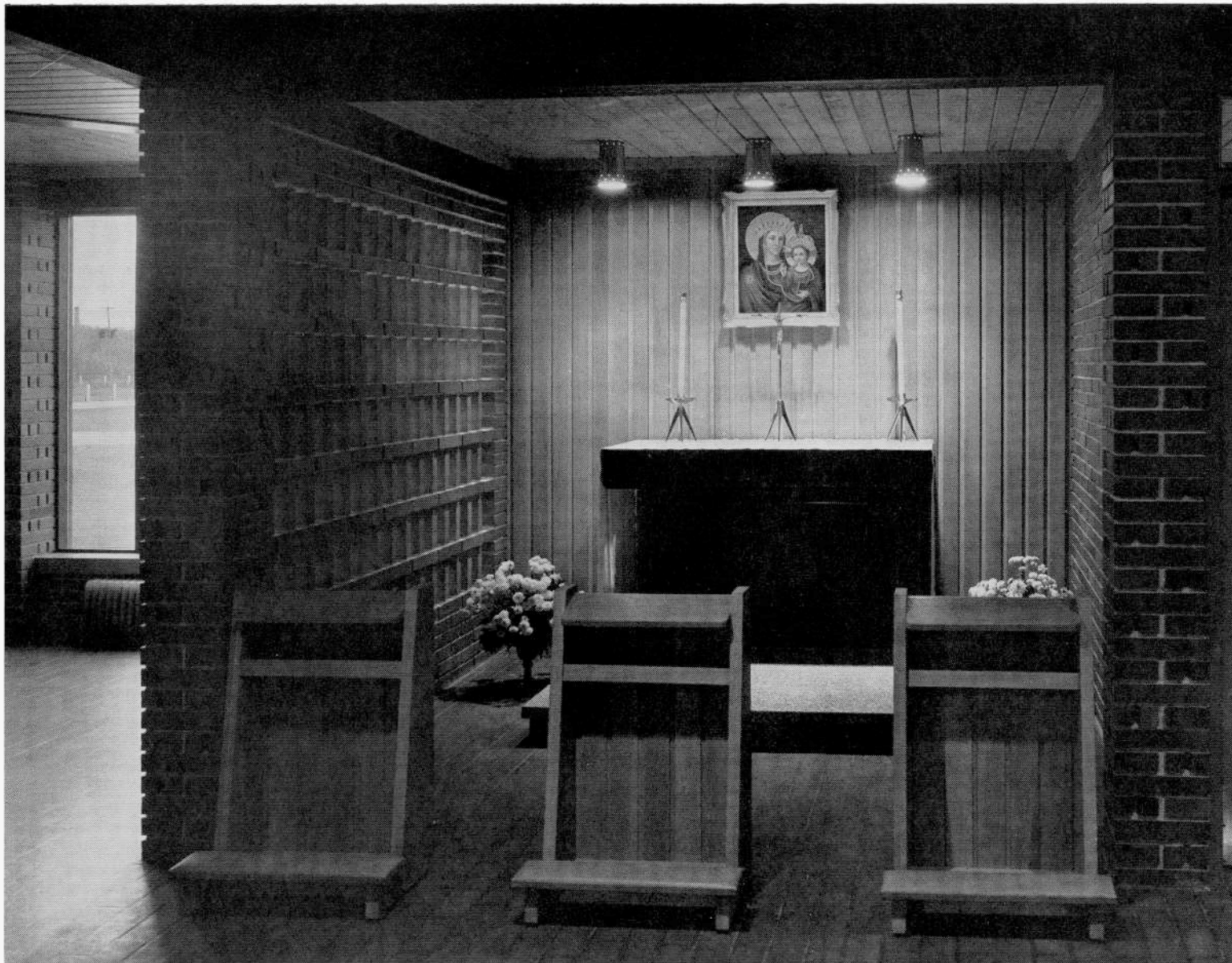
The building rests on a piled foundation; the structure being

either concrete frame or load bearing brick piers and walls, and a wood plank roof deck on wood or steel beams. The hollow upper walls of the chapel are of concrete sprayed over cardboard boxes; this evolving from the need to eliminate (because of sight lines from the aisles) any columns under the side walls of the chapel. Finishes inside are, brick, granwood or lino tile floors, wood panel or brick walls and wood plank or wood slat ceilings; on the outside the building is faced with random Tyndal stone, except on the upper walls of the chapel which are of mosaic tile; a mural of Christ the King (by Vancouver artist Lionel Thomas) being the theme for the east wall.

HENRY KALEN

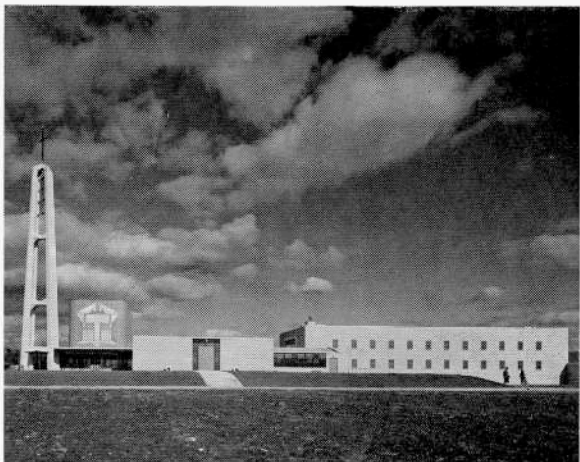






Side chapel from ambulatory

West elevation with chapel belfry and main entry at left. Classrooms and residence at right.



Main chapel from ambulatory



THE CAMPUS LANDSCAPE

BY LOIS LISTER

THE PLEASURE OF AGAIN BEING IN A FAVOURITE CAMPUS is only enhanced by analysing, from a technical viewpoint, why it looks beautiful, and operates well. It is re-assuring to realise that success, whether rooted in the 15th century or the 20th, is rarely, as is popularly supposed, the result of haphazard development, glossed over by the mellowing and beautifying effects of age and tradition. It has always been the result of good basic planning, for clearly recognized purposes. When needs have altered, deliberate changes have been made. The distinction between mellowing and decay, whether in masonry or trees, has been respected. New or old, a good campus is always vigorous and alive and well cared for.

With some effort, I can think of campuses which in whole or in part are ineffective, impractical, even downright ugly. The thoughts that come unbidden are all pleasant; the tree outside my window at college, the magnificence of the Great Court at Trinity, half-hidden gardens seen as you walk from one lecture to another, the respite from the traffic and summer heat as you cross into the Harvard Yard – and academic processions, student “rags”, the bustle of hordes of undergraduates. Lest it should be thought that these are only the maudlin memories of the middle-aged, contemplating past youth, I should add that pictures of the campus at Ontario Agricultural College in Guelph during a summer school course, and the always pleasing walk from Queen’s Park at the University of Toronto campus, are just as vivid.

No problem of site development and landscape planning could be more attractive than the laying out of a new campus, or the development and change of an existing one. The situation has clarity. The governors of the university, the staff, the student body and the public at large, are all likely to agree to a large extent on what the purpose of the campus is. Its purpose is education. The campus is an academic precinct. It is an area which should be deliberately defined and controlled to provide the environment for the students. In addition to the minimum

Illinois Institute of Technology. Paved walks between buildings are wide. A low iron rail defends the grass from heavy traffic. The forms of elm and hawthorn act as foils to the severe geometry of the buildings. Ivy is beginning to climb the walls.

practical needs of space for fresh air and exercise, and paths from one building to another, there is general agreement that even if it is not consciously appreciated by every student, a campus should be aesthetically pleasing. It should also, at any rate in places, provide a dignified setting for processions and such functions. Beyond these elementary concepts are many more that are not usually so clear in people’s minds, yet, if pointed out, seem just as reasonable and acceptable. If we can organize the space between buildings so that it contributes to the life of the university, a place where students will meet each other informally, where they sit or stand without interference from traffic, where they can have some exercise and sports close to hand, surely we should try to do this. Then, on another plane, we should regard the grounds and the buildings of the university as complementary parts of the total design. Nowhere but in a campus is there the opportunity to define individual buildings with a landscape setting appropriate in scale, or to harmonise buildings of differing ages and styles and functions by often simple but determinate landscape treatment.

Character

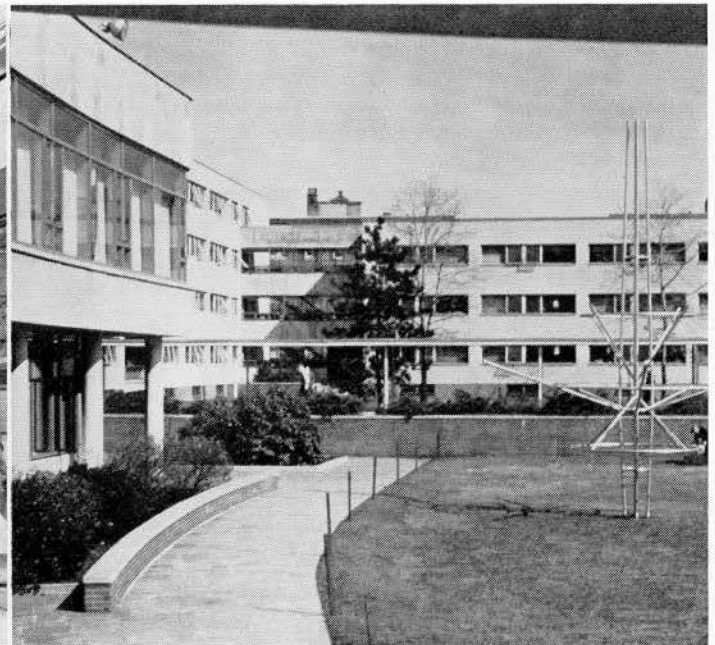
A modern campus, in both larger cities and smaller but expanding towns, is much more closely associated with the community at large than was the case with the more ancient universities.

With the tremendous broadening of university education, a large majority of students attend a university in their home town. After they graduate, they maintain some connexions with it and often re-visit it. The university has courses and lectures and concerts open to the public. Summer time, when once the campus was deserted, is now a busy season of summer schools for local and out-of-town students. The campus serves a much broader function than its fundamental purpose as the environment for an undergraduate student population. None

Harvard Graduate Centre. Changes in level are emphasized by brick retaining walls and by the strategic planting of large, well formed shrubs. In the foreground, a free-standing wall of seat height borders the paved walk.



W. S. GOULDING



of this conflicts with the basic demand, but does justify extra thought in planning and design. It is a trend we can expect to increase in the future.

The use of the term "campus", in referring to office buildings on extensive grounds, is misleading. The *raison d'être* of the academic precinct, or campus, is that it is in constant, purposeful use; it is not just an agreeable place for office workers to take their lunch hour stroll.

A college campus ought not to look like a beautiful park with incidental buildings, nor like a series of public buildings intersected by traffic routes. One should be able to tell at a glance that this is not another group of insurance buildings, or a hospital. Courts and quadrangles, sports grounds, sometimes experimental planting can all be part of the scheme, and help to create the characteristic feeling of a good campus, that it is actively lived in and worked in, and as suitable for an alive, cheerful crowd as for a few people walking quietly by themselves.

A campus should always have a setting for special occasions, such as graduation ceremonies and academic processions. Apart from this, the space between and around the buildings should be organized on a human scale. It should have areas detailed for movement and for pause, so that as he walks around the campus, the student can meet friends, make arrangements for the many activities beside lectures, chat, argue, perhaps just sit in the sunshine. All this contributes to a very important part of the rewarding experience of being a university student and can be encouraged or discouraged by the physical organization of the campus.

Design Elements

Consider pathways. If they are not wide enough, at least ten feet in most places, it is not possible for people to stop to talk without blocking the traffic. If two groups of students meet, going in opposite directions, there is general confusion. Generously wide walks with well-kept surfaces are as important as well-lit lecture rooms.

We can hope that the organization of paths and roads will be considered from a visual as well as practical standpoint. The shortest distance between two buildings is not necessarily the ideal route to connect them. A strong line of paving going at an awkward angle to the building may seriously mar its appearance. The line of paving can be invaluable when used to give a sense of unity to a group of buildings.

To make the campus more useful and enjoyable for the students, and at the same time more manageable and more interesting to look at, there are many features of landscape design which are surprisingly rarely seen; a broad terrace outside a building, with a parapet at seat height for example; a flight of steps shallow and wide enough to be used for sitting, sheltered from winter wind and summer sun.

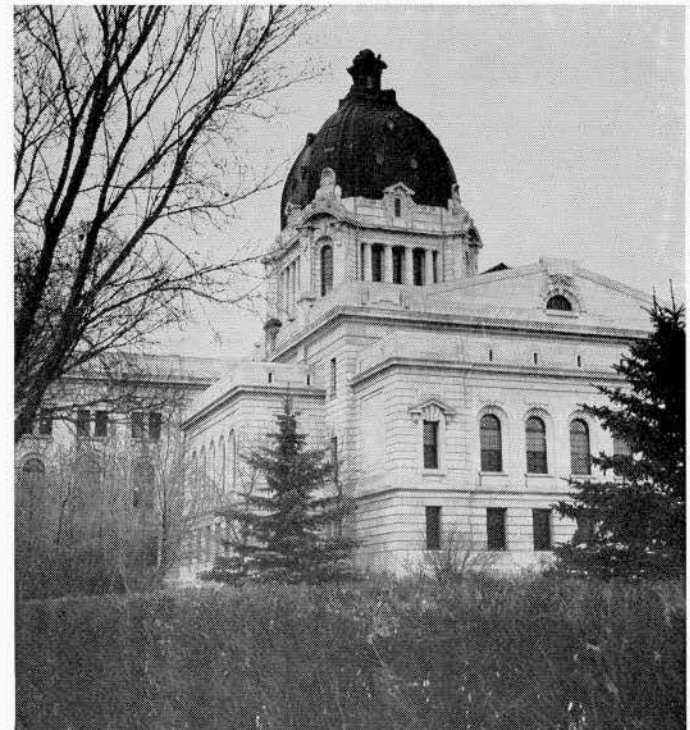
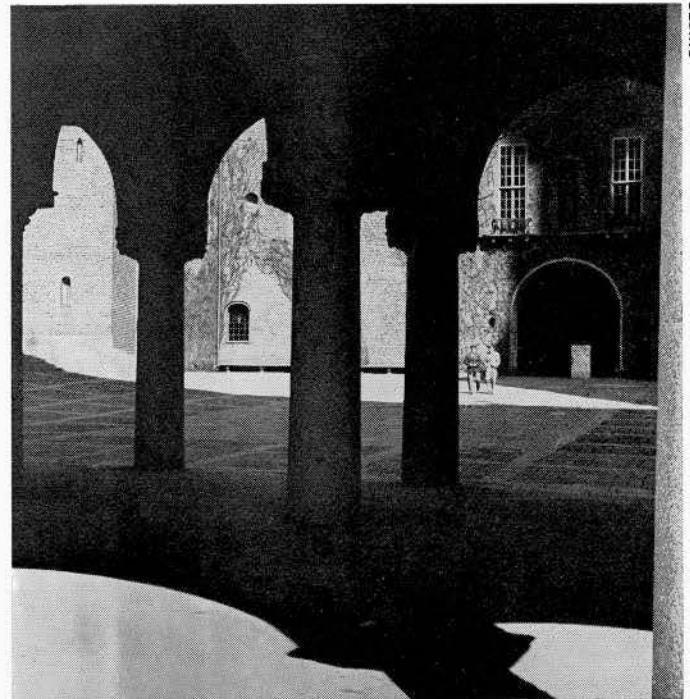
In this connexion, restaurants, book stores and other service buildings on the campus often deserve more consideration than they usually get. They serve as natural centres, and should not be tucked away in out-of-the-way corners of the campus. Public transport terminals, too, should not be overlooked.

A campus offers a fine opportunity to use trees and plants architecturally. The bold use of defined grass areas, large groups of shrubs and smaller trees. Above all, we have the opportunity to use large trees. But with too many large trees,

Top: An architectural landscape. The sharply defined corner of the building, the cobbled and gravelled drive, the trees and lawn, are all essential elements of the design of this precinct space. The spacing and location of the trees are proportioned as carefully as the relation of wall to roof or of wall to wall.

Centre: An internal court sharply sloped for drainage is paved in large squares. Granite paving stones in intersecting rows contain areas of paving brick. Plant material is restricted to ivy on the wall.

Bottom: A prairie winter scene in which the planting has taken on a strong architectural quality. Elm planted in rows and in blocks, well trimmed carragana hedges and spruce provide a carefully organized setting for the building and cut the wind.



the campus may easily become either too monotonous or too monumental.

The landscape treatment around each building may, of course, vary, but not so much that it causes an effect of restlessness. The most important aspect of landscape treatment of each building is the initial siting, and the grading, and the greatest care should be accorded to these matters.

All planting and construction derives, of course, from the various considerations of function. Within this framework, the approach can be positive and creative. It should be recognized that an overall impression of verdure is dependent on a greater, not lesser use of hard surfaces. A special use for tree planting is in redevelopment and expansion in existing campuses. Trees, planted ahead of final construction, help to compose the scene when it is complete. Costly conventional planting may be entirely inappropriate in appearance, serve no useful function, and be very time-consuming to maintain. With new architecture, and new methods of maintenance, a great variety of available plant and construction materials, and also a new sort of student population to serve, we ought to be able to come up with ideas which derive some inspiration from successful experience of the past, but are more the result of imagination and practical thinking applied to present circumstances.

As far as possible, control over the use of the campus grounds should be a natural by-product of good design. However, just as it is sentimental to imagine that a track worn across the grass from one building to another will constitute an adequate or desirable path, it is even worse to believe that every student has a right to walk on the grass at all times. Turf will only carry limited and dispersed traffic, at certain seasons of the year. The rest of the time, it is to be enjoyed for its appearance. Lawns near buildings and in other places where it is important that they look well at all times, should be regulated as automatically as tulip beds.

Quality and style of paving and structural features such as walks and steps and fences, suffered from neglect in the nineteenth century, and have not been given enough attention

since. The admirable and practical use of paving in bold patterns is demonstrated in some of our illustrations. Combinations of flagstones and cobbles, in handsome dimensions, stand up to wear indefinitely, while automatically protecting the lawns from traffic. A predilection for the cheapest, plainest asphalt or concrete for surfacing walks is a lamentable contrast nowadays. We do not need to reproduce methods and styles of past centuries unless they are singularly appropriate. But we do need to use modern paving materials with vigour and imagination, and accept the view that if a basically very economical material, such as asphalt is used, then we should not at the same time use minimum dimensions; also we should spend a little extra on ornamental pattern.

Climate

The best known climate control, shade by a deciduous tree in summer, is usually recognized, but in a haphazard way. In the large controllable area of a campus, there is scope for much greater design for climate modification. A carefully worked out system of windbreak planting looks attractive, and can make a difference to the comfort and pleasantness of the campus. It will also save noticeably on heating costs. Lesser windbreaks and baffles inside the campus area should be studied. Large separated buildings often cause turbulence and gusts of wind, which need to be remedied. It has been said, and I think with reason, that no factor is more inhibiting to intellectual thought than wind.

In a city, or near traffic of any sort, planting to lessen noise and dust should also be undertaken. By proper planting and grading, in relation to the mass of buildings, "sound shadows" can be created. By this means, large areas can be protected from the distraction of traffic noise, although they are at no great distance from the roads.

Circulation, Pedestrian and Wheeled

Reflection on some of the most successful campuses, and others that are indifferent in quality, leads to the conclusion



that the approach to the question of circulation and communication within the campus has many important implications. Also that the unsatisfactory state of affairs that often prevails is not necessarily due entirely to the intrusion of the automobile. Basically, do we regard driveways and pedestrian paths as unfortunate necessities, to be dealt with apologetically, made unobtrusive if possible, considered purely from an engineering standpoint? Or do we think of them as a major contribution to the aesthetic design of the campus, and an actual force, as we have suggested above, in the student's life? The latter view prevailed until the early nineteenth century. Fine, wide walks, well paved, laid in purposeful routes, are characteristic of older campuses on both sides of the Atlantic. Nineteenth century romanticism produced individual buildings of considerable size, often connected by paths little better than trails, and divided from each other rather than joined by major driveways. Add a few cars to this and the result is confusion.

As with most planning, it costs no more in the first place to cope with these considerations imaginatively and effectively than it does to leave them to chance; in the long run it effects great savings in maintenance. As with the buildings themselves, something a little better than the cheapest possible, is appropriate in the landscape construction and for an institution thinking not just of this year and next, but of the long term. It is true economy.

Walks and roads within the campus deserve the most careful planning. Cow-paths crossing grassed areas and intersecting at odd angles, worn edges to turf, *melee* of students and

Cambridge, one of the classic solutions in campus design. Here the walk is amply wide enough for groups of students to pass each other. It is also in scale with the buildings, indeed, it almost seems an integral part of them. The smooth flagstones in the centre of the path take the traffic, the cobble stones being uncomfortable to walk on, protect the grass. Such a treatment in landscape design is as suitable for the open spaces of the Backs, shown left, as for an internal area of Kings College quad shown below.



cars on roads, are as much a sign of inadequacy as leaky roofs or endless queues in the cafeteria.

Automobile traffic naturally does produce special problems, especially in city campuses. An internal peripheral road, with defined parking areas which would be tied in with public transport terminals, might be the basic line of a campus plan. It would also take all heavy deliveries, especially oil trucks. In the large internal areas, wide paved paths would only be used for automobiles of especially privileged people, such as the university president.

A good example of such restricted walks is seen at William and Mary College in Williamsburg, Virginia. Broad, paved walks deserve the name of parades rather than paths, and are most handsome and functional.

New colleges in the outskirts of small towns, should take a look at some older campuses before dismissing the necessity for eliminating car traffic from the campus. Light traffic density may become overwhelming in a few years.

Any roads which must exist inside the campus should, of course, have not only regulation sized side walks, but extra wide ones.

Parking lots, where they must exist, should be screened at least by planting, and the lines of these lots, and of their screening, may easily be very strong, and must be thought of when buildings are being sited, not afterwards. Surely it is time, too, that some genius could invent several sports which would use parking lots as surfaces, during the many hours that the lots are empty, and students have leisure for playing games.

Maintenance

Maintenance is the proper duty of the superintendent's department. Any matters involving design, including choice of trees and plants, and any changes in lay-out, from the shape of a flower bed to the routing of the driveway, may be carried out by that department, but deserve expert advice. No one would expect this department, unaided, to design and carry out major or even minor architectural changes; the same attitude must be extended to landscape matters if successful results are to be expected.

Many older campuses are operating on schemes that never were very good in the first place, but earlier in the century at least achieved respectability because a force of skilled gardeners was at hand to maintain them. These now look decrepit, for no changes have been made to permit maintenance by a few skilled men, with modern machinery. The nature of the available labour, and the sort of machinery that can be employed, must constantly be kept in mind for new campuses, and renovations in existing ones. Snow removal, sweeping, and other housekeeping out-of-doors should also be considered carefully.

Good maintenance, an interesting and suitable choice of trees and plants, can by themselves do much to make a pleasant campus, even where other design features are not exceptional. The converse is not true. No amount of good design will compensate for inadequate and unskilled maintenance. Plans should always include a realistic appraisal of maintenance costs. While every attempt should be made to keep down these costs, there is an irreducible minimum, substantially above the level evidently recognized by some academic institutions close to home. A properly qualified man, with the training and status of a parks superintendent, should be in charge of the grounds. Professional advice and a policy-making standing committee of the university, should constantly, not in spasmodic crises, direct the development of the campus grounds.

As our universities increase in number and in size, and become more and more important in our national life, planners, architects and landscape architects face a fascinating challenge in the design of the campus. We can increase the intellectual stimulus of students and faculty members, give pleasure to the townsfolk, and bring a tear to the eye of the Rich Old Grad. Perhaps we can even make a real contribution to Survival Through Design.

FRANK LLOYD WRIGHT

1869 — 1959



ANTS ELKEN

THE *Journal* takes this opportunity of showing its appreciation and respect for a great man by a brief appreciation of his work and influence from an architect, a professor of art and archaeology and a student.

THE ARCHITECT

Frank Lloyd Wright lived with the love of an idea, understanding, and the love of beauty. These he considered to be the parts of the whole man. The whole man being the only one capable of creating great architecture.

Within his poetic idiom, it was the idea that man and matter being made one was and is architecture, 'organic architecture'. He amplified Plato's "Know Thyself" concept of understanding into one where understanding grows out of an honest comprehension of all things through manifold inner activities and stated that, "we have to be masters of the thing we call Nature – in ourselves". He considered beauty to be the only joy available to the human species and that it lies in a life lived in truth; to be found in freedom, space and nature.

To view Wright's architectural works with sympathy is to see them as concentrations of space within the continuum of nature.

He conceived man together with matter as a plastic entity, the merger being the creative source of everything real in architecture. His creative struggle took place in matter so as to embody man architecturally, incorporating in the structure, the idea of man as the exception and summation of the world of nature.

Wright insisted upon the plastic continuity of matter differentiated according to the various qualities of the materials used. Within this understanding of the nature of materials he created spaces internal and external, which incorporated not only the use of matter as a building material but also light, air, earth and trees. These spaces are orchestrations of matter, all permeated by the idea of man – the whole man.

In 1901, very early in his career, Wright delivered the much-quoted Hull House Lecture "The Art and Craft of the Machine", in which he spoke on behalf of technology and stated explicitly the place of the machine in an ever growing mechanistic society. The framing of that declaration to a society which was to rush headlong, at the command of mechanization, freed him from any reference to mechanistic symbolism, then, or in the future, and placed the machine and its methods at his hand as the most helpful tool yet devised, to bring into reality his idea. Every technique was bent to his will and was sublimated in the final result. The whole was always greater than the sum of the parts.

His imagination thus free explored spaces created by the use of a myriad of geometric forms. Matter came to life in circular, spiral, hexagonal or square forms with absolute logic. These forms were reintroduced into architecture in what are perhaps the most extraordinary and definitive works of Wright's genius.

In most cases the fascination which the work of Wright's genius has exerted upon us is through a disturbing realization that no "a priori" programming of conditions was ever needed before the concrete synthesis of creation took place. He seemed to have all reality at hand and appropriate space would come into existence by way of his understanding.

"The time is here for architecture to recognize its own nature – it must again become the most human of all the expressions of human nature – if we ourselves are to live with individuality and beauty."

J. W. Strutt, Ottawa

THE PROFESSOR

The architecture of Frank Lloyd Wright has always been cause for controversy, even though in late years he has enjoyed a greater degree of general acceptance than ever before. This does not mean, however, that at the time of his death there was any real concurrence among architects and critics as to the intrinsic value of some of the seemingly more radical designs of his last years. Indeed much of the criticism has been harsher than that vented against Wright for some time.

The project for the Arizona State Capitol in 1957 was met with caustic comments that the master had finally lost his touch in his old age, or was simply pulling the leg of the public. The designs for the Grand Opera and Civic Auditorium at Baghdad, published the following year, were received with polite reserve or dismissed as being more fantastic than the *Arabian Nights*, which quite admittedly had been a factor in their inspiration. Neither of these plans have been executed.

An earlier and equally controversial building, unlike those already mentioned in that it is being built, has certain stylistic and structural affinities with the project for the Arizona State Capitol. This is the Beth Sholem Synagogue now nearing completion on the outskirts of Philadelphia. Although designed in 1954, the germ for the idea can be traced back to Wright's project of 1922 for the Tahoe Summer Colony at Lake Tahoe, California.

In the synagogue Wright, for the first time, used plastics as a material of primary importance. Combined with concrete,

copper, and steel, the plastic shell formed a monumental and translucent tent (or mountain since Wright likened it to Mt Sinai) which enveloped the congregation and other rooms within its enclosure. This extensive use of plastics and the concept of a translucent cover for freely arranged spaces within, was a basic premise also of the State Capitol design.

Therefore we may come to two conclusions, first of all that there is to be found in Wright's latest work a continuity with his own past and, secondly, that the major new material of the twentieth century – plastics – was being used (perhaps beyond its present technological limits) as an element of structure. Neither of these factors, then, need be the cause of any feeling that Wright may have veered from, for him, a normal course of development.

Another objection raised against these late works has been that the designs lack clarity and tend to 'fall apart' due to excessive intricacy and multiplication of detail. A closer look will inevitably reveal that, in spite of a certain richness of treatment, there is an overall unity. Massing is simple and well ordered without too many individual fragments, while in reality the details seem even more complex than they actually are, due to Wright's style of rendering. A comparison between the finished synagogue and original drawings will bear this out. It would appear, therefore, that our judgement has been swayed, unfortunately, to assess the whole by our interpretation of the parts.

If one condemns these designs for excessive richness, may this not be primarily a subjective interpretation? After all, we still think of modern architecture in terms of the international style, especially the Miesian variety. If this becomes a test of 'correctness', then one can readily understand why Wright's most recent work has been difficult to accept. But should this be our standard of values?

Curved and plastic forms have become more prevalent, in fact almost common, during the past six or eight years. Both colour and decoration are once again finding expression in architecture. When we think of the chapel at Ronchamp, the TWA terminal at Idlewild Airport, or the Toronto City Hall design we realize that architecture is moving, or has moved, into a baroque phase. In the work of Frank Lloyd Wright this tendency began much earlier. The Guggenheim Museum was actually designed in 1943, the Johnson Wax Administration Building in 1936, and the prototype for the Price Tower in 1929. Wright has always been ahead of his age. Would it not

be wise for us then to ponder more seriously the question of what Wright has had to tell us these last few years?

Perhaps it is for the next generation to realize that Frank Lloyd Wright was actually projecting into the future. The new plastics with which he was so interested seem hardly ready for the forms Wright envisioned for them, and in like manner those of us who conceive of these designs only in traditional materials must necessarily fail to comprehend their form. Likewise the intricacy and richness of the designs may simply be an unrecognized sign of what the future holds in store.

Throughout history it has been typical for men of genius to project themselves into the future and thereby to forecast what will come to pass. And for those who do not believe in prophets, they may well recall that our present debt to Frank Lloyd Wright is one established in decades past, when he was often repudiated even among his own profession.

H. Allen Brooks, Jr.

THE STUDENT

In the countless attempts to find some definitive statement on the life of Frank Lloyd Wright, we hear such phrases as "American architecture's one authentic giant", or "the architect of the century" or even "the greatest living genius" and again "history's most creative architect". There is no doubt that these words show their author's appreciation, and some are to their author's credit. But "missionary", "iconoclast", "genius", these do not leave us with an understanding of the man. They leave us only with a distant reverence or a silent incredulity. We feel that he must have been somewhat unreal and perhaps superhuman, but at least so far beyond us that we cannot reach him. We tend to assume that his truth was but a private mission, his work a personal style; he walked alone with his greatness, in a place beyond our understanding. We regard him with awesome curiosity, as a myth, a legendary character, to be committed to a reverential and calculated oblivion.

It would only be our ignorant misfortune but to him a personal tragedy, if we regard him so, whose life was given to the service of humanity, to beauty, to our enlightenment and the ennoblement of the human spirit.

It was reverence for the legend of Frank Lloyd Wright that took me up to the Studio at Taliesin, it was faith in the impossible that asked for an interview with the master, white-faced fear that said yes I had seen the roses on the walk coming in, and straight adrenalin that heard him say, "Well, young man, you are welcome here, come down to the desert and pitch a tent with us". That was the last time I saw "the world's most creative genius", and with a much greater respect, the first time I saw Mr Wright.

Taliesin was at once the greatest freedom and the strictest discipline. There were the weeks of getting up to make the Fellowship's breakfast hours before dawn and not being finished with the kitchen until the lights were all out. There were the weeks of pick and shovel, sun and desert hardpan until one was too tired for supper. There were the tasks of absolute solitude on a quiet Wisconsin hillside, and the panic of the job that had to be done yesterday. One felt the supreme importance of working in the draughting room, and the complete futility in seeing no possible significance for the task one

was doing. But at any time, if one felt there was no use going on, and what does it do for you to collect the garbage all day, it was enough to know that one was serving Mr Wright.

It was Sunday breakfast that ended one week and started the next. Mr Wright's Sunday morning talks were perhaps the only element of formal education at Taliesin. They assembled, once a week, the sixty apprentices of the Taliesin Fellowship and were conducted in a cobalt blue suit, flaming white hair, the gesticulations of hands, spoons, glasses, crusts of bread and a lively enthusiasm for what he had repeated and rephrased for just such groups of sleepy Sunday morning risers for as many years.

The Taliesin Fellowship was to us a complex and incomprehensible structure. It was, on the one hand, Mr Wright's home, his workshop and the atelier of his apprentices, and yet its organization was for the apprentice, his complete life. To say it was complete, is to say it had no inadequacy, is to say nothing. To say it was complete, is to say it was the embodiment of one central idea in complete consistency and without contradiction; is to say more than words can describe. This central idea, on one level of comprehension, was the life and being of Frank Lloyd Wright, and on a higher level it is the development of the complete man — for only this is the creative architect.

This then is Taliesin. To those of us who were born, who stumbled or were driven to Taliesin, a promise, an opportunity, based upon the understanding and love of man, a surety for those with faith and a determination equal to the goal, and a goal, for each one of us, his own. And it is only with this faith that one can know Mr Wright, who surely had this quality. He believed resolutely in us, in Taliesin, in democracy and in human nature, and he required the same of us.

When I had finished a task for Mr Wright, he said to me, "Inigo, you have learned the abnegation of your self to the service of another. And that is the only way that one can grow. You believe that, don't you?"

This is what he gives us, in his work and in the example of his life, the ennoblement of the human spirit, in the science of man. We can have no higher aim, nor any more difficult task.

Inigo Adamson

WELLS COATES 1895-1958

An address to the 1957 graduation banquet,
School of Architecture, University of
British Columbia.

*You young men are about to unfurl your sails and make a passage
Across seas unknown to you, and no doubt you may find your courses
Set for some time to windward,
It may well be a little while before you reach the waters
Where the trade winds blow – blow more easily, surely, downwind,
To the snug harbour of your intentions.
And so, this evening, it may be permitted of an old sailor,
To yarn with you for a short while, and to give you some account
Of experiences before the mast, in the days when the architecture of our times
Was in being but not yet manifest in all its full intentions
In the days when we stood before the mast without sextants
Or many of the contemporary benefits of navigation.*

*But before I embark upon my yarn,
I must claim at once an undoubted, a singular, advantage over you
I have never been to a School of Architecture
Indeed, I have never been to a school at all
For I was born in the Far East, in Japan, where no such facilities existed,
And my own course was directed by private teachers
A French governess, a Japanese painting master who taught drawing with a brush,
A Japanese architect-builder, who taught the skills of shaping materials
Into elements of structure, and the arts of regulation of dimensions
Pleasing to the eye and to the mind – and – well, among others.
A German violin teacher, whose dimensional generosities
Might well have been today the envy of a Lolobrigida or a Marilyn Monroe . . .
But above all – my future course was marked out for me
By an English tutor (from whom I derive my accent)
Whose name was George Edward Luckmana Gauntlett, the most versatile person I have ever known
He spoke nine languages – and he played four musical instruments –
He wrote three systems of shorthand – he was a painter, a superb draftsman, an expert in illuminated manuscripts,
He was an explorer, an artist and above all, a great teacher. . .
He it was who kept instilling into me the notion of the importance
Of Learning first the ways of the world and of men
Of living with them in all circumstances and places
Before making the final decision as to what to do with one's life –
And he claimed this should not be before the age of thirty.*

*But it was not only my tutor who gave me navigational instructions.
When I was about to leave Japan, and work my passage westwards,
Through the lands of the Far East and of Asia, Africa,
To Europe and the countries of my race and culture . . .
And so finally to the New World, the countries of my family . . .
There was my mother – who was the first woman, I suppose, to train and practise as an architect –
She had studied under Louis Sullivan in Chicago, at the same time as Frank Lloyd Wright –
Who said to me: "If you still think of becoming an architect, a designer, a planner,
Let me give you one piece of advice – do not stay at an architectural school
Longer than you can bear it – but study the modern sciences of structure and of materials . . ."*

There is still yet another whom I must mention and whose words made an impression on my memory, when I was about twelve

*I was sailing with my Chinese skipper, being instructed in the arts of helmsmanship—
In an old junk with the full-battened chine lugsail,
Between the bamboo battens were stretched the sail cloths
Some of proper canvas, more often of matting or old flour bags,
And here and there, throughout, a sail cloth was missing,
So that the general face of the sails was pockmarked
With broad openings for the wind to go through . . .
And I said "Skipper, too many holes in your sail—wind get through".
After a period of ten minutes or more of silence, as is the custom of the Chinese
To pause for reflection before responding—the skipper said: "Little mistah—
Plenty wind go through—plenty wind stop here!"*

*This was a saying comprising greater meaning and wisdom
Than its subject matter announces. Let me paraphrase it:
"Man desires perfection—Man cannot always achieve it—
Man must however always have a basic framework, a structural system—
Upon which to hang the cloths to take him to windward,
And somehow—for all the vacant gaps in his sails—he will get there, just the same."
And so I passed through the ancient countries, saw the famous buildings and places,
Of the East, of Egypt, of Greece and Italy, and France and England,
And came to the countries of my own people—
And I remember being overwhelmed with the sights I saw,
The clutter and the lack of order, the lack of seamliness,
The absence of recognizable meaning, visual meaning,
In the background, the surrounds, the street furniture, all elements
of the daily drama and routine of life in cities—and
I remember writing it down at the time:
"The man whose eyes are born in the East
Will only rarely wish to open them in the West."
And I entered into a series of passages without suitable direction,
Not believing it possible that the people of my own race and time
Could be so savage, so barbarous, as all that.
By the time I had entered University here in Vancouver
The conflicts of Western man had flared into open warfare
And I felt drawn to the scene of operations
And so first in the Canadian artillery
I followed the guns to Vimy and Paschendaele, and from the mud and blood and shellfire,
Escaped to flying alone over the Italian Alps, in a single seat fighter . . .
And so finally I came back to the UBC—and the BA and the BA Sc
Gained in the huts at Fairview—probably the very same ones you now inhabit at Point Grey—*

I see I have no advantage over you in that.

*But the call of the older countries was strong in me and once more
I made my passage back to Europe, came to London and to the University there,
For the PhD in Engineering, for the plays and ballets and exhibitions
Came back to the vigour and intensities of life during the roaring twenties—
a name given to a period largely sponsored by a few creative persons,
Men struggling towards the setting up of a pattern of life and of behaviour
away from the blood and shells and the destruction of the war—
Men struggling for the rescue of their own souls, snatching at every cue provided for their liberation—
Men preparing themselves for the battles yet to come, for the establishment of the modern movement in all the arts.*

*We kept to close circles, invented the most outrageous themes for parties—
It was the age of the Black Bottom and the Charleston—of Night and Day—
And so it is not unlikely that one found oneself in Paris, working for a newspaper for money,
Finding at the Cafe du Dome in Montparnasse,
Men and women working out their courses, trying to find a way towards the re-shaping of the modern world . . .
the brave new world it was, indeed, in those days . . .*

And one met people, and when I say people, I mean people —
 Met Le Corbusier, in whose atelier in the Rue de Sevres
 Working on the Plan Voisin for Paris, for the Pavillon Esprit Nouveau, for the Exposition des Arts Decoratifs,
 1925 — working
 In that place, within the narrow confines of the cloister-like sombre studio —
 With its endless dreary approaches from the cabine of the concierge, one found kindred spirits, and with them,
 drank our bocks and fin champagne,
 Prepared designs for not merely buildings but whole groupings with full size drawings chalked upon the
 high black walls, testing the new forms and structures, to make up the plan for the reconstruction of the city . . .
 Listening for hours to the brave new words of the Master, to Le Corbusier, endlessly calling up and revising
 his eventail des themes — his fan of themes,
 Themes for the new world that simply must be constructed over the bones of the unborn world,
 themes of scales unimaginable, delineated in the inimitable sketches of the master, Le Corbusier, the poet,
 the architects' architect: . . . air, son, lumiere — la verdure, le ciel, la mer.
 Met Gertrude Stein and from her learned that the 'way to say it, is to say it' and at her salon, one found
 Brancusi, master sculptor and great teacher, great friend to all young men — Picasso, inventor par excellence
 of our times, prophet and delineator of every kind of form, line, concept, sometimes even the serious Braque,
 and Matisse, so unlike his luscious and colourful paintings, Sandy Calder, beginning to reach his way
 towards the invention of the mobile — and, well, Ernest Hemingway — feeling his way towards
 the girls and the bulls.

And — on a short leave of absence to London — coming up to a party at the house of H. G. Wells, inimitable
 charmer, best of all conversationalists — H. G., as everybody called him, in his high squeaky voice saying:
 "I see, my dear Wells, your eye is roving — to whom may I introduce you?"
 To which I replied, "I would like to meet the lady dancing with the Chinese ambassador . . ." and within
 two minutes of arriving, was dancing with my future wife — the lady who was there for the launching
 of a thousand ships.

These were the days before active creation — the days of the creative spirit in the toils of birth — the sense of being
 in a world not yet manifest, but in being, not yet in being, but yet to be . . . a world with so much content,
 import, significance, that one was overwhelmed,
 Carried away into the waist of the ship by the high seas over the bows, and so, once more one set out
 upon a passage back to the New World,
 To New York to explore for a bitter three weeks in the office of McKim Mead & White the descendant principles
 of the Academie des Beaux Arts and the Pas Perdue —
 The places where you lose your feet — in the company of I know not how many scores of others — drawing
 endless lines for window details for still-born buildings . . . and so back to Vancouver, where there still
 remained as if in a forgetful oasis, the basic ideas and forms of the frontiersmen still exploring in 1926,
 the middle necessities of wood and brick and stone, for buildings designed for a complex of social themes
 wholly divergent from the talk at the Cafe du Dome, and the rarities of Bloomsbury, and the realities
 and vigour the twenties were yet to provide, on the other side . . .

And so yet another passage — back down the West Coast through the Canal to Cuba, to Liverpool and London —
 and, hardly a poise before one took up still another passage — the long single-handed passage to windward,
 working for oneself, setting up the brass plate at 32 Doughty Street, once the abode of Dickens —
 with ten pounds in cash, and without the hat, lost long ago riding in the Paradise Valley, near Lake Louise . . .
 Taking up the first commission, to design a desk and chair for Virginia Woolf, in whose Sussex farmhouse
 cottage the plans were finally made for the whole writing room, the room with a view, overlooking
 the South Downs, and Virginia saying: "I want in my room nothing more than it will give me by its location . . .
 nothing more than it needs for writing . . . it must be fresh, it must be free."

One had learned something of the great traditions of the past, in both the Eastern and Western hemispheres —
 one had been enthused by a vision of the possible future — one had realised that there had been, after all,
 nothing much wrong with one's first impressions, coming from the Far East to see the monstrous banality of a
 contemporary commercial city . . . But one was plunged into the necessities of the present, entering the
 world to live precariously — to do the first things which came to hand, and finding in the minds
 of people the obstructions, the barrages, and the barricades of ancestor-worship in design, writing it down:
 "The Past is all behind us: the Future all before us — so we say — But, more often than not,
 the Past is out in front — blocking the way to a foreseeable, attainable, Future . . .
 The Past is still in the minds of people . . ."

Shall we say — the intimacies of the homes and so of the lives of our fathers was a museum-type intimacy,
 and that one of the chief occupations of our mothers was that of curator and guide.

*How barbaric their habit of overloading was!
 How rarely they were aware that a room exists for the man, and not man for the room,
 that he and not the bric-a-brac is to be given the best possible setting!
 Let me quote you from the sale catalogue of one of these personal museums I had the privilege of slum-clearing
 in those days. The objects which were placed, arranged, or merely included in the Entrance Hall
 had been untouched for a generation, except by the daily dusters of a dozen maids—were described
 in the solemn poetry of the auctioneer's catalogue as:
 "A large oval mirror in carved and gilt foliated frame,
 and a pair of hat rails with 8 surplus hooks,
 a pair of Koodoo horns with skull and shield
 and a pair of Moorish chairs inlaid with ivory and a small pair of horns and a skull . . ."
 And the contents of the Waiting Hall included:
 "A photogravure after Maude Goodman; a pair of Italian majolica brackets with figures;
 two Worcester pattern jardinières with aspidistras;
 a statuary marble figure of Venus di Milo, by E. Fersarini, Roma, 36 inches high . . .
 a 42-inch antique marble spiral column on octagonal base, forming support for the previous lot;
 and a set of ten Swiss cow bells on chain, forming dinner gong . . ."*

* * *

Although we knew that this kind of museum-scene had in fact moved out into the streets and, indeed, gone out into the countryside, although we knew this well enough — we could do, in those days, little about it — concepts for city planning and its expression in urban design, were still in an embryonic stage, and we were well enough occupied in the business of designing everything for our buildings: radiators, light fixtures, door handles—for you could buy nothing in the shops to suit—we invented the rules and procedures for fixings and fittings of elements of structure and of finish, had to train the carpenters and builders in new techniques constantly, and designed for clients who had the taste for freedom and newness, but not always the cash to pay for what they wanted . . . And these were, gradually, too, the days of the depression . . . which finally exploded once more into the Second World War.

So we sought refuge in the people of our own kind, in the close companies of artists in all fields; well bathed in the visual invigorations of the Diaghilief Ballet — half a dozen new pieces invented each season; scenes, decor and costumes by painters of the *avant garde* — and the new films from Germany and Russia; Eisenstein, Emil Jannings, Marlene Dietrich, *Caligari*, *Warning Shadows*, the birth of the documentary, Man Ray and Cavalcanti, John Grierson . . . met Wyndham Lewis, strange and brilliant painter, writer, recluse and revolutionary, saying:

"The arrangement seems to be that you spend half your time destroying the cheap, the foolish, the repellent: and the other half enjoying what is left, after your efforts. This evidently being how we are intended to live, there is no excuse for slackness in the carrying out of your unpleasant duty; that is, to desire equity, mansuetude, in human relations; fight against violence; and work for formal beauty, significance, and so forth, in the arrangement and aspect of life . . ." and D. H. Lawrence saying "Don't listen to what people say — that is not important — but watch how they say it; you will learn so much more . . ." —studied under Bertrand Russell in the intricacies of mathematical logic, to be able to read Wittgenstein, his pupil, in *Tractatus — Logico — Philosophicus* with its famous definition of a point in space — so useful to know, if you are a navigator — a Point — long argued, since Liebnitz, from which, once defined, one might derive the Universe itself . . . and which Wittgenstein, in a final aside, throwing away his mathematics, defined simply as "A point in space, is a place, for an argument . . ."

And for escape and refuge, we dashed across the continent in fast vintage motor cars — Hispano-Suizas, Bentleys, Sunbeams, Alfa-Romeos and Lancia Lambdas — dashed to Germany to stay with Gropius, philosopher, sage and great teacher — of whom more later — through France and Spain to the beaches of the Mediterranean — but above all, the period of the roaring twenties is known for its famous parties — and during its final phase in 1929, I remember one evening early in May in the studio of Cedric Morris, picking up a paper and reading that on the 29th of that month, the Seventh Day Adventists would be proceeding seven hundred strong down to the beaches at Weymouth, dressed in white sheets to meet the end of the world they prophesied. At once — cards were designed with thick black edges, and in gothic type "You Are Invited to a Party—to Celebrate the End of the World" Positively Judgement Day Dress Only, R.S.V.P., B.D.O.B. (bring your own bottle) and finally, in a party to end all parties, the last weekend in July, 1929 — at the country house of Dick Wyndham, designed by Etchells, translator of Le Corbusier's

first books: for three days from Friday through Saturday, Sunday to Monday, directed by the familiar yellow Automobile Club signs, from the Vauxhall Bridge for 60 miles through to Uckbridge, Sussex, at every relevant corner: signs, simply saying "To the Party" – Daimler hire cars for those who had none – the bathtubs filled with ice and champagne – a nude water ballet in the millpond.

So! by the beginning of 1930 the period was over, the single-handed passages completed – and the company of friends – not more than 150 in all – who had fought their way through to some form of liberation, got down to work – there were no more parties. These were the years of manifestos, of special groupings, of preparation for the battles to come. Gropius, Le Corbusier and Giedion appointed me delegate to C.I.A.M. (the *Congres Internationaux d'architecture moderne*) – delegate from the United Kingdom, and so the Modern Architectural Research Group – the MARS Group – was formed – in London – first of two or three persons, then of six and eight, and with willing student volunteers assisting we prepared the Map of the County of London, according to the indications for the Fourth Congress, at Athens, in August, 1933 – the most famous, the most exciting, perhaps the most important of all CIAM Congresses.

The delegates and their wives or girl friends assembled at Marseilles to board the *Patris II* – chartered for the two and a half day voyage to Piraeus – 365 strong: for the first time, young architects from twenty-one countries met their opposite numbers, all of us had been fighting lone battles without contact – and without, above all, any common strategy. Five days of meetings in Athens – an Exhibition of the Maps of sixteen major capital cities, all to the same scale, and marked with the same indications: Places for work, Places for Habitation, Places for the Cultivation of the Mind and Body, all linked by a system of Communications. Eight days of holidays (spent mostly on the Acropolis by day, and on the moonlit beach at Glifada, by night) then four more days of meetings and so finally aboard the *Patris II* once more bound for Marseilles. During those last hectic two and a half days, I can remember Giedion, General Secretary, in a confusion of tongues, speaking incomprehensibly, waving his arms and trying in vain to organize – something – while after in the quiet smoking room, late into the night, a small group of us – Le Corbusier, Sert, Alfred Roth, sometimes Alvar Aalto (when he was sober) with Morton Shand as interpreter and myself at my typewriter – pounding out the reports which were to become the *Charte d'Athene* – the town-planning Bible of C.I.A.M. Aalto – great designer – almost the only one there to have completed a building which everybody accepted and admired – giving his famous lecture on the design of hospitals, in a mixture of German, French and some English: "Problem of hospitalsh – man comes into hospitalsh in horizontalsh position – and mostly man leaves hospital also in horizontalsh position – architect's problem of hospital – is make man leave hospitalsh in vertical position . . ." drawing all the while . . . and so to Paris to complete the draft Charter, and in a fast Bugatti to Poissy, to the Villa de Mme Savoie – she being away, we were conducted around by the concierge. Standing in the large living room, with its double ramps leading away down to the entrance and garage . . . the small circular service staircase – no more than 2'6" in diameter making a dangerous hole in the middle of the room: one asked the concierge about the ramps: do people like them, do they use them? – "Mais, monsieur," was the reply, "on prends toujours l'escalier de service!" But on another occasion, Madame told me that her paintings were along the walls of the ramps, and people used them at parties. Sad to relate, the Villa de Poissy, partly destroyed by the Germans in 1940, is now a stable and hay-loft, and the long ramps make a fine run for the chickens.

It is time to sum up, and to finish this yarn, which might well be endless as is the manner of old sailors – but how to sum up the feeling of the twenties and thirties, except by describing some only, of the varied passages, and the still more varied crews?

Firstly, then – the importance of human contacts with all manner of people: as my tutor had prescribed. And the people? My mother had said study engineering – but once having done so, having learned the basic machinery and procedure, one's contacts were rarely with engineers – but with artists in all other fields, as one has shown, and with writers and thinkers, with serious and gay people – I have forgotten to mention Marcel Boulestin, who taught us the arts of the *haute cuisine francaise*: I remember him saying once to a duchess who pleaded to know how to do an omelette francaise, drawing himself up to his full Napoleonic stance: "Madame la Duchesse, mois, Marcel Boulestin, Grand Maitre chef de la haute cuisine francaise, have for 37 years been trying to learn to make une omelette francaise – when I have discovered the secret I shall be glad to teach you, free of charge – good afternoon!"

And more often than not, in this company of the twenties, one found one was the only architect amongst them. But I have said it was also a period of groupings and of manifestos, one night dining at the Cafe Royal, with Paul Nash, Henry Moore and Edward Wadsworth, the four of us formed unit one, an association of painters, sculptors and architects, to create an exhibition and a book together – and then there was, of course, our MARS Group, with its first exhibition of contemporary design in 1936, opened by Le Corbusier and followed by a wild evening, during which we took him in a hansom cab to Bedford Square and gate-

crashed the white tie annual party at the Architectural Association School—a female journalist came up to us, and asked him “What does M. le Corbusier think of English women?” and Corb replying: “Oh, je m’en fou des questions comme ça . . . Tell her that women all over the world arouse me . . .” (if that is the correct translation . . .)

And later—the MARS Plan for London—which in some respects has become the basis for the present County of London Plan . . . This was all Group work—vountary work—for the good of all, and for the promotion of contemporary notions, practices, and concepts.

It was a movement born and supported by persons and personalities . . . which brings me to my Second point of summation: the masters:

Walter Gropius—greater teacher, and true sage of modern architecture, his quiet old-German sincerity shining above all and running through every one of his statements—the great man of the sage type—whose influence, not so much in design—for he has designed comparatively few buildings—but on *thought*, on principles, will some day be seen and revealed in its true perspective. When finally chased out of Germany, I met him at the station and took him to live in my own building in Hampstead. Years later, on the eve of the CIAM Congress at Bridgewater in 1947 we spent the day motoring through the lovely English countryside in the Lancia—and on hill overlooking the Plain of Avebury, lurching over chicken sandwiches and a bottle of wine, he told me of his first trip back to his native country, which he had just completed, the pain and the terror of seeing his Germany torn and mutilated, physically, mentally, spiritually—and only three years ago, a week after he had arrived in Japan, he wrote to me quite simply: “Why didn’t you force us to stop everything, and go to this country long ago? The old Japanese house is the most modern in conception I know of . . . a real revelation to me.” There speaks the simple humility of a great mind. And *Frank Lloyd Wright*, the romantic Welshman—poet, prophet, preacher and high priest living single minded in his own world, divorced from the universe—actor in the grand manner, dressed stylishly in 1936 in an Italian cavalry officer’s cape with white silk lining, with a silver-topped ebony stick tapping the columns in the main hall of Barry’s Reform Club in London, where I was giving him dinner . . . and saying: “Renaissance—false, false, all false . . .” (Le Corbusier had said, three weeks before: “Quel ordonnance—magnifique . . .”) But in Taliesin, F.L.W., in his own surroundings, in the organic country, a brisk and stimulating mind, a great inventor . . .

And *Mies van der Rohe*—purist and perfectionist—at a party in Chicago . . . Konrad Wachsmann, architect of the science of joints and jointing . . . saying: “Do you know, Mies, that Giedion has recently mentioned my work in an article: “My dear Konrad, I, am in Space Time.”

And so to *Le Corbusier*, architects’ architect, full of cheer and of humanity, proud of the description in his passport, which still reads “artiste peintre”—saying, as he enters my fast, open, Lancia Lambda: “Fasten belts—no smoking!” And at the presentation in 1953 of the Royal Gold Medal of the RIBA, when I had the honour of introducing him, saying amongst other things that he was the inventor, the designer through whose following by a generation of architects, had influenced the lives of ten thousand more clients than he could ever have had . . . And Corb making the finest of the speeches I have ever heard: recounting with humour, without bitterness, not one, not two, but twenty-seven cases where he had failed to build the building he had designed . . . and ending with a description of himself as “le cheval de fiacre”, the old cab-horse, of architecture. And later that year, on the toit terrasse at the Unite d’Habitation at a party to close the CIAM Congress IX a Aix-en-Provence, listening to the musique concrete he had imported from Paris, the sounds through weird loud speakers ringing amongst the concrete forms and shapes on the roof—one saw during forty minutes of converse, the final satisfaction of the artist: his monument, his Parthenon, completed at last—la lune, les montagnes—la verdure—la mer—la musique.

And so, finally—what did we set out to do—what did we accomplish—where did we fail? I believe that we set out, to set up a program, a strategy and a method, and that we accomplished just that: we plotted the main courses for navigation, for an architecture for our times.

It was a long and continuous struggle against all manner of odds—the depression, the restrictions and obstructions in the minds of people and of governments—the compromises, the deficiencies we had to accept, and so very often our main intentions were never realised—there were too often great gaps in our sails, and the cold winds blew through them, but somehow, we reached a harbour, a recognizable place . . .

We had, perforce, to concentrate upon single buildings, placed here and there upon nodal points of the maps of cities . . . single portraits or even sketches, in the surrounding rogues’ gallery of streets and squares, lined with romantic dramatic sets for out-worn architectures—pretences to beauty at second-hand—cardboard sets for mere buildings—nowhere, a one-man show covering a recognisable, defined area.

Of the masters I have mentioned, only Le Corbusier, consistently, patiently, from the very beginning, in those brave new world days of the Plan Voisin and the Ville Radieuse – conceptions which today are rejected even by him – only he had a clear vision of the total sphere of architecture – of urbanisme, as he called it, or urban design, as we say today.

And during those days, the techniques and methods, the forms and spacial concepts, had been already set down, and have since been worked out by many thousands of architects into the textbooks, the precedents, for designs in all spheres of purposes and functions for buildings – they are in the libraries, the schools and museums of the world today.

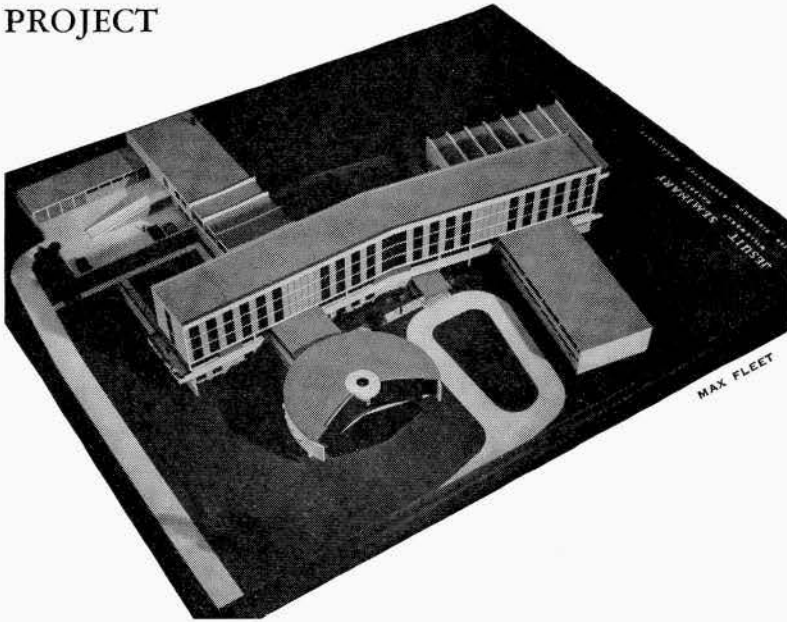
Many say that the battle for contemporary achitecture has already been won, and they rest upon their singular laurels for individual buildings – I say that the battle is still very much on – indeed, perhaps it has only started – for the realities of an architecture for urban living. If, by the 1960s, as it is said, seven out of every ten people in Canada will be residing in urban communities – must we not apprehend the totality of the urban scene – as architects of the human and material scenes of the contemporary environment for living and working – are we satisfied, puffed out, with the success of single entities, or of small groups of buildings in a townscape whose basic pattern still derives from the outworn diagrams of our grandfathers' days? When we view the visual scene of our environment in cities, are we as architects satisfied that barely 5% of all buildings are designed by us – are these eyes in our philosophies?

It will be up to you, members of the graduating class of 1957 – and to those who will come after you – to apprehend the total nature of the architectural problem of our days – the next stages of accomplishment will largely be in your own hands . . .

It will be for you to preserve your eyes and open them to the realities of the contemporary scene – equipped, as you may have to be on occasion with blinkers and masks – to accomplish your specific tasks in the visible world of nature around you, that visible world, which as Santayana has said:

“The visible world offers itself to our regard
With a certain lazy indifference . . .
Peruse me, it seems to say . . .
If you come to me – I am here –
And even if you pass me by NOW – and later find it to your advantage to re-survey me . . .
I may still be here . . .”

PROJECT



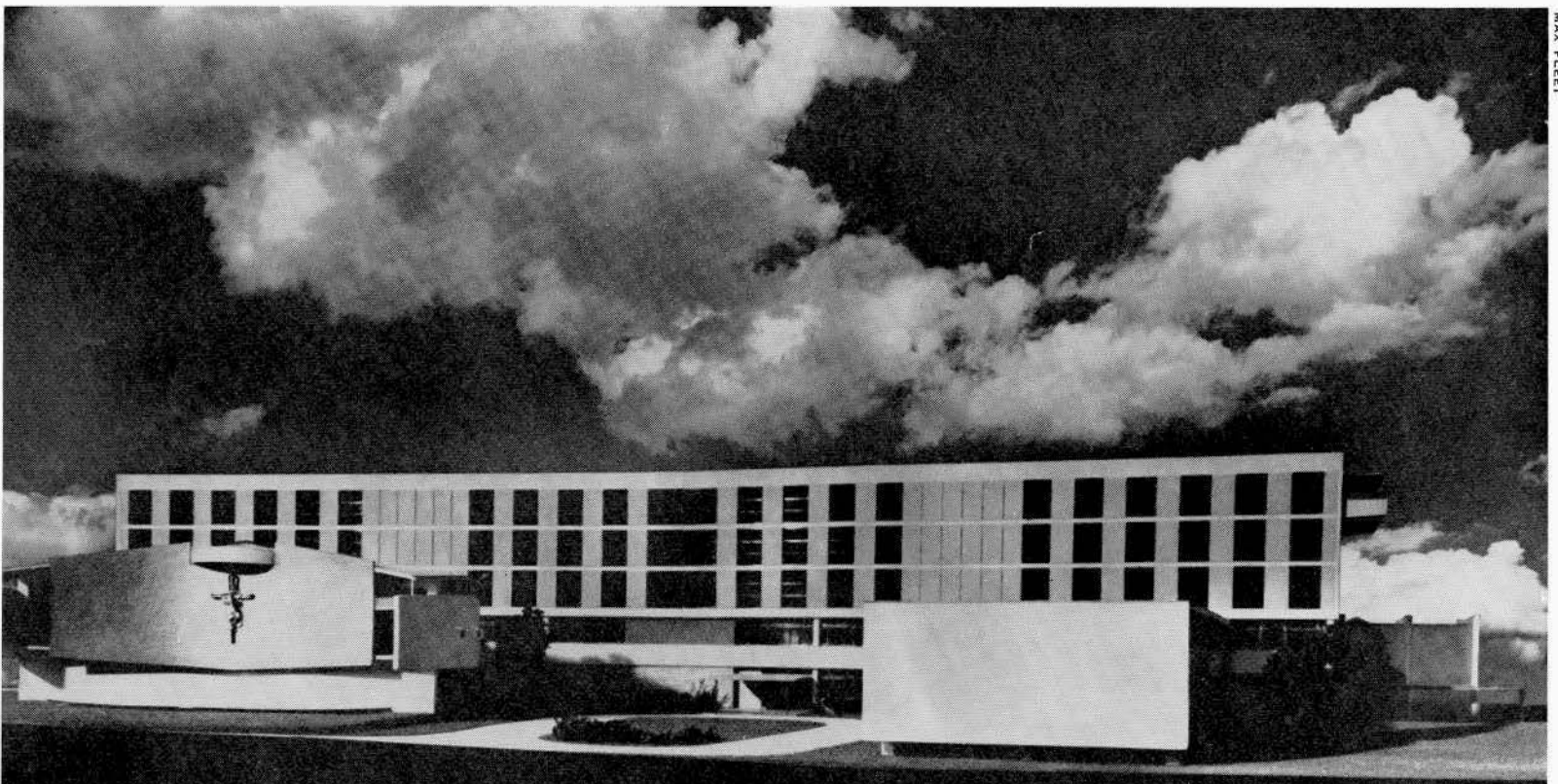
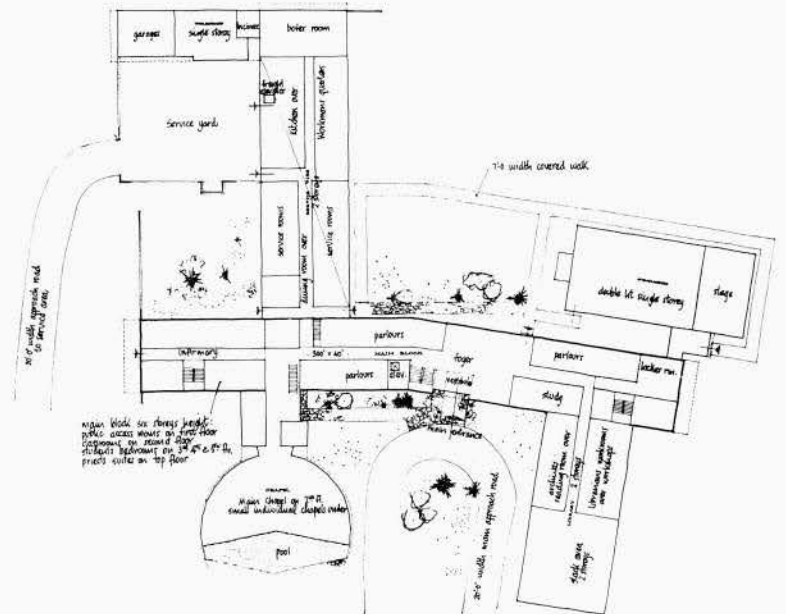
The new Seminary for the Jesuit Fathers of Upper Canada is to be erected just east of Bayview Avenue and south of Steeles Avenue on the banks of the Don River in Willowdale, Ontario. The building is of concrete construction, faced with precast stone panels and natural granite fieldstone.

The 300-foot central residential block is flanked by a dining and kitchen wing to the upper left, a gymnasium to the upper right, a library containing 100,000 volumes to the right of the main entrance and the chapel to the left. The main block also contains classrooms, offices, reading and recreation rooms, and public areas separate from the cloistered areas of the building.

The semi-circular chapel accents the whole scheme and is roofed by a shallow concrete dome crowned by a translucent skydome over the main altar, with a wall of mosaic tile embracing a reflecting pool at ground level.

JESUIT SEMINARY, TORONTO

Architects: Peter Dickinson Associates, Toronto



FROM THE EXECUTIVE DIRECTOR'S DESK

At the point of writing these words, the 1959 Assembly at Windsor is only ten days old. It was my first Assembly as Executive Director, and I enjoyed the hectic whirl. One of my first conclusions on Sunday morning, May 31st, was that detailed planning for an Assembly starts no later than a full year before the event. So — the Institute office in Ottawa and a keenly enthusiastic committee in Winnipeg has already met to set the stage for the 53rd Assembly at the Fort Garry Hotel, Winnipeg, Wednesday to Saturday, June 1-4.

What makes any convention successful? Surely it is not one predominant factor alone. Good planning is essential, of course, but city and hotel location is important and leadership is vital. Weather plays a key role too. All these elements take a hand in giving momentum to the meeting, and preventing it from going flat.

Looking back over recent weeks, I have concluded that the success of the Annual Assembly is brought about by the effective integration of a great mass of apparently unrelated detail, into a co-ordinated well-balanced program.

One is impressed with the need to establish, as early as possible, the closest liaison between Institute headquarters and the Assembly host committee. There is an obvious advantage in good team work when the problem of geography (communication between Ottawa and Winnipeg) is to be overcome . . . as it must in 1960.

There is point, therefore, to the demand that the Institute develop a long-range plan so that convention locations are established five years in advance . . . and host committees are given an opportunity to organize with full flexibility. As a start in this direction, the 1959-60 Council has decided that after Winnipeg in 1960, Assemblies will be held at St. Andrews, New Brunswick in 1961, and British Columbia in 1962.

In examining the purpose of national architectural conventions I have come to the conclusion that a thread of continuity between Annual Assemblies should be sought as an objective. If an Assembly embraces a serious purpose, and architects take up the torch, the flame should be maintained year-round.

This then is the real significance of the 1959 seminar, "The Profession at the Crossroads". An effective seminar must awaken and arouse latent interest for more than half a day, and machinery should exist so that the recommendations and proposals which emanate from the seminar are referred at once to the Executive Committee and implemented, wherever possible.

I have come away from Windsor asking many questions. Did the Saturday seminar accomplish its objective? Should it be continued? What is the best time of the year to have the Assembly — at the end of the academic year, and before the on-set of holidays or, could we not hold our 1962 convention in British Columbia in April? Should an Assembly meet from Sunday to Wednesday inclusive, rather than from Wednesday to Sunday as is now the case? What should the Assembly theme for Winnipeg be?

Is the purpose of a seminar to provoke keen, provocative participation by architects in discussion of current issues, or ought they to invite symposium contributions by experts? Do architects keep too much to themselves, or should we draw on the experience of other people, e.g., contractors, investment brokers, realtors, planners, public officials, sociologists, etc., by inviting them to cross verbal swords with us.

It is interesting that the "Crossroads" seminar has stirred interest to the point that the American Institute of Architects has inquired about the session, the form it took, and the results anticipated.

Curiously, it comes at the same time as a series in the *Architectural Record* — "The Image of the Architect". Because interest is keen, copies of the seminar transcript, when available will be circulated to the national membership.

Any seminar at Winnipeg in 1960 will be staged early in

the Assembly proceedings so that note may be taken by Council and the Executive Committee of any recommendations and proposals advocating specific action by the Institute. In the meantime, consideration is being given to the formation of a permanent resolutions committee.

One of the really noteworthy features of the Windsor, 1959 Assembly was a note of informality which prevailed. Ontario Chapters played hosts to guest associations, thus helping to fashion closer bonds between our members.

The RAIC would like to develop the Annual Assembly to the point where it becomes a really important event in any architect's yearly calendar, ranking next to his wife's birthday and his wedding anniversary.

Such an objective is only part of a long-term program to encourage Canadian architects to look increasingly to the Institute for national stimulus and direction.

Robbins Elliott

Au moment où j'écris ces notes, l'Assemblée de 1959, à Windsor n'est terminée que depuis dix jours. C'est la première assemblée à laquelle j'ai assisté à titre de directeur exécutif, et j'ai aimé ce tourbillon étourdissant. L'une de mes premières réflexions, le dimanche matin 31 mai, a été qu'il faut préparer les plans détaillés d'une assemblée annuelle au moins une année entière avant qu'elle ait lieu. C'est pourquoi le bureau de l'Institut à Ottawa et un comité d'organisation fort enthousiaste, de Winnipeg, se sont déjà réunis afin de jeter les bases de la 53e Assemblée qui se tiendra à l'Hôtel Fort Garry à Winnipeg, du mercredi 1er juin au samedi 4 juin de l'an prochain.

A quoi est attribuable le succès d'un congrès? Ce n'est certainement pas à un seul facteur isolé. Il importe de bien dresser les plans, naturellement, mais l'endroit où sont situés la ville et l'hôtel où va se dérouler le congrès compte pour beaucoup, et la direction est essentielle. La température joue aussi un rôle prépondérant. Tous ces éléments concourent à donner le branle à l'assemblée et l'empêchent de languir.

Me rappelant ces dernières semaines, j'en suis venu à la conclusion que le succès de l'Assemblée annuelle résulte de la coordination d'une foule de détails, en apparence sans lien entre eux, et qui produit un programme bien équilibré.

On est frappé par la nécessité d'établir, le plus tôt possible, des communications étroites entre le quartier-général de l'Institut et le Comité de réception de l'Assemblée. Il est évident qu'un travail d'équipe ne peut donner que de bons résultats surtout lorsqu'on a à résoudre un problème de distance, ainsi qu'il faudra le faire entre Ottawa et Winnipeg en 1960.

On est donc bien fondé à exiger que l'Institut mette au point un plan de longue portée, de façon que l'endroit des assemblées annuelles soit déterminé cinq ans à l'avance, et afin que les comités de réception puissent faire leurs préparatifs avec toute la flexibilité voulue. Premier pas dans cette voie, le Conseil de 1959-1960 a décidé que les Assemblées annuelles qui suivront celle de Winnipeg en 1960 auront lieu à St Andrews (Nouveau-Brunswick) en 1961, et à Colombie-Britannique en 1962.

Après avoir étudié l'objet des congrès nationaux d'architecture, j'en suis venu à la conclusion qu'il faudrait tenter d'établir un élément de continuité entre les Assemblées annuelles. Si une Assemblée a un objet sérieux et si des architectes désirent s'y consacrer, il faudrait qu'ils y soient encouragés pendant toute l'année.

Tel est alors le vrai sens de la séance d'étude de 1959: "L'Architecture à l'heure de la décision". Une séance d'étude efficace doit éveiller et susciter l'intérêt pendant plus d'une demie journée, et il faudrait établir une procédure selon laquelle les recommandations et propositions formulées à la suite de la séance d'étude seraient soumises aussitôt au Comité exécutif et il y serait donné suite chaque fois que cela est possible.

Je me suis posé bien des questions à mon retour de Windsor. La séance d'étude du samedi a-t-elle atteint le but qu'elle se proposait? Y a-t-il lieu de la maintenir? Avons-nous choisi le

meilleur moment de l'année pour tenir notre Assemblée, à la fin de l'année scolaire et avant l'assaut des vacances? L'Assemblée de 1962 à Colombie-Britannique ne pourrait-elle pas avoir lieu en avril? Devrions-nous nous réunir du dimanche au mercredi inclusivement plutôt que du mercredi au dimanche comme nous le faisons présentement? Quel devrait être le thème de l'Assemblée de Winnipeg?

La séance d'étude a-t-elle pour objet de provoquer la participation vive et spontanée des architectes à la discussion de problèmes courants, ou y aurait-il lieu de demander à des experts de prendre part à une discussion collective? Les architectes s'isolent-ils trop et devraient-ils faire appel à l'expérience d'autres personnes, par exemple des constructeurs, des dirigeants syndicaux, des urbanistes, des personnes employées à des fonctions publiques, des sociologues, etc., et leur demander de prendre part à des échanges d'idées avec nous?

Il est intéressant de noter que notre séance d'étude portant sur "L'Architecture à l'heure de la décision" a suscité suffisamment d'intérêt pour que l'American Institute of Architects nous ait demandé des renseignements à ce sujet, notamment, quelle procédure nous y avons suivie et quels résultats nous en attendons.

Coïncidence, en même temps paraissait dans l'Architectural

Record une série d'articles intitulés "The Image of the Architect". Vu l'intérêt qu'on y porte, on distribuera sous peu à tous les membres une copie des délibérations de la séance d'étude.

S'il y a une séance d'étude à Winnipeg en 1960, elle aura lieu au début de l'Assemblée, afin que le Conseil et le Comité exécutif puissent prendre note de toutes recommandations et propositions portant sur des mesures précises que devrait prendre l'Institut. D'ici là, on songe à constituer un comité permanent des résolutions.

Notons en particulier l'atmosphère de camaraderie qui a régné à l'Assemblée de Windsor où les Groupes de l'Ontario recevaient les associations invitées; des liens d'amitié plus étroits se sont ainsi noués entre les membres.

L'IRAC voudrait faire de l'Assemblée annuelle un événement dans l'année de tout architecte, un événement qui viendrait, par ordre d'importance, après l'anniversaire de sa femme et celui de son mariage.

Ce n'est là qu'un point d'un programme à longue échéance ayant pour objet d'encourager les architectes à chercher de plus en plus auprès de l'Institut un stimulant et une orientation sur le plan national.

VIEWPOINT

"To what extent should, or could, the professional association influence teaching in the Schools of Architecture without infringing on academic freedom?"

There are many kinds of institutions which purport to provide architectural education. However for the purpose of this discussion I am concerned only with those which the profession recognizes as proper places of instruction for those preparing themselves for a career as professional architects. In such institutions the profession has a definite and real interest, and academic freedom cannot be divorced from academic responsibility for such institutions are professional schools. So long as the profession continues to accept their graduates as having completed a course of instruction in the basic sciences and arts required by the profession, so long must the profession exert its influence and at times provide direction with respect to their curricula and the competence of those who teach. No professional school can possibly fulfil its function without a real and continuing liaison with the profession, and on its part the profession cannot shirk its duty to make known to the schools its requirements. In the United States the profession has found it necessary to institute a system of accreditation of Schools of Architecture and more than one well known school has failed to measure up.

Perhaps the greatest danger threatening our schools is the pressure exerted upon them by university authorities in their justifiable zeal for maintaining a university level of education in all faculties and in all courses.

Too often this means the superimposition of courses of study of a general nature upon time tables already over crowded with essentials. I have no objection whatsoever to this in principle, but I believe that more consideration should be given to its effect upon the time table. It is entirely a problem of time available. Even with a five-year course, comprising not more than one hundred and twenty weeks, it is not possible to cover the essential ground adequately. If the humanities are to be added then something is going to be neglected. This is a matter which is of vital concern to the profession and calls for some very serious study by both the profession and the schools.

A. S. Mathers

The members of the architectural profession might, to the decided advantage of all concerned, bring their influence to bear in the teaching of all subjects which might be broadly classified as having to do with the "practical" considerations of architecture and especially those things pertaining to professional practice and "architectural business". However, the question of architectural design must be viewed in an entirely different light. In this facet of architectural education the profession would do well to maintain a stringent "hands-off" policy. Freedom of design expression must be considered as sacrosanct as "freedom of speech".

John B. Parkin

The architect must accept the responsibilities of ensuring the future of his profession through actively participating in the training of students.

The associations are the only sources of information, related to the demands of the day on the architect in practise, which can be utilized safely to modify curricula.

Academic freedom exists only in part even in our society. Too few guide-posts leaves an ill-defined road.

As long as the spirit vitality and inquisitiveness of youth are given sufficient freedom to exercise their ingenuity, it may be assumed that the influence of the professional associations will be a help rather than a hindrance.

It only remains to be said that the members of the profession must take an active part in their associations, and the associations an increasingly active part in the formation of the education process.

D'Arcy G. Helmer

Toute association professionnelle qui a autorité sur l'admission à la pratique et sur la qualité de cette pratique, et c'est je crois le cas pour chacune des associations canadiennes, a discrétion pour établir les conditions qui qualifieront le candidat. Soucieuse de sa responsabilité, elle doit se tenir en éveil et maintenir, pour le plus grand bien de la profession, un intérêt actif à la formation du futur architecte.

En conséquence, l'enseignement dans les écoles d'architecture se trouve relativement assujéti à ces conditions et doit tendre pour le moins à rencontrer les exigences de l'association.

Il ne faut pas conclure par cela que la liberté académique est violée, car chaque école, et ceci est essentiel, doit déterminer elle-même la forme et les moyens par lesquels sera dispensé un enseignement architectural avec ses particularités distinctives.

Lucien Mainguy, Quebec

INSTITUTE NEWS

Effective June 30th, **William Goulding**, a member of the Faculty of the School of Architecture, University of Toronto, who has been Assistant Editor of the *Journal* of the Royal Architectural Institute for more than two years, is terminating his service with the *Journal*.

Members of the RAIC Editorial Board and the *Journal* Committee have commended Mr Goulding for his very effective editorial work on behalf of the Institute during 1958 and 1959. For several months Mr Goulding served as Acting Editor during a period when the editor was engaged as Chairman of the Toronto City Hall competition jury. Mr Goulding leaves the *Journal* staff secure in the knowledge he rendered the architectural profession distinguished service as a member of the *Journal* editorial staff.

The February 1959 issue of the *Journal* recorded the excellent work of a Special RAIC Committee under the direction of Dr F. Bruce Brown, which made a thorough review of Institute by-laws, and proposed several recommendations which subsequently led to certain by-law revisions being made. It is regretted that the name of Hugh P. Sheppard of Windsor, an active committee member, was inadvertently omitted from the list of serving members.

ONTARIO

The future of our profession, to a large extent, hinges on two facets: firstly, the conduct and work of the individual; secondly, the effectiveness of the professional associations.

About the former, little needs to be said. Architectural practice, if it is to continue in the sense that we now know it, must be conducted on the highest professional level, beyond reproach, producing work of a quality which cannot be surpassed, given like conditions.

The professional associations influence, to a marked degree, the conduct and work of the individual and vice versa. Yet we find that eighty per cent of the membership are willing to sit back and accept carte blanche the decisions made by the active remainder.

The acceptance of a policy, set by so few, on the internal operation of the associations is normal in professional associations. But surely the effectiveness of the associations, in dealing with matters of community interest, suffers because of the lack of active support and direct aid of such a large majority of the membership.

Through his training, the architect is especially qualified to take his part in shaping the future of his community, province and country. He can make a direct personal contribution, help shape national policy and take an active part, through his local chapter, in community development. The latter is probably the one offering the greatest challenge and producing the quickest, most rewarding results.

This active participation is not without selfish interest. Who else should be more concerned with zoning laws to protect the good that exists and shape the future toward a better environment? Who else should be more concerned with municipal legislation placing restrictions on building appearance, traffic and parking considerations, etc.?

Surely active participation by the *whole* membership in providing our city fathers with the benefit of their specialized skills is a cause worthy of a plea. The results of such help, constructively given, will produce a personal reward and a much-needed crutch to the battered prestige of our profession.

D'Arcy G. Helmer, Ottawa

Something has been happening in the secondary schools of this province in the last few years, something that was lacking when most of us were teenagers in high school, interested mostly in old cars and girls, and had very little thought about what lay in store after graduation.

This something is "Vocational Guidance". Up to the end of Grade XII (Fourth Form) the most important job that guidance does is to see that students with university potential are channelled into courses of study which will enable them to attain university entrance status. This is done through the medium of at least one personal interview in each of the five high school years with trained guidance personnel.

It would appear that purposely no effort is made to channel a student's interest into any one job or profession, but rather information of the best quality is made available to these students so that they may make an intelligent choice of their future vocations. This is done through the media of printed literature available from various trade and professional organizations and a yearly "careers day". This day is one set aside, usually in the spring, when members of these groups are invited to address a number of potential business and professional people on the merits of their particular fields.

Now the question arises — what, if anything, can we do as architects to help students of pre university age to make an intelligent choice of a career? Any written information that I have seen is woefully inadequate to properly inform the interested student what is involved in the practice of our profession.

I believe that if some of our members would contact the guidance teacher at their local high schools and volunteer, not only to talk to students at a careers day, but also to make available to them a visit to their offices, or a construction site, plus the personal attention of a busy man to these students' problems, that in this way our profession would be rendering an invaluable service to our most valuable asset — the youth of our country.

W. W. Rankin, Toronto

APPOINTMENT OF A COMMISSION TO ENQUIRE INTO SUBURBAN DEVELOPMENT

Maurice Payette, President of the Royal Architectural Institute of Canada, announced at a meeting of the Executive Committee at Ottawa on June 19th and 20th, that E. C. Pratt of Thompson, Berwick & Pratt, Vancouver; John C. Parkin of John B. Parkin Associates, Toronto; and Peter Dobush of Dobush and Stewart, Montreal, have been appointed by the Institute to examine "the whole subject of design in the building of the residential environment in Canada".

This action results from the decision of the Institute at the 1959 Annual Assembly in Windsor to establish a commission of enquiry, and request the support and financial assistance of the Central Mortgage and Housing Corporation under Part 5 of the National Housing Act. A written proposal from the RAIC, designed to set the commission machinery in action is presently being studied by the Federal Government.

NOVA SCOTIA

New officers of the Nova Scotia Association of Architects were elected on May 22nd, as follows: President, John L. Darby, Bedford; Vice-President, C. D. Davison, Halifax; Treasurer, Henry M. Romans, Halifax; Secretary, Lester J. Page, Halifax; Councillors, James S. MacDonald, Thomas W. Bauld and Charles A. E. Fowler, all of Halifax.

Shown left to right below are Messrs MacDonald, Darby, Bauld, Fowler (past president) and Page.



HALIFAX HERALD

AWARDS

The Pilkington Travelling Scholarship Awards in Architecture

FIRST — \$2,500

Gene Kinoshita, Slocan City, B.C.
University of British Columbia

SECOND — \$200

Donald Matsuba, Edmonton, Alberta
University of British Columbia

THIRD — \$100

Nobuo Kubota, Toronto, Ontario
University of Toronto

Report of the Jury

The Winning Design — A Jazz Centre for Vancouver, by Gene Kinoshita.

This student showed great imagination. The presentation of the drawings and the report was handsomely done. It was a mammoth undertaking but was carried out in a capable manner.

The problem was well chosen and the site excellent. The layout provided good parking for cars as well as docking facilities for pleasure craft. The choice of reinforced concrete for the structure was a practical one. The Jury felt that the structural forms were too playful and suggested that a little discipline in the use of these forms would have produced a still happier solution. The detail of the reinforcing bars, the dynamic background for the future cultural bars, and the integration of the refreshment bars was indeed well done.

The general feeling of the Jury was that it would be an excellent acquisition for the City of Vancouver if this project were produced for the Performing Arts. Further, it was felt that the Scholarship would be put to very good use.

Second Prize — A Civic Library for Edmonton, by Donald Matsuba — University of British Columbia.

The general presentation and planning was well thought out. The library was far too large and imposing to be married to a neighbourhood market. The scale of the activity and the scale of the architecture does not go hand in hand. This must have been felt by the student as well since he wrote a long report on the project and devoted a single paragraph to the market. It was felt that another site might have given greater scope to the building rather than the limited site chosen.

The selection of the problem was somewhat unfortunate; possibly the students should spend more time with the staff in arriving at a selection of a project.

Third Prize — A Bhuddist Temple for Toronto, by Nobuo Kubota — University of Toronto.

A sensitive little building. An occidental building clothed in an oriental cloak rather than an integration of the two. The marriage was not sufficiently blended. The planning is simple and excellent.

The amount of labour expended on this project was considerably less than that of the first two winners.

Peter F. Tillman
Jury Chairman



Mr Donald H. Jupp, President of Pilkington Glass Limited, congratulates Gene Kinoshita on winning first place in the 1959 Pilkington Scholarship. Mr Kinoshita's elder brother, Hajime, took third place in the scholarship contest three years ago.

CONTRIBUTORS TO THIS ISSUE

Since 1955, **Professor Gordon Stephenson** has been head of the division of Town and Regional Planning School of Architecture, University of Toronto, and is at present consultant to the Planning Boards of the cities of Toronto and Hamilton and the council of the city of Halifax, Nova Scotia. In 1957, he was adviser to the President's Planning Committee in the University of British Columbia.

Professor Stephenson received his degree of Bachelor of Architecture at the University of Liverpool in 1930, where he was later Lever Professor of Civic Design. From 1930-32 he was Chadwick Scholar at the British Institute in Paris and the University of Paris, and from 1936-38 Commonwealth Fellow at MIT, where he obtained his Master's degree.

Before coming to Canada, Professor Stephenson was senior research officer with Lord Reith's reconstruction group, and, later Chief Planning Officer with the Ministry of Town and Country Planning. In 1943-44, he was seconded to assist Sir Patrick Abercrombie on the Greater London Plan, and, in 1946, was responsible for the design of the first new town under the New Towns Act.

Wells Coates, a prominent leader in the modern movement of architecture, died last year in his adopted home at Vancouver. He was typical of other great minds who tried to forge a new intellectual attitude: he ended in spiritual loneliness with misunderstandings strewn behind him.

Yet he was not without great friends and disciples, whether among England's "angry young men", Harvard's post-Gropius groping students or Vancouver's "Group '58". This latter, at Wells Coates' dynamic and persuasive urging and with his leadership, prepared a program for the replanning of the city's core which aroused only the most favorable of comments, but which unfortunately did not produce the necessary funds. The failure of this project was a great blow to Wells. The dreams and ideas which were developed during the period that this project was studied will however live on with the young men who banded with Wells: Peter Oberlander, Arthur Erickson, Ted Watkins and Geoff Massey. To them, as well as many others everywhere, Wells will remain a landmark, a guide post, a great friend.

Fred Lasserre

Lois Lister is a Landscape Consultant in Toronto. See *Journal*, September, 1958.

BOOK REVIEWS

REHABILITATION CENTRE PLANNING—AN ARCHITECTURAL GUIDE by Salmon and Salmon. Published by Pennsylvania State University Press, University Park, Pennsylvania. Price \$12.50.

This book of 164 pages and its companion supplement of 26 pages is an outstanding, authoritative contribution to this field of literature. It is the first book to offer such comprehensive, detailed narrative and illustrated information on rehabilitation centre planning. Over 350 diagrams, charts, sketches and plans are included in the book. The supplement offers a selection of plans and programmes of ten centres in the United States and Canada.

The authors are members of the American Institute of Architects, with a background of note in planning facilities for handicapped children and adults. Their extensive research programme for this publication included visiting and studying the services and architectural planning of 28 centres of various types in the United States and Canada.

This publication does not presume to suggest a particular plan of centre as being ideal for any community. It does provide, as a guide, a wealth of information on equipment and planning for the various components to be found in most centres, such as physiotherapy and hydrotherapy, occupational therapy, speech and hearing services, psychological services, social services, in-patient accommodation, doctor's offices, examining rooms, brace shops, vocational training services, and administration. Related areas for children also are detailed, along with broader considerations in planning, such as programming, planning principles, site considerations, environmental considerations, and traffic flow and control.

This book is a valuable guide, not only in planning rehabilitation facilities, but in the planning of other institutions, public buildings, private dwellings, schools, and hospitals that accommodate or that may be used by physically handicapped children and adults, particularly those using wheelchairs.

Edmund J. Desjardins

REINFORCED CONCRETE FUNDAMENTALS by Phil M. Ferguson, Professor of Civil Engineering, The University of Texas.

In this book the author presents a thorough and up-to-date introduction to the fundamentals of reinforced concrete design. The approach is a practical one. While the inadequacy of simple strength of materials as a basis for design is recognized and emphasis is placed on the ultimate strength concept, working stress methods are covered in complete detail. At the same time enough details of ultimate strength design, for practical use, are presented. Of particular interest is the chapter on the yield-line theory for slabs on which very little has, up until now, been published in the American literature.

For designers of reinforced concrete this volume should constitute an exceptionally useful reference. Numerous examples are worked out in detail. In the appendix are collected most of the charts and tables usually used in reinforced concrete design as well as the pertinent requirements of the American Concrete Institute Building Code. Also included are the Moment Area Method and the Moment Distribution Method for the analysis of statically indeterminate structures and an outline of limit design analysis based on the plastic hinge and collapse mechanism concepts.

Teachers and students should find Professor Ferguson's correlation of theory with the results of tests and observations on the actual behaviour of reinforced concrete under load lucid and thorough. Included are particularly detailed discussions of shrinkage, bond and diagonal tension stress, the behaviour of tied and spirally reinforced columns, and the manner in which members fail under overload.

On the whole, the subject of reinforced concrete design is presented as a developing and changing process in which research is the foundation of theory and design is based on the observed behaviour of the material.

C. Hershfield

PHILOSOPHY OF STRUCTURES by Eduardo Torroja. English Version by J. J. Polivka and Milos Polivka. University of California Press, Berkeley & Los Angeles, 1958. U.S. Price \$12.50.

For most of us the name of Eduardo Torroja conjures up a somewhat blurred, legendary figure. Thought of vaguely as one of the pioneers of reinforced concrete shell construction, he is usually identified with the only one of his structures that has been widely illustrated on this side of the Atlantic: The Hippodrome at Madrid. There, twenty-five years ago, he covered his grandstands with a wonderfully graceful and exciting canopy of reinforced concrete two inches thick consisting of a long series of hyperboloid scollops unequally cantilevered on their column supports and daringly kept in equilibrium by thin ties to another cantilevered shell at a lower level. Though the section would terrify most of our municipal building inspectors, this structure — so airy that it seems to be suspended on sky hooks—is said to have sustained 26 artillery hits during the Spanish Civil War and suffered no failure.

This story emphasizes what seems to be basic in Torroja's approach to structural design: "the structure of concrete is much stronger than the mathematician can prove — you have to go ahead and try what you know by intuition." He means, of course, a thoroughly educated intuition: "Intimate and intuitive comprehension of its working forms is also needed. One should become so familiar with the structure as to have the feeling of being, in full vitality and sentiment, part of it and of all its elements. As a German would express it, it is necessary to achieve a sincere *Einfühlung* of the process of resistance, a process we are made aware of through the deformation that is always essentially united with the process of stressing. We could express it in a more concise and academic language: the comprehension of a structure requires intuitive knowledge of the ethology of its resistance and of its constituent materials."

In an introductory chapter, Torroja denies that he will offer anything new; the book's purpose is "to offer an informal discussion that will stress ideas and concepts at the expense of anything mathematical or theoretical." The book is exactly that: the reflections on structural design of one of the world's great engineers and, as such, it must take its place amongst the very few great documents on structure that are available to us.

Unfortunately, the subject is perhaps by its very nature highly resistant to popularization. Torroja and his translators have tried hard, but the book has little of the lightness and clarity of his structures and "academic language" often intrudes to devalue his many uses of vivid and homely metaphor (you see; it's catching!)

On the credit side, the book is highly systematic: separate chapters are devoted to each material, structural element or structural system, profusely illustrated with photographs and sketches, the latter being sometimes not too intelligible to a non-engineer. Amongst the photographs are some two dozen illustrations of Torroja's own work. Since his structures have been so little illustrated in North America, it was a disappointment to find that most of these seemed to have the character of progress photos. There is, for instance, no photo that even begins to equal Eric Schaal's shot of the Madrid Hippodrome in *Time Magazine* (June 1, 1959), which also contains a charming, and long overdue, appreciation of Torroja himself.

Hazen Sise

ERRATUM

The *Journal* regrets that in the May issue, the County Building in Brockville, shown on page 149, was named as the Town Hall.

FUTURE ISSUES

July	RAIC Annual Assembly
August	General
September	Industrial

THE INDUSTRY

"COLOUR VS. ILLUMINATION" IS SUBJECT OF NEW MANUAL

Colour in relation to illumination levels, a subject of increasing importance in modern architecture, is discussed and pictured in a newly-published manual prepared especially for architects by American-Marietta Company.

This authoritative manual was written by Walter C. Granville, currently president of the Inter-Society Color Council, and a member of the Illuminating Engineering Society. The 16-page book, plastic-bound and of file size, is printed in full colour and covers many phases of colour selection for interior decoration as it relates to various types and levels of lighting.

The author points out that the consideration of illumination levels in selecting colours is especially important today because of the greater range in footcandle levels now used in general lighting for building interiors.

Subject matter of the new manual is divided into two general classifications: Colour schemes suitable for low-illumination levels, and colours recommended for normal and high illumination. Palettes of colour chips suitable for both of these divisions are displayed in the manual and, in addition, packs of the same colour chips are enclosed in several pockets, for convenient use.

Among the topics discussed in the manual are these:

Colorimetric basis for the low-illumination palette . . . examples of typical colour selections in low illumination and normal illumination areas . . . relation between illumination and paint-colour appearance . . . colour selection for walls opposite windows, walls at right-angles to windows, window walls, walls illuminated from the ceiling . . . compensation for unequal illumination.

The Color-Illumination Manual is available to architects without cost, and can be obtained from representatives of American-Marietta, or by writing to American-Marietta Company, 687 Wellington Street, Ottawa 4, Ontario.

BARBER-COLMAN COMPANY INTRODUCES A NEW HIGH VELOCITY FILE

A new High Velocity File has been compiled by Barber-Colman Company to help the air conditioning industry make the best possible use of high velocity air distribution. This comprehensive file embraces such subjects as: What is High Velocity, What Can High Velocity Do and Where Should It Be Used, Duct Design, Duct Construction, and Temperature Control for High Velocity Systems. Copies are available by writing to Barber-Colman Company, Department 766, Rock Street, Rockford, Illinois.

NEW ACHIEVEMENT IN LIGHTING BY ELECTROLIER

Exceptional lighting flexibility and versatility in industrial lighting is achieved by the Ortho 88 Fluorescent fixture, manufactured by Electrolier Manufacturing Co. Ltd., Montreal.

This unique fixture is merely 'plugged in' on a pre-mounted raceway which is easily assembled on the floor and hung in lengths up to 48 feet. A plug built into the Ortho 88 engages a receptacle in the raceway. Spacing of the Ortho 88 is then automatic — it can be mounted in continuous rows or spaced at any desired 4 foot interval. Fixtures may be added, removed, re-spaced simply at anytime, without tools or re-wiring according to the changing requirements of the plant layout. No additional electrical work is ever needed. It is approved as a raceway for multiple lighting circuits and is said to save over 75% in installation time.

Another example of versatility of the Ortho 88 is its ability to accept every type of fluorescent lamp from Rapid Start to VHO. It is available in 48" and 96" lengths.

Full details and specifications are available in Electrolier Manufacturing Co. Ltd.'s Bulletin 188. The address, 5849 Boyer Street, Montreal, P.Q.

THE HOLOPHANE COMPANY LTD. ANNOUNCES No. 440, A HEAVY-DUTY OUTDOOR LUMINAIRE

The new unit's light controlling element is a one-piece prismatic refractor made of thermal shock-resisting glass, designed for use with 400 watt mercury vapor or 500 watt incandescent lamps.

The over-all dimensions are 16½" diameter and 15½" in depth. Excellent mechanical holding device supports glass member by means of stainless steel spring hinge; pressure latches securely hold refractor assembly against a gasketed hood keeping interior of unit weather tight and free of dirt.

Luminaire can be installed on cast aluminum bracket No. 0877 or standard pole bracket arm.

Typical applications for No. 440 are parking lots, outdoor work areas, shopping centres, outdoor play areas, private roadways, storage areas, industrial property roads, entrance and exit ramps, plant emergency and watchman areas.

For further detailed engineering information, write: The Holophane Company, Limited, 418 Kipling Avenue South, Toronto 18, Ontario.

A NEW COMPATIBLE COLOUR SYSTEM BY KAWNEER

Take a step into tomorrow, today. You will find selective use of colour in the design and styling of the complete building now possible. By creating colour for store front sash and trim members, for door hardware, for facing materials, Kawneer offers you the opportunity to express a compatible colour theme on every section of a structure.

The possibilities are exciting. A building faced with Zourite in Sunlight Yellow, for example, is enhanced by a black accent strip. The door hardware repeats the black, and, for contrast, Sunset Red is used on the lower floor store front sash and jambs. Each colour is compatible and can be mixed with complete harmony.

For further information on these new, colour fast products from Kawneer, write to Kawneer Company Canada Limited, 1460 Don Mills Road, Don Mills, Ontario.

NEW SECTION IS ADDED TO ROBERTSON LONG-SPAN ROOF DECK LINE

Robertson-Irwin Limited has completed their line of Q-Deck depths and gauges with the addition of new Section 5-60 Long-Span Q-Deck. The new section has a vertical depth of 6", is designed for normal, economical spans of 20' to 25'. It has a maximum length of 25' and is available only in metallic coated steel, either 18 or 16 gauge.

Other Robertson Long-Span profiles are: Section 5-75, 7½" deep, spans up to 32'; Section 5-45; 4½" deep, spans from 16' to 25'; Section 5-30, 3" deep, spans from 10' to 17'.

Robertson Long-Span Q-Deck is designed for, and is widely used, in the construction of all types of flat roofed buildings where extra long spans between supports are desired to increase usable floor area. Schools, shopping centres and bus depots are prime examples. The company reports that Q-Deck has often been placed by installation crews at the rate of an acre per day. The deep flutes of the units possess a noise reduction effect and can be used for installation of recessed lighting fixtures. Any standard insulation and built-up roofing can be applied.

Complete descriptions of all Robertson Roof Deck Sections are contained in the company's new catalogue, No. Q-46-59. Copies are available by writing to: Robertson-Irwin Limited, P.O. Box 100, Hamilton, Ontario.