RAIG JOURNAL

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MAY IT PLEASE YOUR MAJESTY to accept the humble duty of the Royal Architectural Institute of Canada upon your first visit as a Canadian Monarch to your North American realm.

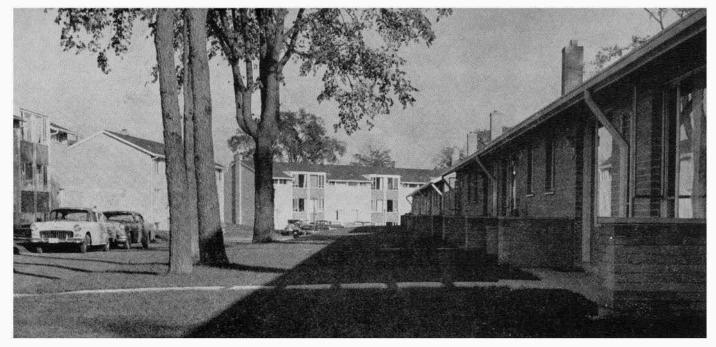
His Majesty, your revered great-grandfather, King Edward VII, granted to the governing body of the architects of Canada the honoured appellation of "Royal". For almost fifty years, and, during four reigns, successive holders of the Crown which unites the Commonwealth, have continued to grant us this honour.

Your Majesty, upon her accession, further favoured us by accepting the position of Patron.

For these honours we are deeply and personally grateful, and, as Your Majesty acts as the mortar of the Commonwealth, so does Your Majesty's recognition of our Institute act to bind us individually to the principles of service inherent in our profession.

To your husband, His Royal Highness the Prince Philip, Duke of Edinburgh, may we extend our respectful welcome, and as you both leave this your vast and developing country, may we add the voice of all Canadian architects to the national prayer

God Save the Queen



Don Mills, 1956

Terrace Houses in Ontario

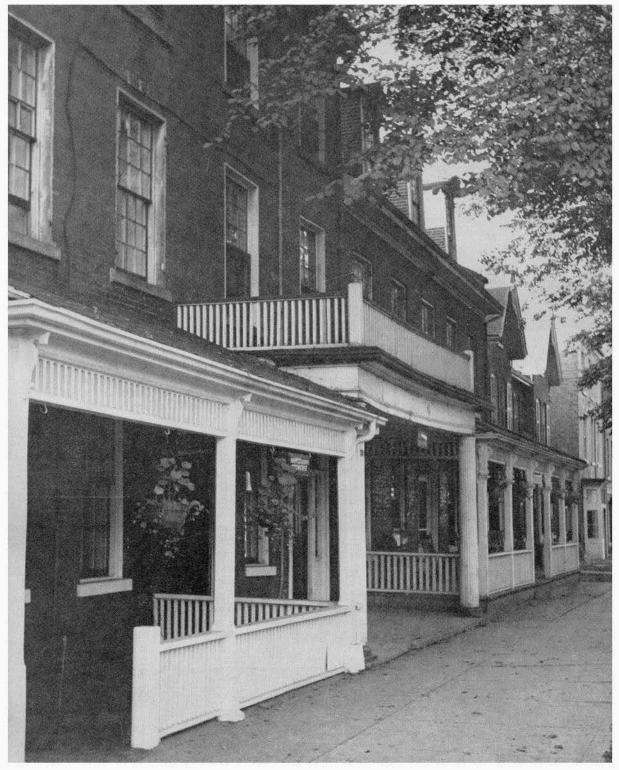
an Urban Tradition Revived

In the midst of the continent-wide enthusiasm for "Splits" and "Ranchers", it is good to be able to report the arrival on the urban scene of a small number of well-designed terrace houses. Although the terrace may be considered a standard architectural form in nineteenth century Quebec and Montreal, a considerable number of this type of house were also built in the market towns along Lake Ontario, on the upper St. Lawrence, and in the valleys of the Rideau and the Ottawa. To-day, these hundred-year old structures have an admirable sturdy charm. Their masonry shows a fine level of craftsmanship; their elevation to the street shows a quiet confident balance of wall, door and window; they give a sense of enclosure to the urban scene, in contrast to the free-standing houses and barns of the countryside beyond.

In the two examples of new terrace houses illustrated here, a tradition is revived. In the first place, the street has regained some visual unity. Whether one believes that streets should veer and twist, or compose grid patterns or complex mathematical shapes, if they are defined only by the repeated incidents of small detached villas, their pattern is never properly expressed. A terrace can pick up the pattern of a street and define

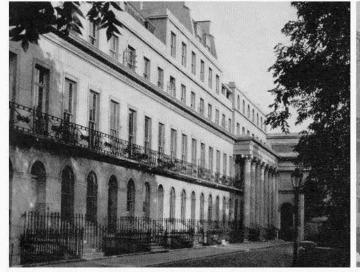
Perth, 1856





19th century Cobourg

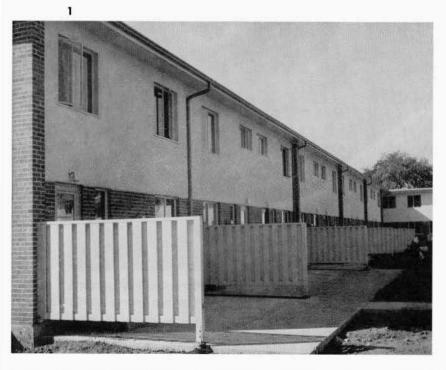
Terrace houses in the height of English fashion. On the left, the London of George IV; on the right, early Victorian Brighton.



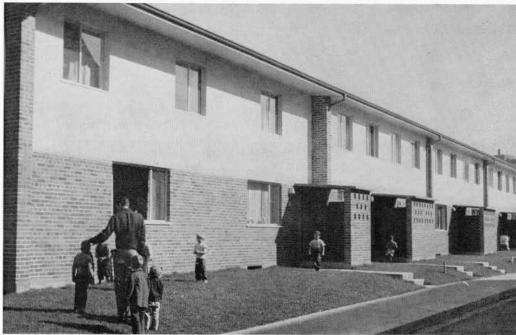


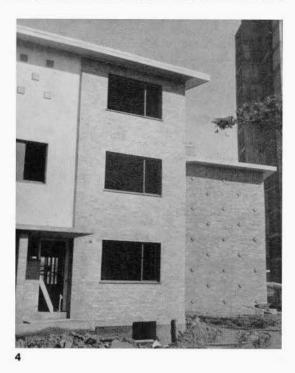
Architect for Terrace Houses, J. E. Hoare, Jr.

- Service court entries of 2-storey terraces
- 2 Street elevation
- 3 Street view of 3-storey terraces
- 4 Adjacent blocks of 3-storey terraces









2

it in three dimensions. A wall long enough to embrace, say six single-family houses, is long enough to define and to describe the street. The front elevation of a small single-family house is not.

In the case of the Don Mills terraces, the street pattern is a free one; it curves to give one a sense of its length and by a turn, the vista is closed, and closed by a wall, six houses long. One is made aware of an enclosed urban space. This space is a carefully scaled one, and rather romantic in concept. The eaves line of the terrace on one side is a whole storey higher than on the other; trees are left in the road right-of-way, specially curbed and offering a rather powerful inducement to slowing the traffic, as well as giving a continuous park-like quality to the whole site.

In Regent Park, the terraces front onto a rather simple street pattern but contain spacious service courts which include a car park, a route for delivery vans, individual paved yards outside each service door, and an open grass lawn. The service court is the enclosed space, and its functions are well described in the design.

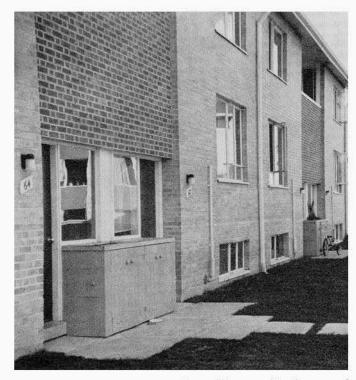
In addition to the visual unity of scale provided by the terrace house, it offers, in the second place, some very good plan types of a wide variety. The basic plan must be two rooms deep, but it may be one storey, one and a half, two or three. With a careful site plan, the view from the two outside window walls may give a much greater sense of space than is possible from a detached house facing other detached houses, all of them on small lots. The current lack of interest in providing

cross ventilation from adjacent walls in free-standing houses, means that a house in a terrace gets just as good circulation of air as any other. And the terrace house does recognize its neighbours. To use the jargon of the social worker, it is community-oriented. In spite of the many ways by which one's particular house can be identified, by the paint on the door, by awnings, by plant boxes, or whatever, the terrace house acknowledges its place as part of the urban order, by showing individuality within a frame, in a way that no single-family house, and no apartment house can ever do.

For many years the terrace house has been unpopular. The free-standing villa, no matter how minute, or at most the "Semi," has been repeated to the horizon of all our suburbs, varied only by slight twists and jerks of the facade. As the districts in which terrace houses had been built became older and less popular, this type of building became identified in the public mind with overcrowding and poor maintenance. It was thought to be pretty slummy. In fact, when the group illustrated was about to be built in Don Mills, the residents in the detached villas around raised howls of protest that their neighbourhood was being betrayed to the poor and the slovenly. They were somewhat embarrassed when a subsequent survey showed the new residents of the terrace houses to have an average annual income a thousand dollars higher than their own.

The possibility of an increase in the building of terrace houses at the expense of Splits and Ranchers presents some very attractive possibilities, both to the visual improvement of new neighbourhoods, and to a more efficient use of serviced land. However attractive, this possibility is but slight. We build what institutional lenders and public policy dictate. Local councils, provincial planners, federal underwriters, banks and insurance companies all believe that the detached villa, Split or Rancher, makes a handier and easier package to finance, and the industry can but agree. The number of hours spent in negotiating the finances for both the new groups of terraces illustrated could have bankrupted many a small building firm. Nonetheless, one feels bound to commend even a small revival of the terrace, as bringing back some sense of urban order and control and scale to new residential neighbourhoods.

W. S. Goulding



Don Mills — combined street and service entry to 2-storey terraces

Associate Architects, James A. Murray and Henry Fliess

19th century Dundas



Spaces Order and Architecture

BY LOUIS I. KAHN

an address given at the RAIC Golden Jubilee Assembly, revised and edited by the author Architecture is the thoughtful making of spaces.

Reflect on the great event in architecture when the walls parted and columns became.

It was an event so delightful and so thought wonderful that from it almost all our life in architecture stems.

The arch, the vault and the dome mark equally evocative times when they knew what to do from how to do it and how to do it from what to do.

Today these form and space phenomena are as good as they were yesterday and will always be good because they proved to be true to order and in time revealed their inherent beauty.

In the architecture of stone the single stone became greater than the quarry. Stone and architectural order were one.

A column when it is used should be still regarded as a great event in the making of space. Too often it appears as but a post or prop.

What a column is in steel or concrete is not yet felt as a part of us.

It must be different from stone.

Stone we know and feel its beauty.

Material we now use in architecture we know only for its superior strength but not for its meaningful form. Concrete and steel must become greater than the engineer.

The expected wonders in concrete and steel confront us. We know from the spirit of architecture that their characteristics must be in harmony with the spaces that want to be and evoke what spaces can be.

Forms and spaces today have not found their position in order though the ways of making things are new and resourceful.

The continual renewal of architecture comes from changing concepts of space.

A man with a book goes to the light.

A library begins that way.

He will not go fifty feet away to an electric light.

The carrell is the niche which could be the beginning of the space order and its structure.

In a library the column always begins in light.

Unnamed, the space made by the column structure evokes its use as a carrell.

A man who reads in seminar will look for the light but the light is somewhat secondary.

The reading room is impersonal. It is the meeting in silence of the readers and their books.

The large space, the small spaces, the unnamed spaces and the spaces that serve. The way they are formed with respect to light is the problem of all buildings. This one starts with a man who wants to read a book.

dedication

ritual

is the chapel
a chapel of a university
ritual is inspired
dedication is personal

Inspired by a great teacher the fortunate young man winks to the chapel as he passes. He feels dedication and performs his own ritual. He was there though he never opened its door.

The rally centers there and inspires its own ritual.

A man is honored there.

dedication is its essence.

When I first came to Pisa I went straight in the direction of the Piazza. Nearing it and seeing a distant glimpse of the Tower filled me so that I stopped short to enter a shop where I bought an ill fitting English jacket. Not daring to enter the Piazza I diverted to other streets toward it but never allowing myself to arrive. The next day I went straight for the Tower touched its marble and that of the Duomo and Baptistry. The next day I boldly entered the buildings.

So it is with a university chapel.

Possibly a space protected by an ambulatory entered from an open arcade in a dimensioned garden.

Space for those who never go there, those who must be near and don't enter and those who go in.

house a house home

In a certain space it is good to sleep.

In another it is good to dine or be with others.

The serving spaces and the free spaces combine and are placed to the garden or to the street to suggest their use.

House implies a place good also for another. It is that quality which is closer to architecture.

It reflects a way of life.

It does not make small spaces for small people.

Spaces transcend function.

A house is more specific.

The Renewal of City.

The new spaces that want to be will emerge from the designs drawn from as order of movement. An order of movement that distinguishes staccato from go movement and includes the concept of stopping.

The zoning of streets for characteristic movement must precede the zoning of the land they serve.

A street wants to be a building.

Expressways are rivers that need harbors. Streets are canals that need docks.

The architecture of stopping is equal in importance to the great walls that surrounded the medieval cities.

Carcassonne was designed from an order of defense. A modern city will renew itself from its order concept of movement which is a defense against its destruction by the automobile.

Center City is a place to go to - not to go thru.

Great vehicular harbors or municipal towers will surround the innermost center of the city. They will be the gateways, the landmarks, the first images that will greet the visitor. Their place in order and their strategic locations will demand of the designer more meaningful form as a composite building of many uses. Its street story will be a

market, the outer ring towards the light may be used as a hotel or for offices and the inner core for storage. The main body of the tower gateways between the outer perimeter and the inner core will be the wound up street of vehicular arrival and stopping.

The spaces and buildings within the gateways must embody and strive for the fulfillment of gregrarian tendencies. Only the consolidation of all centers—cultural, academic, commercial, athletic, health and civic—into one Forum will inspire renewal of a city.

Decentralization disperses and destroys the city. So-called shopping centers away from the Center are merely buying centers. Shopping cannot exist away from the city's core.

An arena placed outside the city for the same reason of parking is isolated from its other living companions. Its existance outside is limited, unenlivened by the other places where people gather. In the Center its spaces will stimulate ideas for its use and strengthen other places of meeting and commerce by its presence.

The center need not be large. It now is more complex than the village green. Consolidation and its lofty spires is contained within the scale of walking. The moving sidewalk extends the area of that scale.

The Center is the cathedral of the city.

The column or wall defines its length and breadth; the beam or vault its height.

Nothing must intrude to blur the statement of how a space is made.

The forms characterizing the great eras of architecture present themselves and tempt us to adapt them to concrete and steel. The solid stones become thinner and eye deceiving devices are found to hide the unwanted but inevitable services. Columns and beams homogenized with the partitions and ceiling tile concealing hangers, conduits, pipes and ducts deform the image of how a space is made or served and therefore presents no reflection of order and meaningful form.

We are still imitating the architecture of solid stones.

Building elements of solids and voids are inherent in steel and concrete. These voids are in time with the service needs of spaces. This characteristic combined with space needs suggest new forms. One quality of a space is measured by its temperature by its light and by its ring.

The intrusion of mechanical space needs can push forward and obscure form in structure.

Integration is the way of nature. We can learn from nature.

How a space is served with light air and quiet must be embodied in the space order concept which provides for the harbouring of these services.

The nature of space is further characterized by the minor spaces that serve it. Storage-rooms, service-rooms and cubicals must not be partitioned areas of a single space structure, they must be given their own structure.

The space order concept must extend beyond the harbouring of the mechanical services and include the "servant spaces" adjoining the spaces served.

This will give meaningful form to the hierarchy of spaces.



Long ago they built with solid stones.

Today we must build with "hollow stones".

House of Mr Harry Cohen, Montreal, Quebec

Architect, Fred Lebensold

Situated on Summit Crescent Avenue, at the summit of the Westmount Mountain, the house has a panoramic view of the City and the St. Lawrence River to the west, and a view towards the Bird Sanctuary to the east.

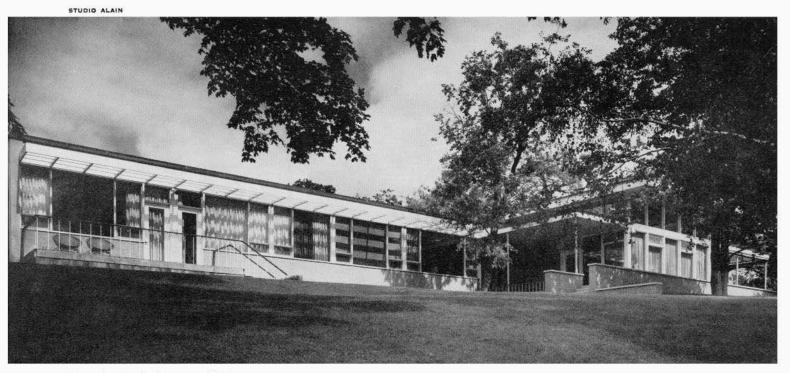
The plan is organized in three areas — the sleeping area with three bedrooms, including bathrooms and dressing rooms; the living, dining with its terrace form one interflowing living area; and a work zone, including kitchen, utility space and laundry room. Service accommodations are in the basement.

The structure is framed in steel.

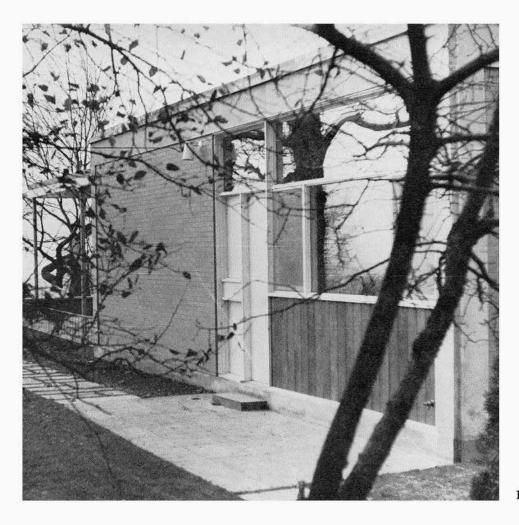
Face brick, limestone facing and teak panelling are used for the exterior wall surfacing.

The house is air-conditioned throughout.





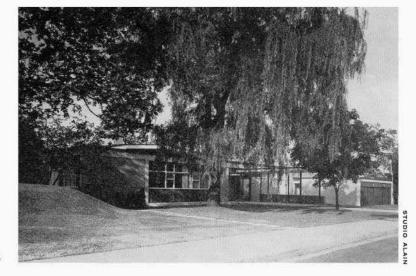
View showing bedrooms and living room



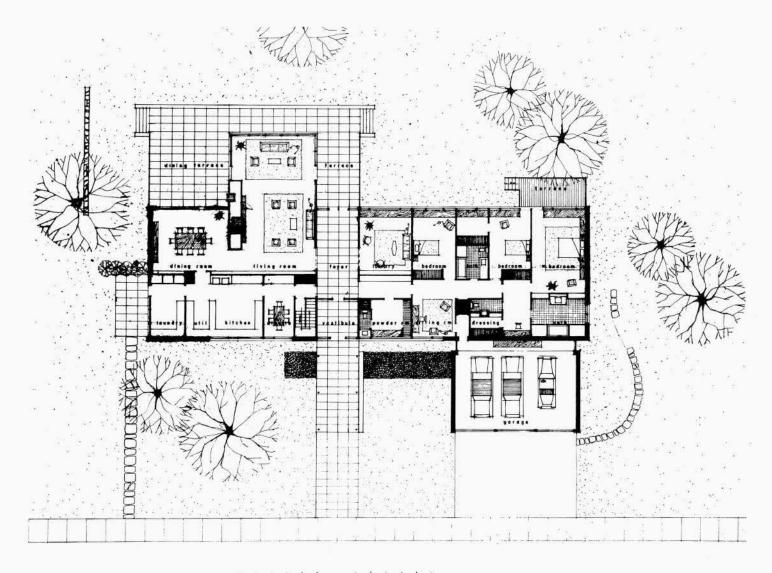
Detail of corner of south elevation



The living room



The principal elevation



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View of kitchen



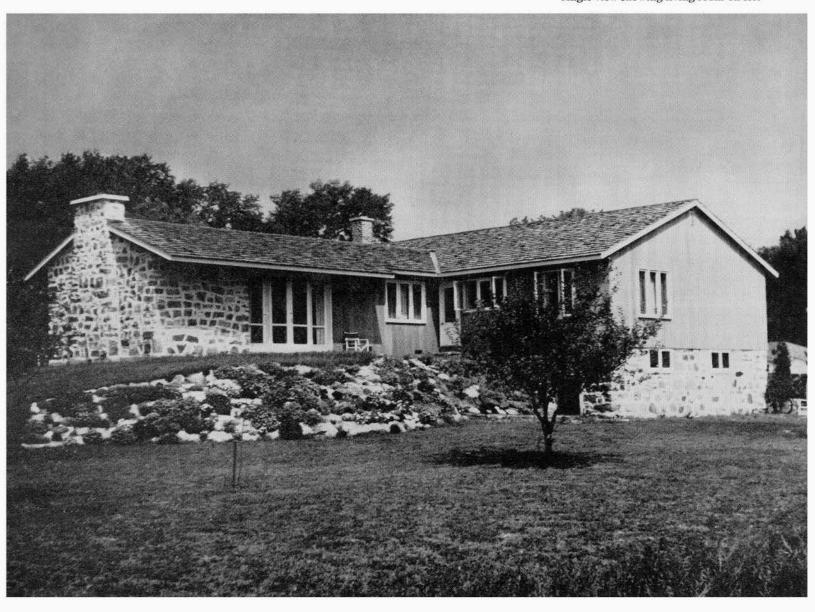
Sitting room

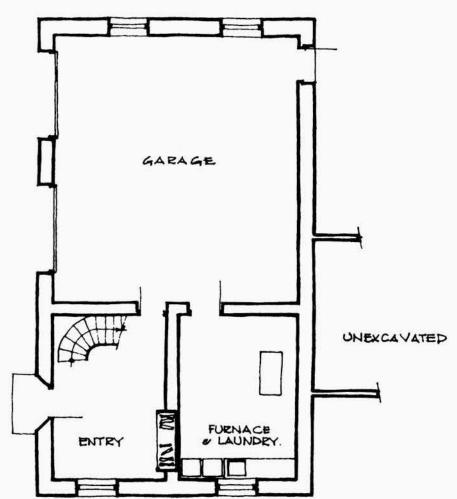


House of Mr Charles W. Goodfellow Chateauguay County, Quebec

Architect, Philip F. Goodfellow General Contractor, W. Gordon Bryson

Angle view showing living room on left

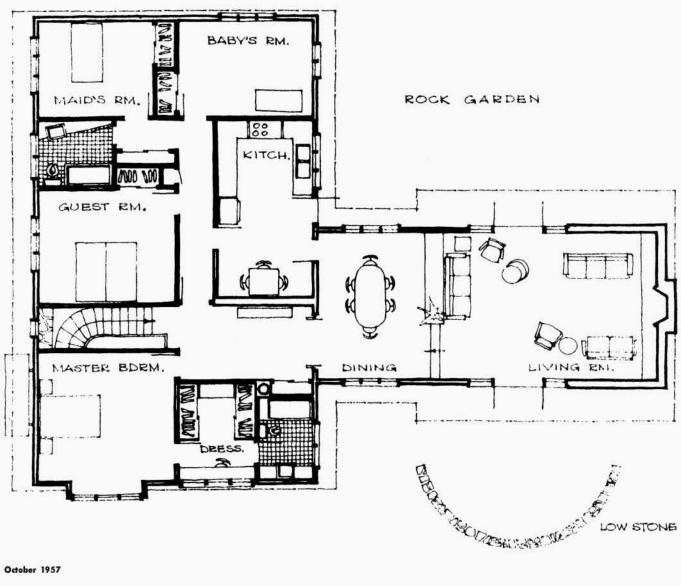




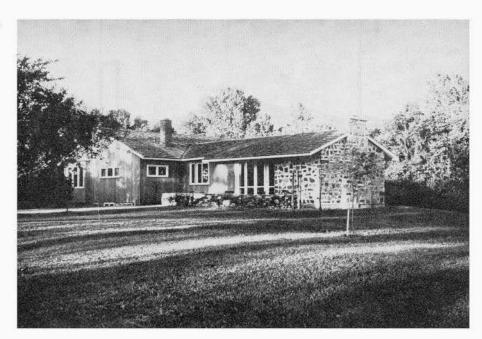
Rising land overlooking Lake St. Louis to the west, orchard and woods to the east. Stone foundation and ground floor are the 100 year old walls of a barn set into the side of the rise in land. The house was built over these walls and the living room dining room wing added at the main floor level. The existing stone partitions in the basement remain to form a large two-car garage, a laundryfurnace room and main entry ball.

Existing stone work and some new to match. Redwood vertical boarding stain and wiped a pale salmon colour. Hand split shingle cedar roof.

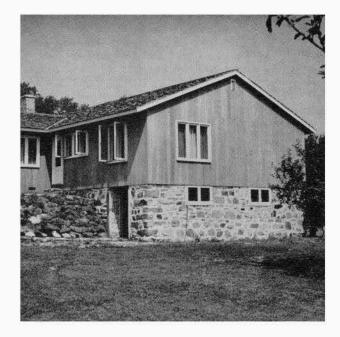
The interior is finished with gypsum board walls and a number of special wood finishes, teak counters and floors, red wood, pine and oak plank panelling.



View showing semi-circular stone wall with living room on right



View showing rock garden and door to garage



View showing garage doors and principal entrance

Modular Co-ordination in Canadian Building

BY S. R. KENT

IN OCTOBER, 1956, at the request of the Division of Building Research, the Canadian Standards Association formed a committee to establish the size of the module to be used in Canada, and to define the modular terminology. The committee, composed of members from twelve phases of the building industry, met and agreed on a module of 4 inches. The standard is being drafted now and will probably be completed by September. It will be based on the American Standards Association document A62.1 with consideration being given to the glossary of

the European Productivity Agency Project 174.

The National Concrete Products Association has sponsored a Canadian Standards Association standard on concrete masonry products and to date the sub-committees are working on the quality specifications. When completed, this standard will determine the appropriate modular sizes for concrete masonry blocks and bricks, based on the above-mentioned general modular standard. The concrete brick and block industry is one of the fastest growing post-war building industries, as blocks are used in many parts of Canada for foundation walls, exposed interior and exterior walls, and as back-up for clay brick masonry. Because of the last, manufacturers must make a variety of sizes to bond with the various sizes of clay bricks, and so they are most anxious to promote a system of co-ordination. The Canadian Standards Association specifications on brick and hollow tile, published in 1954, accept the wide range of brick sizes throughout Canada and determine only permitted tolerances. Steps are now being taken to have modular dimensions for clay brick and tile added to these specifications. The Canadian Government Specifications Board is preparing a standard on drafting room practice for federal government architectural offices. Modular drafting procedures are being proposed for inclusion in this standard.

The National House Builders Association has shown keen interest in the use of modular co-ordination in house building and two members of the Research Committee are putting it into practice. One, a builder of custom houses, has prepared drawings by the modular method, using key reference grid lines on 4-inch intervals. These drawings, he finds, are easier to prepare due to the reduction of decisions on dimensioning, everything being on the 4-inch multiple, and simpler to follow on the job due to elimination of fractions. The other member shop fabricates wood stud walls on 4-inch multiples.

The Ontario Association of Architects has taken an active lead in educating the profession on modular co-ordination and in establishing liaison with manufacturers on modular products. Last summer, the OAA accepted the recommendation of its committee studying uniform brick sizes, and endorsed the changing of brick to modular sizes. Local manufacturers agreed to make the change when there was evidence of a continuing demand! To create this demand the committee began an educational program for teaching modular co-ordination to members of the Association. The first step was to feature a discussion panel and a modular display at the annual meeting in February. This meeting created much interest, but many architects still felt they did not know enough on the subject to introduce modular drafting into their offices. The committee is therefore arranging a series of lecture-workshops on modular co-ordination and drafting to be held during the autumn in

Toronto. As well as carrying on the internal educational program, the committee will also approach other manufacturers of non-modular building products.

A meeting has been arranged through the Director of the Division of Building Research for the discussion of modular co-ordination with the Toronto Branch of the Engineering Institute of Canada. This group consists primarily of civil and mechanical engineers, many of whom are in private practice

working with architects in the building industry.

As in the United States, the teaching of modular drafting and modular construction in the Canadian universities' schools of architecture has been neglected. Until this year, L'Ecole des Beaux Arts in Montreal was the only one of the five schools of architecture that had attempted any work in modular. This year a few lectures were given in all the schools and some drawings were prepared at the University of Toronto. All schools are planning more extensive training for the next session

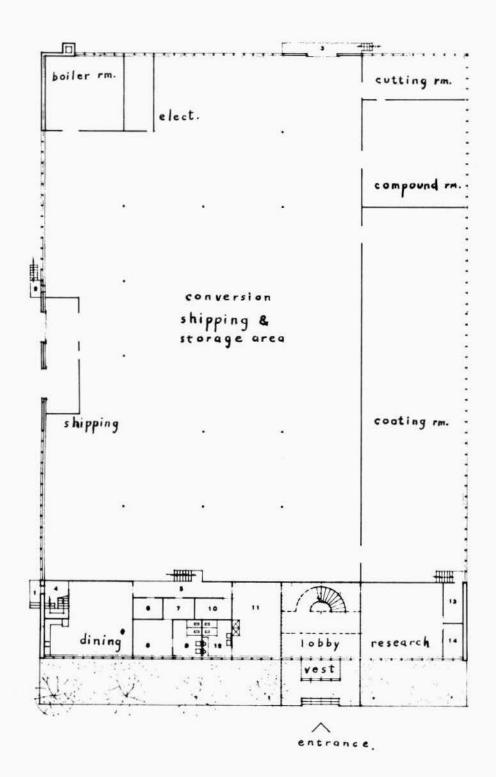
In the architectural department of the Ryerson Institute of Technology at Toronto, where architectural draftsmen are trained, lectures and instruction in modular drafting were given and some drawing was prepared for the first time this past year. Here again, more will be done next session.

Shortly after the formation of the Division of Building Research in the National Research Council, the Director, Mr R. F. Legget, sought to initiate a Canadian program for co-ordinating building materials and in 1951 called together representative manufacturers in the building industry. The meeting agreed that the basis of dimensional co-ordination should be on multiples of the 4-inch module but positive action following the meeting failed, owing to the lack of personnel with enough time to promote the system. It was not until 1956 that the Division was able to begin a continuing program when the writer joined the summer staff of the Division and was subsequently retained as a consultant.

Within the last year, the Division has established connections in the United States with trade associations, professional associations, architects and schools of architecture that have been sponsoring the American modular program. This relationship has been most friendly and has greatly assisted the Canadian work.

Lectures on modular co-ordination have been given to the annual meeting of the National Concrete Products Association, to the architecture students of McGill University, L'Ecole des Beaux Arts in Montreal, and the Ryerson Institute of Technology in Toronto, and lectures are planned for the architects in the Maritimes and for the Toronto Branch of the Engineering Institute of Canada. The Division is following the work of the Modular Society in England, the British Standards Institute and, through the London Office of the National Research Council, developments in the European Productivity Agency Project 174 on Modular Co-ordination in Building. The year's work in modular has revealed the lack of current descriptive literature, especially in Canada. The Division, therefore, is now preparing a publication on the principles of modular co-ordination using the 4-inch module and another publication on modular drafting.

(continued on page 412)

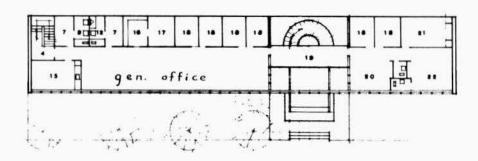


- 1 Employees' entrance 2 Shipping 3 Receiving

- 4 Stair
- 5 Passage 6 Mechanical equipment
- 7 Rest room
- 8 Ladies' lockers 9 Ladies' toilet

- 9 Ladies' toilet
 10 Janitor
 11 Men's lockers
 12 Men's toilet
 13 Control
 14 Office
 15 Dining
 16 Mail
 17 Storage
 18 Office
 19 Bridge
 20 Reception and secretary
 21 Sales' Manager
 22 President

Ground floor plan

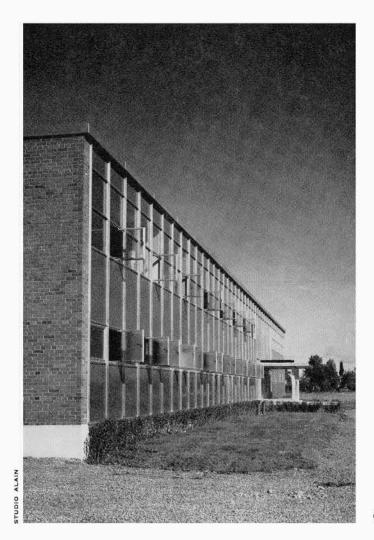


Second floor plan



STUDIO ALAIN

The principal elevation



Canadian Technical Tape Ltd. St. Laurent, Quebec

Architect, John Bird

Structural Engineers, Jasen & Eskenazi Mechanical Engineers, J. P. Huza & Associates General Contractor, Roland Chalifoux Ltd.

Curtain wall detail





Office interior

Design of this building was greatly dictated by the nature of the terrain. The site, a former garbage dump, required that the complete structure, including floors, be supported on piles. This being so, it was decided to raise the factory floor to accomodate truck loading and to locate all other areas on two levels, each one half level from the factory floor. The resulting split level scheme provides office space one half level above the factory floor and plant employee facilities one half level below the factory floor.

Developing a new enterprise, the owner wished bis building to leave its mark on the passing traffic. The two-storey lobby is the key design element as it provides, with the stone mosaic mural and circular stair, a dramatic visual feature. At the same time this space serves to separate the general office from the executive offices; a bridge wide enough to provide waiting space and circulation, joins the two areas.

Silhouette of stair against mural



♠Detail of main stair and stone mosaic. The open terrazzo treads of the stair are cantilevered from the central spine. The mural has highlights of white and the colour range of blues, greens and browns. It was designed by Adrien Vilandre.

Entrance lobby



The structure is a composite of reinforced concrete foundation and lower floors together with a steel superstructure carrying steel roof deck.

Front two storey section is enclosed with aluminum curtain walling containing aluminum sash and porcelain enamel faced panels. Factory walls are, for the great part, 5" thick insulating precast concrete panels with steel sash running continuously above. These panels will allow for easy dismantling when expansion of this part of the building will be required.

Offices are air conditioned. Heating throughout is by forced hot water using unit heaters and fin type convectors.

Cost, less fees and furnishings but including mural, \$11.00 per square foot.

The building is fully air-conditioned.

Main entrance steps and landings are beated for snow removal.

All walls at basement level are glazed.

The silver bronze and wrought iron screens in main lobby were designed here and produced in England.

Floor of main lobby is terrazzo with radiant heating.

Total floor area is 21,200 sq. ft. Final cost was \$454,412.00, being \$2,000.00 below the original contract sum.

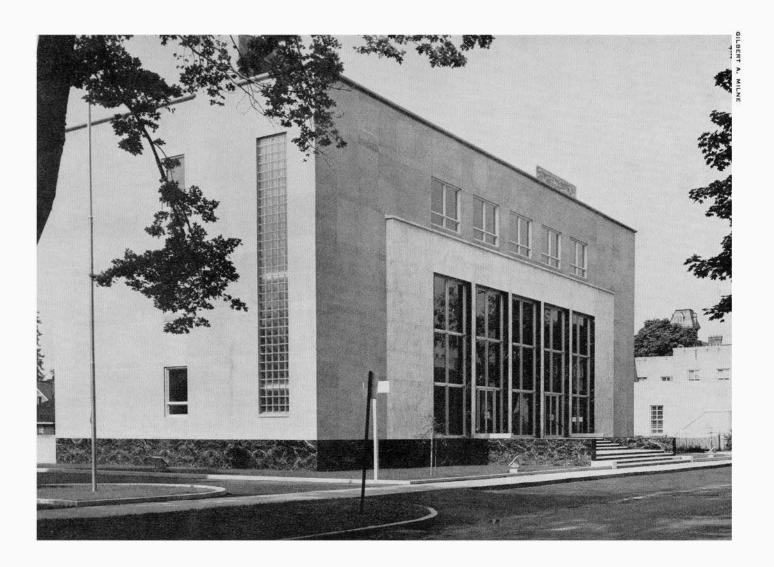


The foyer

Public Utilities Commission Brantford, Ontario

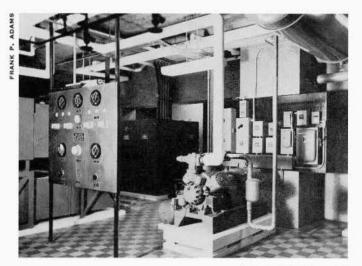
Architect, Leslie H. Kemp

General Contractors, Hamill Construction Mechanical Engineers, R. P. Allsop & Associates Ltd. Structural Engineers, Wallace Carruthers & Associates Ltd.

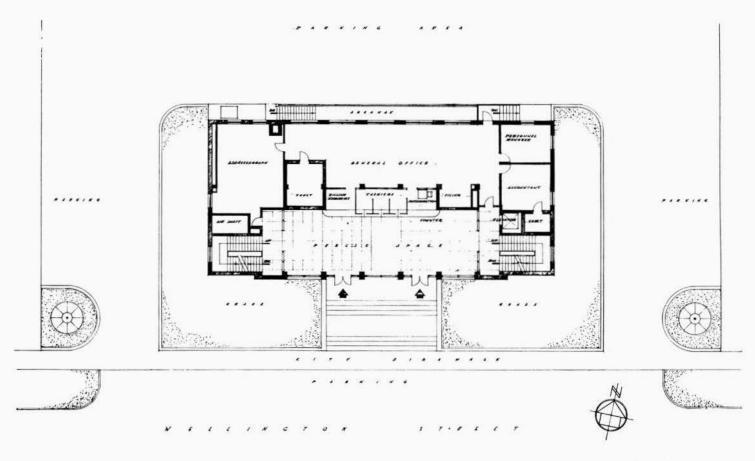




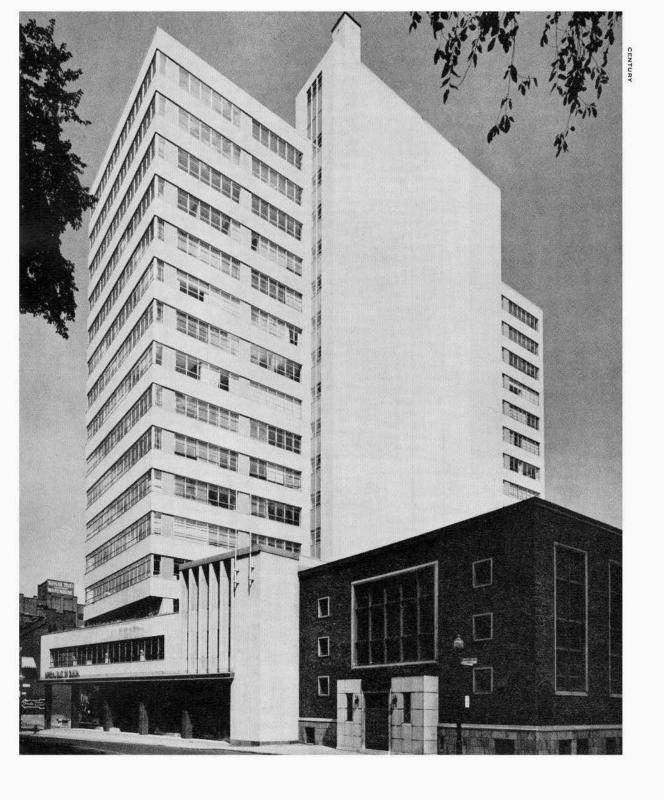




Air-conditioning units

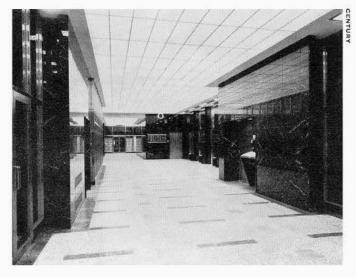


Ground floor plan



Office Building, Montreal, Quebec

Architects, Greenspoon, Freedlander & Dunne Structural Engineer, Irving S. Backler Mechanical Engineers, A. Benjamin & Associates General Contractors, Anglin-Norcross (Quebec) Ltd.



The foyer



Second floor roof garden

550 Sherbrooke Street West

The 550 Sherbrooke Street West Office Building occupies the corner of Sherbrooke and Aylmer Streets in the heart of the commercial district of Montreal.

The structure is made in a reinforced concrete skeleton with a flat slab construction. Air conditioned throughout, with the weathermaster system which blows cold air in summer and warm air in winter. The building has 16 storeys above ground and 3 basements accommodating 100 cars.

The typical floor area occupies 13,000 square feet and is served by 5 elevators at a speed of 500 feet per minute. A roof garden with special floodlight arrangements to illuminate the building during the night, has been provided on the second floor terrace. The building is faced with limestone on the upper floors and with red rose polished granite on the ground floor area for columns and plants.



The Case for a Theory of Modern Architecture

BY JOHN SUMMERSON

EVER SINCE THE MODERN MOVEMENT got on to its feet, questions have been asked about what it stands on. An association of some kind between what is vaguely called 'theory' and what is vaguely called 'modern architecture' continues, I believe, to be a topic frequently debated, and I am told that teachers in some of the schools feel a practical need for some sort of theoretical formula as a means of introducing students to the principles of modern design. Hence this paper, which offers nothing new but is simply an investigation—an attempt to discover whether there does exist any basis of principle applicable to modern architecture, different from the bases applicable to any other architecture or alternatively whether such a basis can be abstracted out of prevailing practice and ideas.

I should like to take this alternative first because it offers an obvious prima facie case. I think it is a bad case but it is necessary to put it up in order to put it down. Modern architecture exists to the extent that there are plenty of buildings which everyone in this room would immediately classify as products of the modern movement on the basis of certain recurrent formal arrangements and relationships. Embarrassed as we are by the use of such expressions as 'the modern style', 'manner' or 'idiom' there is positively no denying the consensus of characterisation. Modern architecture is there all right. Furthermore, closely associated with this architecture is a number of ideas - ideas expressing modernity in one sense or another, nearly always either by analogy with the past or by analogy with some other activity than architecture. The architects who design the buildings tend to quote and promote these ideas and it would be very difficult to show that this complex of architecture and ideas is anything short of valid in relation to present-day conditions. There is indeed no other complex of forms and ideas which seriously rivals it. Now, in a situation like this, it may be argued, it should be possible to put together a theory of architecture without very much difficulty. It is simply a question of two rather prolonged exercises in analysis and synthesis. First, of assembling the ideas, examining their common trends of meaning and reaching a series of general concepts. Second, of abstracting formal characteristics from a select repertory of modern buildings, eliminating merely modish elements and providing a grammar of form. It would then only remain to illustrate how the forms embody the ideas. The whole exercise would, it may be supposed, add up to something like a Palladio of modern architecture, a pedagogical reference book not in any way restricting further development but consolidating the achievements of modern architecture, clarifying them and providing a departure platform for new experiments.

Such is the *prima facie* case for a specific theory of modern architecture. I have tried to make it sound plausible but of course it is hopelessly gimcrack. Only imagine for a moment the task of isolating characteristically modern forms from whole buildings. Only imagine the horror of stirring around in the rag-bag of aphorisms, platitudes and fancy jargon and trying to determine their common trend and resultant meaning. The

imagination boggles, and when it does that it is a sure sign that something stupid is being attempted. So let us leave this whole enterprise and look for firmer ground on which to start our enquiry.

We had better consider first what is in our minds when we think about a 'theory' of architecture. The elementary meaning is a conspectus of knowledge in any particular field. A theory of architecture may be, like many of the treatises of the 18th century, purely encyclopaedic, without any explicit philosophical orientation at all. But I suspect that what is in our minds when we talk about architectural theory now is something both less extensive and more profound - a statement of related ideas resting on a philosophical conception of the nature of architecture — in short, principia. Since Alberti wrote his De Re Aedificatoria in the middle of the 15th century there have been a certain number of statements of this kind, though not quite as many as you might think and few, mercifully, as difficult to understand as Alberti. It is worth emphasising that to state the principles of architecture does not at any time take very many words. It is the demonstration by historical instance and the exposition of grammar which fills up the tomes. This evening my quest is for statements of root principle.

If we review the statements of principle which have attracted attention in the course of the last five hundred years we may be struck by the fact that they are much more easily related to each other than they are to the architecture prevailing at the time they were written; which suggests that just as architectural style has evolved from generation to generation, each changing the favoured accentuation of the last, so architectural thought has developed phase by phase with its own dialectic. There has been, in fact, an evolving process in theory just as there has been in style and the two processes have not made anything like the same pattern. Each has been and is in fact autonomous, to the extent that it would be possible to write a history of architectural theory without reference to a single actual building and even a history of architectural style without a single reference to architectural theory - though I am not suggesting that anybody should try

The actual relationship of architectural theory to architectural production at any given time is problematic. It is perfeetly possible for a new idea to be announced, cherished by one generation, turned upside down by the next and only in a third to be validated in architectural designs. Something of the sort happened with the 18th-century idea of rational architecture, to which I shall refer later on. On the other hand it is possible for architectural style to be revolutionised without so much as one corollary gesture on the plane of theory. Who has ever had a more powerful effect on architecture than Michelangelo? Yet his effect on the theory of architecture was nil. So we must bear in mind about theory that it is an historical process with a life of its own in its own medium of words and that there is no question either of principles being abstracted wholly from practice or of practice being necessarily a reflection of theory. This makes a pretty big hole in the proposition

called 'A theory of modern architecture'. But it brings us nearer to a realistic view of what we are discussing.

In the present century a fairly large number of books – I make it about 120 - have been written about the nature and principles of architecture. Up to 1925 there was a modest issue of one book a year out in 1926 at least seven books (English, American and French) appeared, though oddly enough not one of these recognised that any fundamental changes were taking place in architectural thought. The general tendency before 1927 was to re-write the principles then stagnating in the Beaux-Arts tradition and to comment on them in essay style, but I do not know of a single book which investigated those principles historically or attempted to evaluate them philosophically (there is one outstanding exception which I will mention in a moment). After 1927 books stating the modern point of view began to appear. Between that year and the present there have been statements from Behrendt, Lurcat, Taut, Cheney, Platz, Hitchcock, Duncan, Gropius, Moholy-Nagy, Teague, Giedion, Fry, Saarinen and Zevi, to mention only some of those who have produced books; to collect the statements appearing in the form of papers, articles and catalogue introductions would be a mighty exercise in bibliography. The general character of all this writing is enthusiastic and propagandist. The authors tend to start with a belief in the new architecture and to write around their beliefs supporting them by picturesque and forceful analogies. Only rarely does one detect a realisation that architectural thought is a continuing activity sui generis in which what is new must be distinguished by criticism of the past. But there are a few books of great penetration and to some of these we must now

I suppose nobody will doubt that Le Corbusier's Vers une Architecture has been the most consequential book on architecture written in this century. Published thirty-four years ago, it is still widely quoted and quite frequently read. It is not and does not claim to be a theory of architecture. It is a series of critical essays, reprinted in the order in which they first appeared in L'Esprit Nouveau, starting in October 1920. In the whole course of these essays nothing absolutely new is proposed in the way of architectural principle, but a great deal that had been forgotten is brought into the light of the present and exhibited with a quite uncommon flair for paradox. I think it would not be an unfair generalisation to describe Vers une Architecture as a critique of the French rational tradition – a critique marking a new phase in that always vigorous and controversial zigzag of thought. This French rational tradition is not, of course, the Beaux-Arts tradition personified in Guadet, for which Le Corbusier expresses a good deal of contempt. It is, on the contrary, the tradition first of Jesuit intellectuals in the early 18th century, later of rebels and academyhaters, and indeed 'tradition', which suggests a handing-down of embalmed principle, is not at all the right word. It is an historical process advancing by a series of contradictions and reassessments, of which latter Vers une Architecture is the most recent. As I am going to suggest that this rational process is still a vital element in the contemporary theoretical situation perhaps I may briefly explain what I understand it to be.

It all hinges on the ancient body of Mediterranean beliefs, re-stated by Alberti; and the hinge occurs in the age of Descartes. One could date its origin rather pedantically from Perrault's critique of Vitruvius. It is picked up in the 18th century by the Abbé Laugier whose two essays were the standard statements for half a century. But in 1802 Laugier was attacked as a muddler by Durand who presented his students at the Polytechnique with an altogether tougher and more materialistic case. So far, the argument had proceeded against a background of belief in classical antiquity, but then, fifty years later, Viollet-le-Duc took up a new position, still rationalist but transposing the background from classical to mediaeval antiquity and purporting to show that the 13th century was the sole repository of rationalist principle. Violletle-Duc was, directly or indirectly, the inspiration of many of the pioneers of the modern movement: Berlage, Horta and Perret among them.

This is, of course, a grotesque simplification indicating only some of the more obvious peaks in a great range of argument. Perrault said antiquity is the thing and look how rational; Lodoli seems to have said rationalism is the thing, down with antiquity; Laugier said up with *primitive* antiquity, only source of the rational; Durand said down with Laugier, rationalisation means economics; Pugin said down with antiquity, up with Gothic and look how rational; Viollet-le-Duc said up with Gothic, prototype of the rational. Eventually a voice is heard saying down with all the styles and if it's rationalism you want, up with grain-elevators and look, how beautiful!

Well, now, in this process, which I take to be the main heritage of the modern theorist, there are certain essentials which hold their own throughout. At the bottom of it all is the axiom that architecture is an affair of simple geometric forms – regular solids and their elementary divisions. This is inherited from Italian tradition and has a peculiar history of its own, passing from the quasi-mediaeval numerology of Alberti to the visual objectivity of the Cartesian world and on to the emphatic apprehensions of the revolutionary school of Boullée and Le Doux. In some form or another it is always there.

Then there is the rational issue whose course through the 18th and 19th centuries I have already sketched.

But there is also the question of antiquity and the measure of its authority and one very important thing about the whole rational process is that it tends to exclude antiquity as an absolute authority. However, antiquity was obstinately there all the time. Only the theorists who never designed anything, like Lodoli and Laugier, could be really tough about antiquity. Those who designed had, in one way or another, to admit it for the important reason that the forms of classical antiquity or (in the 19th century) mediaeval antiquity, provided something which is essential to the creative designer - a bulwark of certainty, of unarguable authority on which his understanding leans while his conception of the building as a whole, as a unity, takes shape. The most interesting, indeed the dominating question, in a search for the modern principia is: where, if not in antique forms, or some equivalent substitute, is the source of unity?

Le Corbusier provides no answer to this in Vers une Architecture. There is no reason why he should. The book is really nothing but a lightly-etched reminder ('Trois rappels' is the title of the first chapter) of the main content of the rational process and it contains few ideas which could not be traced back into the line from Perrault to Viollet-le-Duc.

Le Corbusier's designs, let me say in parenthesis, are a different thing altogether. I have already said that architectural theory and architectural style are things apart - each with its autonomous life and this is nowhere more obvious than in the case of the author of Vers une Architecture. His conception of theory is simply the solid intellectual platform, with foundations deep in the past, on which he stands to do something which has nothing to do with the past whatever. Le Corbusier has not reasoned himself into those architectural conceptions which have so profoundly influenced the expression of modern building. Nor is there any mystery about how they have come about, for it is by now an accepted fact of contemporary arthistory that Le Corbusier's vision in the early days was that of the modern painters - the school of Picasso, Braque and Léger; that after they had discovered the power of converting the commonplace into pure conceptual painting, Le Corbusier discovered the power of composing the commonplaces and crude ingenuities of industrial building into equivalent architectural realities. But there is nothing in Vers une Architecture about that; and if the pictures of the author's own works were eliminated from the book it might easily be construed as foreshadowing some frozen neo-classicism not far removed from that of Auguste Perret.

Obviously, the only thing about Vers une Architecture which helps us to envisage a case for a specifically new theory of architecture is the re-illumination of principles already estab-

lished. If we were to argue from the example of Le Corbusier alone we might well conclude that the theoretical process stemming from antiquity and the age of reason was, in one form or another, the theory appropriate to the modern movement in architecture. That *may* indeed be the case. But we cannot leave the matter there for in another quarter altogether there have been theoretical inquiries of considerable importance and entirely different character. I am thinking of the sphere of thought represented by the Bauhaus.

Bauhaus thought has been pretty copiously manifested: in Gropius' own writings, in writings about Gropius and the Bauhaus and in the Bauhaus-bücher of the 'twenties. But for anything like a systematic exposition of Bauhaus theory the most significant book is Moholy-Nagy's The New Vision: from Material to Architecture, based on lectures given at the Bauhaus in 1923-28. These lectures were given after Vers une Architecture had been published but they owe nothing to it, nor to the Esprit Nouveau circle from which it emerged. Moholy, of course, was a totally different kind of person from Le Corbusier – he represents in a fundamental sense that phenomenon of our time, the displaced person. Le Corbusier's Swiss background was happy and stable. Moholy's Hungarian background was far otherwise and when Le Corbusier was building a luxury villa on Lake Geneva, Moholy was pitched into a war. I do not know how conscious he was of turning his back on Le Corbusier but his book is in some respects a negation of Vers une Architecture. Admittedly he states what he calls the 'basic law' of design as the obligation 'to build up each piece of work solely from the elements which are required for its function', a statement which is the genuine old-style rationalist article (it could well be a quotation from Laugier), but he then instantly declares that the basic law has limitations and he proceeds to search for an ultimate authority.

This ultimate authority is of course likely to be the source of unity of which I have already spoken. It is the *something* occupying the place which used to be filled by 'antiquity'. What is it? Moholy says it is 'biological'. The artist's freedom, he says, is 'in the last analysis determined biologically'. The words 'biological', 'biologically' crop up again and again throughout the book. 'Architecture', he says, 'will be understood . . . as a governable creation for mastery of life, as an organic component in living.' 'The standard for architects . . . will revolve around the general basis, that of the biologically evolved manner of living which man requires.' And, finally, 'architecture will be brought to its fullest realization only when the deepest knowledge of human life as total phenomenon in the biological whole is available.'

This preoccupation with biology and with the organic is obviously a very important issue in our investigation. The word 'organic' especially has had an almost magical significance for architectural writers ever since Louis Sullivan wrote of it fifty odd years ago as 'a word I love because I love the sense of life it stands for, the ten-fingered grasp of things it implies'. That is not a very scientific statement but I have not yet found, among the many writings about organic architecture, any statement that is. Yet it is constantly used as an ultimate, as if organic values (whatever they may be) were absolute values.

Moholy would like to construct a theory which is a perfect description of practice—which coincides with practice. He cuts himself off from inherited theory and postulates a new theory which would fit the biological (let us say psychophysical) needs of man like a glove. I suppose, if the most far-reaching implications of cybernetics were realised, if the artist's functions were at last to be explicable in mechanistic terms, some such theory might be arrived at. But that is such an awfully long way off that it is hardly worth considering in relation to the modern movement now in course of evolution; and in any case I doubt if anybody yet sees the determination of the artistic needs of society as even a remotely possible point on the scientific horizon. Notwithstanding the fine perceptions and immensely valuable practical suggestions contained in Moholy's book, it seems to me that his insistence on the biological

is a premature and purely verbal closure of the subject of modern architectural theory. It gives nothing to hold on to but this elusive myth of 'biological' finality.

Those who have written about 'organic' architecture have usually gone in a rather different direction from Moholy's. Frank Lloyd Wright's use of the expression 'organic architecture' is generally considered to be his own emotional tag for all fine, free and humane architecture but especially for that of Frank Lloyd Wright. Behrendt, Steinmetz, Saarinen and others have speculated on the 'organic' in desultory philosophisings. Bruno Zevi has investigated various recent uses of the word and in his book, Towards an Organic Architecture, devotes a whole chapter to 'the meaning and scope of the term organic in reference to architecture'. He does not discover any evidence of strikingly profound thought on the subject; nor does he commit himself to any precise meaning. But he does write off various spurious or out-moded interpretations and, at the end of his study he does, in a single, rather casual remark, hit what I conceive to be the nail exactly on the head. He says that the organic conception of architecture is based on a social idea and not on a figurative [I take it he means formal] idea'. That rather wide interpretation would, I suspect, command almost universal agreement.

Zevi throws out this comment as if its truth was pretty obvious and I suppose it is, but I want to underline the proposition and see how it relates to the picture of the developing theoretical process which I have outlined. I suggested a few moments ago that although the rationalist writers of the 18th and 19th centuries tended to exclude antiquity as the ultimate authority, antiquity remained insistently there as the *source of unity*, the focus at which the architectural design was realised. Where, I asked, if not in antique forms, can the source of unity lie? Zevi's remark points to the answer. The source of unity in modern architecture is in the social sphere, in other words in the architect's programme.

From the antique (a world of form) to the programme (a local fragment of social pattern): this suggests a swing in the architect's psychological orientation almost too violent to be credible. Yet, in theory at least, it has come about; and how it has come about could very well be demonstrated historically. First the rationalist attack on the authority of the antique; then the displacement of the classical antique by the mediaeval; then the introduction into mediaevalist authority of purely social factors (Ruskin); then the evaluation of purely vernacular architectures because of their social realism (Morris); and finally the concentration of interest on the social factors themselves and the conception of the architect's programme as the source of unity – the source not precisely of forms but of adumbrations of forms of undeniable validity. The programme as the source of unity is, so far as I can see, the one new principle involved in modern architecture.

Whether you accept this statement as a basic principle and a specifically modern principle depends upon a number of things. Mainly, there is the question, what a 'programme' is. It is difficult to imagine any programme in which there is not some rhythmically repetitive pattern-whether it is a manufacturing process, the curriculum of a school, the domestic routine of a house, or simply the sense of repeated movement in a circulation system. Of course this pattern does not dictate a corresponding pattern in the architect's plan or anything crude like that but it does sanction relationships which are different from those sanctioned by the static, axially grouped dominants and subordinates of the classical tradition-different, but carrying an equivalent authority. The resultant unity can, I think, quite reasonably be described as a biological or organic unity, because it is the unity of process. Moholy-Nagy and after him Giedion would see it as a space-time unity and you will recall Giedion's brilliant analogies between modern architecture and the concepts of modern physics on the one hand and the Picasso revolution in modern painting (involving the concept of simultaneity) on the other. The actual reason why the principle embodied here is new is this. It is only in the past half-century or so that the programme has ceased to be

evaluated merely *quantitatively* and has come to be evaluated *qualitatively*. This has to do with the fact that programmes have become more complex, more challenging and therefore more susceptible to qualitative generalisation and evaluation. It has also to do with very much wider issues involved in the social revolutions and re-orientations of our time.

If we accept this principle - unity deriving from the programme - as truly as basic principle of modern architecture, how does it look when lined up with the inherited principles which we found that Le Corbusier had re-illuminated in Vers une Architecture? Here comes the crux of the whole matter. The conceptions which arise from a preoccupation with the programme have got, at some point, to crystallise into a final form and by the time the architect reaches that point he has to bring to his conception a weight of judgment, a sense of authority and conviction which clinches the whole design, causes the impending relationships to close into a visually comprehensible whole. Gropius has stated the difficulty as the lack of an 'optical "key". . . as an objective common denominator of design' - something which would provide 'the impersonal basis as a prerequisite for general understanding', which would serve 'as the controlling agent within the creative act'. That is a precise description of the functions served by antiquity in the classical centuries! The dilemma is really an enlargement of the flaw already apparent in mid-18th-century theory - the flaw that while antiquity was eliminated as an absolute, nothing was introduced which took its place as a universally accredited language of architectural form.

The flaw seems now to have widened into a veritable dilemma. Can it be resolved? Well, I can think of two possible approaches to its resolution. The first involves an extension of the rationalist principle into the sphere of engineering, and the second involves a reconsideration of the geometrical basis and limitations of architecture.

Let us take the engineering question. The engineer is the heir to the basic tenet of the old rationalism — economy of means in construction. So long as traditional methods prevailed the architect could keep his eye on this ball, or at least persuade himself that he was doing so; but with the development of the science of the strength of materials and the application of mathematics to design he was rapidly overpassed by the engineer. It is necessary to declare that no theory of modern architecture can be logically complete which does not postulate the collaboration, immediate or remote, of architect and engineer; and here collaboration must stand for the design of components in factories as well as the personal achievements of a Nervi or a Candela.

But let us be clear about what the engineer's role really is and how different it is from that of the architect. For the architect, the source of unity for his design is, I have suggested, the programme. The engineer seeks unity in another way and another direction altogether. He seeks it within one component—even if it is a very complex component comprising the whole sectional trace of a large building. And it is a unity of interdependent calculable issues adding up to a total whose criterion is performance. His search for finality and the architect's are as wide apart as they can be. It would be altogether too facile to suggest that they are even complementary. Nevertheless, a whole view of architecture must necessarily extend to this latest metamorphosis of the rationalist process in the hands of the engineer.

The idea can be and sometimes is upheld that the engineer, as a result of his enforcement of the rationalist principle, invents forms and formal arrangements which the architect then

absorbs into his vocabulary of expression and uses, sometimes in a strictly engineering way — and sometimes not. This certainly happens. But the engineer is concerned strictly with components and although he may contribute significant inventions he cannot contribute a continuously related system of invention — i.e. a language.

Thus the engineering issue does not wholly resolve the dilemma of modern architectural theory, and so we turn to the ancient axiom that architecture is fundamentally concerned with the regular solids and simple ratios. It is getting to have an old-fashioned look, this axiom, especially in an age which has discovered geometries other than Euclidean. In the field of practice, unfamiliar and complex forms are cropping up. Candela has built a concrete church in which all the surfaces are hyperbolic paraboloids. But surely the axiom stands as an over-all absolute necessity. Even if plans wriggle in the wildest of 'free' curves, even if engineering science introduces forms of great precision but visually unreadable complexity, we shall always seek to read through the complex to the simple, to seek the assurance of those simplicities which must be implied even when they are not stated. Very well. On this principle of geometrical absolutes it is possible to erect systems or disciplines to guide the architect towards that final ordering of form which he must achieve. Of these systems the most celebrated is Le Corbusier's Modulor. But the Modulor, like any other apparatus of the kind, is a system of control, not of expression (Le Corbusier says this as clearly as it could be said). It is not a language. And if I say that in my opinion the erection of proportional disciplines — purely intellectual contrivances — does bring the *principia* of modern theory into satisfactory relationship to each other and to actuality, it may well be objected that this theory excludes almost everything that has been most valued in the art of architecture as a means of expression in the past three thousand years. In answer to that, I have two things to say. The first is that if you accept the principle that the programme is the source of unity, the crucible of the architect's creative endeavour, you cannot postulate another principle, another crucible, at the other end of the designing process to satisfy the architect's craving for conspicuous self-expression. You cannot have it both ways. You certainly cannot have two sources of unity. Either the programme is or it is not the source. It is part of my case for a theory of modern architecture that it is the source. If you do not accept this case, I think you must consider whether, after all, architectural theory does not stand very much where it stood in 1920, or 1800, or even 1750, and whether the position of an architect who is concerned about expression or style is not that of a man feeling his way back to classicism or neo-classicism, or, to put the finest possible point on it, crypto-neo-classicism.

The second thing that I would say is that it is quite possible that the missing language will remain missing, and that in fact the slightly uncomfortable feeling which some of us have that it ought to exist is nothing but the scar left in the mind by the violent swing which has taken place in the lifetime of one generation from an old order of principles to a new.

I have tried to demonstrate that in the light of all that has been written on architecture in the past thirty years a specifically modern theory of architecture does exist, and that it exists not as an arbitrary invention of our time but as a new stage in the long evolution of theory since those forgotten men whom even Vitruvius knew as the Ancients.

The above was a paper given at the RIBA and is reprinted with the kind permission of the RIBA and the author.

Office Building Addition, Toronto, Ontario

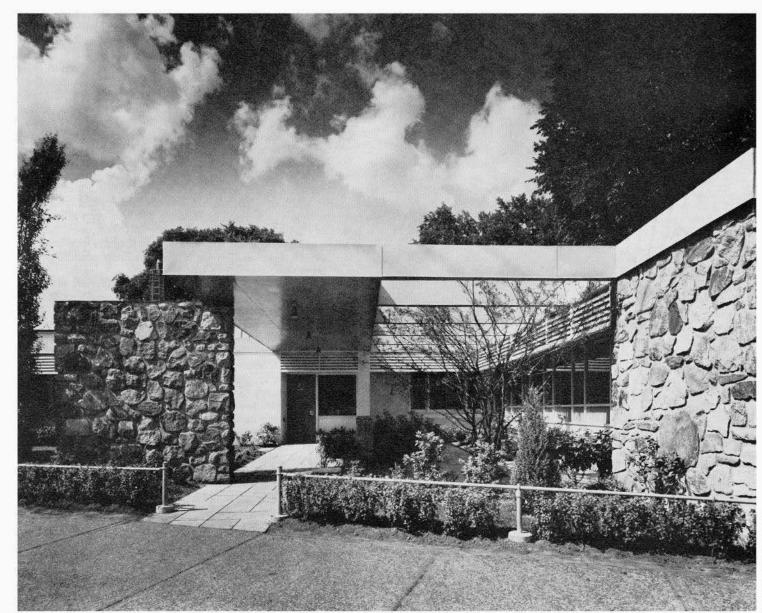
Architects, Venchiarutti & Venchiarutti General Contractors, Condos Construction Co.

The building is an addition to the offices of Direct Mail Advertising, Davenport Road. The client required additional office space and an improved entrance. This was accomplished by removing the existing high pitched metal covered roof and replacing it with a smaller storage area at second floor. A new wing was built to house offices and was integrated with the existing building by means of an entrance canopy and fixed sun shades.

The whole site was carefully landscaped to create a pleasant environment in a patchy commercial neighbourhood. The buildings were located so as to reduce the noise nuisance from the nearby street.

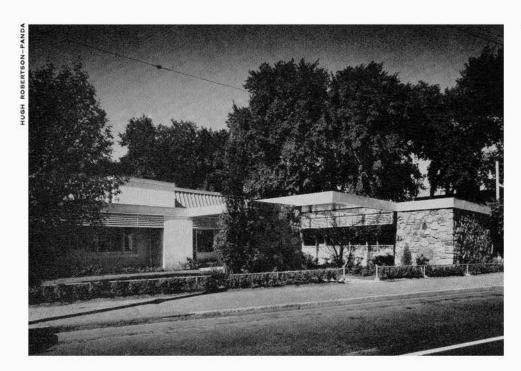
Field stone, white louvres and strong colours were used to create a clean and appropriate building for the owners.

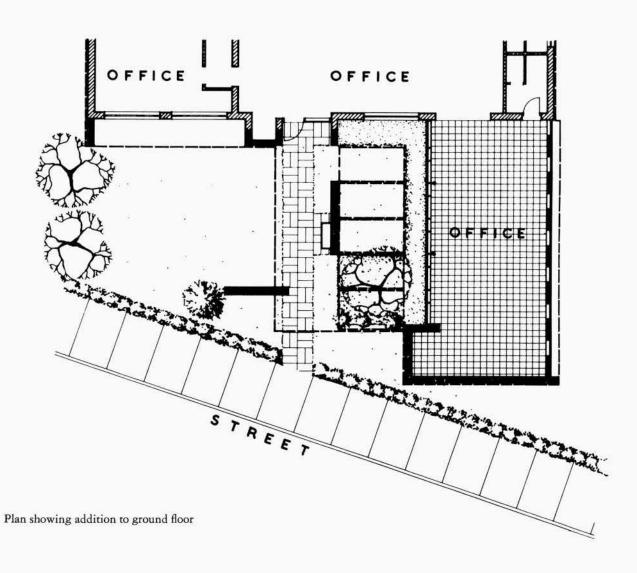
Detail at main entrance



ROBERTSON-PANDA

View from Davenport Road

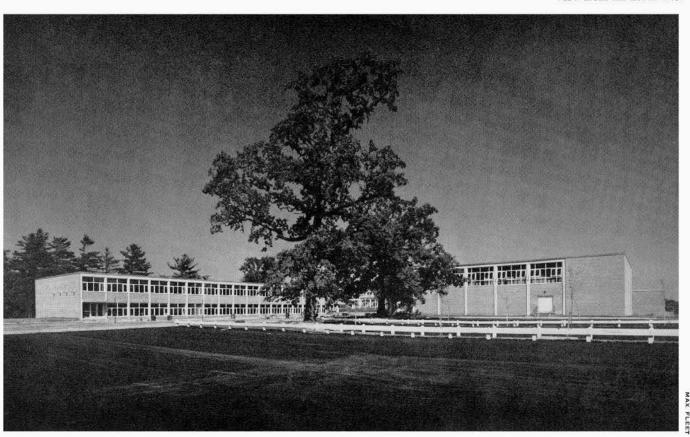


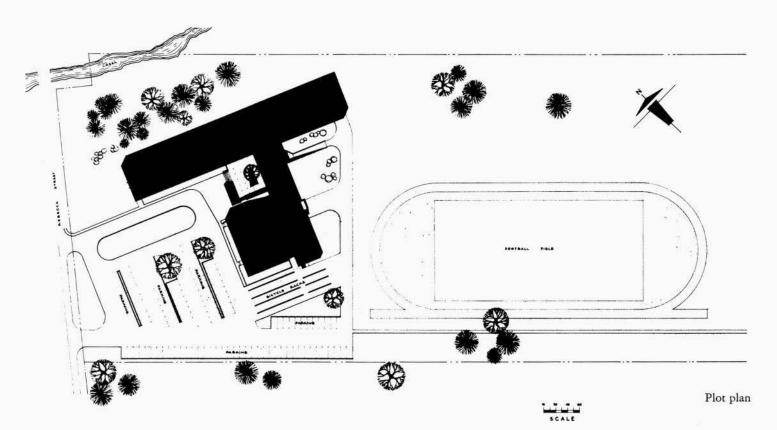


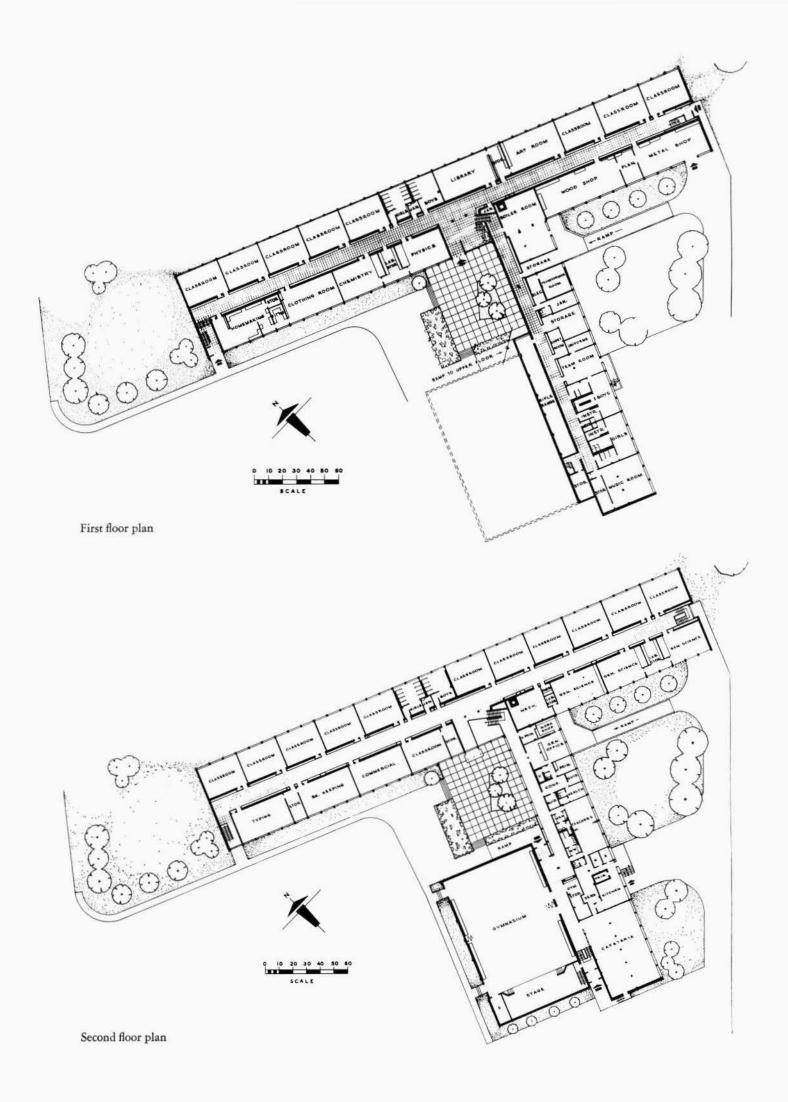
Thomas A. Blakelock High School, Oakville, Ontario

Architects, Shore & Moffat General Contractors, Moir Construction Co. Ltd.

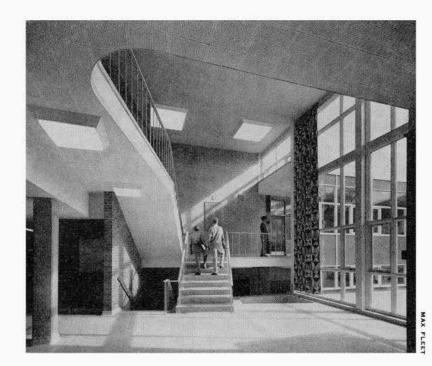
View from the north-west

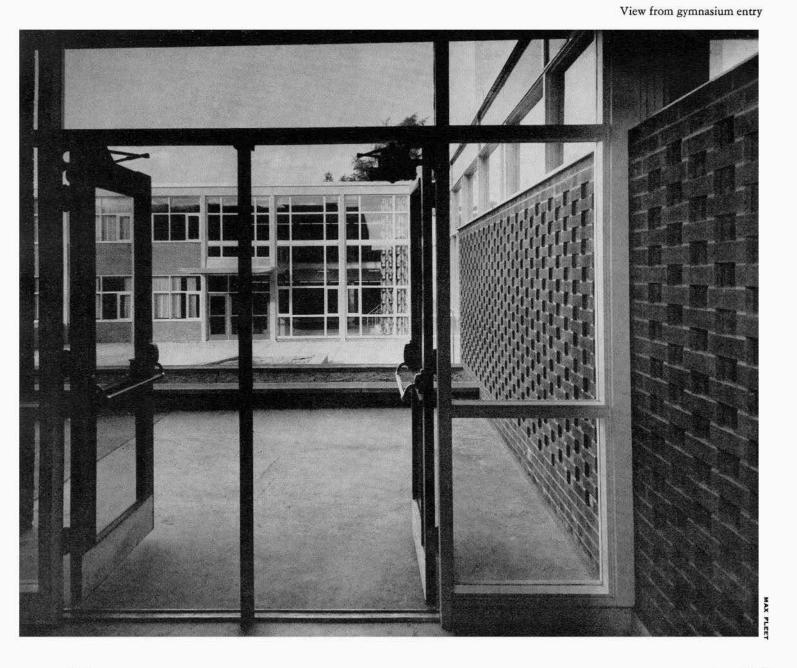


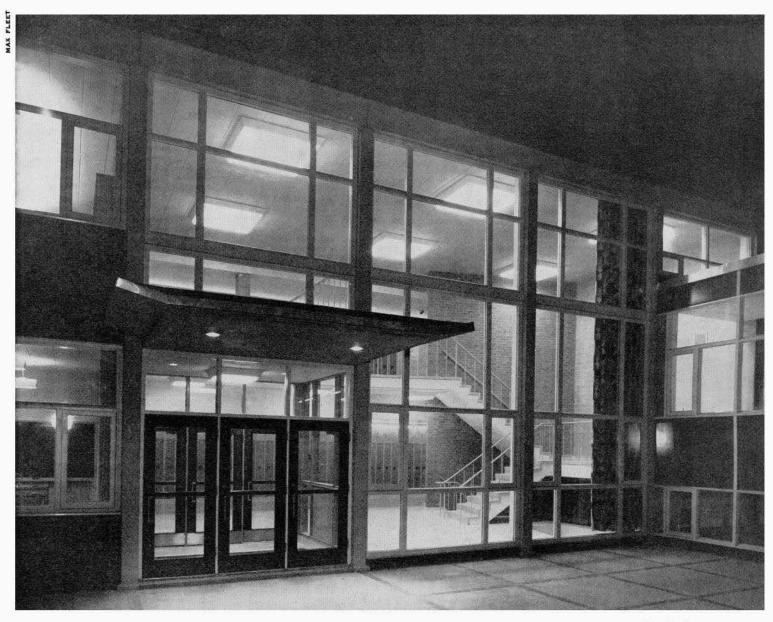




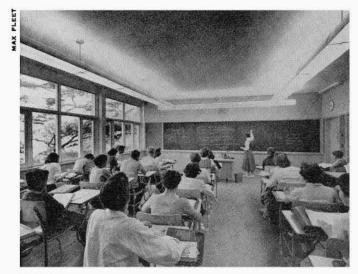
Entrance lobby



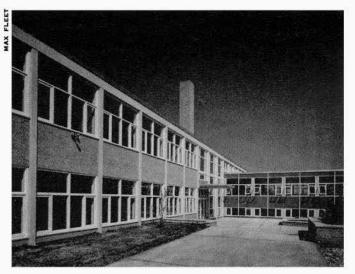




Detail of entrance



Typical classroom



Main entrance court

PROJECTS

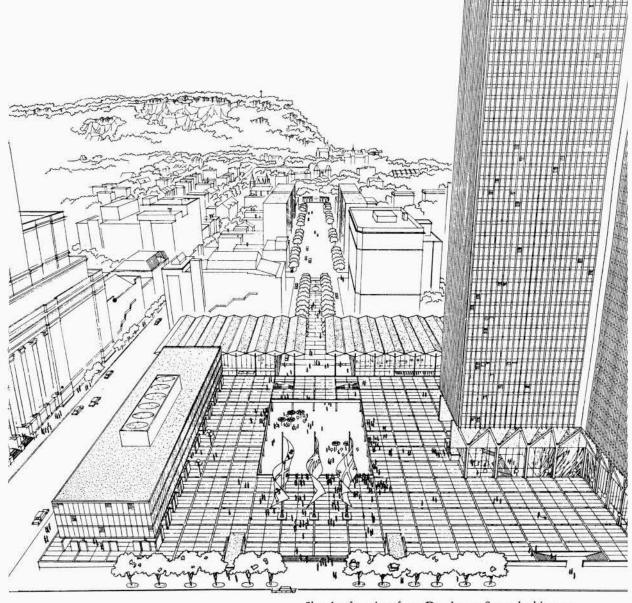


Model of project looking north with St James Cathedral and the Sun Life Building on left. In the foreground is a proposed bus station and heliport.

Ville Marie Montreal, Quebec



Model of project looking south showing plaza and rink on axis of McGill College Avenue. The Queen Elizabeth Hotel is immediately beyond.



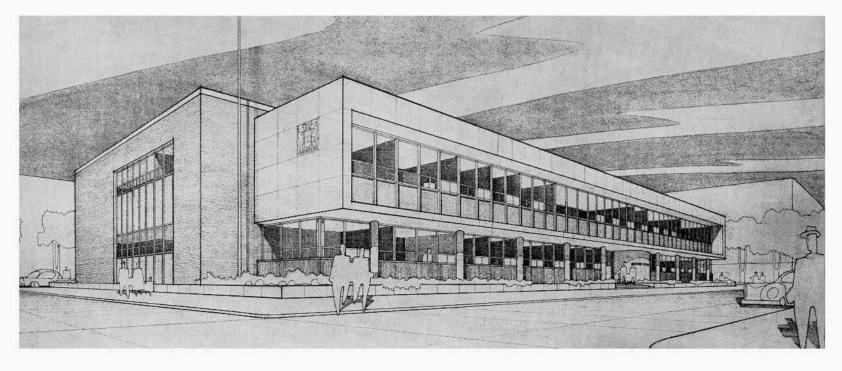
Sketch of project from Dorchester Street looking up McGill College Avenue with 40-storey skyscraper on right.

Shopping promenade on north edge of site



There has recently been unveiled a most elaborate scheme for filling up the Canadian National Railway's Big Hole in the centre of Montreal. The scheme involves a wide variety of building types and uses, and one structure alone will be the largest and tallest ever built in this country. So far, the citizenry have evinced a curious lack of interest in the whole project.

Early last year the Canadian National Railways invited Webb & Knapp (Canada) Limited to make a Master Plan for the area, to re-examine its possibilities for development in the light of modern requirements and to work out a program for its future. According to the agreement, after approval of the Master Plan, Webb & Knapp (Canada) Limited would construct the buildings on the northernmost block according to the approved Plan. The architects and planners retained to prepare the Master Plan are the New York firm of I.M. Pei and Associates.



Federal Income Tax Building, Winnipeg, Manitoba

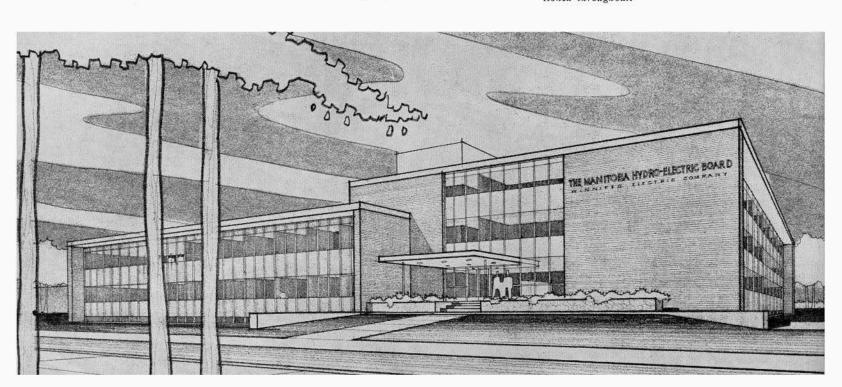
Architects for both projects, Moody and Moore

Manitoba Hydro-Electric Board, Winnipeg

There will be two floors and a basement with provision for a future third floor. The Department of National Revenue will occupy all of the upper two floors, and the major portion of the basement, except for storage areas, has been designated to the Department of Public Works. The framing of the structure is reinforced concrete throughout. The outside walls are finished in brick, Tyndall stone, granite and mosaic tiles, with the windows throughout in aluminum. The main entrance is highlighted by a mosaic tile mural on the curved stairway. The building contains 100,000 sq. ft. of floor space.

This building contains the administrative and engineering departments of the Board as well as a large control room which is the nerve centre of the province's expanding electrical system. The three-storey building has a total floor area close to 60,000 sq. ft. and will cost approximately \$1,000,000.

The structure will have concrete frame, with aluminum curtain walls employing extensive use of glass and porcelain enamel panels, and contrasting solid areas of brick. The interior features the use of a flexible luminous and acoustic ceiling, and is completely air conditioned throughout.



Monumentality

BY P. E. PEACOCK-LOUKES

ONE PARTICULAR NEED MANY ARCHITECTS AND CRITICS feel is a need for means of expressing what are usually called the monumental attributes that certain types of buildings traditionally possess. In presenting a current concensus on three important questions concerning monumentality and its place in contemporary architecture, it must be noted that for simplification this paper is limited to only those buildings which are dedicated to man. Buildings that have been erected to memorialize a religious doctrine are, in this authors opinion, of a different nature and tend to complicate the issue in question.

What is Monumentality?

The term 'monumentality' has been used in the past very loosely, in fact, it has been used only for the lack of a better word. We have to define to the satisfaction of the majority before applying it to any architectural expression. Those who disapprove of monumental expression in modern architecture usually do so, not because they disapprove of all expression in architecture but because they scorn the meaning attached by connotation to the concept of monumentality.

To many people the word 'monument' does not imply a building at all, but rather a memorial statue or a mere tombstone. To historians, on the other hand, any building of the past is a monument of the civilization that produced it and hence all the buildings we are producing today, whatever their character, will in time be monuments. The dictionary revealed that in Latin the word 'monumentality' was never connected with aspects of buildings. It comes from *monumentum*, which means to remind or to admonish. In ancient Greece 'monumentality' was used rarely and then only to serve the gods. Classic Rome used adjectives like 'magnitus, splendidus, decorus' and nouns like 'dnaiestas' and 'dignatas' to characterize their buildings. However, certain attributes of the monument recur.

Firstly, the concept of durability. William Holford sums it up when he says monumentality must be conceived as imperishable. But Walter Gropius, while accepting durability as a characteristic of monumental expression of the past, believes that so far as the future is concerned its equivalent is a new physical pattern for a higher form of civic life characterized by flexibility for continuous growth and change. In the same light, Sigfried Giedion, suggests that the transient mass spectacle will also be a valid ex-

pression of monumentality.

Secondly, the concept of solidity. Henry Russell Hitch-cock suggests that this is a derivative of the idea of durability, implying weight or the appearance of weight and immovability. In this same vein of thought, Walter Schmidt has this to say, "Monumentality is something unchangeable. It removes a thing from the context of a changing world. It isolates, making a thing individually significant and imbues it with a loneliness, whether of haughtiness, awe, tranquillity, arrogance or reserve. It keeps you at a distance."

Thirdly, the concept of dignity. Holford states this bluntly when he says the Classic monument is more monumental than the Gothic. This, the majority will agree upon. It is a dignity implying serenity and a slow rhythmic pattern as well as a concentrated unity. He goes further to say that monumentality must be static and it must achieve unity in its composition. It may have these qualities accentuated, or in extreme cases actually created by the hazards of time and weather. Gropius says that monumentality in the past was the symbol of a static conception of the world, but in opposition to Holford, both he and Giedion lay strong stress on the fact that monumentality in the future should be anything but static.

Fourthly, the concept of size, not necessarily absolute but in the sense of largeness of scale since it gives the assurance of solidity. Schmidt opposes this point when he states, "monumentality is not a matter of scale. The head of Charles on the penny, though measuring only one half inch in diameter is yet monumental. The greatness lies not in dimensions but in simplicity, clarity and finality of form. As a geometric conception, the pyramids are the essence of monumentality." There is some validity here but Schmidt is in the minority. Mathew Nowicki sums up this fourth point when he says, "monumentality does not depend on any form but is a problem of scale. The humanistic ideal of individual freedom and comfort adopted by our architecture and expressed in its sympathy to the small scale treatment should influence also the resolution of the monumental problem, just as the large scale of the baroque influenced every small programme of the period." Now this would seem to eliminate monumentality from modern architecture but Nowicki goes on to say that monumentality, in the sense of a contrast between architecture of exceptional importance and the size of an in-

dividual, has its true and internal qualities of which man should not be deprived.

Fifth and finally, the concept of emotional impact. Paulsson disagrees with the majority stating that it is not right to give the name monumentality to what is called strong emotional impact, for all emotions can be strong wrath as well as fear, sorrow as well as joy. To call the gracious monumental, one of the most beautiful expressions of joy, is to deprive the word of all real meaning. However, general agreement is found to be with Hitchcock --- "the monumental above all must be counted on to provide fundamental emotional impact. The concept of the monumental in architecture is generally equated not to private functions but to public functions. Regardless of the everyday economic right of the actual client who pays the bill to indicate to the architect the character of the architectural expression to be provided, we demand that those responsible for the large public structures which are endowed by their nature with a longish life-expectancy shall seek to achieve an expression worthy, as we pretentiously put it, of our higher aspirations."

Keeping in mind the five attributes discussed, Louis Mumford's opinions form the framework for this definition. "The other name for monumentality is impressiveness; the effect produced upon spectator or user by the scale and setting of a building, by its height and reach and splendor, by the dramatic emphasis of its functions and purposes through the means available to the architect: mass, volume, texture, colour, painting and sculpture, gardens, watercourses, and the disposition of the buildings that form the background. It is by its social intention and not by its abstract form that the monument reveals itself. In essence, the monument is a declaration of love and admiration attached to the higher purposes men hold in common; dignity, wealth, power and freedom go with the conception of monumentality; and its opposites are meaness, poverty, impotence and standardization."

How is this Monumentality to be Achieved?

First of all, consider why there is a lack of monumental expression today. All monumental art is in the nature of a symbol, expressing, representing or recalling in its forms common ideas or conceptions of general consent, and therefore understood by everybody. Walter Curt Behrendt said that such great goods, however, are not granted to an age that lives through a crisis of all thought and social order. Therefore this lack of monumentality is to be charged to the general spirit of our age. Where the architect has been faced with a clear programme of demands, precisely defining the use and purpose for which the building is thought of, there has been a ready answer. However this 'ready answer' has been, if not a total failure, at any rate not successful with those types of buildings which, by nature and destination need a monumental character. As a matter of fact, modern building demonstrates a lack of sense for monumentality.

To raise living standards to a decent level is the aim of modern man. But as we approach a high general level of comfort we forget the function of sacrifice, which Ruskin defines as the arrangement of the good life, not in the order that produces merely physical survival, but in the order that conduces to continued spiritual development. Mumford says that if we were better prepared to accept sacrifice there might be less immediate danger to mankind from the cyclatrons and atomic piles to whose existence we dedicate every available penny. We spend lavishly on mechanical means and scimp on the ultimate human ends. That is why modern monumentality is far to seek.

If the monumental expression has been hidden how are we to achieve a new monumentality? In 1931, the Russians indicated that only a return to the heaviest and most pompous version of neo-classicism would provide intelligible symbols of social unity. The ancient monuments were conceived monumentally and achieved greater monumentality in the course of time. The Baroque movement was designed to symbolize in three dimensions the monumental qualities of order, space, proportion and unity. Holford suggests that real monumentality in the civic design of today may be achieved by a return to the classical formula on the part of the few who are capable of interpreting it; more often it will result from a planned composition in which some significant element has the good fortune to survive as a permanent symbol of the changing efficiencies of our social machine.

Lucio Costa states that from the moment architects apply themselves to the problem of architectural expression, with a passion to conceive, their wholly functional works will respond to the higher purpose animating them and will express themselves in appropriate plastic terms, acquiring, as a result of their symmetry and proportion, a noble and dignified grace. Only then will we achieve monumentality. Elizabeth Mock sees monumentality being achieved through the complete collaboration of architect, city planner, landscape architect, painter and sculptor. Hitchcock is less optimistic and states that it is quite possible that the real stimulation will come only when a new urbanism creates a frame of reference within which individual edifices will be required to symbolize communal needs and aspirations. As the new town plans come it is not difficult to envision the general texture of the buildings in open squares. Holford, concerned with town planning, stresses the time aspect. He says that monumental elements of the town plan are selected by the slow pressure of public feeling; they may achieve monumentality in course of time. Costa states, "This new monumentality is one which is not exclusive of grace; and does not ignore the part played by trees, undergrowth and fields in the natural setting. A monumentality, whose effects, however, are not limited only to civic centers, but which also extend to buildings in which its manifestation is implied by the dimensions and volumes employed. I am of the opinion that to the attainment of the style of our period, we should dedicate the inspired work of Le Corbusier to the definite doctrinal foundation of present professional teaching". He attempts to justify this statement showing how three problems with which our epoch is concerned, are integrated within Le Corbusier's work. Firstly, the technical problem of functional construction and its equipment, secondly, the sociological problem of urban and rural planning, and thirdly, the plastic problem of architectural expression including its relationship to painting and sculpture.

Is Monumentality Desirable Today?

Giedion's thesis stated that it is not enough for a building to be something and do something; it must also say something which, in essence, is a return to commodity, firmness and delight with the emphasis on delight. It is a reinstatement of Ruskin's belief that architecture begins where building left off.

In opposition to the question, a small group were steadfast to the doctrine that monumentality is not compatible with democratic ideas, for they believe totalitarian states have always employed monumentality to strengthen their power over people, whereas, democratic states, because of their nature, are anti-monumental. Paulsson advocates that if we look more closely into the question of when the monumental quality was particularly sought for, we find that it was in anti-democratic times. The word monumentality should therefore be eliminated from the architectural vocabulary as a characteristic desirable for buildings in a democratic society. Genuine monumentality can only arise from dictatorship because it is an adequate expression of its emotional complexes. Monumentality is an expression in a special category, of domination, of arrogance, and other forms of the basic emotion wrath or its inversion, fear. As vast spaces produce fear, tyrants have in all times used vast dimensions in their reception halls and parade grounds to induce in their subjects a feeling of submission. Paulsson further states that the quality of monumentality is possible in contemporary buildings but is not desirable because it diverts our attention from the chief problem of architecture which is to provide people with the best possible physical environment after having analysed their living conditions. Finally, he says that intimacy, not monumentality, should be the emotional goal. Behrendt says that an aristocratic society uses monuments as symbols to impress on the people the static character of the social building. A democratic society is of dynamic character and has no use and therefore no desire for the monu-

Monumentality does not mean the same thing in every country. A totalitarian nation demands monuments which will express the omnipotence of the state and the complete subordination of the individual. When modern architecture tries to express these things, it ceases to be modern, for modern architecture has its roots in the concept of democracy. But the problem is not so quickly disposed of, as a democracy needs monuments, even though its requirements are not those of a dictatorship. There must be occasional buildings which raise the everyday casualness of living to a higher and more ceremonial plane, buildings

which give dignified and coherent form to that interdependance of the individual and the social group.

It is not apparent that monumental architecture is really architecture in the finest and most comprehensive sense? In its most perfect buildings a period perpetuates itself and creates lasting monuments to itself. Roth states that monumentality is the transcendental, most inspired expression of the essence, the will, the greatness of an epoch, that as monumentality is not only the most splendid crown of the finished work, monumentality is bound to propel the architect's creative imagination.

Perhaps the leaders of architecture have been so anxious to avoid the obvious pit falls of the pseudo-monumental that they have done little to develop a new monumental. But work done by engineers is found to be monumental. They are monumental because they have something to be monumental about. Eventually, modern architects will be challenged to provide communal structures whose monumentality will form the proper climax of the pattern of more or less repetitious units which provide for ordinary everyday needs. Giedion says, "monumentality consists in the eternal need of the people to create symbols which reveal their inner life, their actions and their social conceptions. This demand for monumentality cannot, in the long run, be suppressed." Richards sums up this relatively new feeling for monumental expression. "Monumentality today is a symptom of a new self-consciousness about style. This interest has not been fostered by any new development of which architecture itself provides the evidence; rather it is the outcome of analysis of the social role of a fully mature architecture such as we hope one day to achieve. It is further proof that at least we know what we lack, that we realize that the attainment of functional architectural solutions is only a means to an end, and that one of the ends of architecture is to express certain needs of the human spirit."

Monumentality is a desirable architectural expression, especially in those buildings which demand more from modern architecture than merely the expression of function. It is hinted that monumental expression will come solely through the manipulation of landscape and through the aesthetic use of pure art forms; these are the tools by which this expression will be shaped. But such a monumental expression must be one of our time, dedicated to demonstrate our aspirations in a democratic society, and while seeking for this monumentality, architects must remember that life is due to become increasingly mechanized and architecture must follow within a reasonable distance or die.

VIEWPOINT

The trend toward open planning for family dwellings should be reversed to help prolong the lives or sanity of harassed parents of three or more children.

It is hard for a British Columbian to view open planning as an issue at all—it is so much part of a way of life which has long been accepted here. It's true that in the most smoothly operating homes there is generally a good deal of private room, where the monster TV may be shut in its separate cell, for instance, or where children may, if they will, study or ride their hobby horses unmolested. Nevertheless, in everything from tract houses to mansions, a greater or lesser measure of open-plan design is taken for granted. And, as one who speaks of a topic close to his heart, I doubt if we B.C. parents of largish families are any scattier than the national average!

J. Lovatt Davies, Vancouver

Looking at the statement from the point of view of where the harassed parent eventually may find himself or herself, the psychiatric hospital, it is pointed out that of the many considerations in the design of a hospital the essential ones are the nature of social relationships possible among patients and staff and that it is better to provide for physical rather than psychological retreat. Though there is an infinite variety of associations possible, for the purposes of space design the important aspect is the various levels of association in terms of the number of people involved and these are:

- 1. The individual with himself.
- The individual with one other person of an intimate nature.
- 3. The individual with 2, 3 or at the most 5 or 6 others.
- The individual in a large group where he is more or less anonymous.

The desirable plan will provide various types of space so that physical retreat and these associations are possible.

First, a space an individual can call his own which takes care of the place for retreat and the first and second level of association;

Second, a small parlour or sitting area and

Third, a large open space.

Then the nature of enclosure of these spaces must satisfy our means of perceiving this space, by the sense of touch, smell, taste, sight and hearing. Of these the last two are our major concern in this discussion and further, of the two the sense of hearing presents the most vexing problem of space enclosure. It is obvious that this problem is increased as space size decreases and space relationships become more intimate as in a home.

The above are fundamentals for the planning of a psychiatric hospital for the mentally ill. It is suggested that the so-called "normal" person requires similar space facilities in his home if environment is to help keep him out of the hospital. The challenge to the architect is:

- To find out how physical design is related to the problems of human behaviour.
- To realize that architectural concepts are not the whole answer to the problems of living as many tend to believe.
- To understand the social and psychological nature of man.
- Finally, to appreciate the fact that no client is created in the image of his architect.

K. Izumi, Regina

This sounds like an escapist's plea for a refuge, within home, from which the children are neither heard nor seen: one up on the notorious Victorian concept. To harass, according to Webster's Dictionary, means "to trouble, worry or torment, as

with cares, debts, repeated questions, etc." But, if care (pardon the jeu des mots) is not lavished upon children, (debts not paid . . .) and questions not patiently answered the misery of mistrust, loneliness and emotional insecurity will result, adding, no doubt, to the harassment. Troubles of adolescence, juvenile delinquency, even incidence of tuberculosis are often blamed on lack of home life and love. Love is the basic modus operandi in family life. Even if it demands sacrifice it does create and sustain life. The thought of prolonging life at the expense of love brings to mind the horrors of Huxley's "Brave New World". The plea for sanity is, likewise, an elegant cynicism. Mine is a plea for faith, however dull and unfashionable this may sound.

The term "open planning", a lamentable semantic misnomer, is presumably a corruption of Le Corbusier's "plan libre", a principle of plan liberated from the rigid limitations of structure, so that proper articulation of various spaces, according to their function and character, may result in a certain continuity of space and therefore integration of life activities within it. But this is a positive aim that nobody with any sense of social responsibility would deny. Far from dumping everything and everybody in one room this manner of planning, this "jeu savant, correct et magnifique", when carried out skilfully and responsibly, will, by judiciously enclosing some spaces and disclosing other spaces, provide the contrasting stimuli for sociability and solitude, both needed by parents and children alike for their harmonious growth in the twenty-four hour rhythm of life.

The present topic reveals, rather alarmingly, our taste for sensational reversals, an inherent weakness of our time. Thus having crashed about in all directions, having rejected by a series of revolutionary reversals a number of obvious gains made by the early pioneers, we find ourselves without faith, uncertain, insecure, harassed by troubles within us, ready for the momentary excitement of yet another reversal, having never tried hard to evolve a principle to its fruition.

Victor Prus, Brockville

I do not agree that the trend toward open planning for family dwellings should be reversed but rather that the home planner should exercise more consideration for the sanity of parents with regard to their use of open planning.

Open planning in its original conception has many excellent features. The modern trend towards spaciousness, more light, and air, and rooms flowing freely one into the other, is excellent but in my humble opinion open planning loses all its charm when it sacrifices that important feeling of comfort and gracious living, just for the sake of the modern look. A home then becomes a veritable three ring circus.

Granted that Canadians are gregarious, and extroverts, by nature but the more outgoing individuals are, the more necessary it becomes for a well-planned home, with adequate recreation space for children and at the same time consideration for a busy, active mother and father who also require a little consideration for their piece of mind.

In planning a home I feel that there is a time and a place for everything. I firmly believe that open planning in living rooms, dining rooms, family rooms, and playrooms definitely enhances the beauty and comfort of our home today, but my one objection lies in the use of open planning in kitchens. The most fastidious housekeeper will no doubt agree that it is a physical impossibility to maintain a meticulously tidy kitchen at all times when preparing meals, so let us not have kitchens wide open to surveillance from all rooms.

I do feel that open planning with a little thought towards privacy of individuals and comfort for congenial family living

is a step in the right direction.

Beatrice Ramsay, Regina

News from the Institute

CALENDAR OF EVENTS

Annual Meetings of the Provincial Associations:

British Columbia, Empress Hotel, Victoria, December 6th to 7th, 1957.

Alberta, MacDonald Hotel, Edmonton, January 31st to February 1st, 1958.

Quebec, Chateau Frontenac, Quebec City, January 30th to February 1st, 1958.

Ontario, Royal York Hotel, Toronto, February 28th to March 1st, 1958.

RESIGNATION OF THE SECRETARY

The members of the Institute will hear with regret that Mr C. J. G. Carroll has found it necessary to resign his position as Secretary of the Royal Architectural Institute of Canada. All members of the Council and the membership at large will be concerned to learn that Mr Carroll's medical advisors have recommended that he must take a long rest. We all hope that he will be speedily restored to perfect health.

Mr Carroll has been our Secretary for nearly seven years, during which time he has become well known to all members of the profession. He can be assured that every member appreciates what he has done for the Institute throughout the years. We wish for him every success, good health and happiness now and in the future. D. E. Kertland, President

ONTARIO

Once upon a time in the ancient Kingdom of Uz, the monarch and his queen were confronted with the problem of selecting a wife for their only son, Prince Ignatz. After much discussion and many conferences with the prime minister and the minister for internal affairs, it was decided that the only satisfactory method of selection was to hold a contest. The reasons for this decision were as follows - the prince, lacking the wisdom and judgment of his elders, was incapable of making a proper choice on his own - the king and queen and ministers were loath to offend ruling families who had eligible daughters, by singling out one of the many, and were unwilling to take on the responsibility of making a selection which might prove unfortunate. In addition, the current magazines dealing with the fashionable female, promoted styles and forms that were contrary to the king's tastes, instilling in him doubts of his own judgment and a feeling that he was behind the times.

Rules of the contest were drawn up with the assistant professor of art and archaeology at the university appointed as professional advisor.

The contest was limited to daughters of registered nobility a brochure was printed outlining the conditions of the contest, and entry forms were mailed to all eligible parties. The selection of the jury who were to judge the entries posed a difficult problem. It was deemed advisable to procure experts from far afield in order to secure a catholic decision and to avoid possible entanglements with local pressure groups.

The final list of the jury was as follows:

1. The governor of Iceland who although perhaps not an expert on female beauty, nevertheless, considering the long winter night and the cold climate, could make a real contribution to the judging.

The head chieftan of a tribe of African head hunters, a man familiar with forms, and especially with heads.

3. A prominent abstract painter from Paris.

A professor of medicine from a great German University.

5. An industrial designer from the country of industrial

Know How - United States.

The king and prime minister were also on the jury as non-voting members.

At long last the great day came. The contestants were assembled in the great hall of the palace — no identifying marks or names were permitted — and the judging commenced. In a very short time the jury realized the difficulties of their task. The governor of Iceland insisted on entrants being short, stout, fair haired, and blue eyed; the chieftan was equally determined to select a maiden that was dark skinned, brown eyed, with a large head and long neck; the abstract artist only approved those who had one leg longer than another, two heads, or other abnormality; the professor of medicine was concerned with well developed muscles; and the industrial designer insisted on a streamlined form without bumps or bulges. A complete impasse was reached, and time out was called for refreshments. A realization came to the members of the jury that here at least was common ground - everyone was in favour of a competent cook. With this as a starting point, a decision was finally reached. The winner was of medium height and weight with mouse coloured hair, mouse coloured eyes, few bumps, but strong, healthy, and a good cook.

Public announcements were made, pictures and descriptions given to the press, and the Prince was permitted to see his future bride. From then on a veil seemed to fall on the whole proceedings. At first the public looked for the marriage ceremony to take place, but gradually as nothing happened, they lost interest in the matter.

Two years later a small announcement was made public to the effect that the Prince had married a girl of his own choosing. Nothing more was heard of the contest winner.

Philip Carter Johnson, London

CITY HALL COMPETITION

An international competition for a new City Hall and Square for Toronto, Canada, is announced. The competition is approved by the International Union of Architects, the RAIC and the OAA, and will be in two stages. At the end of the first stage, eight competitors will be selected to compete in the second stage, at the end of which each will be paid \$7500. The winner will be the architect for the building and will receive \$25,000.00 in advance of fees which are set at 6 per cent of the cost of the building.

The City of Toronto has not set a limit to cost, but estimates have been discussed up to \$18 million.

Professor Eric Arthur, M.A., F.R.A.I.C., F.R.I.B.A., has been appointed professional adviser by the city and has drawn up the conditions of the competition approved by the city.

The jury, all of whom are architects, is a distinguished one consisting of the following:

Sir Wm. Holford, Architect and Town Planner, London, England

C. E. Pratt, Architect, Vancouver, B.C., Canada Ernesto Rogers, Architect, Milan, Italy

Eero Saarinen, Architect, Bloomfield Hills, Michigan, U.S.A.

Gordon Stephenson, Architect and Town Planner, Toronto, Canada

Requests for copies of the Competition Conditions should be accompanied by money orders made payable to the City Treasurer for \$5.00 (Canadian currency) or its equivalent and addressed to Professor Eric Arthur, the City Hall, Toronto. This amount will be returned to architects who submit *bona* fide drawings for the competition.

The last date for the registration of competitors is *November* 22nd, 1957.

MODULAR CO-ORDINATION IN CANADIAN BUILDING

(continued from page 385)

Last year in Canada after many years of inactivity, action in the field of modular co-ordination began on three different fronts. The National Concrete Products Association decided to take steps for establishing the dimensions of modular concrete units, the Ontario Association of Architects began considering a uniform brick size, and the Division of Building Research began modular research.

The meetings held with manufacturers disclosed that the building industry looked to the architect as the leader in this program which embraces the whole industry. During the postwar years however, architects in practice, as well as in the building industry, have been too busy to consider a change in routine. The slackening of pace over the last year, however, has now given the industry time to think about the future, and on all sides there is evidence that modular co-ordination will

play an important part.

If the architect is to assume his proper responsibilities in modular co-ordination he must be fully informed. The groundwork for teaching modular to architects in Ontario has been laid and this coming year should see the educational program in full swing. Enthusiasm is spreading from Ontario to the Maritimes where both clay and concrete modular masonry units are likely to be available soon, thus making possible the beginning of modular building in Canada. Other provincial architectural associations have also shown interest, and it is hoped that they, too, will consider the extension of modular co-ordination as their professional responsibility.

REORGANIZATION OF CIAM

On September 1st and 2nd, 1957, CIAM met at La Sarraz, Switzerland, to fulfil the task set by the 10th CIAM Congress, Dubrovnik, 1956: to decide upon the form of a re-organized CIAM

Reorganization had become necessary on several counts. Since its foundation at La Sarraz in 1928, the main reason for the existence of CIAM has been to present problems of contemporary architecture and to point our emerging problems upon the horizon. These are tasks which can not be undertaken by large associations. CIAM itself had become too large. It was necessary to restrict its membership exclusively to active participants. The decisions of La Sarraz, September 1957, were unanimously agreed by the Reorganization Committee, Council and Delegates.

All former CIAM Groups are dissolved. CIAM is to be composed solely of individuals without reference to place or nationality. A Co-ordinating Committee, with J. Bakema (Rotterdam) as General Secretary, was appointed which will designate the new participants of CIAM on the basis of recommendations from former groups and others. All matters of organization are in its hands until after a Working Congress of the Participants has met. The primary aim of CIAM now is to establish the inter-relation of the social structure and the contemporary means of expression. Its title has become:

CIAM: Research Group for Social and Visual Relationships CIAM: Groupe de Recherches pour Interrelations Sociales et Plastiques

CIAM: Arbeitsgruppe fur die Gestaltung Soziologischer und Visueller Zusammenhange

(signed) S. Giedion

POSITION WANTED

Registered Architect, MRAIC, wishes position as Senior Assistant with Associate possibilities with progressive firm. Twenty-eight years Canadian experience. Reply c/o The Journal RAIC, 57 Queen Street West, Toronto, Ontario.

CONTRIBUTORS TO THIS ISSUE

John Summerson, architect, writer and teacher, has been one of the leaders of architectural thought in England for a generation. His early book, Architecture Then and Now, done in collaboration with Clough Williams-Ellis in 1934,

established him as a major critic who was concerned to relate the vital new architecture then beginning to appear in England, with the vital old architecture from its past. Among his other works were studies of Christopher Wren and John Nash and a volume of the Pelican History of Art series, Architecture in Britain 1530-1850. He has been a member of council of the Architectural Association. He was a Silver Medalist of the RIBA in 1937. In 1952 he was awarded the CBE. As curator of Sir John Soane's Museum, a post he has held since 1945, he has published works on Soane and on the museum and its collection.

Louis Kahn is currently best known for his work at Yale, where he has designed the elegant and startling new building for the department of Fine Arts, and where he acts as critic to the advanced architectural students. He continues to commute to New Haven from Philadelphia. Professor Kahn has been identified with housing and planning in Philadelphia for many years. After an early period in the office of Paul Cret, he became consulting architect to the Philadelphia Housing Authority, and subsequently designed a number of its projects in collaboration with the late George Howe and with Oscar Stonorov. He also collaborated with Stonorov on that classic little planning manual, You and Your Neighbourhood.

Patrick E. Peacock-Loukes, B.Arch., MRAIC, graduated from the University of British Columbia in 1955. He became a member of the Alberta Chapter of the RAIC in January of this year. The following March he left Canada for an extended tour of the United States and Europe, studying, in particular, industrial design and industrial estates. At present, Mr Loukes is working in London, England, with Mr Raymond P. Bee.

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BOOK REVIEW

Pencil drawing for the architect by Charles I. Hobbis. Published by Alec Tiranti Ltd., London, England. 8 pages of text, 64 halftone reproductions. Price 6s (Cloth 7s 6d).

This, the fourth of the Scopas Primers series, is a small hand-book which will be helpful to any student of architecture who is interested in learning how to draw accurate and attractive sketches or studies of architectural subjects — especially buildings and streets of historical interest. It is not another of the familiar "how to do it" books on drawing in which a pat formula or method is laid down. Rather, it is a guide in which many points of sound advice for the beginner are stated plainly and with clarity.

Most of the sixty-four illustrations include works by British artists like Muirhead Bone, John Sell Cotman, R. P. Bonington, Samuel Prout and Leonard Squirrel. The remainder are by the author and they have been included to demonstrate points which would be useful for a student of drawing. These drawings are good examples of skilful draughtsmanship and of sensitive and poetic organization of picture material.

In the notes which accompany each illustration Mr Hobbis stresses the value of accuracy in rendering significant detail, economy of drawing technique and, in most cases, he discusses in detail the various ways the artists have composed their drawings to emphasize the important features of their subjects.

John A. Hall