

RAIC JOURNAL

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ROYAL ARCHITECTURAL INSTITUTE OF CANADA

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FOREWORD

There has never been a period in history when the architect has been provided with a greater variety of material, color and texture to use in his buildings. The new alloys, plastics, glass and wood products are offering a challenge to his ingenuity and imagination beyond the wildest dreams of the architect of a half-century ago. There seems to be no limit to the forms that can be created, and this, in a way, provides the greatest challenge of all, for the architect must be able to temper his imagination with a reasonable restraint. His buildings must not only represent the latest ideas in design, but, like buildings in every age, must function efficiently and with the lowest possible maintenance cost.

The Canadian climate offers the perfect test for many of the new methods and materials of construction, and the present building boom in Toronto provides the opportunity to use them. The students of the School of Architecture are very fortunate in either being active participants or interested spectators in this great experiment being carried on around them.

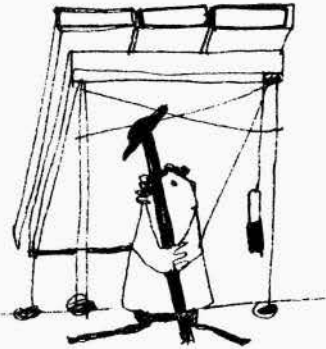
Much of the architects' education is visual and there is no doubt about the value of this tremendous building enterprise if our students will understand and appreciate it. Our students are singularly fortunate in receiving their training in a great metropolitan centre where the materials they will be using are either manufactured or prefabricated. Our teaching program includes, as it should, visits to plants where such work is done and where the processes can be easily explained and understood.

The series of lectures on practice so generously given by eminent local practitioners are of inestimable value to the students for they provide not only a personal contact with men prominent in the field but give an abbreviated story of the problems to be faced by students after graduation.

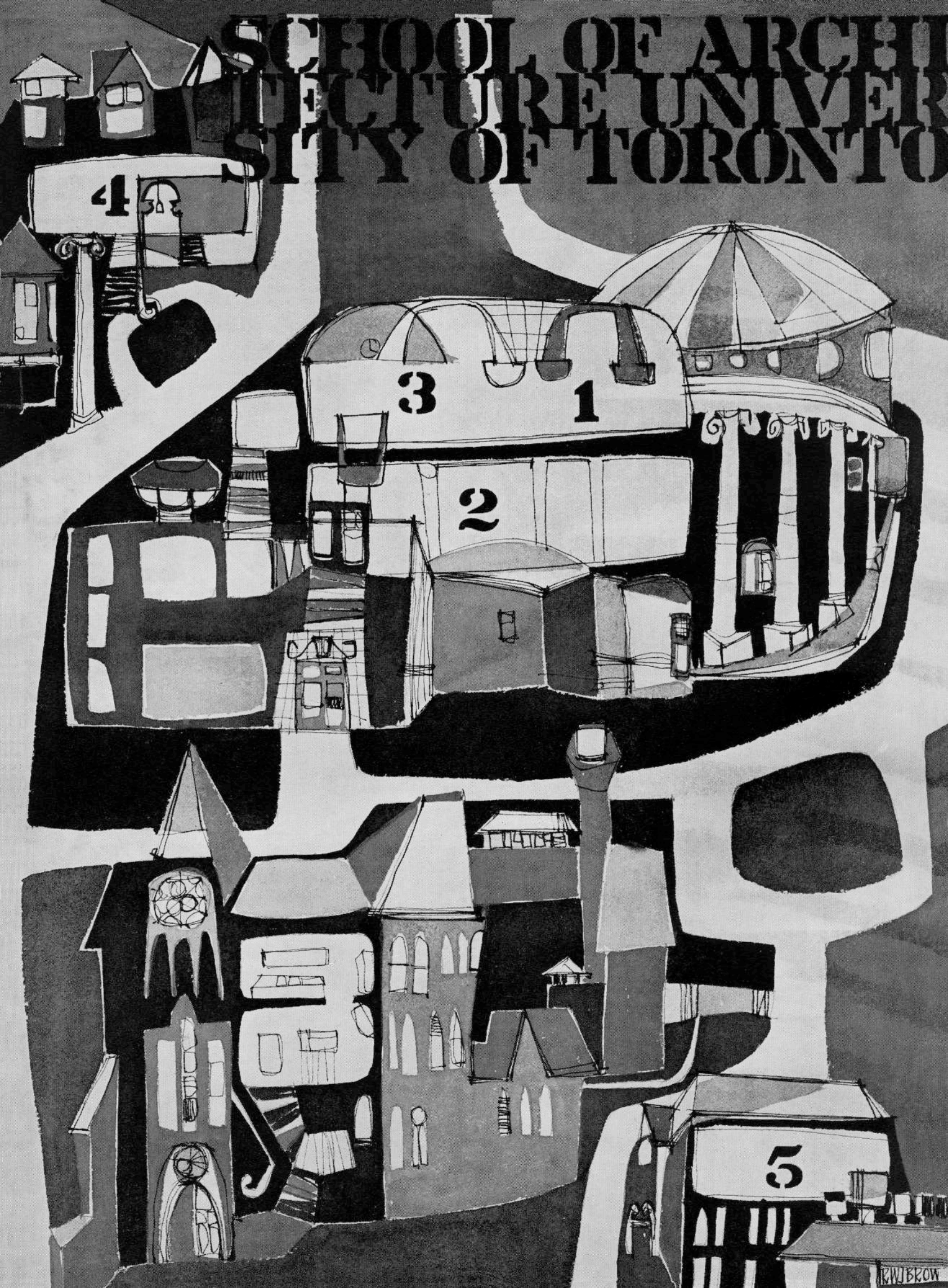
A unique feature of the program at Toronto is the opportunity provided each fall for the students of the 2nd, 3rd and 4th year classes to gather under the ideal conditions of the Forestry Camp at Dorset, for ten days of painting and sketching. The value of this experience cannot be measured only in the amount of work turned out, for it fosters a personal contact and understanding between students impossible to acquire on the campus of a large university such as Toronto.

The important role the School of Architecture will play in the life of the nation is assured by the program of service the University of Toronto has outlined for the future. The proposed building for the School will help us to coordinate our work and provide a centre where an active program of graduate research work can be carried out. However, it is always interesting to see that the spirit of undergraduates seems to be undaunted by the limits of space or equipment, and the fine cooperation of a dedicated staff is not too seriously affected by the problems of carrying on in four separate buildings.

Milton S. Osborne, Acting Director.

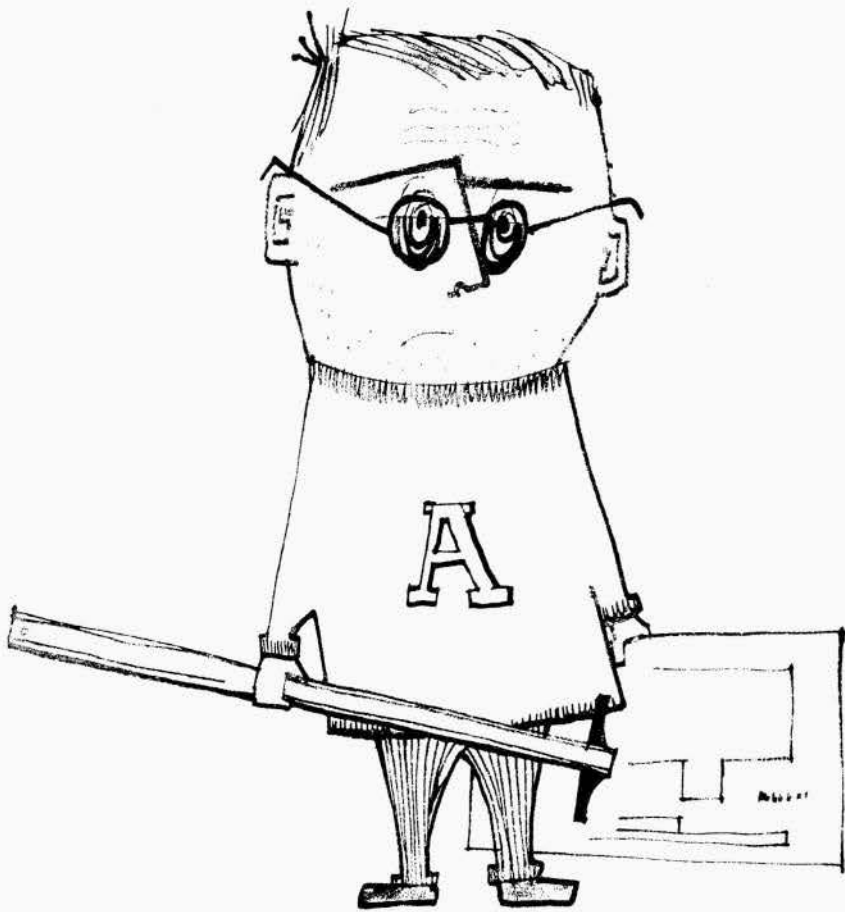


SCHOOL OF ARCHITECTURE UNIVERSITY OF TORONTO



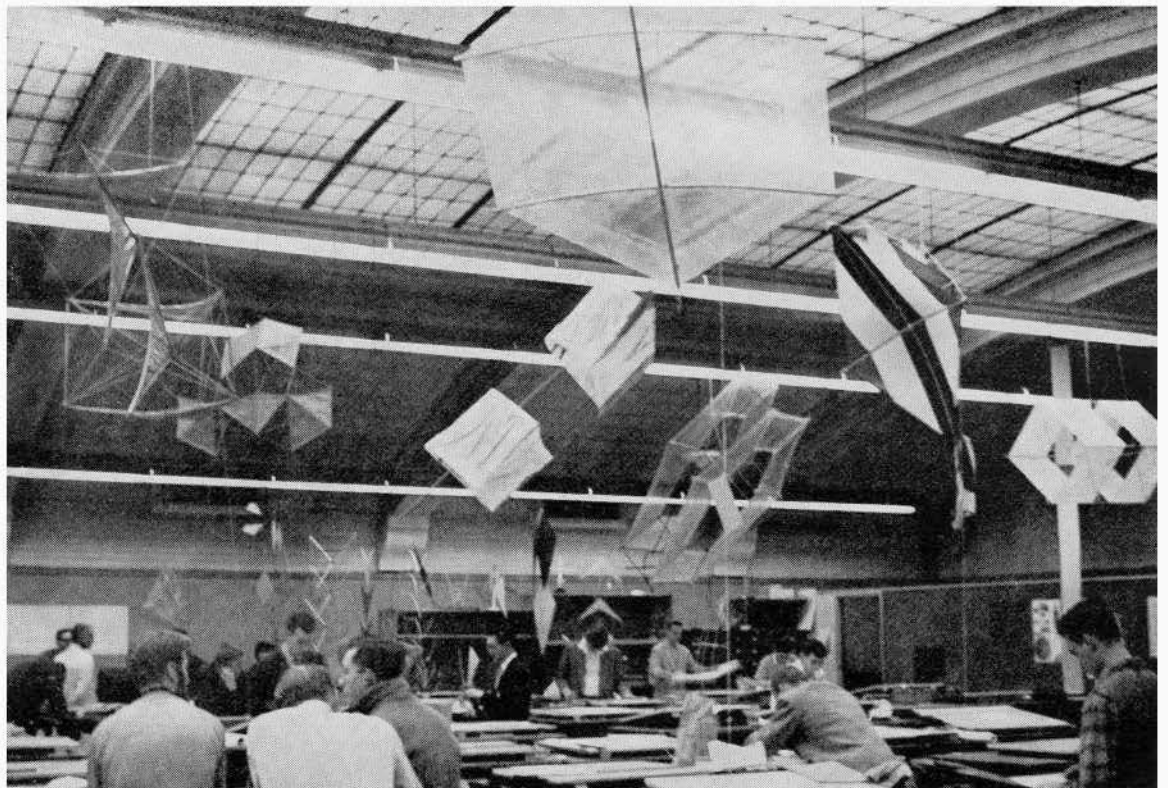


PERUGINI
ROMA. Jan. 12. 57.



The initial impact of our basic design course in first year leaves most of the youngest members of the School with a feeling of insecurity. Nothing conceived in High School is sacred. All the preconceived ideas are quietly shattered with what we believe to be a new approach. Instead of supplanting old ideas with a rigid set of new conceptions, the student is led into his new field by a constant question and answer programme. As a result, weird shapes in paper and wood emerge from the active exploration of the potentials of mind, hand and eye on common materials. Exploration for its own sake is followed by the results of that exploration being translated into forms requiring the fulfillment of a definite simple function. Work in the drafting room is supplemented by concentrated study in construction, engineering and humanities. As the year progresses, the results of the happy combination of extensive work and a field trip to New York begin to awaken the student to his environment. The city and the town have new dimensions . . . dimensions of space, colour and texture. Granted these are not standards yet, they are just a part of the magnificent discovery. The gap between problems involving the provision for simple functions and those of a more complex nature, for example the difference between a problem involving the support of a given weight and that involving the provision of a space for exhibition, is bridged in the second term of the first year. This introduces the student to the work being done in the second year, that of the solution of problems involved in the design of simple buildings and of the small house.

First year draughting room →



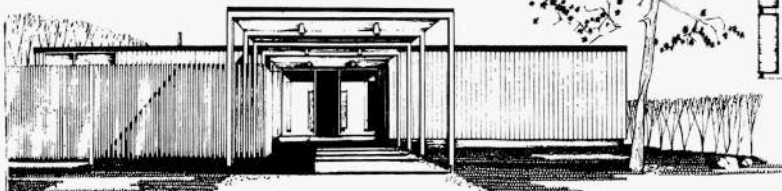
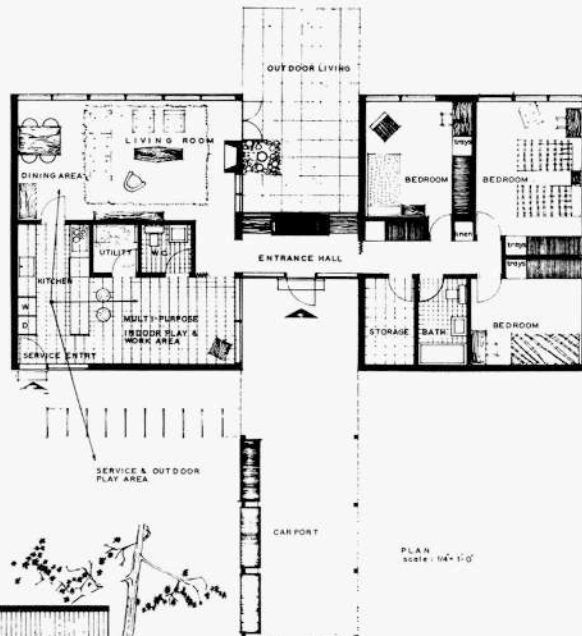
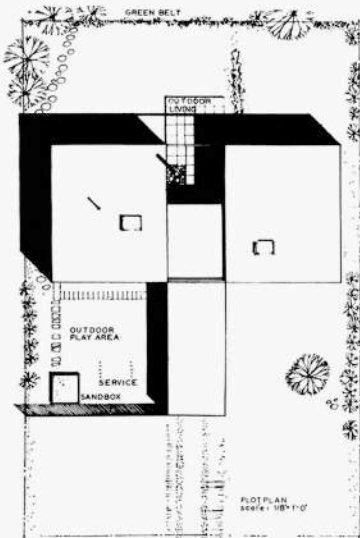
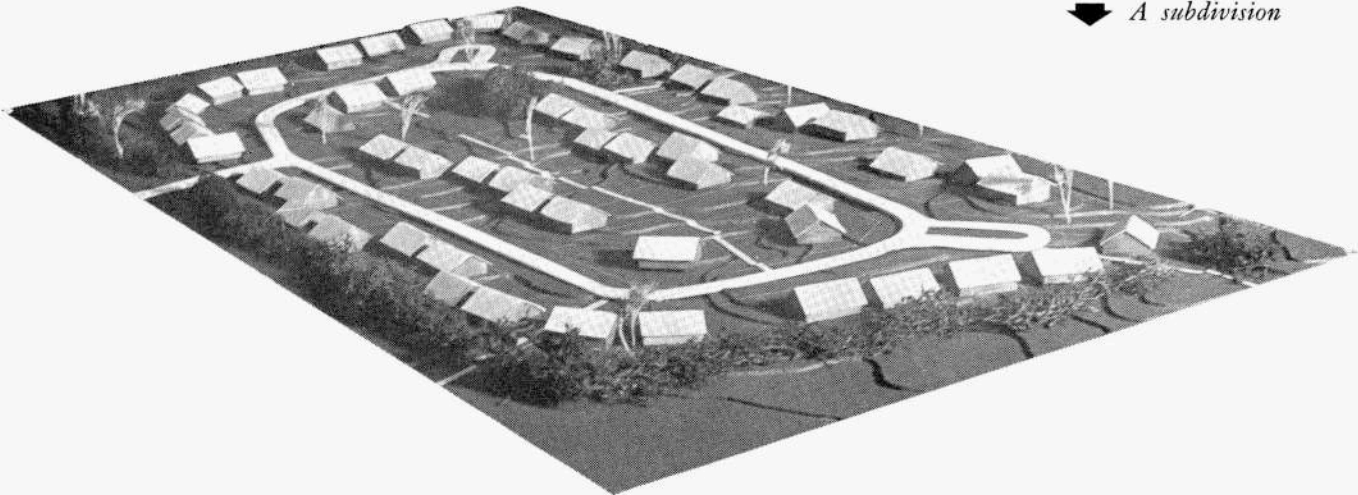
◀ On a summer visit to Rome, a third year student's impression of the soaring splendour of San Carlo Alle Quattro Fontana

HOUSING



A primitive house study ▲

▼ *A subdivision*



A BUILDER HOUSE 1

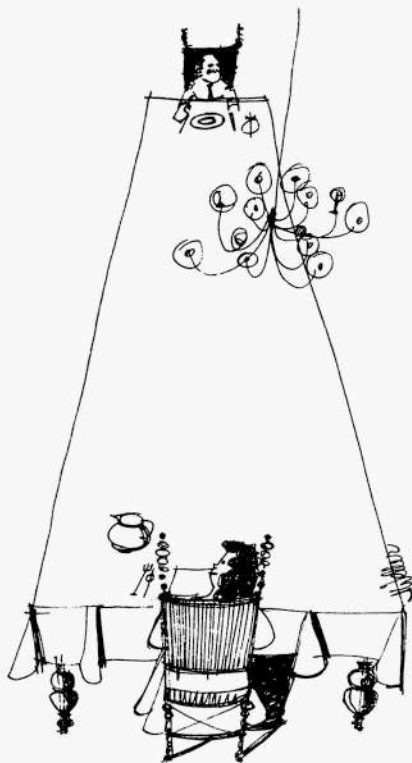
TAIVO KAPSI ARCH. ST. SCHOOL OF ARCHITECTURE, UNIVERSITY OF TORONTO, FEB. 1964



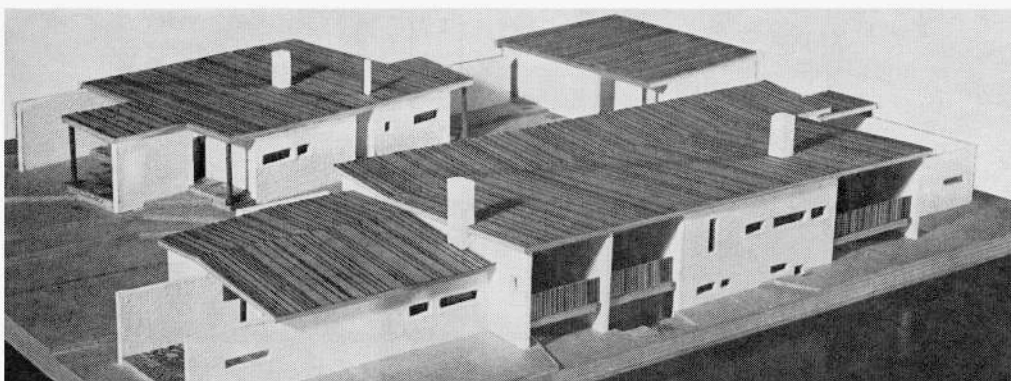
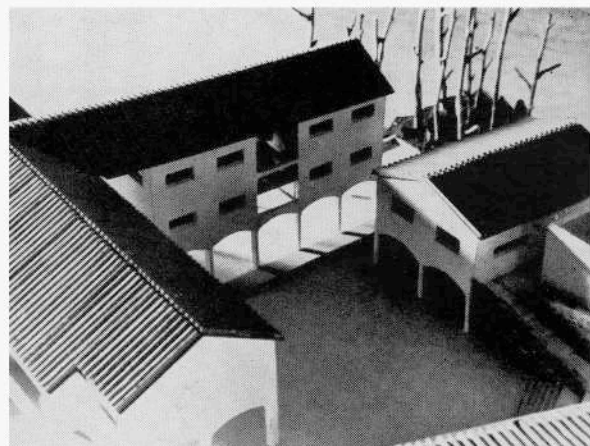
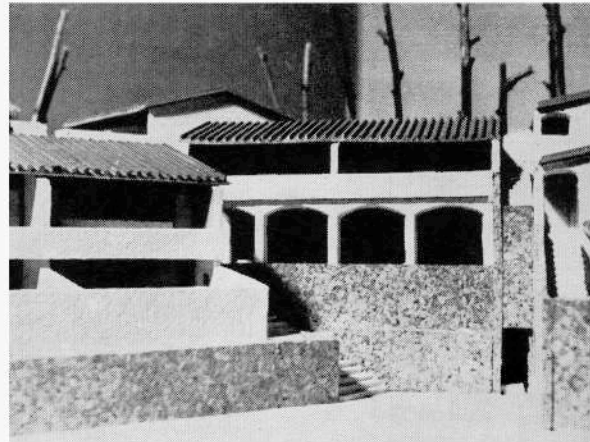
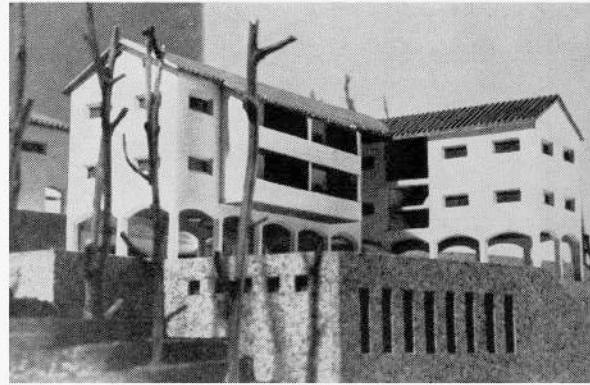
▲ *A hamlet outside Poitiers*

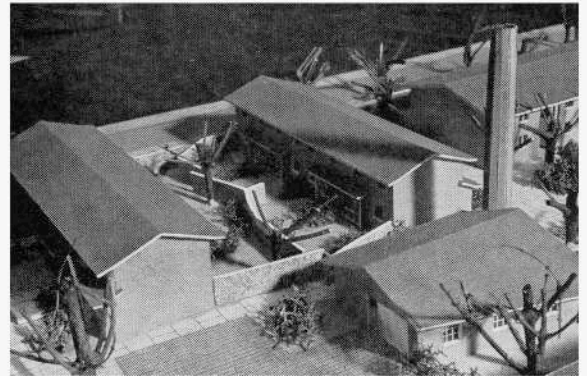
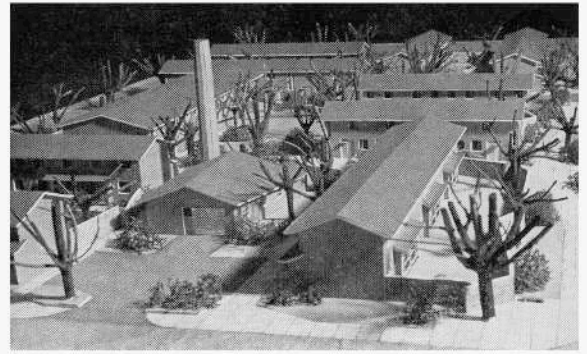
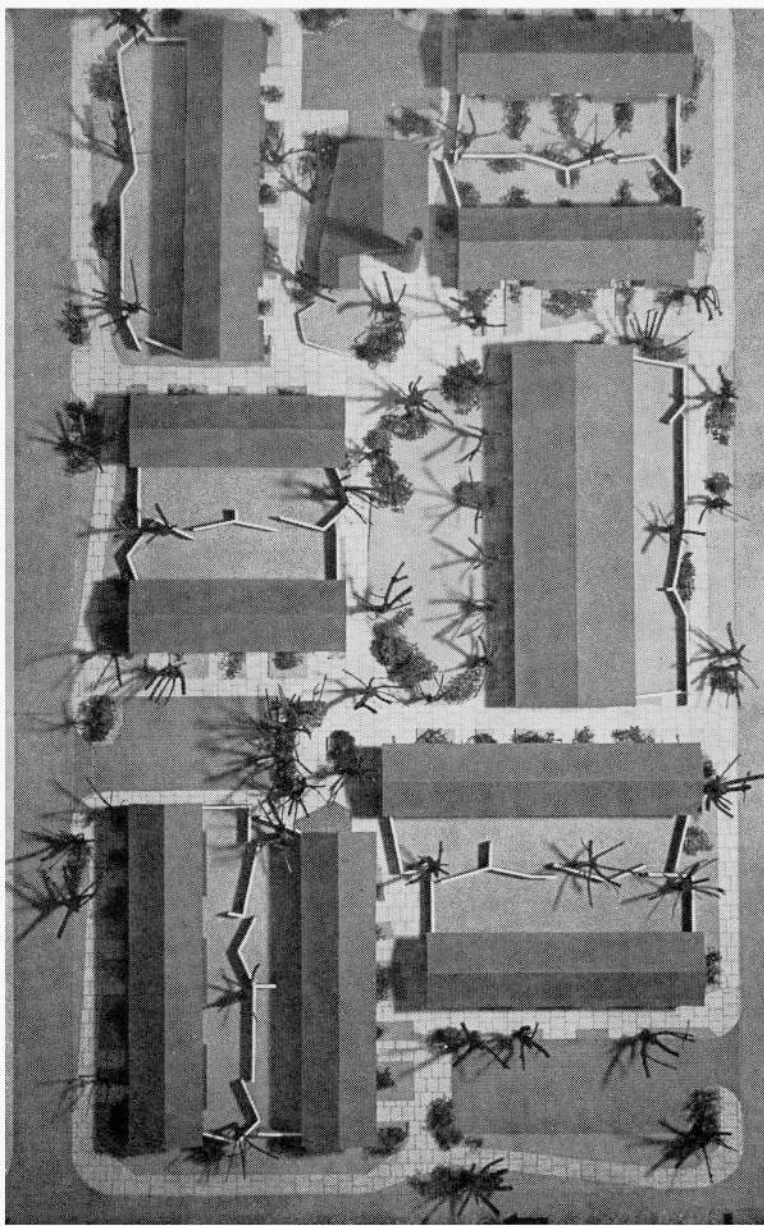
Model of high-density urban housing ▶

Thesis: country residence ▼



The vastness of suburban wasteland surrounding our major cities is at the present time appalling. Every man's home is his castle, but must every castle have its sixty foot estate? High density housing located near the center of the city may be the answer. Can we take a lesson from Poitiers?

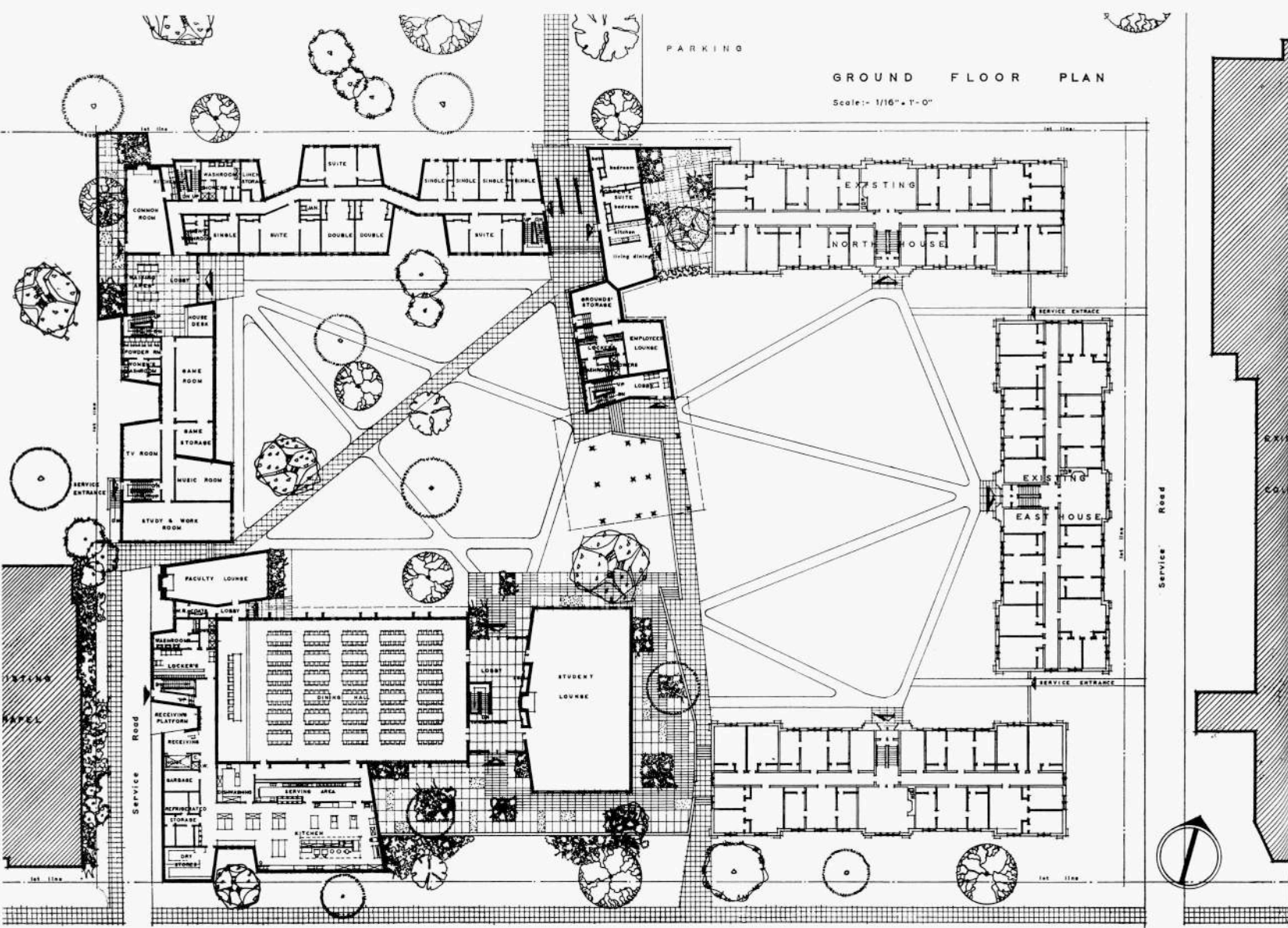




◀ *Thesis, cooperative housing* ▶

*Another hamlet outside Poitiers . . . organic growth . . .
a spirit obtained through generations of living* ▼

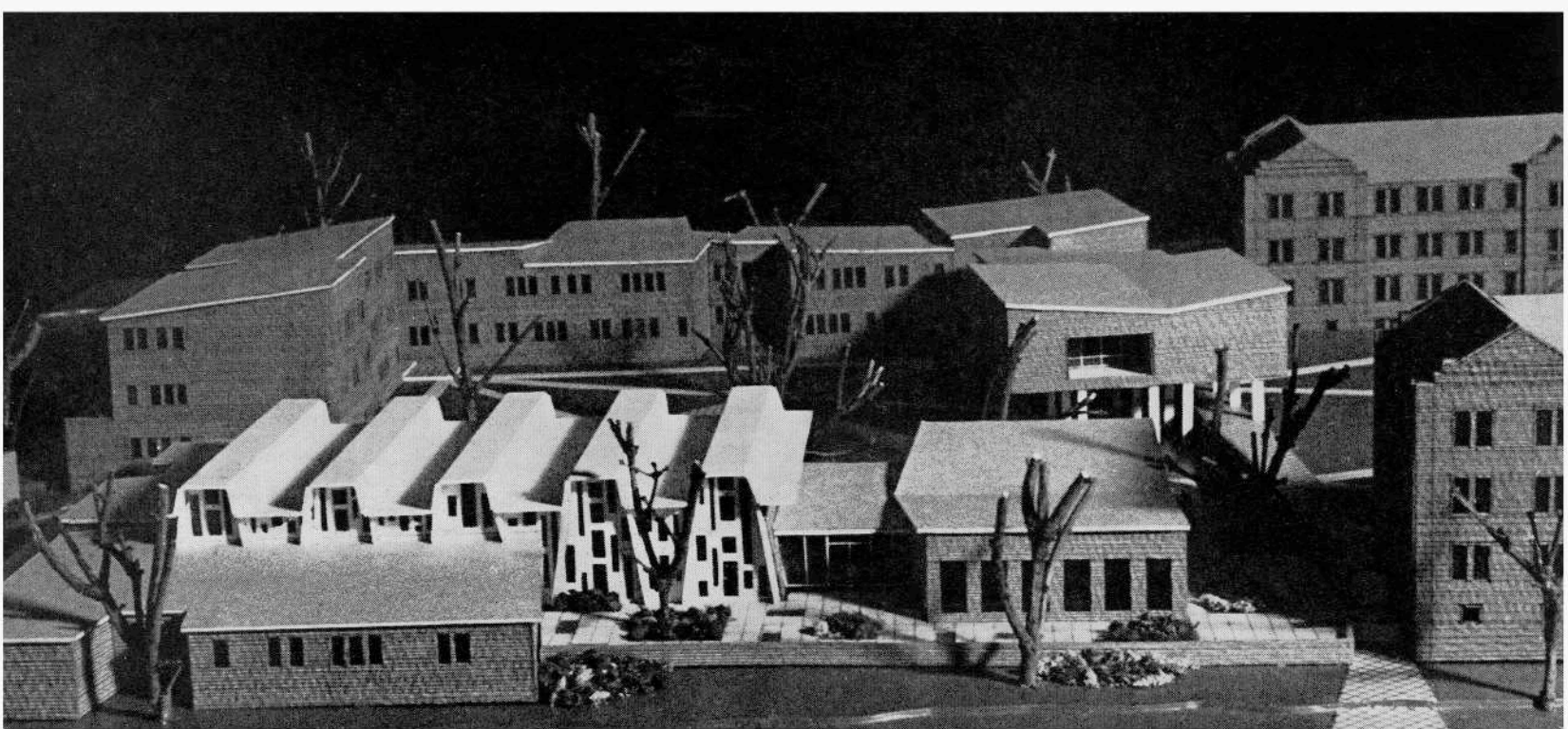


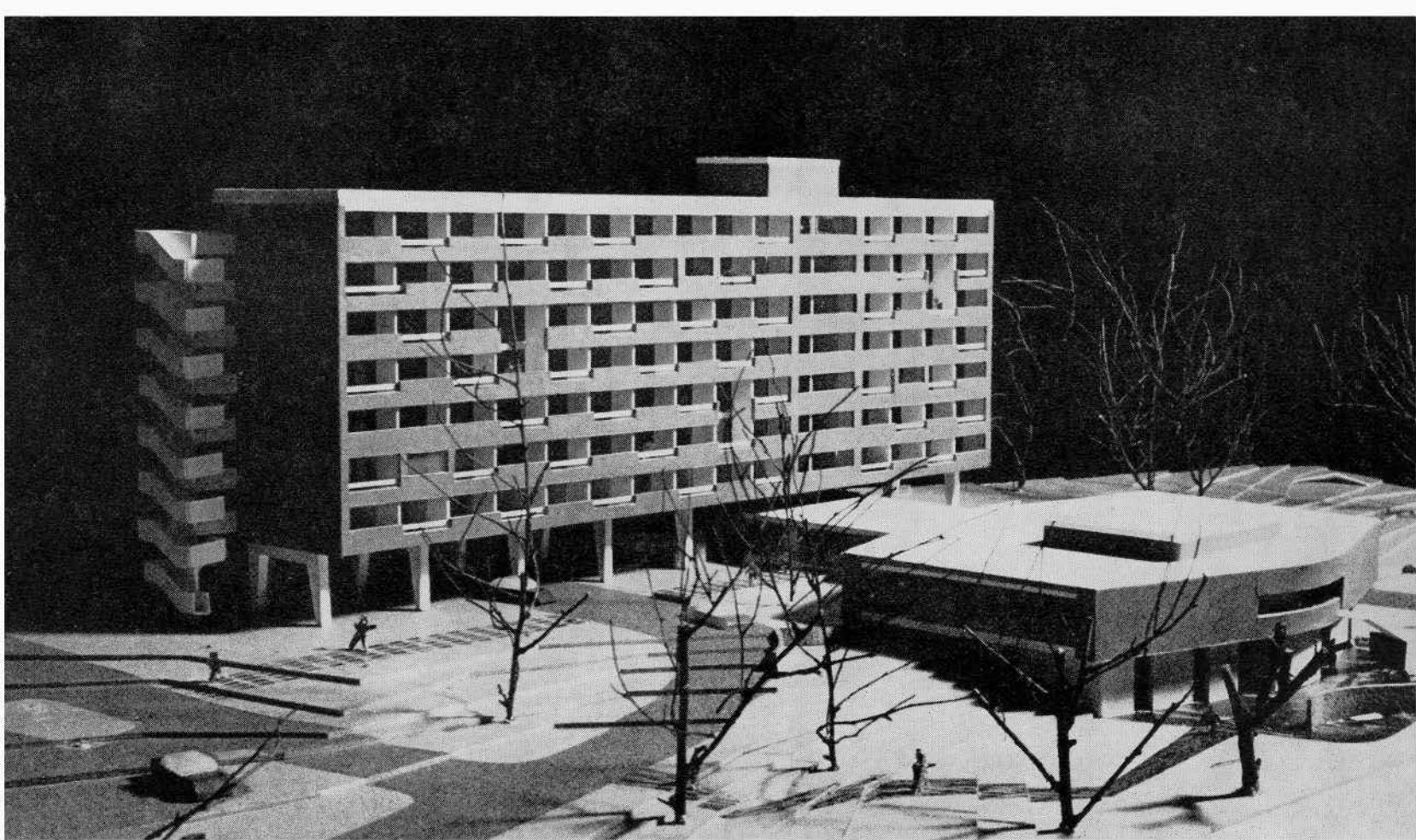


DEVONSHIRE HOUSE EXTENSION

UNIVERSITY OF TORONTO RESIDENCE FOR MEN

DESIGN THESIS
 JAMES J. NOWSKI FIFTH YEAR
 SCHOOL OF ARCHITECTURE
 UNIVERSITY OF TORONTO
 DECEMBER, 1957 SHEET No. 1

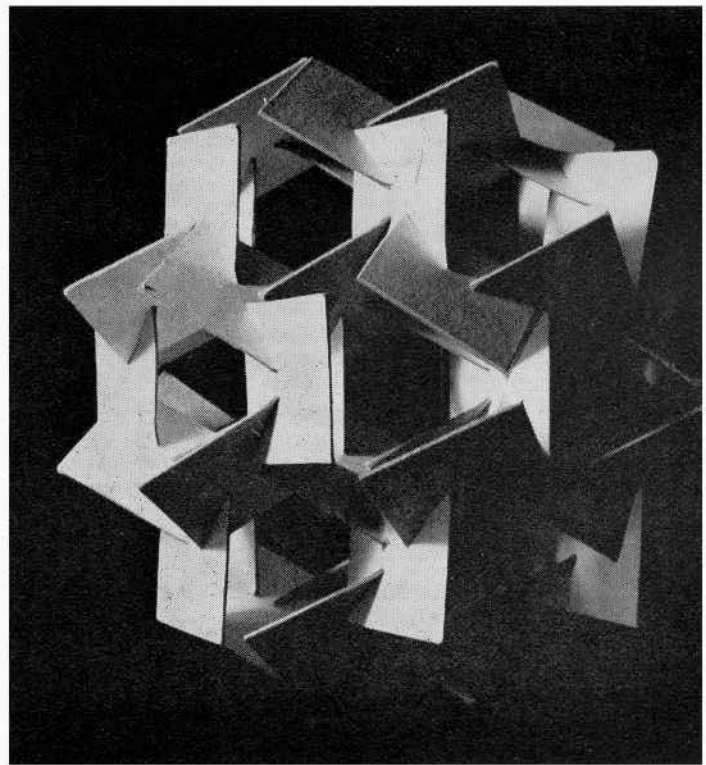




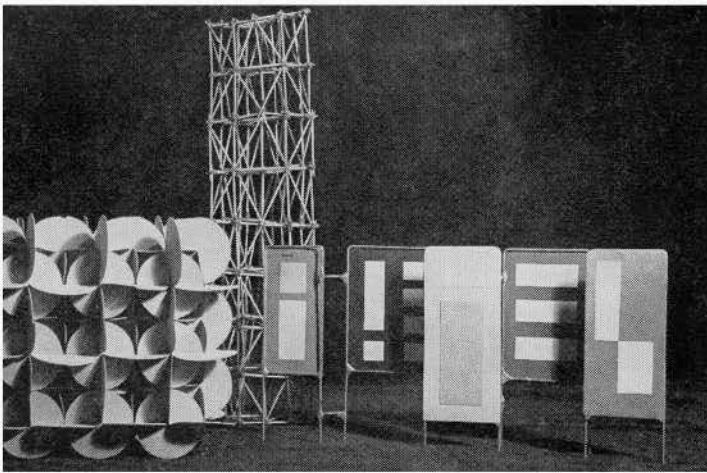
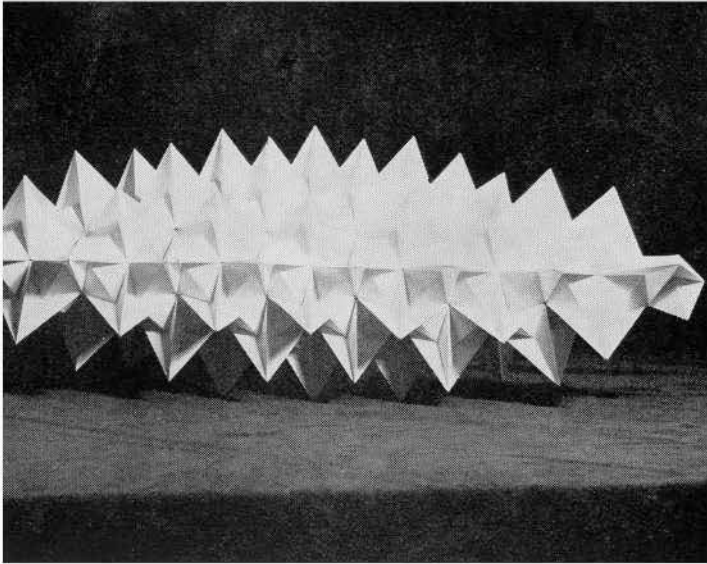
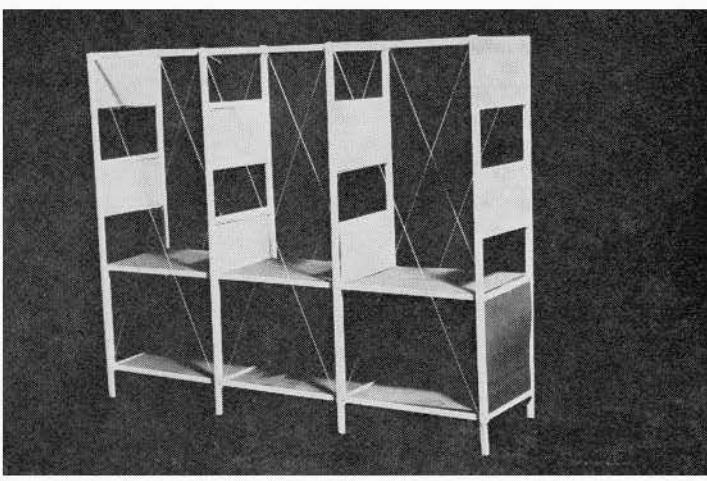
▲ *An hotel for the mining community of Elliot Lake . . . an organic collection of cells, expressed by the rhythmic succession of cube enclosing structural members . . .*

First year cellular structure ➡

Student residence . . . an attempt to maintain and complement the character of an extant complex: with the addition of a residential unit and dining facilities . . . the creation of visual exterior space . . . the irregular shape of rooms as a result of the desire to maintain individuality of students ◀



TECHNOLOGY



"IN HIS NATURAL READINESS TO GRASP LIFE AS A WHOLE, A STUDENT SHOULD FIRST GET A COMPREHENSIVE VIEW OF THE VAST FIELD OF POSSIBILITIES OF EXPRESSION LYING BEFORE HIM . . . THE STUDENT SHOULD BE INTRODUCED FIRST, THEREFORE, TO THREE DIMENSIONAL EXPERIMENTS, THAT IS TO THE ELEMENTS OF BUILDING, THAT IS, COMPOSITION IN SPACE WITH ALL SORTS OF EXPERIMENTS IN MATERIALS."

Walter Gropius

on the other hand . . .

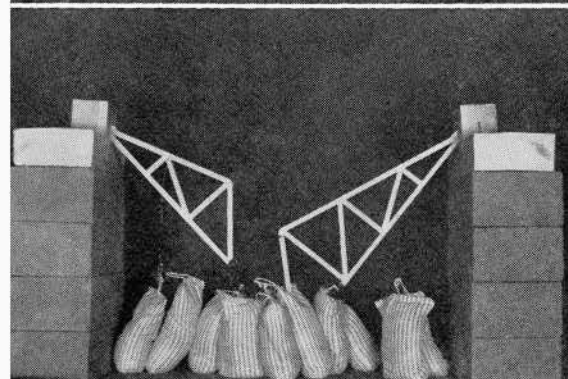
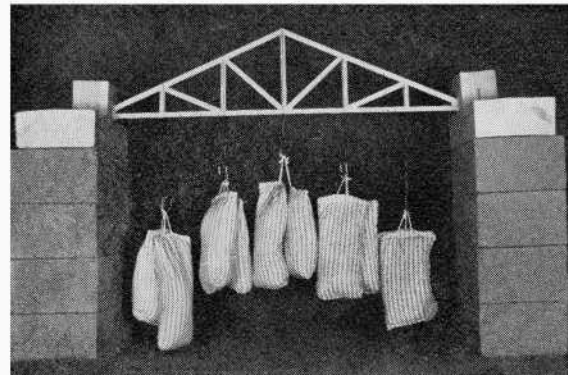
"IN THE GENERAL EDUCATIONAL SYSTEM, THE STUDENT IS REGARDED AS AN EMPTY SACK TO BE STUFFED WITH FACTS . . . AT THE END OF EACH YEAR, THE SACK IS OPENED TO SEE IF ALL THE FACTS ARE THERE . . . THEN HE IS SENT ON FOR FURTHER STUFFING . . ."

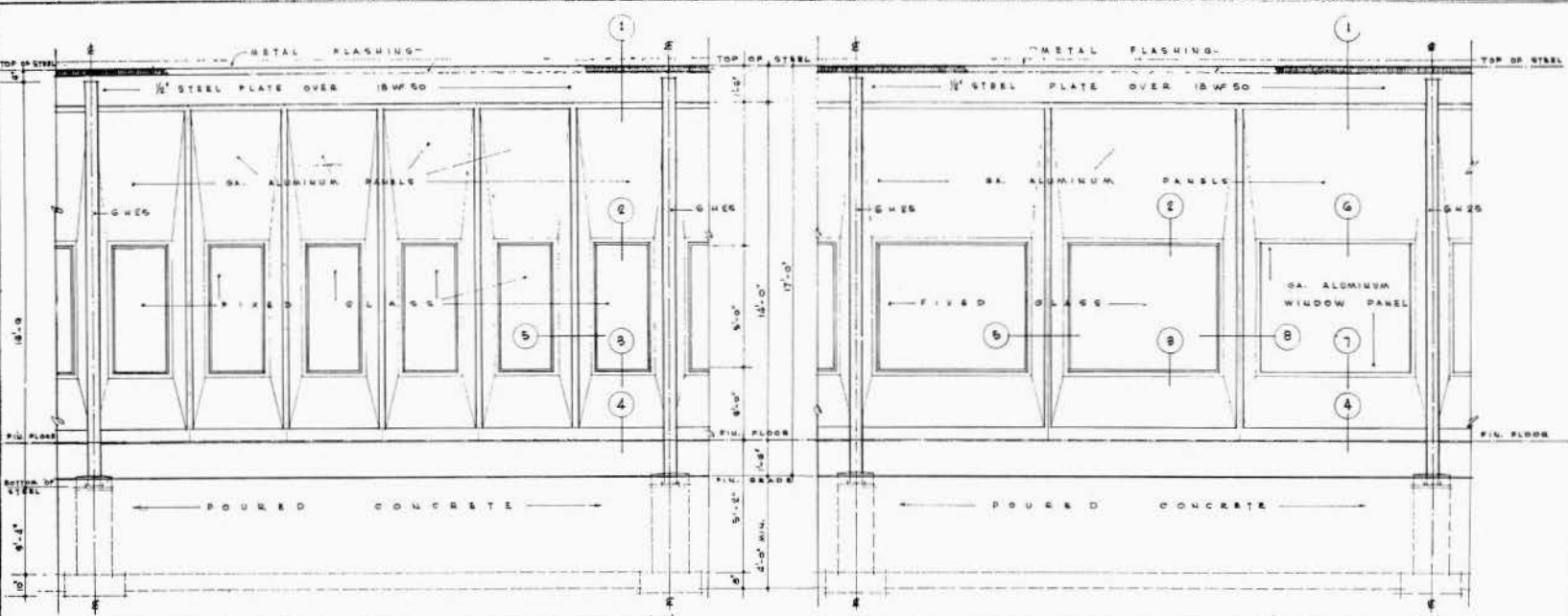
Eliel Saarinen

To counteract the all too frequent accusations of technical incompetence directed at the architect, the school provides a full grounding in the knowledge of materials and of the methods of their use in construction. EXPERIMENTS IN MODEL FORM are made to test the characteristics of materials and the relative strengths of various structural shapes, as shown at left and below.

Students are expected to achieve a certain level of competence in the production of WORKING DRAWINGS, such as the example shown at right, which are submitted as part of the information required at the end of a major problem.

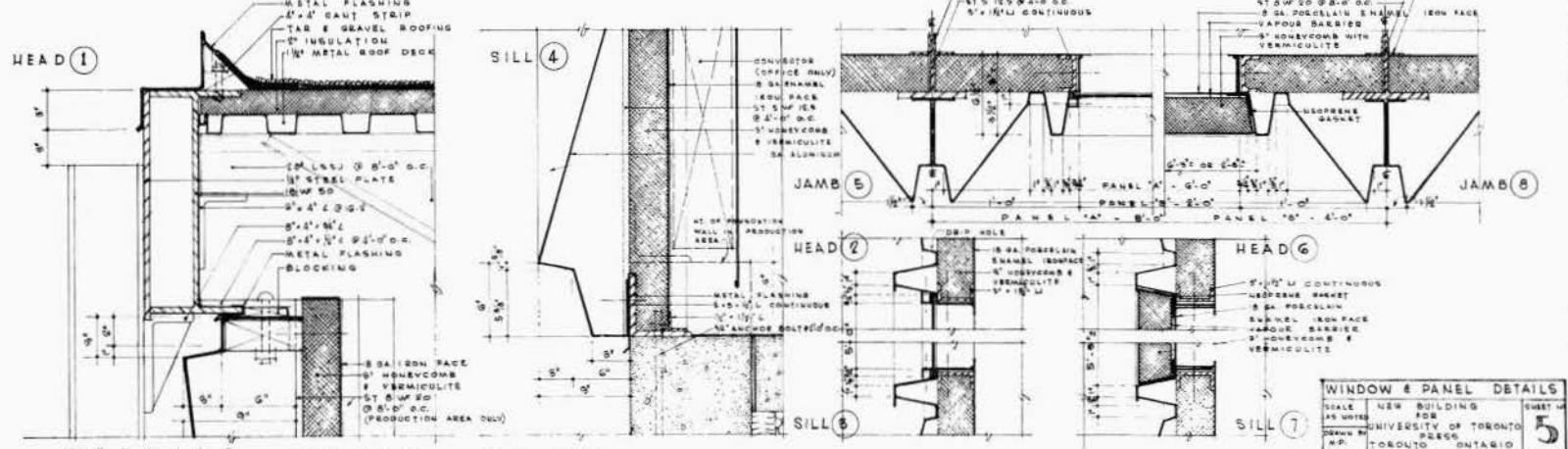
In addition, a summer must be spent on actual construction and a research project is undertaken into some phase or method of construction at a particular job site. The results of this research are presented in the fall term in the form of a CONSTRUCTION REPORT, which usually takes the form of text, drawings and photographs.





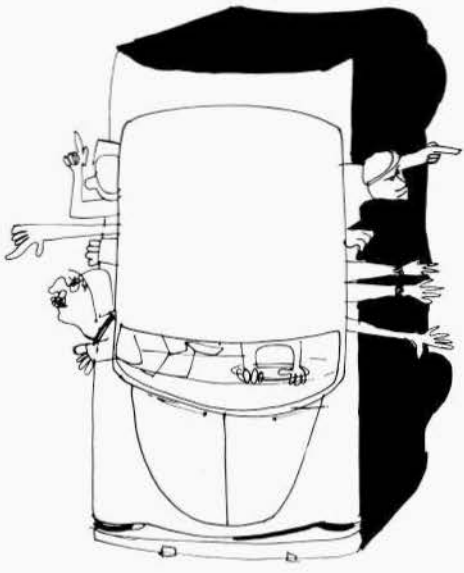
ELEVATION - TYPICAL OFFICE BAY (TYPE PANEL 'B')
SCALE - 1/2" = 1'-0"

ELEVATION - TYPICAL PRODUCTION BAY (TYPE PANEL 'A')
SCALE - 1/2" = 1'-0"



DETAILS SCALE - 8" = 1'-0"

| WINDOW & PANEL DETAILS | | | |
|------------------------|-------------------------|--|-------|
| SCALE | NEW BUILDING | | SHEET |
| AS NOTED | FOR | | 5 |
| DRAWN BY | UNIVERSITY OF TORONTO | | |
| CHECKED BY | PRESS | | |
| DATE | TORONTO, ONTARIO | | |
| PROJECT | THIRD YEAR ARCHITECTURE | | |
| | UNIVERSITY OF TORONTO | | |



CLASS TRIPS are organized by various years to visit such places as metropolitan New York or Chicago and Taliesin. Arrangements are made in advance to tour the significant new buildings and some of the famous older ones. On these trips, the stamina of the students, left, often exceeds that of the staff, right.



HUMANITIES



As part of study at university level, courses in the humanities are included, in which the student is required to read and think and write in terms other than those of applied mathematics or design in space. Among these courses is a series on the development of architectural form. Two papers follow, the first by a third year student on "Mies van der Rohe and Le Corbusier"; the second by a first year student on "The column form in ancient Greece".

MIES VAN DER ROHE AND LE CORBUSIER

A revolt against the *ecole des beaux arts* was begun at the turn of the century and supported by many young architects including Mies van der Rohe and Le Corbusier. Each revolted in his own fashion; Mies van der Rohe followed the idea of structural honesty and delighted in the sense of proportion inherited from Schinkel, while Le Corbusier belonged to a group of cubist painters and was absorbed in their ideas. From the very beginning the architecture of those two masters differed, and as the years passed the difference grew. An investigation of these differences in their attitudes towards the basic elements of architectural composition such as space and form will show their convictions more clearly.

Mies van der Rohe's main concern from the beginning was, and still is, architectural space. The concept of flowing horizontal space was first expressed in the brick country house of nineteen-hundred and twenty-three and carried to its triumphant culmination of that period in the Barcelona Pavilion. There the unit of design is not the enclosed volume anymore but the free standing wall extending into space, the wall which does not enclose space but channels it, producing a continuous movement. Here the interior and exterior space are not defined, and the whole emphasis is placed on the flow of horizontal space.

The result of Mies van der Rohe's recent experimentation is his present idea of "universal space". This final concept gives unity to the work of his lifetime which was a series of steps towards this final culmination. Space, being the chief element of architectural composition, now gains even more importance so that it becomes synonymous with architecture. Now less becomes more, for the building materials are dissolved in this space and only the absolutely necessary solid remains which acts as the defining line. All effort is clearly directed towards the abolishment of defining boundary line separating the outer from the inner space. The attempt is to fuse the outer space into the inner. The "universal space", therefore, is the liberation of the interior space. Space, the physical absence of anything, has become the essence of architecture. The confining element has been modified into a defining one retaining the eternal principles of architecture such as proportion, scale, rhythm.

This "universal space" becomes forcefully apparent in Mies van der Rohe's "Museum for a Small City." The auditorium in the museum was composed of free standing partitions and an acoustical dropped ceiling, which provided for liberation of space from function and especially enclosure. In his theatre for Mainheim he

again set his form and function free of one another by enclosing the complicated theatre organism into a huge, column-free hall of steel and coloured glass. His concept of universal space produced a building of universal function. Instead of fitting the skin to the function of the building he created a vast and simple space and then placed all his functional requirements into that protected space. Here form becomes free to use a simple economical structure and function becomes free to adjust itself with time, or even to change completely if necessary.

His "universal space", the aspect of which he believes to be flexibility, determines the type of construction. His buildings, therefore, are essentially of simple post and beam construction. He employs steel and glass because he considers them to be representative of our age. He believes that the structure is the "basis for all artistic design" and he does achieve beauty through his "ultimate effect of structural elements". He does not want his buildings to be self-consciously architectural; he desires rather "the absence of architecture" and in its place he practices "the art of building". His vast accumulation of technical knowledge, and many hours of patient experimentation produces unity, simplicity and rhythm.

Mies van der Rohe believes that architecture has nothing to do with form. Form is not "the aim, only the result." He stated that form per se does not exist, that form as an aim is formalism, a long-rejected theory. This philosophy he expresses very clearly in his buildings. He agrees with St. Augustine that "beauty is the splendour of truth" and tries to achieve his beauty from structure.

Building encloses space and within that enclosed space function is performed. There must be an enclosure of space for a function to be performed. According to Mies van der Rohe "function is the expression of the times". "Function has the intensity of life" and Mies believes that "only that which has intensity of life can have an intensity of form". Thus it seems that no matter what Mies van der Rohe considers . . . whether form, function, or proportion, he always finds an answer in space. His philosophy of architecture, can be summarized in his statement: "Architecture is the will of the epoch translated into space, living, changing, new".

The greatest criticism of Mies van der Rohe's architecture is the lack of humanism. It seems that his buildings (residential ones included) hardly consider the human beings at all. For flexibility, proportion, and flow of space, he has sacrificed immediate function. Mies van der Rohe, according to Phillip Johnson, takes as much time in placing a chair in a room as another architect would in placing a building on a square, but one cannot move the chair from its original position for he will destroy the whole composition. One cannot put a glass of water on the table or leave a newspaper on the chair for the results would be drastic!

The architecture of Mies van der Rohe in general does not have emotional appeal; its appeal is directed to the mind and the intellect, for his architecture is simple, rigorously methodical, well ordered and well proportioned.

Just as the goal in Mies van der Rohe's architecture is space, the goal of Le Corbusier is the achievement of the plastic aspect which is the result of feeling in architecture. It seems to me that Le Corbusier has undergone three major periods in the search for plasticity. The first period is the period when his house is a "machine for

living" because of its stressed functionalism; the second period is after the war, when his buildings reach very good proportions and rich textures through the use of his Modulor; the third is his final achievement of plasticity in the Chapelle de Ronchamp and the buildings at Chandigarh.

The first period occurred before the war, when Le Corbusier, in his book *Towards New Architecture*, declared that architecture was a "plastic invention" in addition to being a result of "intellectual speculations" and "higher mathematics"; that "architecture goes beyond utilitarian needs"; that it is a "plastic thing". But at the same time Le Corbusier decided that the house was a "machine for living in" and this idea he emphasized in his architecture. His buildings are utilitarian and there is no evidence of plasticity. The cubist movement of that time seemed to have emphasized the idea of the house as a machine even more.

The Villa Garches, for example, built at the culmination of cubism, was influenced greatly by the movement. It was a "machine for living", for it was functional, rational, urbane and pragmatic. Garches is an excellent example of Le Corbusier's particular interpretation of the machine aesthetic. The body of the house, built by quite conventional methods for its time, consists of skin walls of concrete block rendered to a monolithic, poured or sprayed effect; an aesthetic for a structural aesthetic not yet in being. Yet while Garches is not the product of any high-powered mechanization, the whole spirit of the building expresses the essence of machine power.

During the war, Le Corbusier crystallized the theory of the Modulor and started his second period of architecture.

He based his Modulor on the golden mean founded on the proportions of the human body, which helped him to establish an essential bond between pure mathematical event and the determining factor of the building field — to construct a shelter for the body of man. This Modulor has preserved Le Corbusier from the misjudgement of scale and proportion which other modern architects commit at intervals. And yet he seems to have broken his unbreakable rules, for there is a disturbing ambiguity of scale about the Cité d'Affaires façade; for he has covered a third of its key pattern of loggia-like sun breaks, the scale of which is exactly double that of the rest of the elevation. Moreover this arbitrary doubling of the scale corresponds to absolutely nothing on the plan. If there are eternal rules, then this design breaks them. In general, with his Modulor Le Corbusier protected himself and made his task of proportioning easy. As A. Einstein says; "It is a range of dimensions which make the bad difficult and the good easy."

It seems to me that in the second period Le Corbusier sought the plastic architecture through his Modulor. This he could never achieve, for he himself has defined the plastic aspect of architecture as being above mathematical calculations and intellectual speculations while the Modulor is nothing more than a set of mathematical dimensions. Therefore the forms and proportions achieved could only be the means to the end, never the end itself.

There can be no doubt that Le Corbusier's architecture of this period is of a very high standard. Perhaps the best evaluation of the Cité d'Affaires in Algiers is given by the master himself: "... unity sparkling from a work of architecture. Here reigns the golden section giving an overall harmony supplying with a prim of command and

purity; marking rhythm, proportional to the human scale, allowing for variations, authorized by imagination, ordered from top to bottom by the same principle."

His residential architecture gained more humanism and warmth in this period. The house he built for Mr Jaoul seems primitive in character, personal and anti-mechanistic as compared with Villa Garches of the first period which appears urban, sophisticated and essentially in keeping with "l'esprit parisien."

Although it is possible to criticize the Unite d'Habitation on many points, especially from the point of a sociologist, one must admit that the Unite is an ingenious work of planning, and the culmination of Le Corbusier's architecture of that period.

In the second period Le Corbusier had begun his experimentation with the plastic form, but he finally achieved his long-sought plastic architecture in his recent works at Chandigarh and especially in the Chapelle de Ronchamp. Only now the intention become realized; only now Le Corbusier succeeded in creating "emotion out of inert stone".

The Chapelle de Ronchamp is primarily a creation of Le Corbusier's feeling and not any religious function or Modulor. Of course the religious function was to be performed within the unique space created, but the main consideration was the effect achieved. The Modulor might have regulated the design but certainly it is not evident in itself. Every part of this building, even the coloured glass conveys the intensity of feeling. It seems to me that the most remarkable thing about this chapel is the fact that even though Le Corbusier was not motivated by any religious function, he achieved it. The religious function of any church is to create an atmosphere of prayer and devotion. Since the Chapelle de Ronchamp is a creation resulting from the emotions of Le Corbusier, the emotions being strongly imparted on the sculptural forms radiate on the participants of the religious rites creating the desired effect.

The buildings at Chandigarh have been described by Maxwell Fry as being "the most sophisticated architectural sculpture yet". Here Le Corbusier was very much concerned in the function but it is his acquired plastic sculptural sense which made his most beautiful creations conceivable. Here all his buildings are regulated by the Modulor, but the Modulor is only the means to the end and not end in itself. His strive for interest and variety he describes himself "By this eloquent classification of working function and materials; by the use of contrast and analogies, of harshness and softness of sharp and blunted lines, I have been able to create an architecture full of variety."

"In the building of Chandigarh, the forms are lively and baroque, tactile interest in accentuation to relief, colours are strong and dominant. They reveal a warmer and more humane view of individual personality and of family life than was expressed in earlier rationalistic Le Corbusier for whom the home was merely a machine."

It seems to me that the time when function was the primary consideration has passed. We no longer think that when the problem of function has been solved the exterior form will be found crystallized, but neither do Mies van der Rohe or Le Corbusier. The "universal space" resulting in building in which form and function are liberated is a great contribution to modern architecture per se and because of great possibilities in the future.

Mies van der Rohe's influence is great for his archi-

ecture does fulfill the commercial requirements of our epoch. Le Corbusier's architecture appeals to many because of its emotional effect.

At this stage it is difficult to predict the future developments in architecture but it would be interesting to know in which way it will proceed. Is it going to centralize its efforts on the enclosure of space in the simplest form possible, or is it going to be effected by the pursuit of emotional effect?

N. Salkauskis

THE COLUMN FORM IN ANCIENT GREECE

In an effort to control his environment, man is constantly confronted with the unsympathetic laws of nature, and until he has discovered a more economical way to overcome the force of gravity, the structural use of columns will persist as an essential method in the support of his shelters. Through the ages and up to the present, columns have appeared in a variety of forms, from tent-poles to two-by-four studding. Unique, however, among these forms are the Greek columns, which have been reproduced in exact replica over a period of twenty-three hundred years after their original occurrence in the agorae and acropoli of classical Greece. In the Roman and Renaissance periods, they were copied for defined structural necessity as well as aesthetic purposes. In more modern times however, with the advent of steel and reinforced concrete, the use of Greek columns had relatively no practical value as a structural element. Their persistent popularity lay completely in visual appreciation. This represents an acclamation of architectural form unparalleled in history.

The exact origin and development of the Greek column to its ultimate refinement in classical times is a much debated question which is embodied in the origin of Greek architecture as a whole. Some authorities are of the opinion that the Greek style of construction developed entirely from an early stone type, while others hold that it may have evolved from the combined use of stone columns and timber beams. With respect to columns in particular, these two theories imply a stone origin, and together contrast with the more popular belief of the columns evolving from use in the wooden hut, as upright posts supporting beams and rafters.

The advent of stone in construction caused a great development in the technical skills of masonry and sculpture among the Greeks. With the eventual employment of their native marble as a structural material, in solid and veneer forms, the Greeks found a medium ideally suited to delicate outline.

Of the three types, the Doric predominated in the Greek world. Its origin, as that of the rest of Greek Architecture, is uncertain. Although many link it to an Egyptian prototype as exemplified at Beni Hasan, the Doric column is generally thought to have evolved locally from the square timber post. The four angles of this form were probably splayed longitudinally, producing an octagonal column which was further developed into a sixteen-sided column by again splaying the eight edges already obtained. Finally these edges or arrises were rendered more prominent by hollowing out the flat sides between them into flutes.

This capital was truly unique among its contemporaries, being simple and unfrivolous in design. It consisted of an abacus, echinus and annulets. The abacus was square and very functional looking, resembling a flat

building-block. Beneath this, and in pleasant contrast, was the echinus which tapered downward in a gentle curve. The curve was quite pronounced in earlier times, but eventually became very conservative. The annulets of the capital were simply horizontal fillets, three to five in number, which marked the termination of shaft flutes in the necking. The shaft, of the column as a whole, was generally convex in profile, and this to various degrees in different buildings. In the Basilica this so-called entasis was too exaggerated causing a bulky effect. In the Temple of Corinth, it was completely omitted and the columns appeared hollow and lifeless. Just the correct entasis was used in the columns of the Parthenon. They didn't appear over-stressed but certainly seem to be working actively in the support of the overhead members.

Unlike the other types, the Doric columns have no individual bases. Instead they rested directly on the stepped stylobate or floor of a building. Possibly the Greeks considered this elevated floor to act as a common base for all Doric columns stemming from its surface. Herein lies further evidence of the Doric column as a simple and refined architectural form.

By present standards of architecture, the design of the Ionic and Corinthian columns appears distastefully complicated in contrast to the Doric. These orders were nevertheless justifiable for their time, and expressed the contemporary growth of a distinctive art and style of sculpture. In addition to an evolution from this local need of self expression, the Ionic column specifically, was considerably influenced by contact with Asia Minor. This contact is implied in the remarkable volute capital which was probably derived from the spiral, a typical West Asian motif.

Because of its comparative lateness in development and expensive construction, the Corinthian column was not used nearly as much as its counterparts. Where the Corinthian columns were used, as in the Apollo temples at Bassae and Miletus, they were not the main structural element, being treated as focal points of interest, not unlike pieces of sculpture. In contrast, Doric columns were used widely and in a very functional manner. These columns were very dominant throughout the Spartan colonies of Sicily, Italy and North Africa. In the Athenian colonies on the eastern Mediterranean coast, the Ionic columns were most utilized. This regional distribution was very general and inconsistencies appeared in both areas. However, the mixture of these two main orders was natural for it implies a coexistence of Spartan and Athenian ideologies which was inherently the make up of the Classical Greek world.

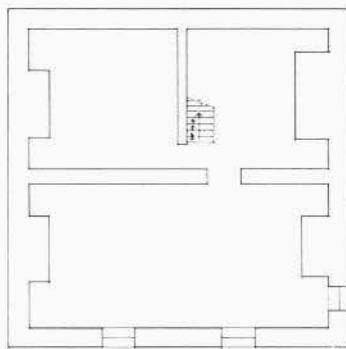
In mainland Greece particularly, builders appeared to have no regard for political significance in the use of column types. The Acropolis at Athens shows the use of columns in a purely architectural sense. Here the Doric column with its innate strength and stability is used on the perimeter of buildings, where the maximum roof load is concentrated. The Doric with its thick shaft and slightly bulging entasis, truly expresses the function of a peristyle column. The Ionic column although occasionally used externally for variety, was considered an interior column. Within the naos of a temple, structural necessity was lessened, and the more decorative column justified. The Ionic column had a delicate effect with its organic capital and slender shaft.

The skill of the Greek architects was not only demonstrated in their treatment of columns, for much effort

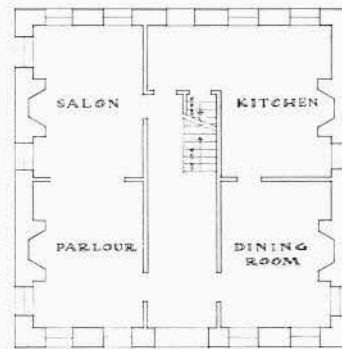
was expended in the design of roofs and etceblatures, as well. However upon analysis of all successful Greek buildings columns are the constant distinctive feature both visually and structurally. It must be recognized that successful Greek architecture began when the people first came to appreciate their columns in an aesthetic sense. From this point on, columns were more carefully treated and appeared in locations as to best express their particular structure. The temple of Ancient Greece was a public building to the extent that public ceremonies were conducted around it. It was essentially to be viewed from the outside. In the Greek house, which was strictly private, the decorative columns were used in an interior portico surrounding an inner courtyard.

Derived from their use in temple structures, colonnades were used to support canopies projecting from blank wall. Such structures were called storas, and by the time of Pericles, appeared profusely in the agri or market places of Greece. In the warm climate of ancient Greece, these colonnade shelters were the ideal location for merchants to conduct business. The tall imposing portico columns of administrative and educational buildings were indicative of power and dignity. Columns were so widely used that they essentially had come to determine the character of Greek Architecture, and the Greeks with an artistic handling of the columns had surely produced an architecture perfectly expressive of their environment and way of life. *D. Bielesch*

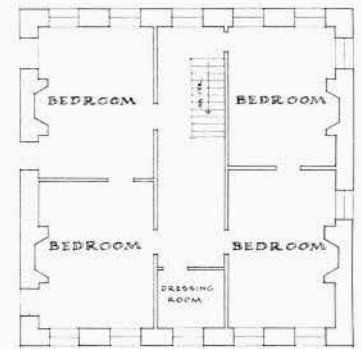
THE SHAVER HOUSE



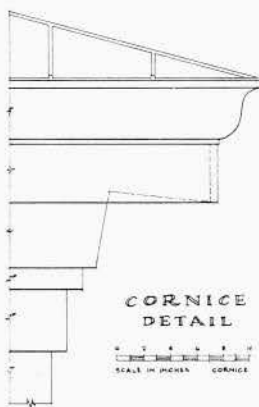
BASEMENT PLAN



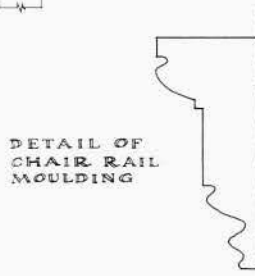
FIRST FLOOR PLAN



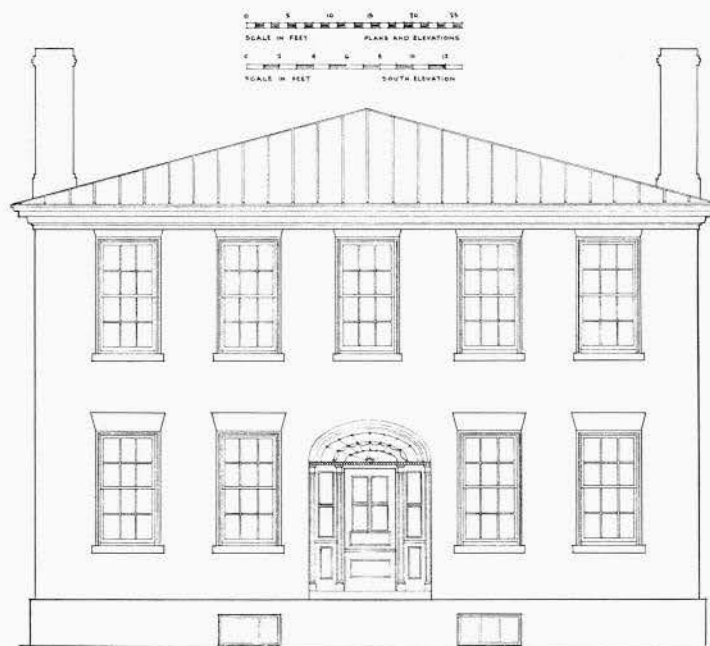
SECOND FLOOR PLAN



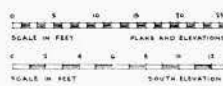
CORNICE
DETAIL
SCALE IN FEET



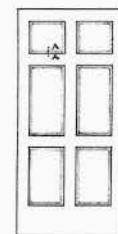
DETAIL OF
CHAIR RAIL
Moulding



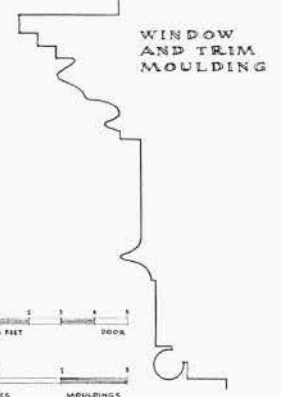
SOUTH ELEVATION



SCALE IN FEET
PLANS AND ELEVATIONS



SECTION A-A
INTERIOR
DOOR

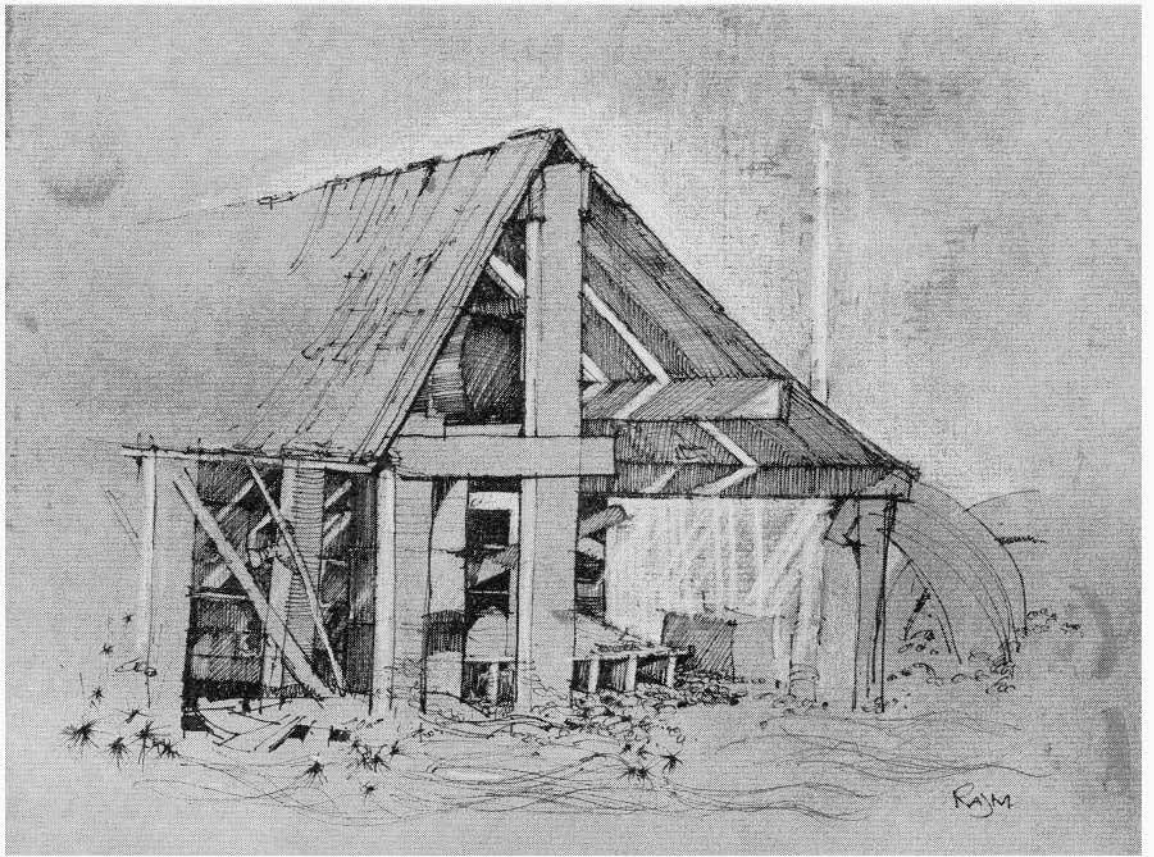


SCALE IN INCHES
Mouldings

In May, 1957, students entering the third year were asked by the Architectural Conservancy of Ontario to visit the St. Lawrence Seaway area, to measure certain buildings which were soon to be destroyed. The conservancy provided each student with a small subsidy. In return, an accurate record of the past would be undertaken which would be preserved in the archives. This work was to constitute the normal school requirements of MEASURED DRAWINGS. Whether it was the fact that we were being paid for the job, or whether it was an excellent chance to get out of the city for a holiday is not known; but the project was a delightful experience and an immense success. Eight buildings were measured, including the Shaver House shown above. The most ambitious job was the Morrisburg Opera House, undertaken by a team of four students. No longer used as a legitimate theatre, it had fallen into disrepair, since even the most liberal of fire marshalls could hardly give it adequate safety rating. Backstage lay the remains of the old vaudeville days, the walls thick with posters advertising everything from Morton's Minstrels to a travelling production of Hamlet.

It is felt by the design staff of the school that one of the best methods of assessing the design potential of the individual student is to inject into the schedule from time to time, **SHORT PROBLEMS** on which no advice or criticism is given. The student is forced to work out his own solution, and from the result, the extent of his development may be determined. Often the inclusion of these short problems into the schedule of larger problems, brings welcome relief to the student's routine. Below, a poster design, inspired by the first year class trip to New York.



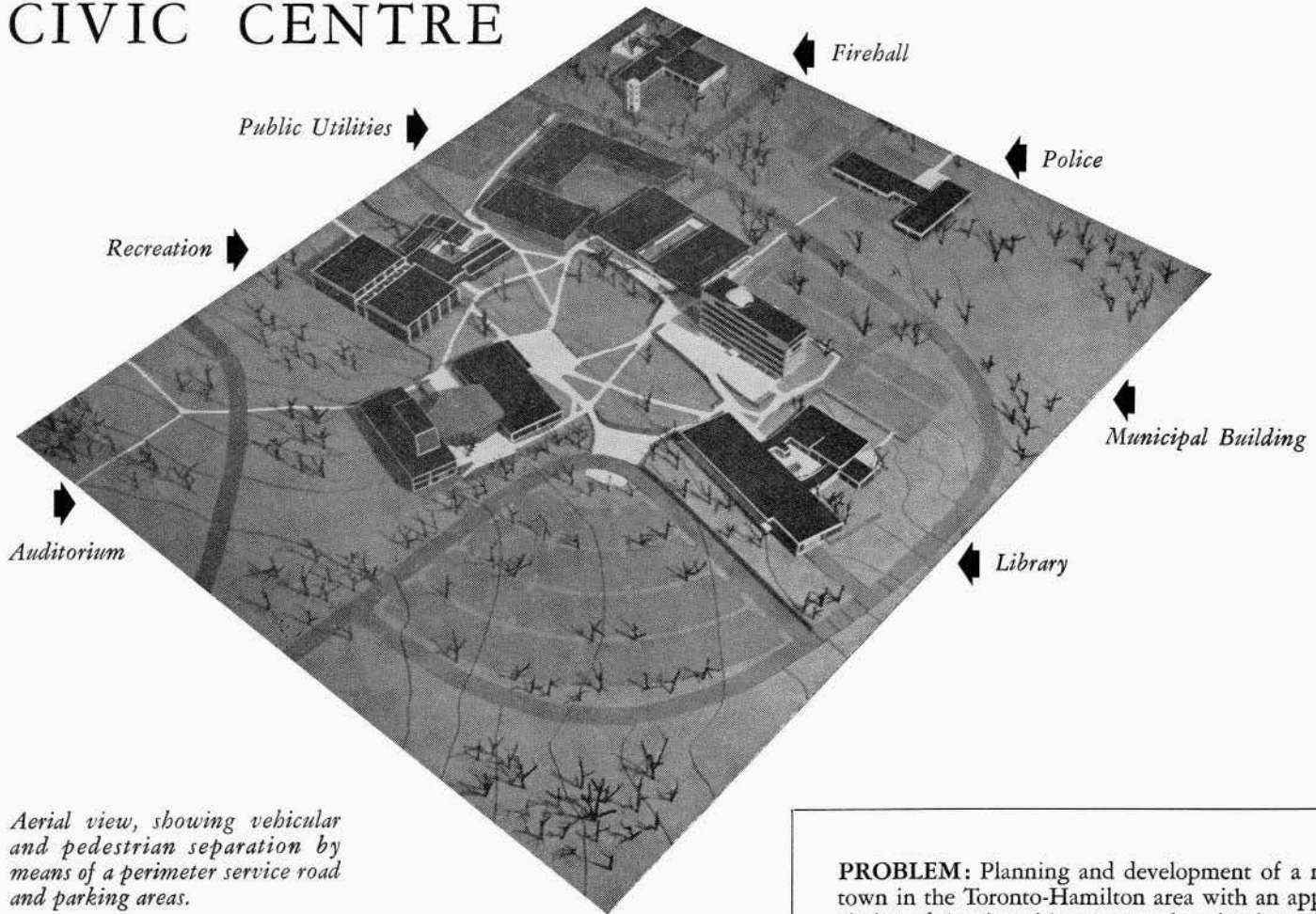


For ten days in late September, the second, third and fourth year students of the School of Architecture attend ANNUAL SKETCH CAMP at the Forest Rangers' School, located in the University's large tract of land near Dorset, Ontario. Encouraged by the staff members, the students paint and draw the colourful autumn landscapes and the local townscapes. This may not seem to be of any practical importance but indirectly instills in the students a concern for design through sketching which will eventually aid them in their careers. A strong feeling of friendship among students of all years is also fostered.

The camp is directed by Professor W. E. Carswell, assisted by Professor John Hall O.S.A., Tom Hodgson O.S.A., and Jim Gordonier, all professional artists. Although each member of the staff has his own opinion on the approach to art, they all agree on the principles of the camp, to foster friendship between the students and staff, as well as to provide a background for the development of each student's interest in art.



CIVIC CENTRE

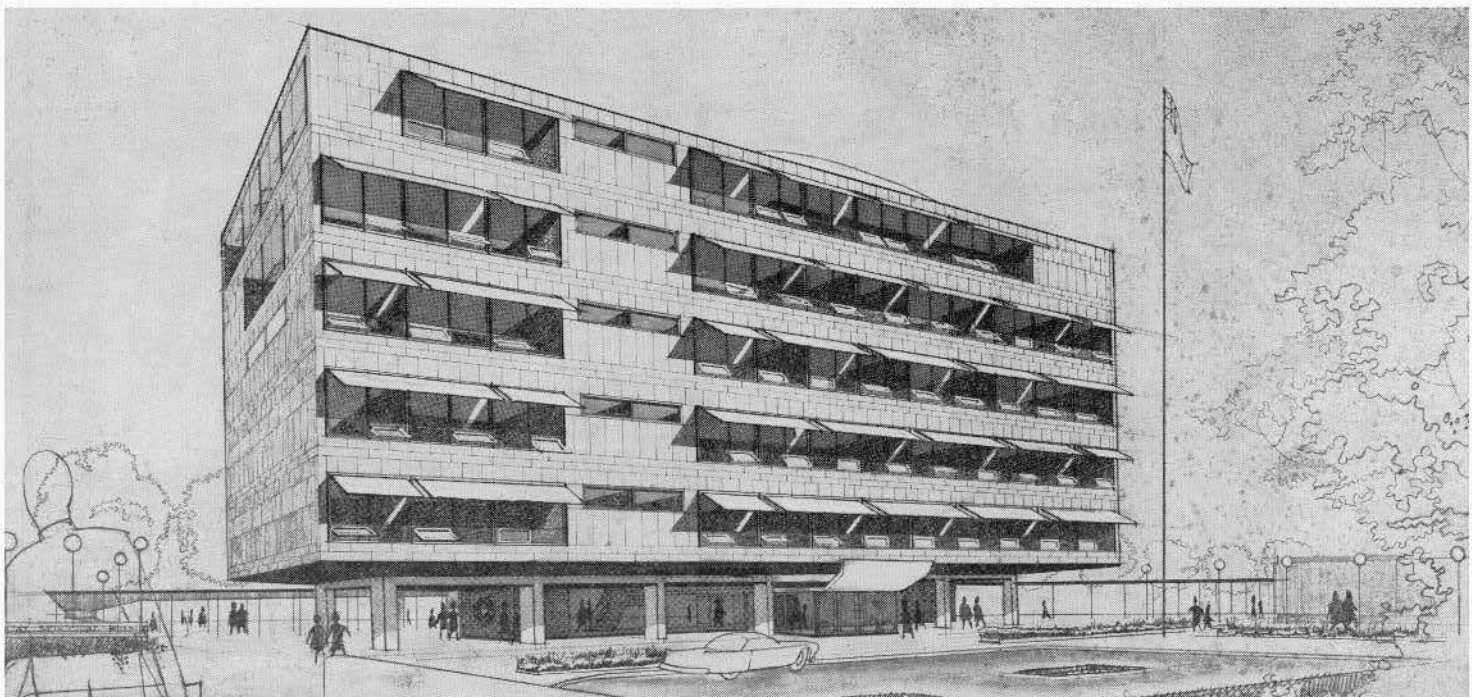


Aerial view, showing vehicular and pedestrian separation by means of a perimeter service road and parking areas.

The social needs of a community of thirty-five thousand people are realized in this group of buildings which form a proposed civic centre for the town of Ajax, Ontario. This particular solution to the problem recognized the potentialities of a large site located in the centre of the town. The concept of this centre was neither urban nor "Main Street", rather of a pedestrian area set within a park space.

PROBLEM: Planning and development of a new town in the Toronto-Hamilton area with an appreciation of the site with respect to location in region, potential development. **ORGANIZATION:** groups of three fifth year architectural students and two town planning students. **SEQUENCE OF STUDY:** survey . . . general plan . . . detailed plans. **PRELIMINARY INVESTIGATION:** a study of boundaries, climate, topography, land use, transportation, services existing and proposed; legal, financial and administrative procedures; demands for residential and industrial land. **MASTER PLAN** is worked out, followed by a detailed study of residential and commercial areas and the town centre within the general framework.

Municipal Building

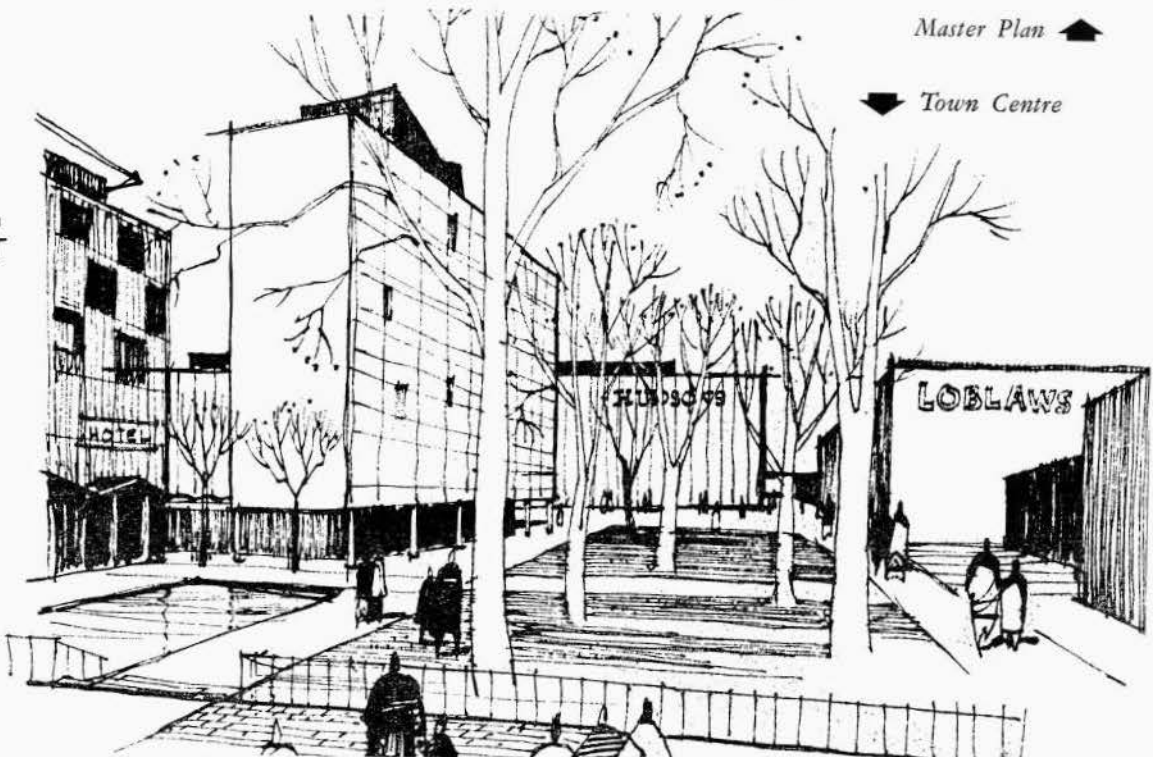


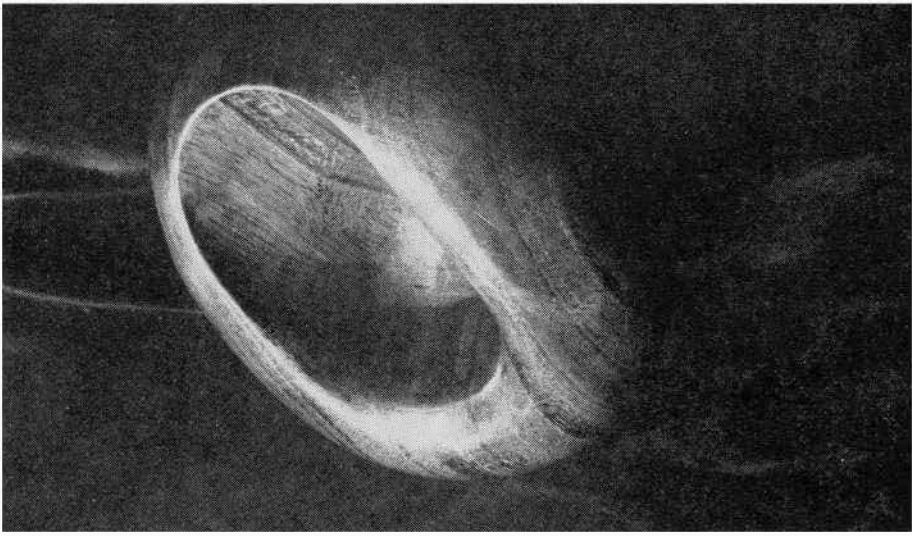


Master Plan 

 Town Centre

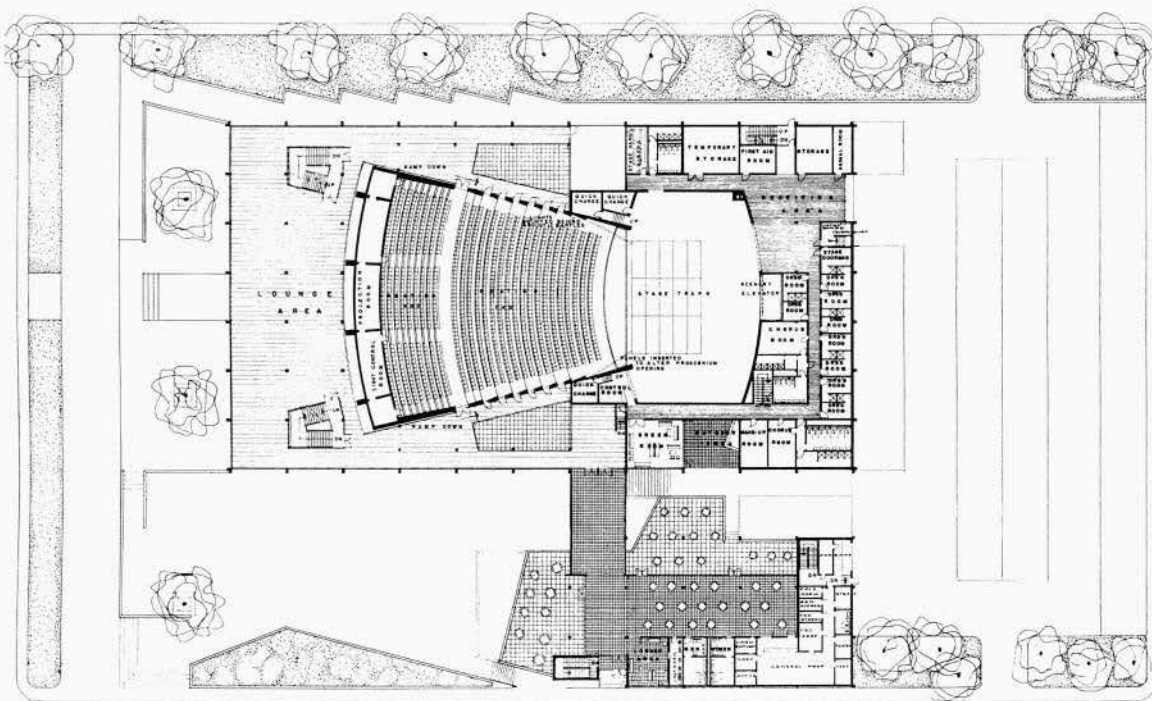
TOWN PLANNING



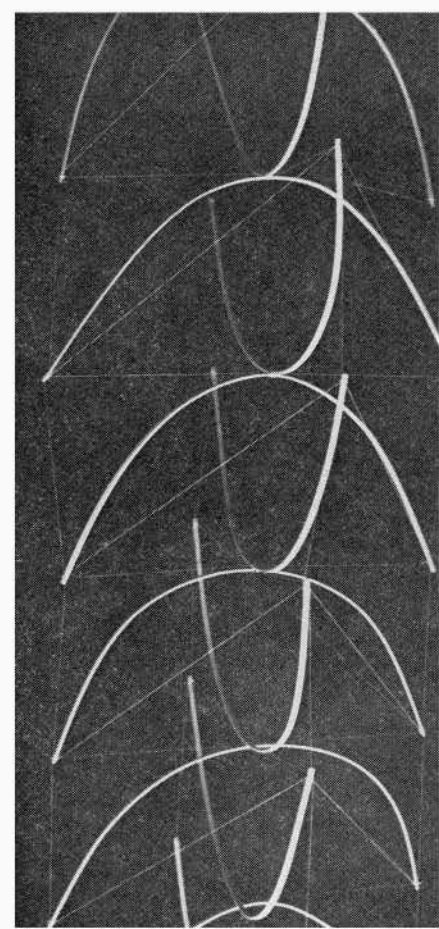
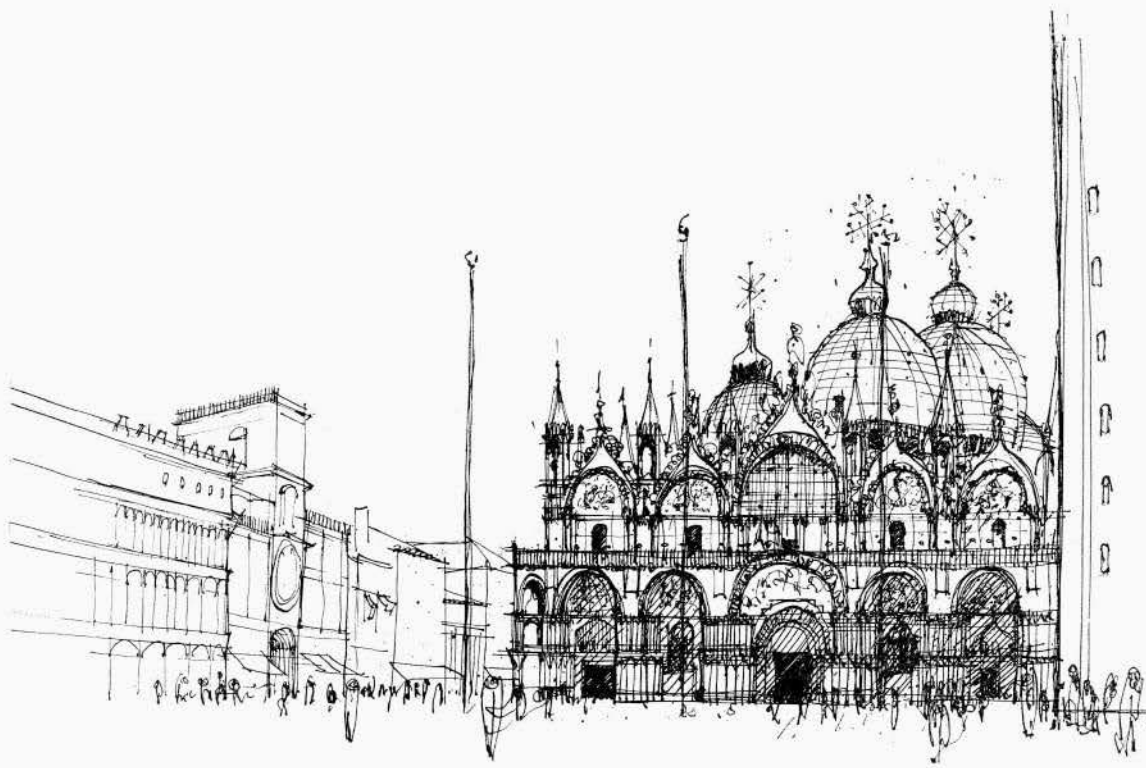


THESIS

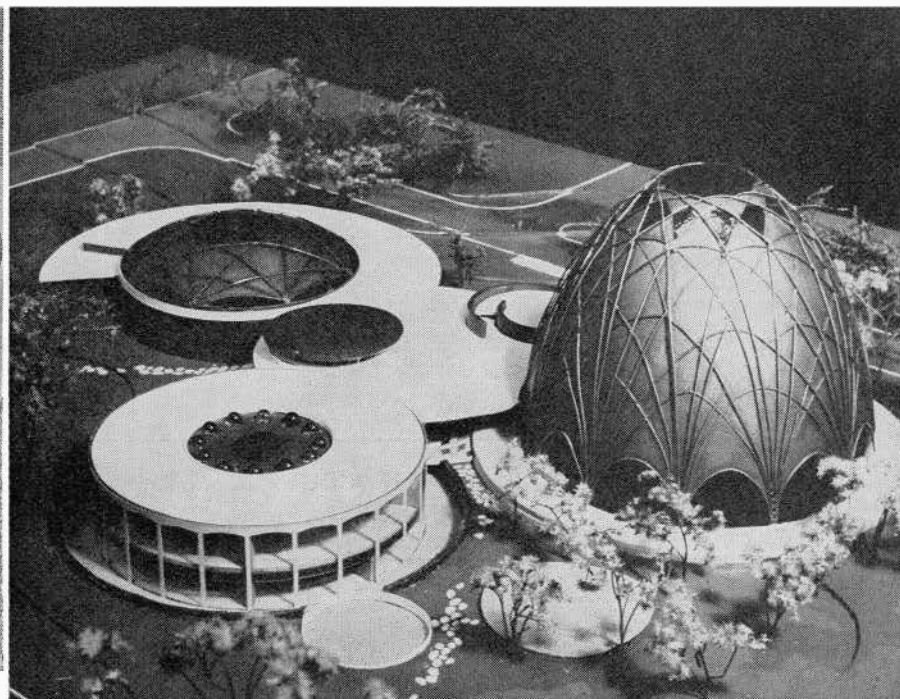
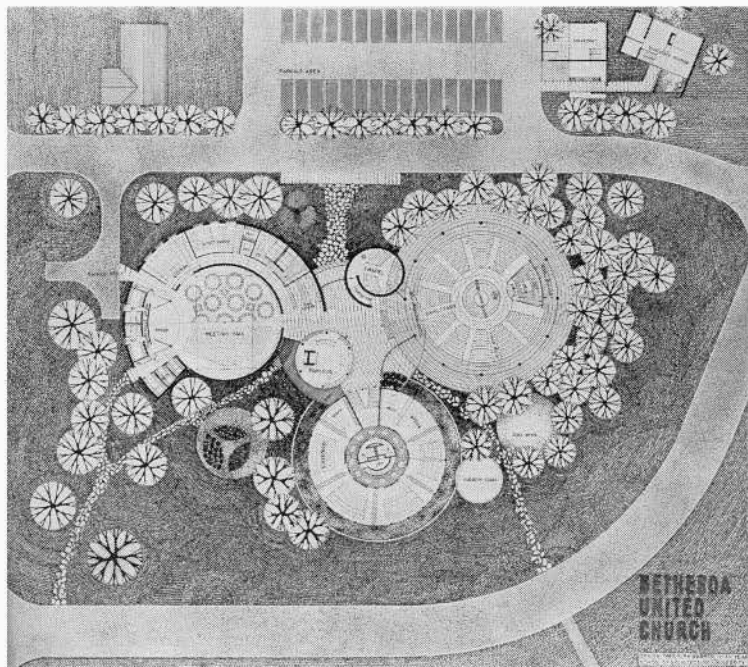
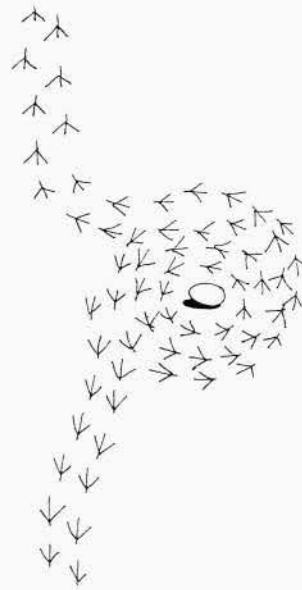
The thesis is the consummation of all the student's experience at the end of five years at the university. As far as time permits, it is intended to be a problem in total design. Programming, for a building of the student's own choice, is done during the summer preceding fifth year. A definite attempt is made to proportion the ensuing twelve weeks to the initial concept, developmental studies, mechanical, structural and acoustical consultations, interior design studies and finally presentation. Practicing architects are invited to participate in the criticisms. Students are asked to explain their approach to their respective buildings. A multisided discussion usually ensues. Examples of work from three recent thesis projects is shown.

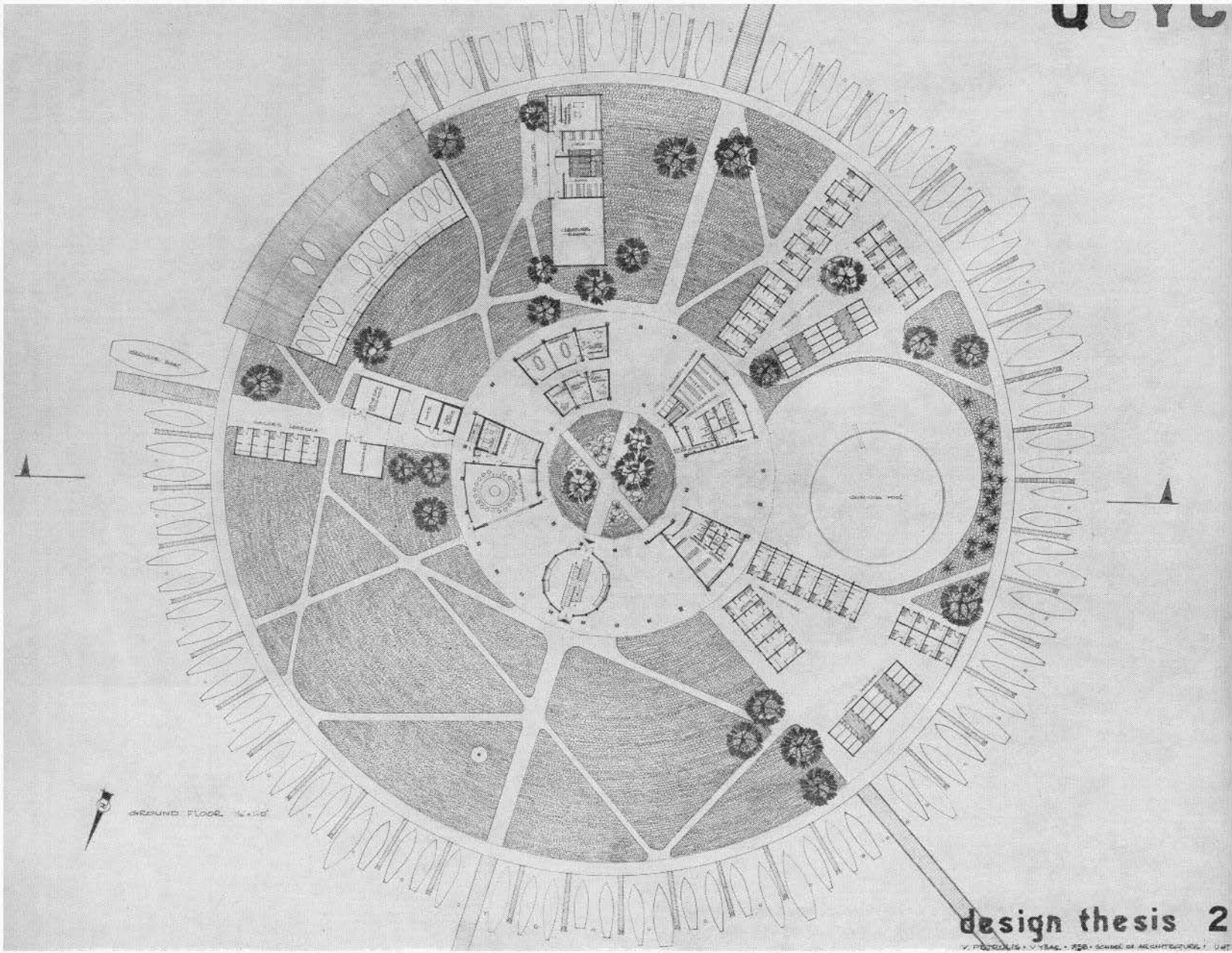


Thesis number one . . . a municipal auditorium . . . to enclose a dignified public space in conjunction with a new city hall and library . . . to achieve a monumental character . . . to contain adequately a variety of functions for a city of two hundred and fifty thousand people . . . small concerts . . . drama . . . ballet . . . opera . . . the gross warbler.



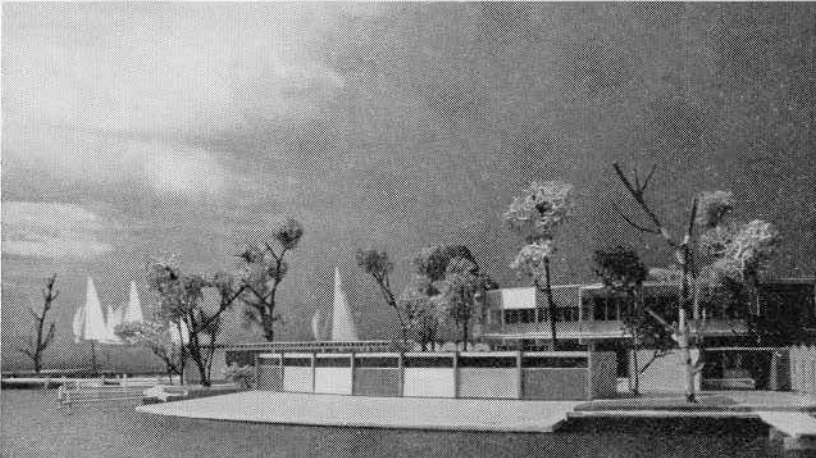
The Piazza San Marco . . . light sparkling . . . detailed architecture . . . drawn with a fine pen to capture the feeling . . . movement everywhere, in the square, in the buildings, and in the people and the pigeons . . . and in the first year study of tension and compression structures . . . recaptured in thesis number two, Bethesda United Church.





design thesis 2
V. POCOCKIS • V. 1946 • 228 • SCHOOL OF ARCHITECTURE • U.M.T.

Thesis number three . . . a yacht club for Toronto Island . . . the integration of boating and social activities, the necessity of raising the level of the island site with perimeter piling, the consideration of circulation, provision of maximum view for armchair sailors and of optimum mooring conditions . . . all lead to the conclusion that the circle is the most appropriate shape.



EDITORIAL BOARD . . . r. w. j. brown, clive h. clark, p. g. gilbert, alistair grant, g. g. d. milne, d. o. moffat, michael roberts, murray ross, p. h. warren, j. a. s. weller, and others of the school . . . european sketches by g. a. macinnis and c. b. millar.

SOME ELEMENTS OF HOSPITAL DESIGN

In three parts, on the following pages the Journal is offering some expert opinions about a highly specialized and increasingly intricate field of design, that of the general hospital. In part one, Mr Kaminker of Govan, Ferguson, Lindsay, Kaminker, Langley, Keenleyside, concentrates on the problem of expandibility as an essential in the early stages of programming with the client. In part two is shown a recent project of Mr Kaminker's firm with a detailed account of its mechanical plant by Mr D. L. Angus of H. H. Angus and Associates who participated in the project. In part three, Mr Izumi of the firm of Izumi, Arnott and Sugiyama, discusses an approach to the design of a hospital ward, describing in general terms the significant relationships that need to be established, regardless of the particular solution achieved in any one building.

PART ONE

GREEK MYTHOLOGY TELLS US about Pallas Athena springing fully armed from the head of Zeus. This was a neat trick, certainly, but not to be compared with the feat expected from the persons called upon to create a hospital where none existed before.

Scarborough General Hospital was such a project. In the planning stages, the hospital did not exist even as a legal entity; it owes its origin primarily to the fact that the Sisters of Misericordia who were at the time operating thirty-five bed St. Mary's Hospital on Jarvis Street, saw in the rapidly expanding area of Scarborough a more adequate outlet for their humanitarian services and ideals. Since there was no background of hospital experience in the area and no hospital staff to consult with, there was obviously nothing for either the client, represented by the dynamic Sister Ste. Roseline or the architect to draw on in preparing the programme beyond their pooled experience of other hospitals.

Let not the uninitiated imagine for one minute that the lack of consultants (medical and otherwise) is an entirely unmitigated evil. We are not told whether (Mr?) Zeus suffered any great pangs of labour in his remarkable achievement; certainly the period of gestation must have been very short. So it proved with the preliminary developments of the plans of the Scarborough General Hospital. Let us be honest and admit that failing a crystal ball, no one can foretell with precision how the loads will fall on the various departments. Will the demand on emergency be high? On surgery? On obstetrics? With no previous experience in the area to fall back on, it was clear that any major departure from an accepted "norm" was hazardous. The trouble usually lies in determining what is the norm. Recently we heard a hospital administrator bemoaning the fact that the obstetrical department of his hospital located in a medium sized town was never more than 50% occupied. With statistics of birth rates generally available, it would appear that this is one department whose needs might be forecast with reasonable accuracy. Yet it appears that even the local citizens were not fully aware of the extent to which the younger people were leaving the town for the greater opportunities in the city. Either this was the reason for the low birth rate or it was the late, late movie.

In still another hospital on the outskirts of Toronto, it was found that the pediatric department was not pulling its weight. This was ascribed to its closeness to Toronto and the Hospital for Sick Children and the preference of parents for having their children attended by top name specialists. This situation, however, is correcting itself as the public gradually becomes aware of the facilities available within its own community. Another factor sometimes overlooked is the shortage of skilled personnel in medium sized and small communities. What is the point, for instance, in building an elaborate physio-therapy department if there is no trained personnel to operate it?

All these local factors, of course, the planner tries to take into consideration in sizing the departments. With Scarborough, however, it became apparent very early in the planning that the limiting factor was not going to be potential demand or availability of trained personnel, but rather the cost of the project. Truth to tell, this is only too frequently the case.

With sufficient population in the Scarborough area to warrant a 700 bed hospital, it was clear that the department of a projected 170 bed hospital would not likely be oversized, and its location in the midst of a large urban area left no doubt the skilled personnel would be available.

Two factors now come into direct conflict. The first is the necessity clearly established by the size of the hospital compared to the needs of the community, for building-in the provisions for future expansion; and the second is the amount of money available. On the first, the Architect should be adamant. There may be, and probably are, communities in Canada which are static. Generally speaking, however, these are not the ones looking for additional hospital accommodation. To design a hospital in a growing community, with no thought given to future expansion, is to make certain that the final cost will be high, and the final solution a compromise. There must, however, be a limit to the ultimate expansion planned, since obviously expansion cannot go on for ever.

The immediately proposed extensions at Scarborough will just about double the present bed capacity and still another future expansion is provided for. Inasmuch as no extra floor space is required at the present time by the laundry, kitchen, power house and central supply departments; and inasmuch as the main services, transformer banks and standby generator are all adequate to take the new load, it is clear that the per bed cost on the completion of the presently proposed extensions (after due allowance is made for the increase in the cost of construction) will be considerably lower than the per bed cost of the initial buildings. Which, by the way, is an excellent way of showing that per bed cost comparisons are meaningless unless the buildings being compared are comparable — which sounds platitudinous but is nevertheless a point frequently overlooked by hospital building committees and others.

The amount of money available is, of course, in no way the architect's responsibility — but if there is a public fund raising campaign, as there was at Scarborough, he will undoubtedly be called upon to explain the plans to a public meeting or to the Ladies Auxiliary. This is an opportunity for winning friends and influencing people not to be missed — slides, of course, are the answer here — and the question period that follows is likely to produce many an inward chuckle. Witness: a mother of six in all seriousness asking the writer what he thought of babies rooming in with their mothers.

While the optimum sizes of the various departments cannot be determined with any great precision – the relationships of these departments to each other and the pattern of traffic from one department to the other can be more definitely established. It is, for instance, desirable, as was done at Scarborough, to have the X-Ray department fairly close to Emergency and this is true, regardless of the respective sizes of these two departments; Emergency, in turn, is tied to the ambulance entrance, which, of course, is governed by grade levels and the accessibility of adjoining streets. This is merely an isolated example showing the manner in which one phase of hospital planning interlocks with another. This, of course, is true in all planning but the problem is more complicated in a hospital because of the large number of diverse and interrelated functions that take place within its walls.

The Scarborough Hospital site consisted of about 25 acres bounded by Lawrence Avenue on the south and McGowan Road on the east. A water course, dry most of the time but a raging torrent during Hurricane Hazel and at other times, cuts diagonally across the lot from Lawrence Avenue to a creek at the rear of the lot, and the whole site slopes towards this water course and creek. At the time of construction there were as yet no sewers on Lawrence Avenue and this water course had to be retained and diverted around the power house. (Installation of storm sewers on Lawrence Avenue now makes possible the blocking of this water course).

The hospital was planned with the axis of the nursing wing east and west so as to provide the maximum south sunlight into patients' rooms. Both the main entrance drive and the ambulance drive were brought in from the main street – Lawrence Avenue – the fall in grade made possible the goods receiving entrance and the service driveway as well as staff parking one level lower at the rear of the lot. The main floor of the building was assigned to Emergency, Out Patients, Admitting, X-Ray, Laboratory, and Administration; the basement was devoted to Goods Receiving, Dining Room, Central Supply, Physio-Therapy and Locker Rooms. Patients accommodation starts at the second floor level and is divided into three groups – surgical, obstetrical and medical. The obstetrical and operating departments are respectively on the second and third floors of the rear wing. Medical patients and the Chapel occupy the fourth floor level.

Main services such as sterilizing, laundry, kitchen, etc. are centralized for greater efficiency and economy. Illustrated is the food service which is traced from goods receiving entrance through food storage, preparation, tray make-up, food distribution and dirty dish return and dish washing. Food trays for patients are handled mechanically along the assembly line belt and up the tray conveyor shaft to the different floors. Floors are served one at a time by a group of maids who receive the trays as they come off the belt and cart them to the patients. As one floor is done, the same maids will go up a floor and repeat the performance. Mealtime over, the belt is reversed, the maids bring back the trays bearing soiled dishes which now move down the conveyor shaft and are ejected on the dishwasher side of the shaft. Here the dishes are scraped, sorted and washed.

Staff pick up their food along a cafeteria line immediately adjacent to the kitchen. One dish washing set-up serves the entire hospital – both staff and patients. Dirty dishes from the dining room are deposited in the scraping room by the diners themselves; here they are scraped, sorted and then carted to the dish-washing set-up. Clean dishes are restored to their storage spaces along the cafeteria and tray assembly line and the cycle is now ready to start over again.

Each department is subject to the same analysis. In the operating department, for instance, the goal is a well organized plan (in a dead-end location to avoid through traffic) which will contribute to safe operating technique, without delay or inconvenience to any member of the operating team.

The main elements that make up the operating department are as follows:

1. Work Room (sometimes called sterile storage room) connected by dumb waiter to the central sterilizing department. Standardized sterile kits are prepared in advance in the central sterilizing department and sent up to the Work Room where they are kept on hand and not opened until just prior to being used.
2. Locker rooms for nurses and doctors at the entrance to the department to permit these people to change from street clothes and shoes to clean operating clothes and shoes.
3. A combined instrument sterilization, sterile water storage, and doctors scrub-up area. Instruments are one of the few items not sterilized in the Central Sterilizing Department. Sterile water is sent up in flasks in advance from the Central Sterilizing Department.
4. Recovery Room to permit close nursing attention of the patient in the highly critical post-operative period.
5. Clean-up Room to permit quick removal from the Operating Room of soiled instruments, utensils, etc. thereby freeing the room more quickly for the next operation.
6. Carefully controlled conditions throughout the department to reduce the hazard from explosive anaesthetic gases and to increase the safety of the patient. These will include conductive floors, explosion-proof outlets, lighting, ventilation and humidity.

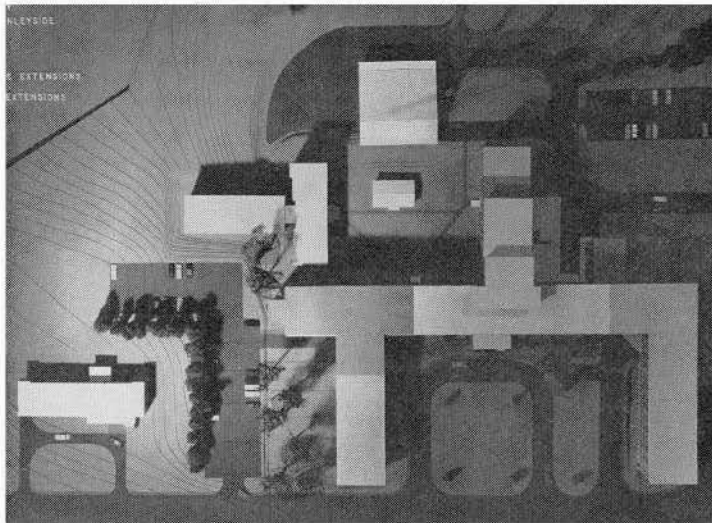
Recent medical investigations emphasize the importance of avoiding dust gathering materials, ledges and crevices in order to cut down on the high incidence of staphylococcal infections within hospitals. They also stress the desirability of cooling operating and recovery rooms mechanically in order to increase the comfort and safety of patient and doctor in periods of hot weather.

Floor finishes are terrazzo, being durable, sanitary and easy to maintain; corridors, stairway and kitchen walls are structural glazed tile full height again for ease of maintenance; ceilings are removable acoustic tile in corridors and noisy areas, and plaster elsewhere. Full height pan ceramic tile was used for walls of operating rooms, delivery rooms and utility rooms.

Structural system is reinforced concrete. At the exterior walls the concrete piers are flattened to 8" thickness and occupy the full length from window to window, becoming in effect load bearing walls faced with brick. The floor and roof slabs are supported on poured-in-place concrete beams, 12" deep at 5 foot centres, spanning from outer wall to main beam at corridor.

For economy of framing all floor-bearing beams are uniform in size and spacing. Main beam at corridor is the same depth as floor beams to facilitate passage of ducts and pipes.

B. Kaminker



SCARBOROUGH GENERAL HOSPITAL in Metropolitan Toronto

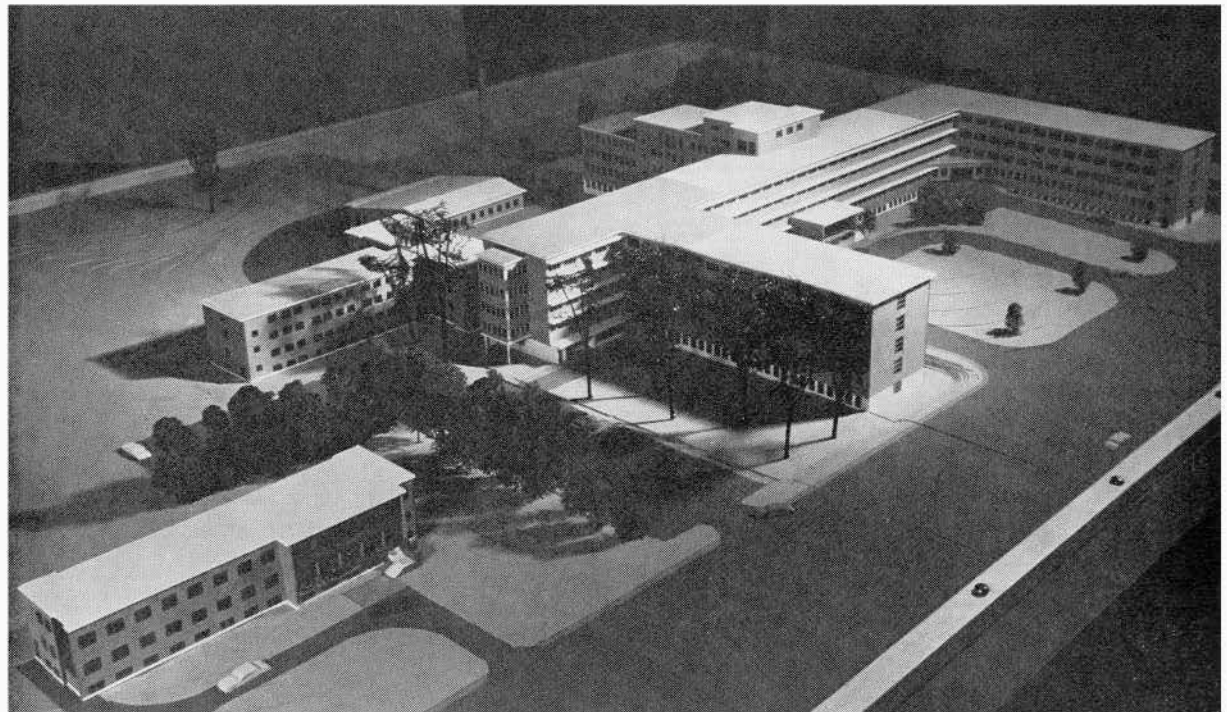
*Architects, Govan, Ferguson, Lindsay, Kaminker,
Langley, Keenleyside.*

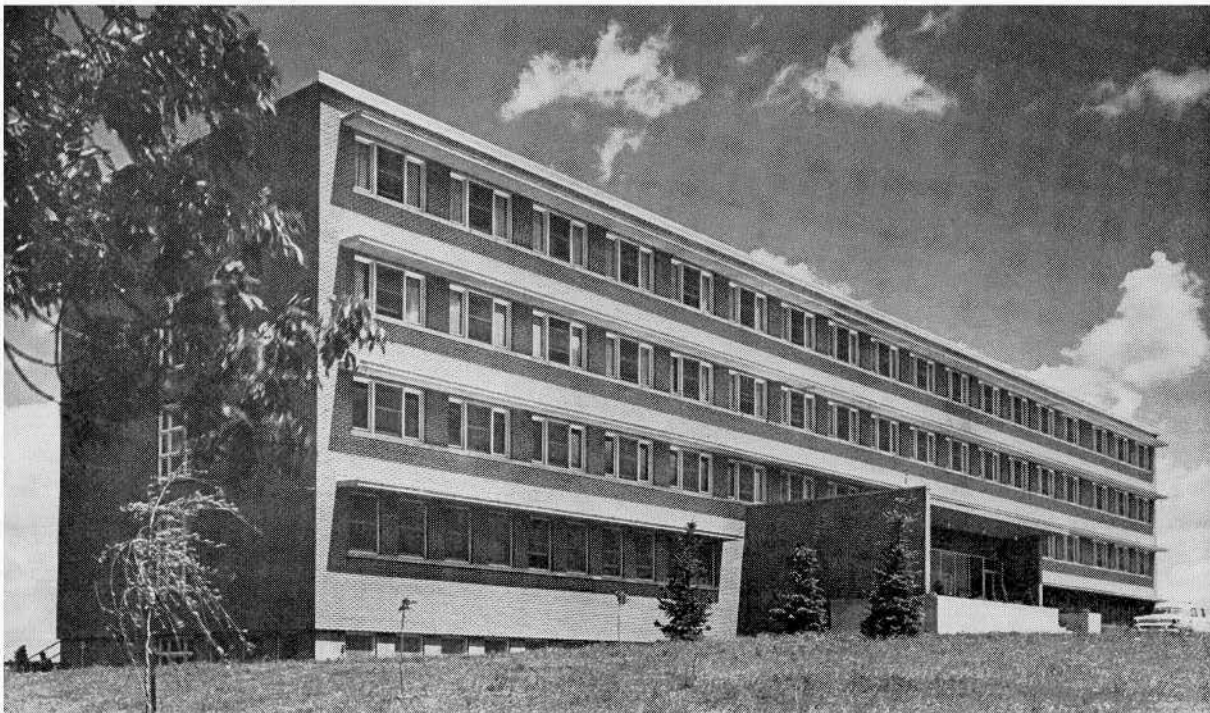
General Contractor, Canada Construction Company Ltd.

Consulting structural engineer, Ralph C. Manning.

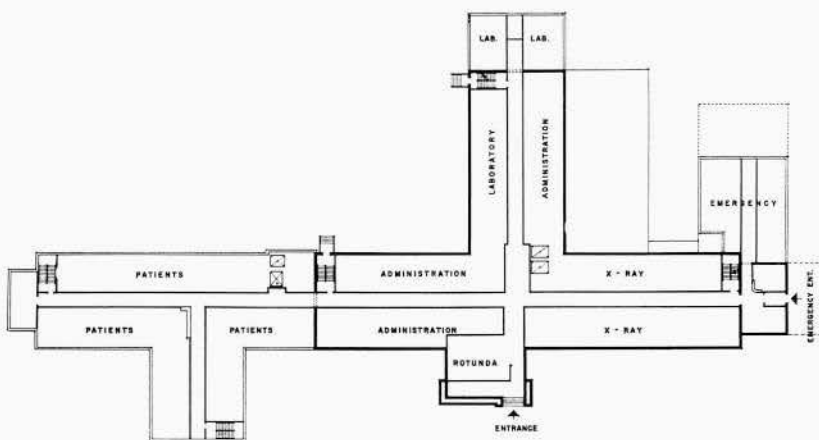
Consulting mechanical and electrical engineers, H. H. Angus and Associates.

Model of proposed development of Scarborough Hospital. Central section shown light, was completed first. Second stage, immediately to the left of it, is now under construction.

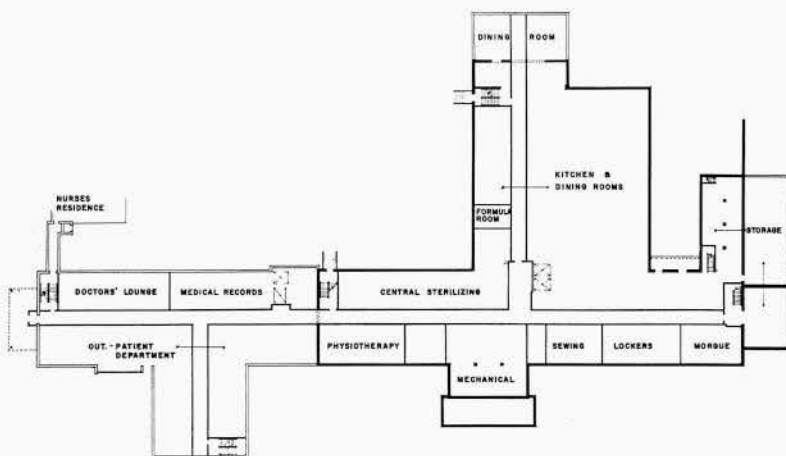




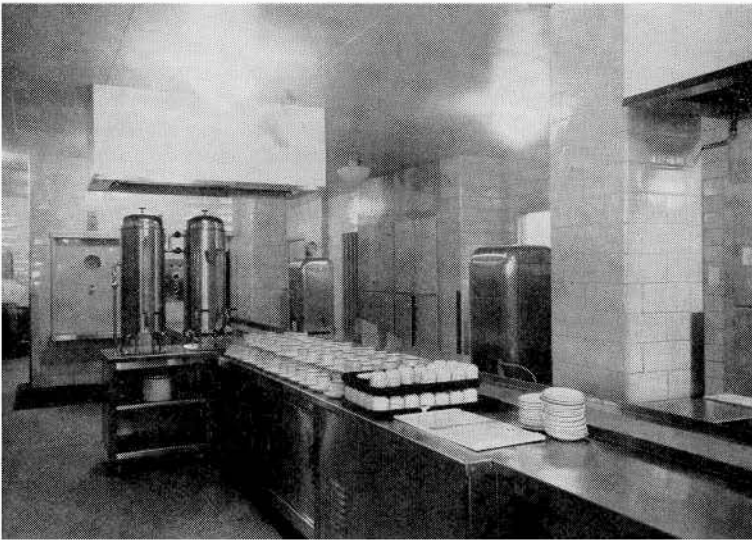
Main entrance and south elevation of first stage of the project to be completed.



FIRST FLOOR



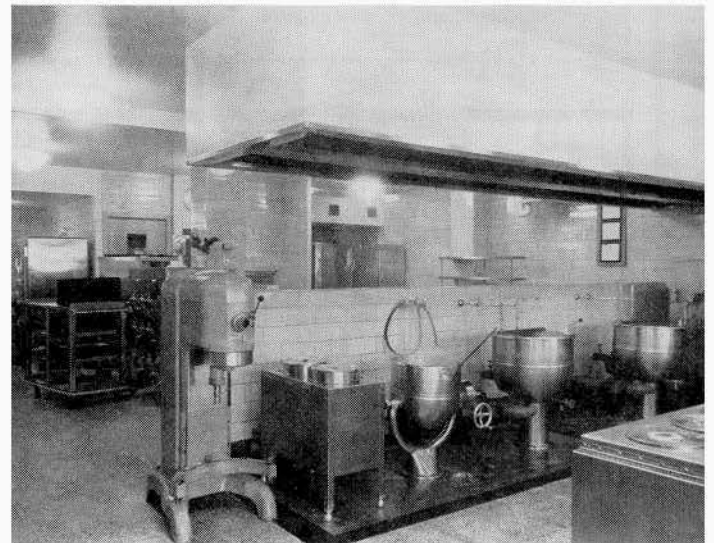
GROUND FLOOR

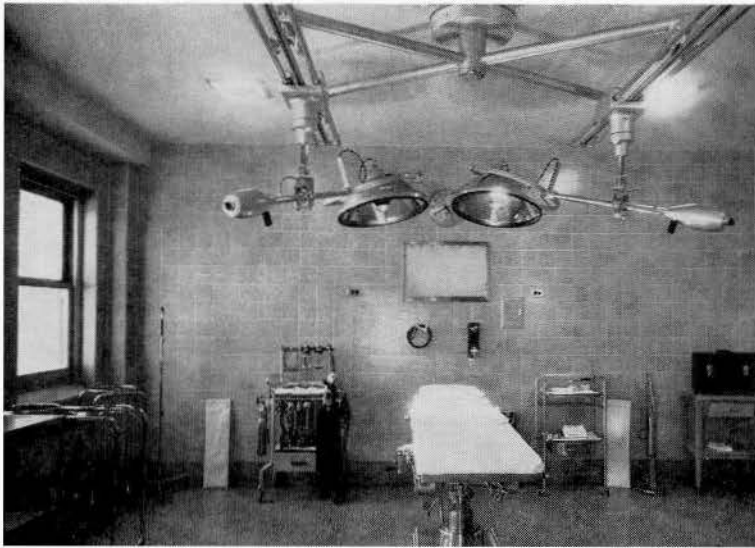


Above and above right, tray set-up belt leading to dumb waiter.

Right, main cooking area.

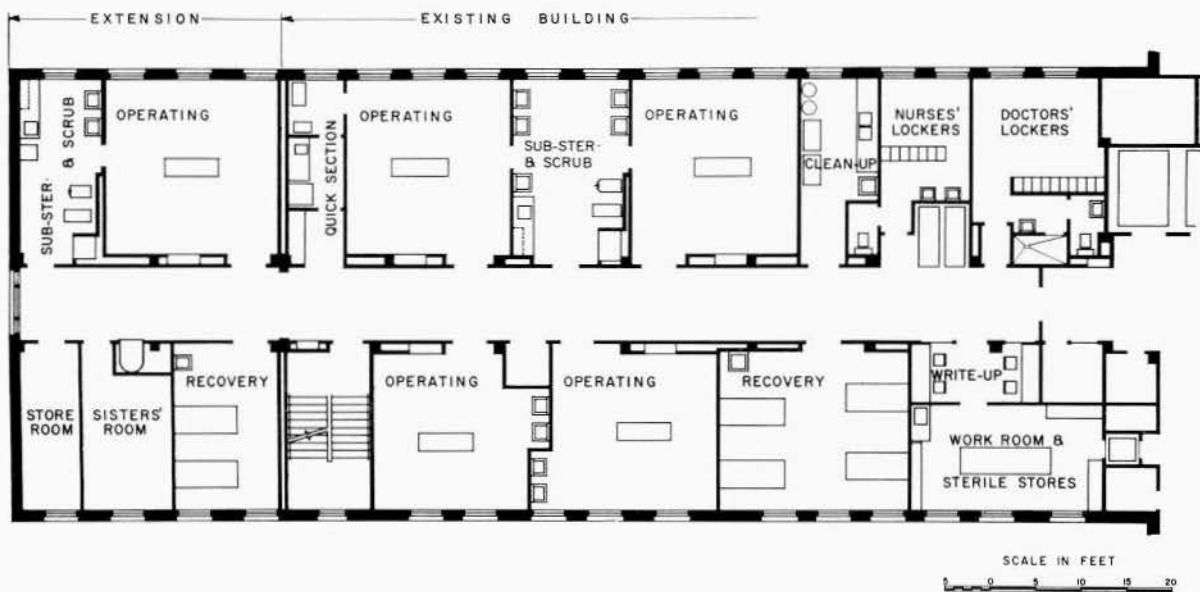
Below, detail plan of kitchen and staff dining areas.





◀ Typical operating room.

Plan of operating suite in Scarborough General Hospital.



The services for this project were planned to give maximum flexibility and thus allow the anticipated future expansion program to develop without being hindered by inadequate services. Apart from this heavy accent on future growth the services are typical of many carefully planned institutions.

The boilers and their auxiliaries, also convertors, pumps and tanks are housed in a separate structure together with the laundry and workshops. This building is connected to the main institution by a walk through tunnel. This arrangement is very advantageous in that it allows this equipment to be placed in a structure specifically designed to contain it and thus avoids the inevitable compromises in space heights which usually result in inefficient plants when these items are tucked away in building basements. In addition, this placement of plant makes for easier maintenance as mechanical and electrical items are grouped, and complaints from noise and heat are reduced.

Two oil fired water tube boilers are installed with space being left for a third. Oil is drawn from two underground tanks preheated and burned in rotary cup burners. Auxiliaries provided are deaerating spray type feed water heater, vertical

steam driven boiler feed pumps, large condensate receiver electrically driven transfer pumps and feed water treatment system. The hospital proper is heated with a two-pipe reversed return forced hot water system. Duplicate convertors and pumps are provided in the boiler room and main flow and return lines are carried through a tunnel to centrally located header rooms. From this room, branches are run to various zones. Vertical risers are used to feed the upper stories and recessed convectors are installed in the rooms each having damper control, balancing valve and air vent. The enclosures for convectors have sloping tops and are integral with the window stools. The operating room convectors are, however, fed with steam and are individually controlled. Steam is used at various pressures throughout the institution as follows:

- 30 psi to kitchen equipment
- 60 " " sterilizers
- 10 " " ventilating coils
- 5 " " localized heating equipment

Complete ventilating systems are supplied but no mechanical cooling was provided in the original installation. Provision for future cooling has been made in connection with the operating

and delivery suites. There are six supply systems and seven exhaust systems installed with the equipment, generally located in the penthouse. Corridor supply is used in patients' areas and exhaust from these rooms is through undercut doors from the room toilets.

Electrical energy for the institution is purchased at 27,600V to obtain the best rates then transformed down by an outdoor substation to 550V. This voltage is used to feed motors and elevators. Power for lighting, cooking and receptacles is distributed at 120-208 volts. An emergency generator is provided to give standby protection to vital areas in the hospital. This system services operating and delivery suites, corridor and stair lighting, fire alarm system and one elevator. Provision is made so that any one elevator can be transferred to this power source in order to be able to release persons caught between floors. Tests have demonstrated the ability of this equipment to be fully operative within five seconds of a power failure.

To reduce demands on nursing staff, an audio-visual nurse call system was installed complete with indicator lights to ensure privacy. In the patients' rooms the night light has been inverted over the door to get it away from possible blockage by furniture. In addition this position, while not disturbing to the patient has the advantage of allowing the nursing staff to see more of the patients' condition than low floor mounted units. A bracket light mounted between beds provides general room illumination and is switched from the door. A minimum of three duplex receptacles are provided in each room. Several intercommunication and signal systems were installed such as audible doctors paging, central clock system, servery intercommunication system and doctors in and out register. In addition, a fire alarm system of the presignal type was provided with a connection to the municipal system.

All domestic cold water is metered in the boiler house and distributed from this point through walk-thru tunnel to the hospital proper. Fire line is un-metered and parallels the domestic lines connecting to a system of fire protection consisting of fire hose cabinets with necessary accessories. Arrangement for emergency water supply for fire protection is provided with the installation of outside siamese or pumper connection. All domestic hot water is heated in the boiler house and distributed through the walk-thru tunnel in a similar fashion to the domestic cold water. Hot water is continually circulated through the system by means of circulating lines and a pump adjacent to the hot water tank. Hot and cold water for the laundry equipment is softened, a separate soft cold water line being also run to special equipment in the hospital such as sterilizers, stills, kitchen urns, etc. A separate hot water tank and heater is provided for the laundry equipment providing 180°F. water for washing.

All storm water discharging from the hospital buildings, including runoff from paved areas, is piped to an open water course to the northeast corner of the hospital site. Sanitary waste water is piped to the township main trunk collecting sewer located at the north limit of the site. A system of dry mop cleaning is included with a main vacuum producing machine located in the mechanical equipment room of the hospital and piped to a number of dry mop cleaners, one per floor, in each janitor's clean-up room. The vacuum producer is remotely controlled from each janitor's room.

Oxygen is piped throughout the hospital to all patients' rooms, operating and delivery rooms, nurseries, recovery rooms, etc. All outlets are "bayonet" type so that a flow meter, humidifier bottle, etc., may be attached when required. Oxygen is supplied by an outside bulk storage unit which can be filled by delivery truck by the oxygen supply company. A system of blood suction is installed consisting of duplex vacuum producers and a separator with all controls, installed in the mechanical equipment room of the hospital and piped to outlets which are "bayonet" type similar to oxygen outlets. Outlets are installed generally in operating and delivery rooms, nurseries and recording rooms.

The hospital laboratory section is provided with all essential services including water, illuminating gas and compressed air. A separate air compressor is included for the laboratory supply. Gas is also piped to gas fired equipment in the kitchen area.

Plumbing fixtures are in general, hospital type with special trim consisting of wrist action blade handles on water supply fittings, open wastes on all wash basins to offset any chance of cross contamination between patients. Water closets in patients' rooms are fitted with bedpan lugs and a separate bedpan cleanser consisting of hose and spray and controlled by wall mounted, foot operated mixing valve for hot or cold water. Flushing rim slop sinks are provided in washup areas, including utility rooms.

One point of interest regarding the plumbing services for the hospital was that due to the extraordinary speed with which the project proceeded even at the time of tendering, no sanitary sewer or main water service was available close to the site. However, with constant effort of the township officials, the required services were available and connections made to the appropriate sewers and watermain just extended to the site by Scarborough Township in time for the occupancy of the hospital.

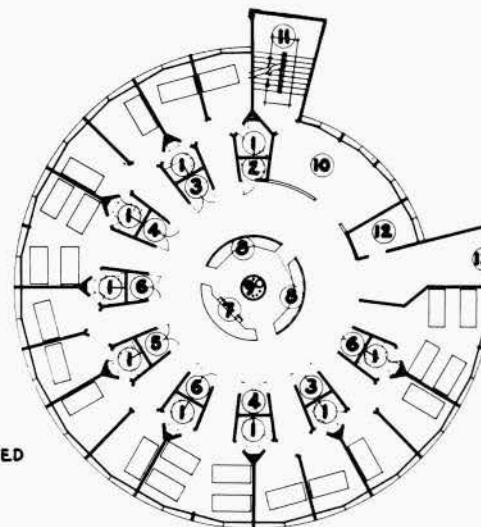
D. L. Angus

PART THREE

A GENERAL HOSPITAL is for the care of the physically ill and generally speaking we recognize two distinct aspects in the care of the ill, the medical and nursing. This paper is concerned with the latter.

Though a plan is presented for a general hospital nursing ward, it is important to keep in mind that this is only one suggested solution and that there are no doubt other solutions based on the same premise. And further that any evaluation of this design should be in two parts. First the critical examination of the premise for the design itself and then, *with the understanding of the premise*, the assessment of the design itself. Too often, an architectural design is "dissected" in a completely different context, like judging apples by standards for oranges.

- ① PATIENT'S TOILET
- ② NURSE'S TOILET
- ③ BED PAN CLOSET
- ④ LINEN CLOSET
- ⑤ JANITOR'S CLOSET
- ⑥ STORAGE CLOSETS
- ⑥ ON MULTI-STOREYED PLAN, DUCT SPACE
- ⑦ NURSE'S STATION
- ⑧ DIRTY AND CLEAN, GLAZED
- ⑨ LAUNDRY CHUTE CORE
- ⑩ SOLARIUM
- ⑪ STAIRS ON MULTI-STOREYED PLAN ONLY
- ⑫ SERVING PANTRY
- ⑬ CONNECTION TO CORE



The premise for the design is that the principal role of the nurse is to give nursing care and therefore the nursing ward should be a means to facilitate this end. What is nursing care would be a dissertation in itself but for the purposes of space design it is only necessary to understand that the important consideration for good nursing is the relationship of human beings, the face to face "contact" of the nurse with her patient. It is apparent that the essential conditions to help establish this human relationship is physical and visual proximity.

The problem is how best to organize space and the various physical conveniences such as baths and toilets; work facilities for the nurse along with the structural and mechanical requirements of a building so that the desirable physical and visual conditions can be achieved.

Given any number of relationships, with the limitations of visual "access" and minimum distance from a point, the appropriate form that represents these desired space relationships is not unlike a spoked wheel, the nurses station at the hub and the patients' space placed on the lines of the spokes of the wheel as it were. Drawing No. 1.

The problem is now reduced to what and where to place the accessory facilities in this form so that the essential space relationship is not destroyed. Drawing No. 2 shows the typical elements related to a nursing ward. Ideally, since it is found that the nurse is involved in all instances at one time or another, it seems that all these facilities be in the ward. However, these accessory spaces and other requirements that are usually included in the ward set-up were screened as to frequency of use, by whom, when, etc. This screening indicated that several facilities as, for example, serving kitchens, treatment rooms, flower rooms, etc., need not be in the ward area proper in the light of the various operational techniques and personnel involved, etc. Certain desirable conditions were listed and the following examples are typical of these:

1. *Patient toilet and bath* — near patients as the nature of facilities and condition of patient require proximity day and night.
2. *Work space for nurse* — the usual facilities of a nurses station, records rack, desk space, counter space, sink, drug and medicine cabinet. Some storage — day and night use.
3. *Serving pantry and flower room, etc.* — need not be in the midst of the ward. Mostly used during normal working hours by additional staff.
4. *Day room* — desirable to have under supervision of nurse.
5. *Linen closets, storage, etc.* — desirable in ward but not essential and so on.

Though local economics may dictate other ratios of number of nurses to patients, for the purposes of this paper 24 beds were selected so that a comparison with typical existing wards could be made if desired. As it turns out, this number of beds seems to provide a balanced design in terms of structure, space,

equipment, etc., while maintaining a reasonable scale with respect to the visual and physical proximity. This approach then resulted in a floor plan as presented here. Drawing No. 3. In the scheme of the entire general hospital plan a nursing ward of this type would lead out from a core containing the usual administrative, laboratory, operating and other common facilities. In a multi-storey building an escape stair may be placed and structural and mechanical requirements will no doubt require modifications in the plan.

There are certain apparent and real difficulties inherent in such a plan. The most obvious one of course is that it is very difficult if not impossible to add extra bed spaces directly to a ward, unlike a rectilinear scheme. However, it should be appreciated that any multi-storey nursing unit as suggested for example in the U.S. or Ontario Health Association manuals present as great as if not equal problem of expansion of a wing. In addition, it has been suggested that if we are to maintain the level of nursing care required, being able to add beds to a ward is not a desirable quality.

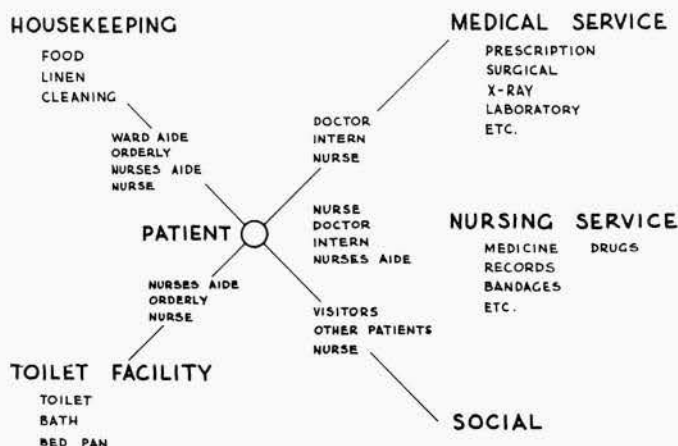
It was pointed out that the nature of any wheeled vehicle used in a hospital made it difficult to push around a curve. In this regard I might refer to another circular plan form for a hospital published recently in the *Modern Hospital* where it is apparent this problem has not been considered.

The structural system and mechanical services such as heating and its control may be more complicated but contemporary technology should be able to solve these problems. The cost/sq. ft. may increase but generally speaking the per sq. ft. area per patient is reduced. However, the capital cost of the building should be measured in the light of the efficiency of the building. We place insulation in a building increasing capital cost to reduce heating and operational cost. Similarly as a result of better space design if there is an increase in capital cost it should be considered in the light of the reduction in cost resulting from better nursing care.

In presenting this paper there is a twofold purpose. First, it is hoped that it may make a direct contribution to better designs of hospital wards in the future and second, that it will help to make aware to any and all concerned that an architectural solution is only as good as the program. And in this respect, there are certain very important considerations. These are:

1. That each problem needs to be examined objectively, and that does not mean ignoring the needs of individuals.
2. That what is good for one hospital is not necessarily good for another as there are many local and unique conditions which may require different solutions though the fundamentals may be the same.
3. That space and other standards should be used only as a guide. It is unfortunate that space standards are usually considered minimums. A type of publication by the U.S. Public Health, Elements of a General Hospital, for example has tended to reduce the exercising of the imaginations of architects, administrators and others.
4. That statistical evaluation be carefully analyzed. It was pointed out that a certain solution devoted less space to patient rooms than another and the architects tried to justify this on the basis of less cost. If a hospital be designed with no space for patient rooms and be just as effective, what then?
5. That a "good-looking" building, unconventional, traditional or otherwise, illustrated as architecture in the "popular" sense does not necessarily mean it is good architecture in the broader sense of the word. It should be understood that there are far more fundamental values involved in architecture than the popular "visual" appreciation of space, color, texture. Only when the fundamental values are recognized, and when the *raison d'être* for the existence of the building is satisfied is the architect free as an artist to contribute accordingly.

K. Izumi



INSTITUTE NEWS

CALENDAR OF EVENTS

8th Annual Meeting of the Royal Australian Institute of Architects, April 14th to 18th, 1958, Perth, Western Australia.

Brussels Exhibition, Belgium (theme—"The Unity of Mankind"), April 17th to October 17th, 1958.

1958 Annual Assembly of the Royal Architectural Institute of Canada, Queen Elizabeth Hotel, Montreal, June 11th to 14th.

1958 Annual Convention of the American Institute of Architects, Hotel Cleveland, Cleveland, Ohio, July 7th to 11th.

ANNUAL MEETING OF THE OAA

Toronto, 28 February – 1 March 1958

Presidents Report

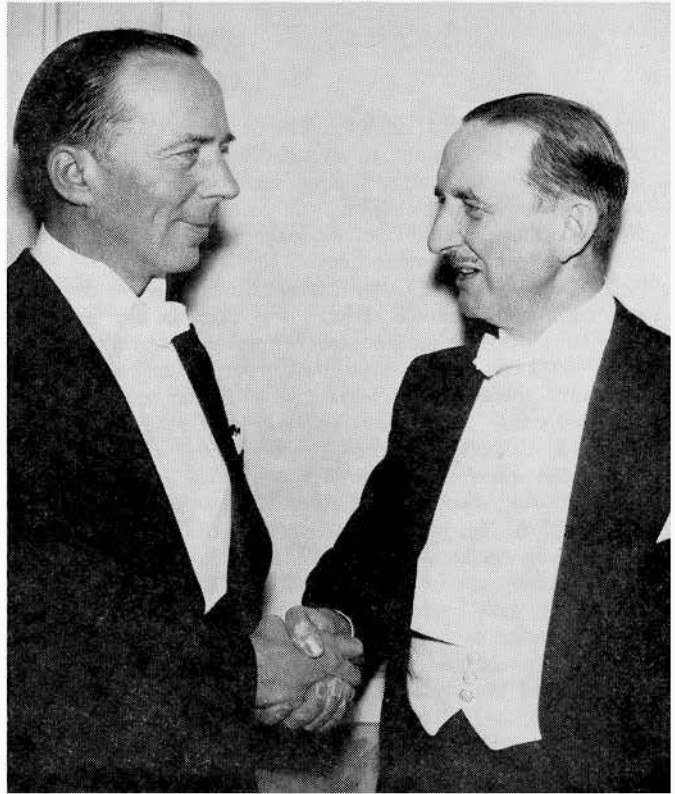
THE YEAR 1957 has been an active and progressive one, both for the Ontario Association and for its members, in spite of the fact that the volume of construction in Canada during 1957 was one-quarter of a billion dollars less than the all-time high for 1956 of three billion dollars.

The Association welcomed the greatest number of new members ever admitted in one year—89 new members and 4 former members restored to membership. The total membership on the register as of December 31st, 1957, was 853, as compared with 785 the previous year—for a net gain of 68. There are, in addition, 10 honorary members, 15 retired members and 9 associate members.

In November 1957, Mr George Gibson, a Fellow and Past President (1955) tendered his resignation from Council and, appreciating his reasons for doing so, Council accepted with the deepest regret and a great sense of loss. He had served on Council for five consecutive years, during which his sage advice and executive energy had become a mainstay. To fulfill the unexpired portion of Mr Gibson's term of office, that is until the end of 1958, Mr Norman H. McMurrich was appointed. Mr McMurrich has a background of sound, hard work for the Association, through service on numberless committees and as a former Chairman of the Toronto Chapter. At this meeting today, Mr Prack and Mr Balharrie now lay aside the robes of office and are put out to pasture. After minor alterations, these robes will be worn, for three busy years, by Mr James W. Strutt, of Ottawa (succeeding Mr Balharrie) and Mr Lloyd D. Kyles, of Hamilton (succeeding Mr Prack). We welcome these new members to the Council.

Ten meetings of Council were held during the year—monthly, except for the two summer months. Council in addition met twice in joint sessions with the Registration Board for special deliberations. One of the regular Council meetings was held in Ottawa at the time of the Golden Jubilee Assembly of the Royal Architectural Institute of Canada. Members of Council have served your profession with distinction. They have given unsparingly of their valuable time and, with perseverance and energy, have handled and solved a wide variety of problems. I recommend them for your heartiest commendation.

The annual reports of the Chapters, Committees, representa-



G. Everett Wilson, incoming president of the OAA is congratulated by the retiring president, E. C. S. Cox.

tives and auditors have been distributed to all members and have been commented upon. These reports indicate a very active year but are merely summaries of the vast amount of hard work on the part of a great many members throughout the year. It is interesting to note that the Chapter reports are full of serious, substantial matter—not so long ago they were confined to a few events of minor importance. It is indicative of a growing zeal for the furtherance of our professional affairs. Committees are the backbone of our Association. Without their quiet work, usually behind-the-scenes, we could accomplish little. They have contributed an aggregate of thousands of man-hours of work and a wealth of wisdom. Their accomplishments, and the recognition that has thereby accrued to your Association, are summarily recounted in their reports. I would like to add further comment.

The work of the Committee on Public Relations is worthy of special mention. Under the chairmanship of Mr Wilson Salter, of St. Catharines, it is doing an outstanding job, with tangible results. In spite of the very limited budget which we assign to them each year, the members of this Committee have formulated a programme of considerable scope, and new ideas for the advancement of this programme are being brought forward in profusion. It is difficult indeed to measure the results of such an effort but the fact that architects, collectively and individually, are receiving more favourable and more frequent attention in the press is one indication of the success of our Public Relations Committee's endeavours. There are other more subtle indications.

The standard job sign, introduced by the Public Relations Committee to assure proper and dignified credit to the architect on his projects under construction, has been accepted by a large number of members and approximately 300 signs have been ordered and put to use. This venture has produced a modest revenue for the Association. Other Provincial Associations are rumoured to be following our lead in this matter. The production of a colour film featuring the architect and his work has been mentioned briefly in the Public Relations report. This is a tremendous undertaking but it is being faced by the Committee in a realistic and rational manner and shows great promise of successful accomplishment.

The members of the Joint Committee on Architect-Engineer Relations are in complete agreement that an attempt to settle the differences between architects and engineers in public and in the press is detrimental to both professions and should be

studiously avoided at all costs. The objective of the Joint Committee is the settlement, in an amiable manner by joint action, of all contentious issues arising between the two professions or their individual members; the establishment and recognition of separated fields of endeavour and the promotion of friendship and understanding.

The report of this Committee outlines in some detail some of its efforts to remove at least one thorn in our side. It will take time and perhaps constant effort to attain all our objectives but it can be said that great progress has been made and our inter-professional relations have never been better than they are today. All architects should take note of this fact and should lend their support to this movement in their daily contacts with members of the Association of Professional Engineers. During the year, a total of 11 cases of complaints were dealt with by the Joint Committee. Fact finding investigations were made by the OAA, the APEO, or by both, and those persons or firms who were found to be at fault have been, or are being, called to account by the governing body of their own Association and are being required to discontinue that practice to which exception has been taken. The APEO members of the Committee have consistently endeavoured to discourage, and where possible prevent, the practice of architecture of engineers.

During the past few years, considerable emphasis has been placed by the Council and Registration Board on the need for a high standard of professional conduct by the members of the profession. The Committee on Professional Ethics has prepared a Code of Professional Conduct which you will be asked to adopt at this annual meeting.

The Registration Board now requires that all new members admitted to the Association must attend an induction ceremony. Following each meeting of the Board, the Chairman of the Board and the Chairman of the Committee on Professional Ethics arrange to meet the new members in the OAA Board Room. An attempt is made to give guidance to these architects in the best principles of professional practice, and to impress upon them the importance of a high standard of professional conduct. It is felt that these meetings have had a good effect on the young architects, and it is hoped that this procedure will do much toward maintaining high standards of professional conduct. For the older members too, a serious study of the new code may not be amiss.

A Legal Committee has been established, to study legal problems which may confront members of this Association and to make recommendations as to the responsibility and proper course of action when so confronted. The legal technicalities of practice seem to become more numerous as time goes on and it is imperative that our members should acquire a general knowledge which may protect them from avoidable entanglements. It is not intended that this Committee should provide free legal advice to individual members on matters peculiarly their own. Such cases should be taken to their own solicitors.

However, some guidance can be given through summaries of actual or hypothetical cases, thus pointing out the pitfalls which beset our professional paths. Legal bulletins will be issued periodically to members, for their retention and future reference. Bulletin No. 1 came out in December and will be followed by additional bulletins, dealing with various legal questions, some of which have been suggested to the Committee by members. Your suggestions and questions are welcomed — but please do not ask for personal legal advice on your personal problems. Consult your solicitor.

Your Association is now in its fourth year of occupancy of the Headquarters Building at 50 Park Road. The building is serving a very vital need, as a headquarters for the architectural profession in Ontario. As originally envisaged, the building is carrying out fully its prime purposes — to provide an official residence for the Association, to house the administrative staff and to act as a meeting place for various committees and professional groups. From the point of view of public relations alone, the building has already returned substantial dividends, by raising the prestige of the profession in the public view. It is here that we entertain important public people, guests from England, South America, Europe. It is a fitting background for a dignified profession. As a statistical example of the degree to which the facilities of the building have been utilized, there are as many as twenty-five meetings in a single month — an average of more than one for each business day. Many of these are revenue-producing, as rentals are frequently paid for the use of our meeting rooms.

The reports of the operating committees—House Committee, Exhibitions Committee, Library Committee—indicate successful operations. The bar and cafeteria were established from the start as a convenience to out-of-town guests and members and for luncheon meetings of committees. It may be noted from the Auditors' Report that this operation has been successful financially also and has added a worthwhile revenue to our coffers. The mortgage on the building and the debentures held by individual members are being steadily and rapidly retired. Our progress in this matter has been little short of sensational and indicates a very solid financial foundation.

When the competition for the design of Toronto's City Hall was initiated, the OAA made strong representations to the city authorities advocating that the competition be national in scope rather than international. In spite of this effort, the City Council, the Board of Control and His Worship the Mayor were insistent that it be open to architects in all parts of the civilized world, and this includes Russia.

The regulations of our Registration Board and the Architects Act are prohibitive in this matter and the Mayor requested our Association to initiate amendments to the Architects Act which would permit a member of any association of architects in any part of the world to compete, and, if declared the winner, to enter into a contract with the City of Toronto, in association with a member of the OAA, for the usual architectural services

New members of the OAA receiving their certificates from E. W. Haldenby, chairman of the Registration Board.



in the construction of the building.

Two joint meetings of Council and the Registration Board were called to consider the Mayor's communication. Following lengthy discussions, it was decided not to attempt to interfere with the Architects Act but to amend the Regulations of the Registration Board, to permit the granting of membership to the successful competitor in this competition, provided that he associate himself with a registered member of the OAA and provided that the conditions of the competition were approved by the Association prior to the holding of the competition. A special committee reviewed on several occasions these conditions as presented by Professor Eric Arthur, the Professional Adviser. As a result, the conditions received the Association's approval. I hope we have been of some assistance to Professor Arthur.

The OAA Scholarship for 1957 was awarded to Peter Rasins, a second year student at the School of Architecture, University of Toronto. The OAA prize, for proficiency in subjects related to building construction, was awarded to Garfield Allister MacInnes, a third year student at the School of Architecture, University of Toronto. The Toronto Architectural Guild Medal for 1957 was awarded to John Sievenpiper, who graduated in 1957 from the School of Architecture, University of Toronto. The OAA prize to the School of Architectural Technology, Ryerson Institute, for the highest standing in the graduating year, was awarded to Frank Allan Cheop. The OAA also made a donation of \$100.00 to the Scholarship Fund of the Ontario College of Art.

The value of our recent years of Public Relations work is well shown by the increasing number of functions to which your President is invited during the year. As President, he is recognized as the official representative of a very important professional body, an Association which is a potent factor in the life of the community. Here are a few of the duties which your President has been called on to perform this past year. The list will undoubtedly lengthen in future years. He was head table guest at annual dinners of: Royal Architectural Institute of Canada, Province of Quebec Association of Architects, Association of Professional Engineers of Ontario, Toronto Branch, Engineering Institute of Canada, New York State Association of Architects. He presided at the OAA luncheon, RAIC Golden Jubilee Assembly; he was guest speaker at PQAA dinner meeting; he was a member of the Jury of Award of the Canadian Housing Design Council, and of the Canadian Plastics Association. He attended the Canadian Housing Design Council presentation of awards, both Provincial and National, both in Toronto. He was a member of the Group of Critics for the Design Thesis, School of Architecture, University of Toronto.

The award of the RIBA Gold Medal to a Canadian architect, in the person of Mr R. Schofield Morris, was an extremely important event, which has been commented on suitably on numerous occasions. However, it requires official mention here, at this meeting, and if Mr Morris can bear with yet another repetition, we wish to congratulate him once more for this great honour which he has brought to himself and to Canadian architecture.

Your Council has felt for several years that all those who have served in the past as President of the Association should be honoured officially and should receive some tangible recognition of their service. Consequently, at the annual dinner to be held tomorrow evening, we hope to have with us about fourteen Past Presidents, to whom we will pay special tribute. At the same time, each will be presented with a suitably inscribed memento.

It is with deep regret that we record the passing of the following members of the Association during 1957:

Blackwell, Walter R. L., Peterborough; Horwood, Edgar L. (Honorary Member), Ottawa; Armstrong, Norman A., Toronto; Rae, William (Honorary Member), Toronto; Sheppard, Earle L., Toronto; McGiffin, Clare V., Toronto; Beck, John Jackson (Retired Member), Toronto; Oxley, J. Morrow (Honorary Member), Toronto; Facey, Arthur George, Toronto; Wilby,

Ernest (Honorary Member), Windsor; Hiscocks, Robert G., Ottawa.

One committee which does not submit a formal report is the Committee on Convention Arrangements under the chairmanship of Mr Bob Servos. The personnel of the committee is listed in the back of your convention programme and I ask you to take careful note of these young men who have worked so hard to make this convention a success. I would like to pay a warm tribute of appreciation to them for their efforts. Only those who have had similar responsibilities can appreciate the amount of work involved. I know we are all glad to be here, in annual meeting assembled, and we are looking forward to the events to follow, today and tomorrow. I thank the Convention Committee most sincerely for what it has done, and has yet to do, to ensure us of another successful convention.

In conclusion, may I express my sincere appreciation and gratitude to the members of Council, the committees, the various representatives and the Chapters, for their splendid support and co-operation throughout the year. I know the entire membership joins me in expressing our thanks for their diligent service to the profession. My thanks to Mr John Miller and his staff for their efficient conduct of the affairs of the Association. It would be a difficult task indeed to serve as an officer of your Association without the experienced help and guidance of our Secretary. It has been an inspiring experience to have served as your President during 1957. I trust that my "sins of omission" may be overlooked and that you will remember only the good things — if you can think of any! For me, it will be something to look back on for the rest of my life. I hold the warmest affection for all of you who have been so kind and understanding during my term of office.

E. C. S. Cox, President

THE OAA'S CONVENTION this year was bigger and better than ever and certainly covered a wide range of topics, all of them in need of airing in professional company. At the start, the code of professional conduct, on which a great deal of committee work has been done, was adopted. This should provide a handy guide in problem situations, and a useful supplement to the official Regulations of the Registration Board.

From out of the west we had Mr Warnett Kennedy, a member of the AIBC, and its newly-appointed Executive Director, to make the Friday luncheon speech. In the ringing accents of John Knox, Mr Kennedy gave some serious warnings about future pit-falls under the title of "The Architect's Persona". He questioned what the status of the professional was going to rest on in the future. In a highly competitive society, the professional's role had already changed from its classic past, and this of course, was what the committee on professional ethics had been struggling with for the last year. He was worried about the attitude to design on the part of many of us; was good design really felt to be the basis of architectural practice, or was not architecture often degenerating into a branch of industrial design. It seemed to him that the architect should be more convinced in heart as well as in mind about his role as creative artist.

Dr Mario Salvadori, the thin shell man from Columbia, gave a demonstration of what is happening in the concrete world. In the way that first year architectural students demonstrate the relation of shape to strength of structure, Dr Salvadori took a piece of blank foolscap, held it flat in the hand and then curved it between his fingers into a rigid form. Thin shell design was just such an application of shape rather than size to achieve a stable structure. In his role as prophet and promoter, Dr Salvadori went on to describe the hurdles that he had had to face in building thin shell structures. First were the building department officials who had no standards for it; secondly the contractor who may not be used to it; thirdly the client who is worried about the cost of it. Dr Salvadori had answers for all of them. He was tremendously interesting and convincing, but he did involve one of the questions raised previously by Mr Kennedy. How many architects from now on, will be capable of designing in terms of these various new



Warnett Kennedy,
Vancouver

and specialized types of structures, and how many will delegate design to another specialist.

The Friday afternoon panel devoted itself to the subject "Design for Older People in the City". Mr William Goulding, the chairman, introduced two ideas, firstly that no matter what buildings were designed for the use of city people, apartments, theatres, churches, houses, subway stairs, from now on, they will be used by an increasing number of older people because of the increasing ratio of older people in the population. Secondly that most older people are ordinary citizens who use what amenities their city has to offer and that the people we often refer to as "old", are generally people who are disabled by poverty or by illness, their age is not the significant problem at all. Speaking as first member of the panel, Mr Michael Sumner of Windsor, a member of the Windsor Civic Committee on a Total Community Program for the Aged, described the very interesting planning operation as well as the first significant steps that had been taken in Windsor. Institutionalizing of the aged, he said, could never keep pace with the rising number of old people and could involve a community in an intolerable burden, while the elimination of old people as effective consumers would defeat the principle of an expanding economy on which our prosperity is predicated. Mr James Govan, a Fellow of the RAIC and the second member of the panel, who is himself seventy-six, referred to a brief which he had prepared for the meeting from material mostly out of "Modern Hospital" which described recommendations and planning standards for nursing home care of sick old people. He then referred to his own recent experience. He and his wife had recently decided to give up life in the suburbs in favour of a small house on a cul-de-sac street close to the subway on which he now rides to the office; so for him now, no tiring drive every day, less snow shovelling, handy but quiet in-town location.

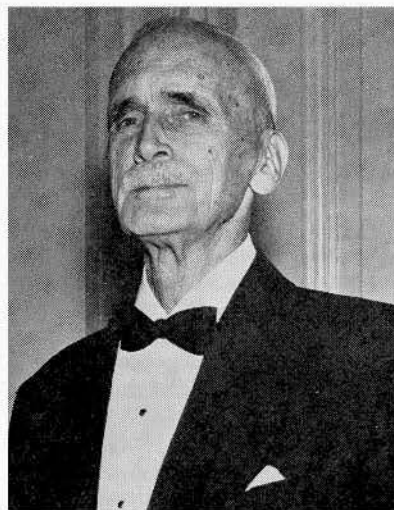


Dr. Mario Salvadori,
New York

The OAA, wanting to get their money's worth out of Mr Kennedy had asked him to be the third member of the panel. He mentioned that Victoria was now known as the "Gold medal city" since the highest design award of the last Massey Medals, had gone to Sharp & Thompson, Berwick, Pratt and Charles E. Craig for the group of small houses designed for old people under the sponsorship of the Kiwanis Club. He also referred to the generous provisions of the BC government, under which one third of the capital cost of self-contained housing for old people is made as a grant.

After this afternoon of heavy sledding through the deep drifts of sociology and planning, the exhibitors entertained us with their usual excellent cheer. This part of the convention is always a very pleasant social occasion. This year it was also a life saver.

The traditional tour this year went all through, and to the top of Mathers and Haldenby's new skyscraper for Imperial Oil on St. Clair Avenue, which has the highest elevation of any top floor in the city. The dominant impression seemed to



C. P. Meredith,
Ottawa.
President of the OAA in
1912, and now its oldest
living past president

be of the enormous scale of the building. From the top, the horizon stretched away on all sides, with only the cluster of mammoth apartment houses on Avenue Road offering a similar quality. Far below lay the little churches and tiny houses of what had been the traditional pattern of mid-town Toronto. Size and power was the thing. Abkar the Great would have been charmed. And so were we.

The Annual Dinner was followed by the traditional awards and presentations made to outstanding students, to new members of the Association, and this year a tribute was made to past presidents of the Association. Seventeen past presidents were given engraved sterling silver bowls; from Hamilton, Charles Lenz, Alvin R. Prack; from Ottawa, C. P. Meredith, A. J. Hazelgrove, W. J. Abra; from Toronto, W. L. Somerville, Forsey Page, Murray Brown, A. S. Mathers, B. H. Wright, R. S. Morris, Harland Steele, L. E. Shore, Gordon S. Adamson, George D. Gibson; from Windsor, Hugh P. Sheppard, George Y. Masson.

W. S. G.

BRITISH COLUMBIA

Of course there is really only one subject to write about from Victoria just now and that is the wonderful weather we have enjoyed all winter, but let us leave this pleasant subject and give some news of an architectural character.

The Capital Region Planning Board recently advanced a most interesting proposal which showed a new Civic Centre planned immediately west of Christ Church Cathedral. Brahm Weisman, MRAIC, their Planning Director, has prepared a report with drawings and a model showing how this could be achieved. The building comprising the nucleus of a Civic Centre are a new Court House, Land Registry Office and City Hall, and as the existing buildings being used for these purposes are all badly in need of replacement it would seem that the present proposal is not only very opportune, but is perhaps the last chance the city will have of ever having a dignified

and well grouped Civic Centre in a location reasonably near the heart of the city. The idea has been enthusiastically received by most of the public, but it remains to be seen whether the scheme will actually materialize.

Last year the official residence of the Lieutenant Governor was totally destroyed by fire, and Clive Campbell, MRAIC, Deputy Minister of Public Works and Chief Architect to the Provincial Government was given the challenging task of designing a new building on the same site, and doing it in the minimum of time in order that the building be completed in the province's Centennial Year 1958. Mr Campbell's department has been responsible for some very pleasing contemporary buildings erected recently throughout the province, and although we have been given the most sketchiest of information we are concerned that the design of Government House may not come up to the standards recently set.

We were sorry that Maurice Clayton has left us to take up a position in Ottawa and our best wishes go with him. Roderick Clack, his late partner, is now assisting the city engineer in building and planning matters, and we anticipate that his appointment will go a long way to improve the aesthetics of our civic amenities.

And now back to the garden where flowers and blossoms have been making a wonderful show since the beginning of February. The only trouble is that this frost free weather will mean two extra months of grass cutting.

Donald Wagg

MANITOBA

The winter is coming to an end. Although this is generally a welcome thought, it also means the end of a fine series of lectures we in Manitoba have enjoyed these past few months. The Manitoba Association of Architects sponsors a Lectureship Fund by means of which guest speakers are 'imported' to speak to the students in the university, members of our profession and the public. We feel this year we have had an excellent roster of speakers.

The proximity of our university has a very beneficial effect on the community at large. Through the various departments, particularly the Extension Service and the Adult Education Department, the public is being made aware of the advantages offered by the university. The Royal Commission presently studying education in Manitoba is helping to raise general interest in the whole field of education. The MAA hopes that in a small way the Lectureship Fund helps stir interest in the field of architecture. It may be fairly stated that the original intent of the Lectureship Fund was to bring outstanding men in architecture to lecture to the students in the University of Manitoba. This is still the primary purpose to be served but the hope grows that an ever increasing number of people from other walks of life will find interest in these lectures.

C. Ross Anderson of Toronto, winner of a Royal College of Fellows Scholarship spoke on "Vision and Vernacular". A talk based on material gathered in Ontario under this scholarship. Paul Rudolph, recently appointed Head of the Department of Architecture at Yale, gave two lectures, "Structure in Architecture" and "Architectural Space". Ralph Rapson, Head of the School of Architecture at Minnesota spoke on "Order and Disorder". Jeffrey Aronin of New York gave two lectures, "Climate and Architecture" and "Seagram House". Louis I. Kahn, Professor of Architecture at Pennsylvania and Yale and a Practising Architect, spoke on "Space, Order and Form in Architecture". Professor Kahn gave a talk to the students in the afternoon and then was the guest speaker at the Annual Dinner of the MAA in the evening.

I have refrained from comment on the various speakers for reasons of space limitations wisely imposed by the editor. The presentations made by the speakers were all illustrated and of an extremely high quality. The stimulating effect of these men on their audience cannot be over-emphasized. The 'talk' among the students after a lecture is ample evidence of this. There remains one lecture on the schedule. Christopher Tunard, Director of Graduate Program in City Planning at Yale

will be in Winnipeg the end of March. We anticipate a successful event to wind up this series.

The end of this series is the signal to start rounding up a list of talent for next winter. We are indebted to Professor John Russell, Director of the School of Architecture, for his suggestions and efforts in this phase of the operation and look forward to profitable and pleasant lectures next fall.

George A. Stewart, Vice-President, MAA

NOVA SCOTIA

The council has realized for some time that if this association is to keep pace with the sister associations and make continued progress that additional funds and secretarial help are a prime necessity. In order to meet these needs, the last meeting of council increased the annual fees from twenty-five dollars to fifty dollars and also appointed Mrs L. Barron as a part time secretary.

A joint committee composed of members of the Nova Scotia Association of Architects and The Association of Professional Engineers of Nova Scotia has been formed. Its purposes are as follows: To discuss matters of mutual concern; To avoid mal-practise; To study respective Acts in relation to each body; In general, to improve relations between the two Professional Associations. The members representing the NSAA are Messrs A. F. Duffus, C. A. E. Fowler and W. W. Downie.

Discussions are taking place between a representative of the NSAA and a group of the Halifax Branch of The Canadian Construction Association regarding the possibilities of establishing a Bid Depository System in the Halifax area.

A large gathering of interested persons attended a one-day symposium on Housing and Re-Development at Dalhousie University. They heard and discussed with Professor Gordon Stephenson, of The University of Toronto, his recommendations for the City of Halifax. His proposals included the clearance of a nine-block blighted area in the down town area to be re-used for commercial purposes. The architectural profession was well represented.

John L. Darby

QUEBEC

In this era of good communications it seems fatuous to recap Mr Cudmore's complete though somewhat laudatory resumé of the doings of the 67th Annual Assembly of the Province of Quebec Association of Architects in the *Daily Commercial News*. Let us pause however for a moment and reflect on some of the subjects which generated so much of the oratorical efforts of the younger members present.

There was an interesting discussion on ways and means for maintaining a high standard of architectural effort. At one point it was suggested that an Inspector-General be appointed. Some of the older members capriciously suggested a bountiful supply of cigars with lavish appointments for the Inspector's quarters and hinted that such a person would descend upon an architect's office with all the flourish of a Federal Tax Agent and no doubt with as cordial a welcome. Mark you, this is a very free interpretation of the wordy exchange conducted in the French language. From time to time I could not help thinking of that pompous yet altogether lovable character: the Major General in Gilbert & Sullivan's comic opera.

Seriously however, it is a healthy sign when the younger members of the profession are concerned with the state of architectural education. The subject seems tailored to meet our new President's motto for the year viz., "The best of ourselves for the good of the Profession". I wonder what rules Council can promulgate to ensure a uniformly high quality of architectural output.

Our vivacious confrere, Lucien Mainguy of Quebec, made a fervent appeal for amendments to the Procedure for the Conduct of Architectural Competitions. Mr Paine stated that the procedure sponsored by the PQAA was based primarily on those in effect in several countries of the Western world. He made a strong plea that we should give most serious consideration to any radical departure from the present procedure which generally conforms to the RAIC practice.

Another matter which was referred to Council concerned the formation of regional groups somewhat similar to the chapter idea in Ontario. There was a time when this subject was given a wide berth and "loaded" with all sorts of constitutional difficulties. However, the pressure of increased membership means that there are about 400 architects in the district of Montreal who should meet regularly to discuss architecture and share in the solution of common problems. The "chapter" idea is worthy of Council's consideration this year and is part and parcel of a public relations job.

In my opinion public relations start with the individual member and he in turn works most effectively in a small group. The communists call them "cells", in Ontario they call them "chapters", so we might call them "CIRCLES" or "GROUPS" or anything so long as they convey the same meaning in both languages. Legal opinion should be obtained to determine if such a set-up is feasible within the terms of our charter.

Now a word about our "antiquated" fee structure. In point of fact they must appear so to more than half the membership since they were last revised and issued in 1912, hence in vogue before most of our present members were born. Architect Henri Mercier has compiled considerable data on this subject. He has tables of tariffs for all the provinces of Canada as well as the various states in the U.S.A. and even abroad. It is a pity that we did not have copies available for distribution at the meeting. Probably the new Council could hold seminars on this subject in Montreal, Quebec, Sherbrooke and at other populous centres. Recently an executive of one of our large industrial concerns expressed amazement that an association such as ours could jog along for almost 50 years without the need for any revision to its tariff structure. The engineers of Quebec have had their fees revised recently, hence it is time that we report our findings to the membership.

All in all the Assembly was far from stodgy. A lot of steam was let off by the younger members at the final business session. There was much fun and good fellowship created in the Annual Curling Competition for the Meadowcroft Trophy. We are indebted to architect Jim Meadowcroft for this novel trophy and the Association has acquired a fine painting by a Canadian artist. Furthermore may this painting grace the walls of our new premises before the 68th Annual Assembly rolls around again!

H. A. I. Valentine

QUEBEC

Une autre Assemblée Annuelle, la soixante et septième, est déjà chose du passé. Bien des sujets ont été étudiés et nombre de suggestions ont été faites par les membres dans le but d'améliorer le standing de notre Association. Il est évident que le travail ne pourra pas tout s'accomplir dans l'espace d'un an mais j'ose espérer, qu'avec la collaboration de tous, nous pourrions au moins couler les fondations d'un édifice qui pourra se compléter dans les années à venir. Il est une chose cependant qui est de prime importance, c'est que chacun de nous doit bien comprendre son rôle dans la société et la nécessité d'une Association pour faire valoir les qualités de la profession. Comme je le disais dans mon premier communiqué, j'aimerais améliorer nos relations extérieures et faire valoir la nécessité de nos services, or, pour ce faire, je crois que trois points importants devraient être étudiés. D'abord l'architecte, au point de vue de ses services professionnels, ensuite l'intérêt qu'il porte à son Association et, enfin, sa collaboration aux oeuvres de civisme.

Il est de prime importance que l'architecte se donne sans compter à la réalisation des projets qu'on lui confie. Il est évident que tous les contrats ne peuvent pas rapporter à leur auteur le même montant d'honoraires mais je crois qu'un architecte digne de ce titre n'a pas le droit de refuser un travail, sous prétexte qu'il n'est pas assez important. Si on veut réellement que la profession soit appréciée à sa juste valeur, il est de prime importance que chacun de nous, non seulement accepte tous les travaux, peu importe leur envergure, mais

aussi qu'on se dévoue tout autant pour faire bien, même la plus petite réalisation.

L'Association des Architectes est un organisme qui a pour objet la gouverne générale de la profession dans la province. De ce fait, elle doit pourvoir à l'administration et à la sauvegarde des intérêts de la profession mais elle a aussi le devoir de surveiller la dignité et l'honneur de la dite profession. Chaque membre devrait s'intéresser directement aux différents mouvements mis de l'avant par l'Association et devrait accepter avec plaisir les différentes tâches que le Conseil peut leur demander d'accomplir à certains moments. Malheureusement, trop de membres restent indifférents à tout ce que fait l'Association et ne vivent que pour un but: l'adoration du veau d'or. Si la proportion des membres qui s'intéressent aux affaires de l'Association pouvait seulement doubler, nous serions d'avance assurés d'un succès entier.

Enfin, de par sa position dans la société, l'architecte se doit de participer à tous les mouvements de civisme ou de services qui s'organisent de temps à autre dans les différentes municipalités ou dans la province.

L'architecte est un homme dont la formation professionnelle et les connaissances générales doivent être mises, en tout temps et en tout lieu, à la disposition du public en général. L'architecture est un art qui se rattache intimement à la vie communautaire et, de ce fait, l'architecte se doit d'aider, chaque fois que l'occasion se présente, ses concitoyens dans les domaines civique, provincial ou même national. L'imagination dont l'architecte doit faire preuve dans l'étude de formes nouvelles ou d'applications nouvelles de matériaux déjà connus, devrait aussi être employée dans tous les autres domaines où il peut se faire valoir.

Si nous réussissions à promouvoir ces trois points, je suis persuadé que nous aurions déjà fait un grand pas dans la voie du succès et la profession ne saurait qu'en tirer des avantages innombrables. Reste à savoir quel moyens prendre pour fouetter les membres et obtenir une meilleure coopération. J'apprécierais hautement recevoir des suggestions quant aux moyens à prendre ou aux initiatives nouvelles qu'on pourrait amener pour atteindre le triple but que je proposais au début. Comme je le disais le mois dernier, ne craignons pas de faire valoir la nécessité de nos services et nous obtiendrons, de ce fait, une reconnaissance qui portera ses fruits.

Gérard Venne, Président PQAA

1958 RAIC COLLEGE OF FELLOWS SCHOLARSHIP

It has been decided by the Executive Committee of the Council of the Royal Architectural Institute of Canada that the College of Fellows Scholarship for 1958 shall be made available to architectural students graduating in 1958 from the Canadian Schools of Architecture.

Consequently, the deadline for receipt of Scholarship applications at the RAIC Executive Offices has been extended to **July 15th, 1958**. All other conditions of the scholarship remain unchanged.

COLLEGE DES FELLOWS DE L'IRAC BOURSE D'ETUDES 1958

Le Comité exécutif du Conseil de l'Institut royal d'Architecture du Canada annonce que la bourse d'études offerte cette année par le Collège des Fellows pourra être obtenue par les étudiants qui gradueront des écoles canadiennes d'architecture en 1958.

En conséquence, la dernière date fixée pour la réception des demandes d'inscription aux bureaux exécutifs de l'IRAC a été avancée au **15 juillet 1958**. Toutes les autres conditions relatives à l'obtention de cette bourse demeurent les mêmes.

POSITION WANTED

MRAIC, ARIBA, Associate AIA, University Graduate, seventeen years varied experience in all fields of professional work wishes to associate with an established firm, in a responsible position, with prospects of partnership. Would also be interested in a senior staff appointment with organization. Reply care of the *Journal RAIC*, 57 Queen St. West, Toronto.