

# JOURNAL RAIC - L'IRAC

SEPTEMBER 1964 SEPTEMBRE

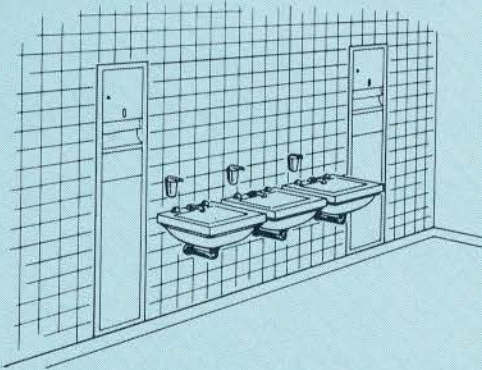




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# JOURNAL

## RAIC - L'IRAC

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# Institute News

## SURVEY OF THE PROFESSION

What could well be one of the most important and far reaching of Institute undertakings — the survey of the profession by the Committee on the Profession, began immediately after the Annual General Meeting at the assembly in St Andrews, NB in June, voted the necessary funds. Detailed arrangements had to be made without delay as Prof. W. G. Raymore (F), who was appointed to the committee earlier to conduct the survey, which had to be carried out in a limited amount of time, (*Journal March 1964 Page 10*) had commitments with the School of Architecture, University of Toronto, in September. The membership survey questionnaire was drafted earlier by the committee, consisting, in addition to Prof. Raymore, of H. H. G. Moody (F), Winnipeg, Chairman; Peter Thornton (F), Vancouver; Peter Dobush (F) and Henri Mercier (A), Montreal; and the late R. S. Morris (F), Toronto, who contributed much to the work of the committee as he had for many years to the Institute, before his death in early June.

The survey was in five parts, all conducted simultaneously:

1. The questionnaire to all RAIC members.
2. The questionnaire to members of council of the Provincial Associations.
3. Tape recorded interviews with groups of architects.
4. Tape recorded interviews with groups of contractors.
5. Tape recorded interviews with clients. Between June 22nd and July 11th the individual questionnaire and council questionnaire had to be printed and mailed to the Western provinces. The individual questionnaire was translated for the use of French speaking members of the Institute and, at the same time, Provincial Associations were asked to arrange group meetings with the survey team in the various cities to be visited. The Canadian Construction Association contributed greatly by arranging for their members to be available for interview at a number of centres.

To aid the recorded interviews, agendas were drawn up, the one for meetings with architects consisting of twenty questions and the one for contractors of eleven questions.

P. M. Keenleyside, of Toronto, accompanied Prof. Raymore on the western tour; and Prof. Douglas H. Lee of Toronto accompanied him on the tour of Quebec and the Atlantic provinces. Mr Keenleyside, who is a member of the Editorial Board and, with Ben Kaminker

of Toronto, wrote the descriptions of the RIBA and AIA surveys of the professions for the April and May issues of the *Journal*, was asked by the *Journal* to comment on the tour of the Western Provinces.

Mr Keenleyside wrote:

"If Professor Raymore's full itinerary were printed it would end up looking like a TCA timetable, so here is the condensed version.

July 13-15 — Vancouver: Meetings with architects and contractors.

July 16 — Victoria — architects.

July 18, 19, 20, 21 — Calgary — architects and contractors.

July 22, 23 — Edmonton — architects and contractors.

July 24 — Saskatoon — architects.

July 26, 27 — Regina — architects and contractors.

July 28, 29, 30 — Winnipeg — architects and contractors.

July 31 — Fort William — Port Arthur, architects and contractors.

Then Toronto !!!

Arrangements were made for the Eastern itinerary and Prof. Raymore, accompanied this time by Prof. Douglas H. Lee of U. of T. School of Architecture, and a good deal of printed material and quite a lot of blank paper, took off.

Aug. 9, 10, 11 — Montreal — architects and contractors.

Aug. 12, 13, 14 — Quebec City — architects and contractors.

Aug. 14 — Moncton — architects.

Aug. 17 — Saint John, NB — architects and contractors.

Aug. 19, 20 — Halifax — architects and contractors.

Aug. 21 — St John's, Newfoundland — architects.

Then Toronto!

The interviews are currently underway in the Province of Ontario, which has 10 Chapters.

If any member of the Ontario Association of Architects feels his nose out of joint due to being last on the list, would he please write his objections and address it to 167½ Bloor Street West. (That is as close as you can come to the centre of Bloor St and Queens Park).

The score to date is as follows:

(1) Individual members questionnaires returned —

				%
B.C.	65	out of	278	23.5
Alberta	59		162	36
Saskatchewan	25		70	35.5
Manitoba	48		148	32
Ontario	375		973	38.5
Quebec	127		710	17.5
New Brunswick	5		26	19
P.E. Island	3		8	37.5

Nova Scotia	7	59	11.5
Newfoundland	2	15	13
		716	2445

(2) Tapes — to date

18 tapes times 4 channels each, times one third of a mile, for each channel = 24 miles.

The record length of taping for one meeting, I believe, is held by a group of architects in Winnipeg. They spoke a little more than 100 feet less than a mile.

Mrs Postill, Prof. Raymore's secretary, records results back at headquarters. The room is small, festooned in tape and knee deep in questionnaires. She has learned to move with care. For variety she records questionnaires, listens to tapes, records questionnaires, listens to tapes, records questionnaires, listen . . . tapes . . . rec . . .

You are a rum lot.

Last time I saw Prof. Raymore he looked well but was starting to sag. He was heading in a Westerly direction.

## A. L. FLEMING NAMED HONORARY SOLICITOR

In recognition of his long and devoted services as legal counsel to the RAIC, Mr A. L. Fleming, QC, HON.FRAIC, of Toronto was named Honorary Solicitor of the Royal Institute at the Annual Assembly at St Andrews in June. The resolution honoring Mr Fleming read as follows:

*Whereas* Arthur Lyman Fleming, QC, BA, LL.B., Honorary Fellow of the Royal Architectural Institute of Canada, has rendered valuable services to the Royal Institute far beyond the call of duty, and *Whereas* the Executive Office of the Institute has now been consolidated in Ottawa, and

*Whereas* doctor's orders have set limits to his activities,

*Therefore be it resolved* that this Institute, in recognition of his many years of service, and in recognition of the affection in which he and Mrs Fleming are held, confer on Mr Fleming the title of Honorary Solicitor of the Royal Architectural Institute of Canada.

## ARCHITECTURAL LIBRARY WANTS BOOKS, ETC.

The School of Architecture, University of Toronto, is augmenting its library and would be pleased to hear from anyone wishing to dispose of collections of books, journals, and slides on architecture, the allied arts, planning and landscape. Gifts of books and bound periodicals would be especially welcomed and loose journals are often useful for adding to incomplete sets.

Information and lists should be sent either to Dr Thomas Howarth, Director, or to Professor William S. Goulding, Chairman, Library Committee.





M. Raymond F. Lagüe

**DIRECTEUR ADMINISTRATIF DE L'AAPQ**

Le conseil de l'Association des Architectes de la Province de Québec, a le plaisir d'annoncer la nomination de M. Raymond F. Lagüe au poste de Directeur Administratif de l'Association. M. Lagüe a été pendant plus de deux ans dans le domaine de la Construction Domiciliaire à titre de constructeur, en 1962 il a obtenu le grand prix national de Canadian Housing Design Council. Avant sa récente nomination, il était Vice-Président Administratif de l'Association des Constructeurs d'Habitations du District de Montréal. Il a acquis une vaste expérience en matière d'administration, travaux de comites et de relations extérieurs.

**DENIS HEGGEN KIRK**

Word has been received of the sudden death on August 31 in Scotland of Mr Denis Heggen Kirk, aged 31, a member of the Alberta Institute. He and Mrs Kirk were travelling when he was taken ill with a heart attack. Mr Kirk was born in Fort McLeod, Alberta and graduated from the University of British Columbia in 1961.

**L. SYLVESTER SULLIVAN, HON FRAIC, FRIBA**

Mr L. Sylvester Sullivan, HON FRAIC, FRIBA, died on September 10 in London, England at the age of 86. Miss Barbara Sullivan, his daughter, wrote from London the following:

"His links with Canada, which dated I think from 1937, gave him great pleasure and brought us both many lasting friendships with people like Mr Forsey Page, Mr J. Roxburgh Smith and the late Mr Schofield Morris. I know that it gave him great pleasure to represent the RAIC here, and the silver salver which the Institute presented to him on his retirement gave him constant pleasure and has been in constant use."

**DBR BUILDING SCIENCE SEMINARS**

The Division of Building Research of the National Research Council will repeat its Building Science Seminar on Exterior Wall Design in eastern and western Canada in November.

At Ottawa, the Seminar will be held in the Auditorium of the Radio and Electrical Engineering Division Building of the National Research Council on 4th, 5th and 6th of November. The western Seminar will be held at Calgary in the Alberta Room of the Hotel Palliser on the 11th and 12th of November.

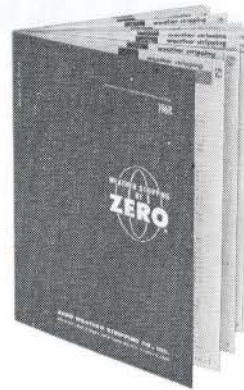
The Seminars are part of a series con-

ducted by the Division of Building Research to communicate the results of studies and research work to the Design Profession and others interested, and are based in part on the papers presented in the Canadian Building Digest supplied to the Journal monthly by the Division Building Research. (See Journal June 1964 page 60). Attendance is by advance registration only. The fee of \$15.00 is payable at the Seminar. Registration forms are obtainable from L. P. Ruddy, Division of Building Research, NRC, Ottawa.

(Institute News continued on page 78)

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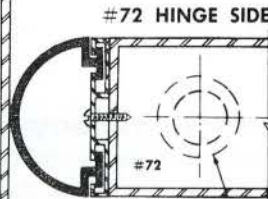
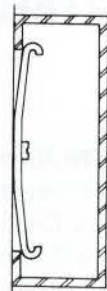
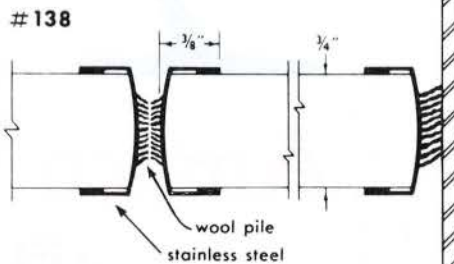
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# Book Reviews

TORONTO—NO MEAN CITY, by Eric Arthur, University of Toronto Press, 1964, 280 pages, \$15.00.

BY JAMES H. AGLAND

What a delight it is to review a book of this quality. Avoiding the lugubrious dialectic of current architectural criticism and the pinched tautologies of the art historian, Dr Arthur has recreated the vitality and the gusto of nineteenth century Toronto. With transparent affection and witty insight he paints the picture of a commercial metropolis emerging overnight from the wilderness. The bumptious squalour and pretentious colonial mannerisms of the architecture emerge as true reflections of the personalities of the tinkers, merchants, governors and dominies who left their mark upon this curious city. This is no tired catalogue of arbitrary styles but rather a brilliant series of essays upon the physical and environmental results of the confrontation of colonial administrator and frontier speculator.

Certainly it is an extraordinarily useful study. This third quarter of the twentieth century has erupted in a violent denial of the values and judgements of the white Anglo-Saxon protestant majorities of Northern Europe and North America. From every quarter of the globe, from Ceylon, Ghana, Quebec or Louisiana, the tale is the same. Now that the WASP has lost her sting must we blindly copy Western values? During the nineteenth century the answer to this question could be held in abeyance. With a narrow morality, an advanced technology, red coats and repeating rifles, missionaries traders and soldiers were able to mould the world to their will. Today it is by no means so simple, and it behoves us to understand clearly

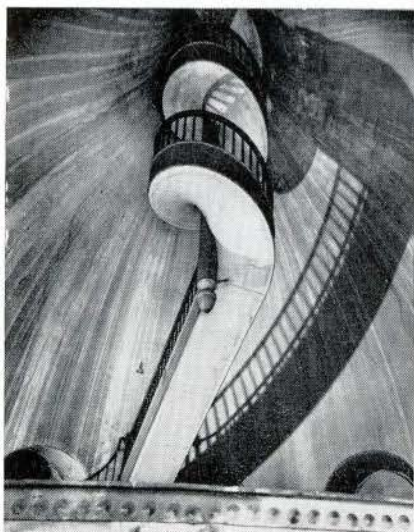


Above, the Great Library, Osgoode Hall; below left, spiral stair to cupola on dome of the Mental Asylum, King Street West.

the historical record. Toronto is an ideal case study. The weaknesses and triumphs of white Anglo-Saxon protestant values and techniques emerge in naked clarity on this mud bank by Lake Ontario. Even in 1842 Charles Dickens was able to point that "the wild and rabid Toryism of Toronto, is, I speak seriously, appalling". And today, Mavis Gallant, in her novel *Its Image in the Mirror*, speaking of the Eastern Canadian Protestant Anglo-Scots, defines the bigoted self righteous assurance of Wasp values. "Flowering in us was the dark bloom of the Old Country—the mistrust of pity, the contempt for weakness, the fear of the open heart.— Our father believed that Scottish blood was the best in the country, responsible for our national character traits of prudence, level-headedness, and self-denial". As architects we well know that the virtues of prudence, thrift and compromise, admirable as they are in their own right, can seriously cripple the creative imagination. The physical effects upon the environment of a whole-hearted accep-

tance of the primacy of private over public values has resulted, in Toronto, in what can only be described as a glorification of ugliness.

In the thirties, when Dr Arthur first began to gather material for this book, the title *No Mean City* could have been taken only as a wry jest. As he points out, "Since 1852, when the railways were allowed to ravage the waterfront and leave on their flanks an unplanned mess of roundhouses, warehouses, factories, and slums, Toronto has turned its back on the lake"; and "Our worst streets are those Victorian and Edwardian thoroughfares where bad design and poor maintenance give an impression of sordidness and decay"; or, "We have an even greater heritage about which Toronto is peculiarly apathetic. Of the 1,900 acres of ravine we once enjoyed, 840 have been filled for factories, roads and houses". Certainly the last twenty years have seen an almost unbelievable improvement in the urbanity and quality of the city. In no small degree this has been the result





*November in*

**JOURNAL**  
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of Dr Arthur's unremitting search for elements of dignity and beauty. Not content with mere historicism he has goaded and prodded the city fathers and the architectural profession into efforts far surpassing the dismal record of the Victorian builders. The monumental new city hall and the great fronting public square are the direct result of his total commitment to the beauty and welfare of the city.

The opening two chapters brilliantly define the site, emphasizing the importance of the trail along the Humber, "the Toronto carrying place", as the focus for a meeting place between the Indians from the north, the French from the East and the English from the south. Seventeenth century Teiagon and Mississaga left a network of trails which today carry the bulk of traffic in Toronto. It is amusing that in a city which is so bedevilled by circulation problems that it was the circulation net which gave birth to the city. The new era of colonial expansion under the British marked a change from the Humber to York Harbour, where the loop of islands gave a superb anchorage better suited to the growing commerce of the lake. The change from the war canoe of the Indian and the long canoe of the voyageur to barque and brigantine was accompanied

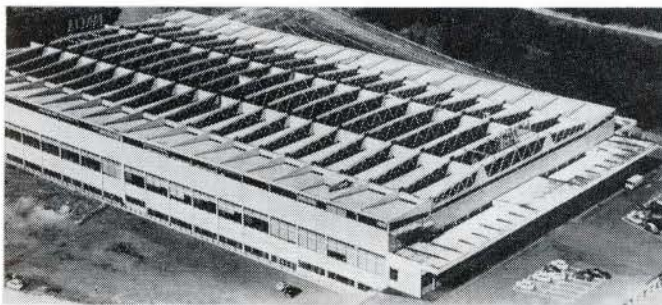
by the early efforts at proconsular splendour by Sir Guy Carlton and Lt-Col John Graves Simcoe. Aitkens unimaginative rectilinear grid plan, disregarding the rivers the lake the ravines and the escarpment, set a pattern for Toronto's development. Without focus or core the city has tended to grow by piecemeal accretion and not in accord with any pattern or form. Although a provincial capital, growth was slow until the twenties when the influx of disaffected Americans brought a marked flavour of Salem Philadelphia and Boston to the site. The Grange or Justice Campbell's house show how much of dignity and urban good manners there was in the building around 1820. King Street in 1835, in contemporary lithographs, demonstrates well the homogeneity possible in a new community with common standards of taste and resource. Through to 1850 the city was a prosperous capital and commercial centre where the dictates of good taste and the needs of commerce lived in a harmonious balance.

From 1850, although buildings of marked originality and brutal vigour enlivened the city skyline, a progressive deterioration of public taste led to the red brick anarchy which is still so constant a feature of Toronto streets. Although Dr Arthur writes with verve and sympathy

of the careers of the early Toronto architects, he cannot conceal his despair at the steady erosion of scale and texture in the city centre as block after block of fine terrace housing was replaced by mean and florid commercial buildings. John Howard, the drawing master at Upper Canada College, left many buildings of merit but it cannot be denied that his eclectic skills paved the way for the frightening ingenuity of late nineteenth century architects. Most telling is the photograph of Toronto which as late as 1875 indicates that the city had a very real core of fine terrace housing fronting on carefully tended squares. Within twenty five years all this had vanished. The almighty dollar proved triumphant over all other consideration. The fatal flaw in Wasp reasoning, the elevation of private over public values, led to the dismantling and destruction of this flourishing Georgian city. A competitive congeries of ingeniously constructed but garishly decorated commercial blocks shouldering up from the streets drove the new rich up the hill into their suburban retreats. Not until recent years has this trend been reversed. As Dr Arthur is at pains to point out, the battle continues between those who would mine the community only for individual profit and those who would leave behind them a

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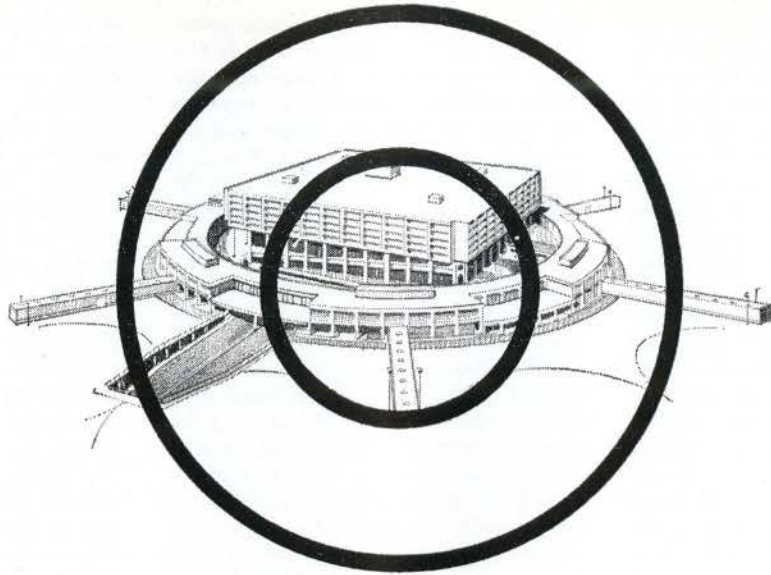


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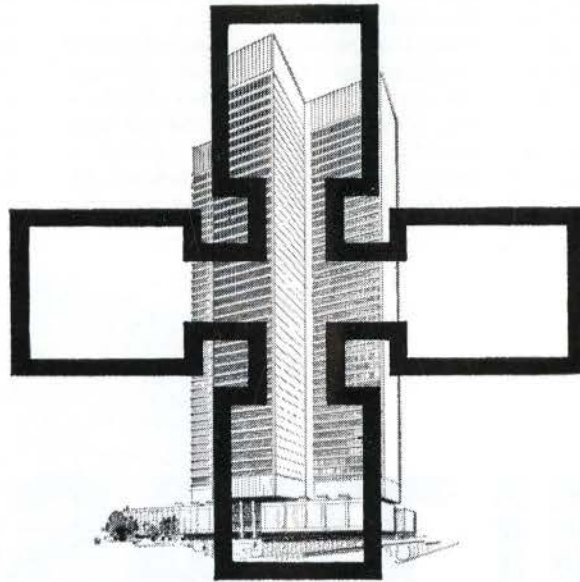
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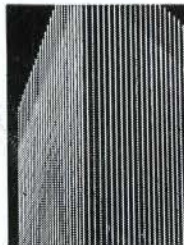


**Problem:** Enclose these shapes in curtain wall

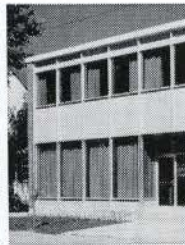


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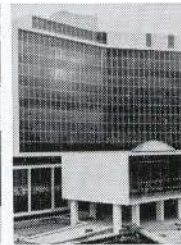
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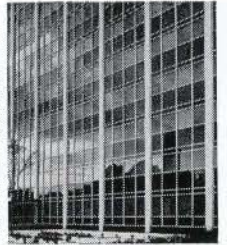
C-1-L House, Montreal  
Architects: Greenspoon,  
Freedlander & Dunne  
Gen. Contractors:  
Angli-Norcross Corp.  
Ltd.



Caisse Populaire,  
Kapusksing, Ont.  
Architect: Morris G.  
Sauriol Services  
Gen. Contractor:  
D. Charbonneau



City Hall Hamilton, Ont.  
Architect:  
Stanley M. Roscoe  
Gen. Contractor: Pigott  
Construction Co. Ltd.



Norquay Building, Winnipeg  
Architects: Green, Blankstein,  
Russell Associates  
Gen. Contractor:  
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splendid testimonial to their life and labor in their city.

The format of the book is particularly attractive, the layout by Paul Arthur makes the book pleasant for scanning without limiting its value for serious study. In my copy some of the plates are rather gray in tone. This may be the inevitable result of the attempt to marry the text and illustrations on the same paper. It is a pity that these priceless illustrations, culled from a variety of sources during years of research, could not have been reproduced on high gloss coated stock paper, to be bound with the text. The two appendices, "the architectural profession in the nineteenth century" and "the origin of street names in Toronto" are valuable supplements to the text, tying in detail points only briefly touched in the study.

If you have a liking for Toronto, you will of course buy this book, but if you hate Toronto (the more normal case) get it too. Its a splendid exposition of how Toronto got that way.

#### DACH DETAILS; ROOF DESIGN; TETTO DETTAGLI

What is the future of zinc roofing in Canada?—A discussion stimulated by the recently published book by Paschen von Flotow and Karl Kramer, published by Karl Kramer Verlag, Stuttgart, 1964

By Stuart A. Wilson, MRAIC

This book is devoted to the employment of zinc in roofing, flashing and in ancillary uses such as wall claddings and weathering arrangements. The details illustrated and described are ingenious and well worked out.

The examples, shown, while of first-rate workmanship, are all of European derivation and provenance. This is unfortunate because metal roofs on curved or straight surfaces have in the past given a good performance in many parts of Canada. In Quebec, where winters are arduous, traditional French-Canadian architecture employed the "Canada Plate" diamond or fish-scale shingle patterns on houses, churches and public buildings. These metal shingles of steel or iron, hand-dipped in tin, bore up well to the hard winters and changeable climate. They rusted slowly over the years, shining all the while like the scales of a trout.

In more recent times galvanized iron or sheet steel with a hot-dipped coat of zinc has served as a common form of metal roof. Such roofs behaved well provided they were regularly painted, otherwise water penetrated to the steel and oxidation occurred resulting in leakage and rusty stains on adjacent materials.

Few parts of Europe are far from the sea. Zinc has high corrosion resistance against the moisture conditions of coastal regions.

On the coastal regions of the Canadian Maritimes, the most commonly employed material to resist corrosion is wood, painted or unpainted, followed by galvanized iron, aluminum or zinc, in that order of preference or occurrence.

The price of zinc sheets per pound lies below the half-way point between galvanized iron and copper. Canada has no domestic production of zinc sheet. In Europe zinc sheet production is high and the price of zinc is less. A tendency exists in any country to employ domestically produced materials. Also, European skill in working zinc is passed from father to son and the trade has achieved a sound mastery of this material through lengthy experience.

Recently, a Canadian distributor of high zinc alloy roofing sheets claimed that there was no call for the material, that sales were limited and that zinc was not popular with the trade. A questionnaire sent to seventy Montreal roofers by a large Canadian zinc producer elicited limited interest and few replies. This company recently brought to this country a European expert on the craft of zinc roofing to study local conditions. However, the company feels that Canadian roofers are unaware of the virtues or possibilities of zinc roofing.

Roofers would need to learn how to handle the material. Zinc has definite physical properties and handling charac-

*(concluded on page 20)*



## What do teacups from Cornwall and bricks from Estevan have in common?

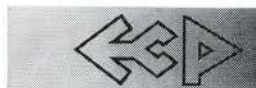
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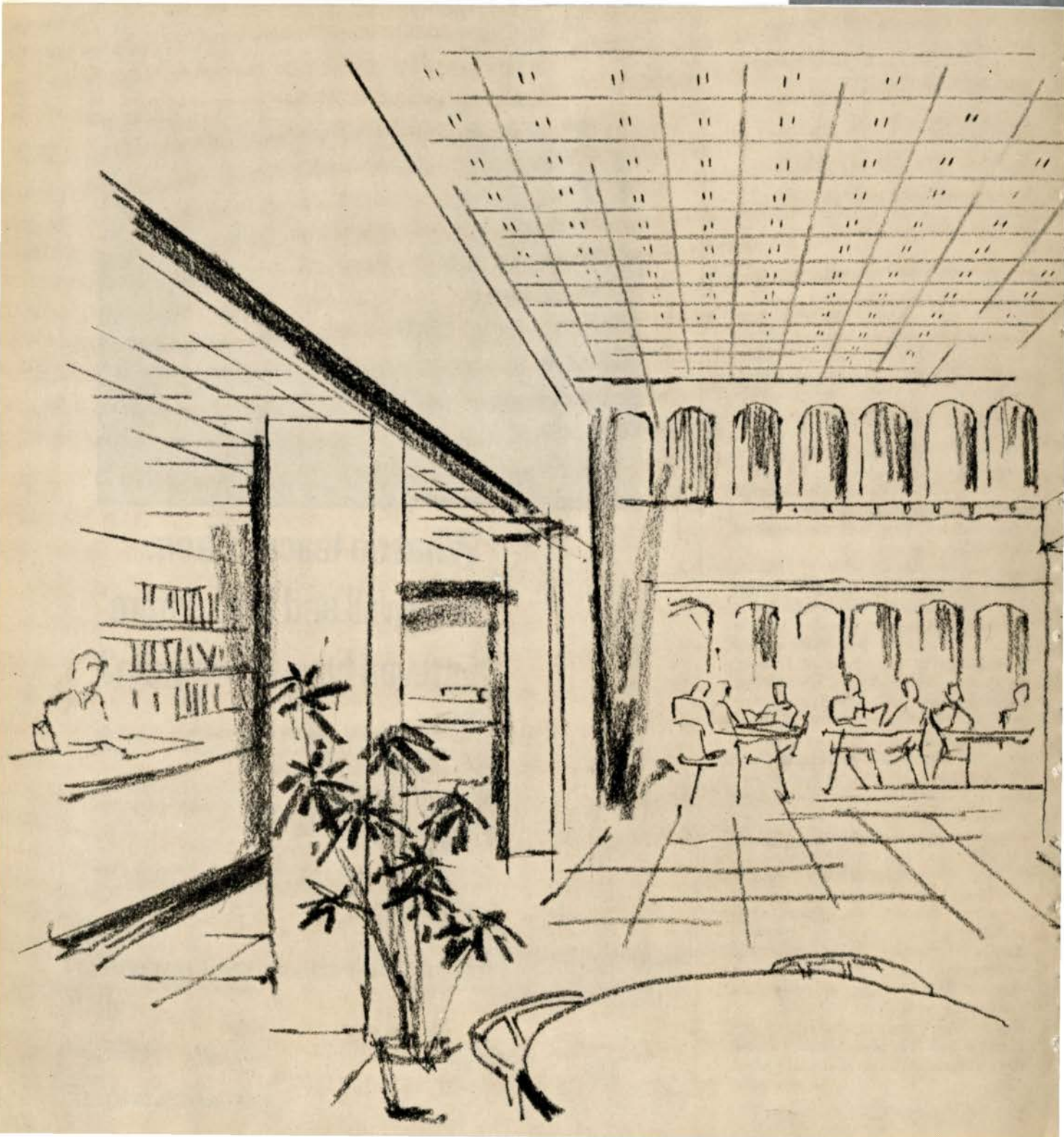
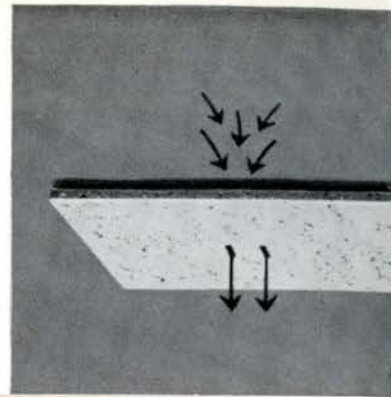
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bent sharply but to larger bend radii. In cold weather zinc becomes less ductile and on the site the sheets would require to be slightly heated to permit easy working. When in contact with West Coast woods such as Western Red Cedar or Redwood or certain metals, zinc requires insulation. The coefficient of expansion is higher than aluminum or copper. As a result, a roof installed six years ago on the St. Marks Anglican Church, Dorval, (Architects: Woolvin and Devitt) gave good service. Experience would tend to indicate that zinc should be used in roofing in smaller, expandable units, and larger areas should not be joined by solder.

The phenomenon of "creep" would require mastery by suitable detailing and material handling skills. On the other hand, since zinc has good corrosion resistance and suitable non-staining properties, it would appear that zinc should be particularly suitable for use in buildings constructed of either poured or pre-cast concrete. In this context, the use of zinc strips imbedded in terrazzo is of interest. Hence, while the details in the book "Roof Design" are interesting and inspiring, they cannot be automatically buttoned into a Canadian building but will require careful thought and investigation by local practitioners.

The book "Roof Design" raises the question whether there is a place for metal roofing in Canada, in particular, zinc roofs, and what are the optimum methods of design for this material under our conditions. Will the use of zinc in roofing increase now that new alloys, a blend of zinc, copper and titanium, are available? The new zinc sheets are said to possess a lower coefficient of expansion and to permit easier and more adaptable forming methods.

The authors and publishers are to be congratulated on the arrangement and presentation; the clarity of the three color details, the photographs, printing, layout and choice of material being of excellent quality.

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### Recent Books Received

THE MODERN ARCHITECTURAL SETTING OF THE LITURGY, papers read at the second conference arranged by the Dept. of Extra-Mural Studies, University of Liverpool, September, 1962, edited by William Lockett. Camelot Press Ltd, 1964, 106 pages, 31 plates, \$3.50.

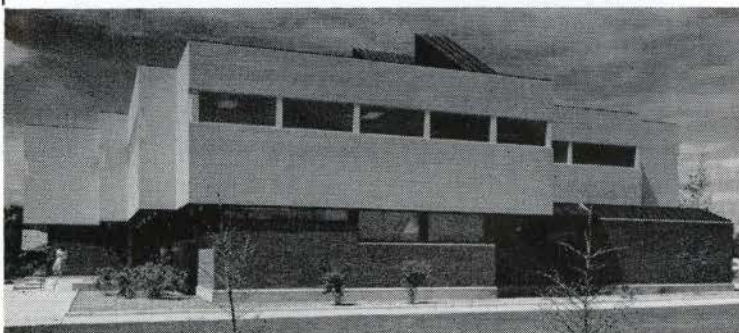
ARCHITECTURAL DRAWINGS OF THE 18TH AND 19TH CENTURIES IN THE LIBRARY OF WORCESTER COLLEGE, OXFORD, compiled by H. M. Colvin. Oxford University

Press, Toronto, 1964, with catalogue, indexes of buildings and persons, and 130 plates, \$13.50.

THE SCULPTURAL PROGRAMS OF CHARTRES CATHEDRAL, by Adolph Katzenellenbogen, a Norton Library paperback reprint of the work first published in 1959 by the John Hopkins Press; George J. McLeod, Ltd., Toronto, 1964, 149 pages plus 79 plates, \$2.50.

## MEDICAL CENTRE - SAULT STE. MARIE

Architect—Jerome Markson : Gen. Contractor—Robertson Yates



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# Group Health Centre, Sault Ste Marie, Ontario

Architect/Jerome Markson

Owner/Sault Ste Marie & District Group Health Association

Assistant Architects/Algimantos P. Banelis

Planning Consultant/Glenn Wilson

Structural Engineer/M. S. Yolles & Associates

Mechanical & Electrical Engineers/Ellard-Willson & Associates Ltd.

Landscape Architects/Sasaki-Strong & Associates Ltd.

General Contractor/Robertson-Yates Corp. Ltd.

Hanging Pottery/Five Potters

Photos/Roger Jowett



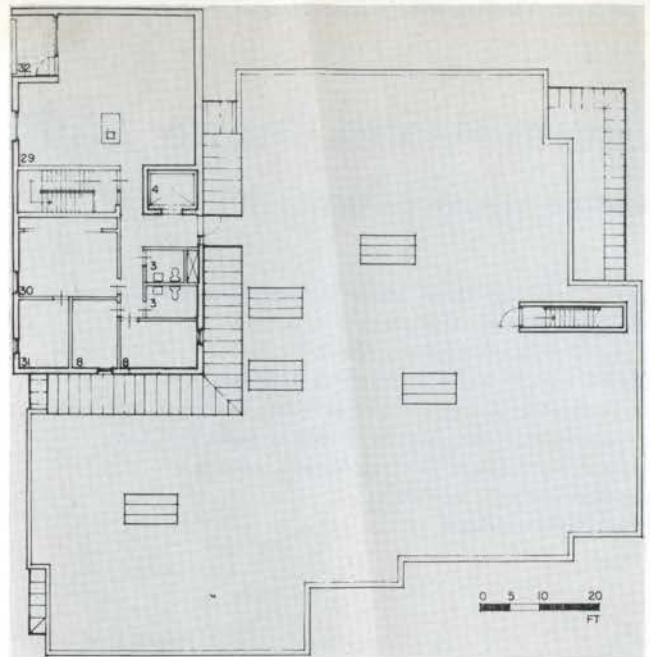
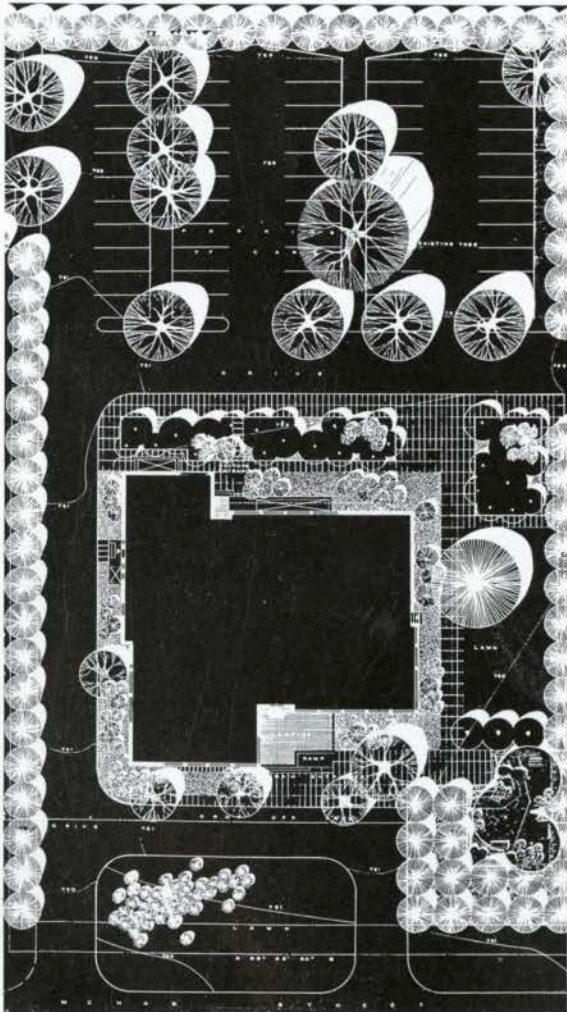


LEGEND

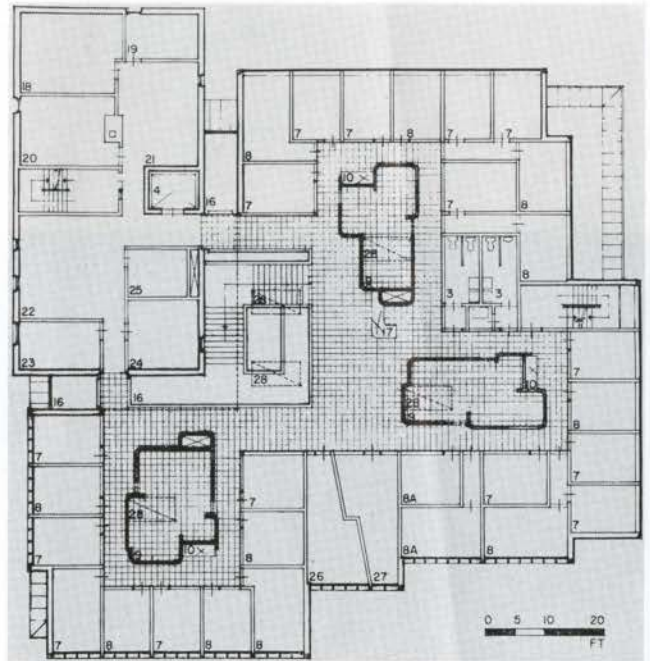
ROOM SCHEDULE

- |                        |                                  |
|------------------------|----------------------------------|
| 1. CENTRAL SUPPLY      | 18. FILES                        |
| 2. E.K.G. ROOM         | 19. LIBRARIAN'S OFFICE           |
| 3. WASHROOM            | 20. APPOINTMENT CENTRE           |
| 4. ELEVATOR            | 21. GENERAL OFFICE               |
| 5. LABORATORY          | 22. BUSINESS OFFICE              |
| 6. PHARMACY            | 23. MANAGERS OFFICE              |
| 7. EXAMINATION ROOM    | 24. DIRECTORS OFFICE             |
| 8. CONSULTING ROOM     | 25. PUBLIC HEALTH NURSES' OFFICE |
| 9. WAITING ROOM        | 26. OPHTHOMOLOGISTS OFFICE       |
| 10. NURSES' STATION    | 27. OPTOMETRISTS OFFICE          |
| 11. COATS ROOM         | 28. SKYLIGHT ABOVE               |
| 12. X-RAY ROOM         | 29. DOCTORS LOUNGE & BOARD ROOM  |
| 13. X-RAY PROCESSING   | 30. GENERAL LOUNGE               |
| 14. X-RAY CONTROL      | 31. WOMEN'S LOUNGE               |
| 15. SURGERY            | 32. BALCONY                      |
| 16. OPEN WELL          |                                  |
| 17. RECEPTIONISTS DESK |                                  |

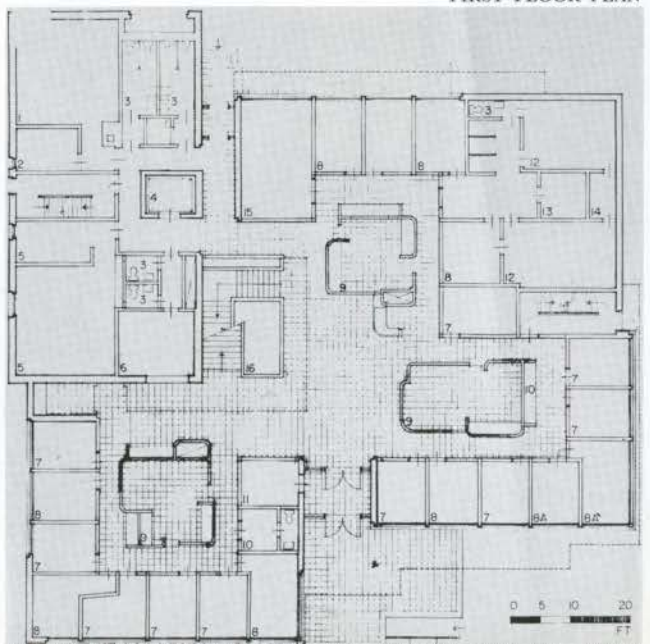
*Imaginative layouts tend to be accelerative in action and cumulative in result.*



THIRD FLOOR PLAN

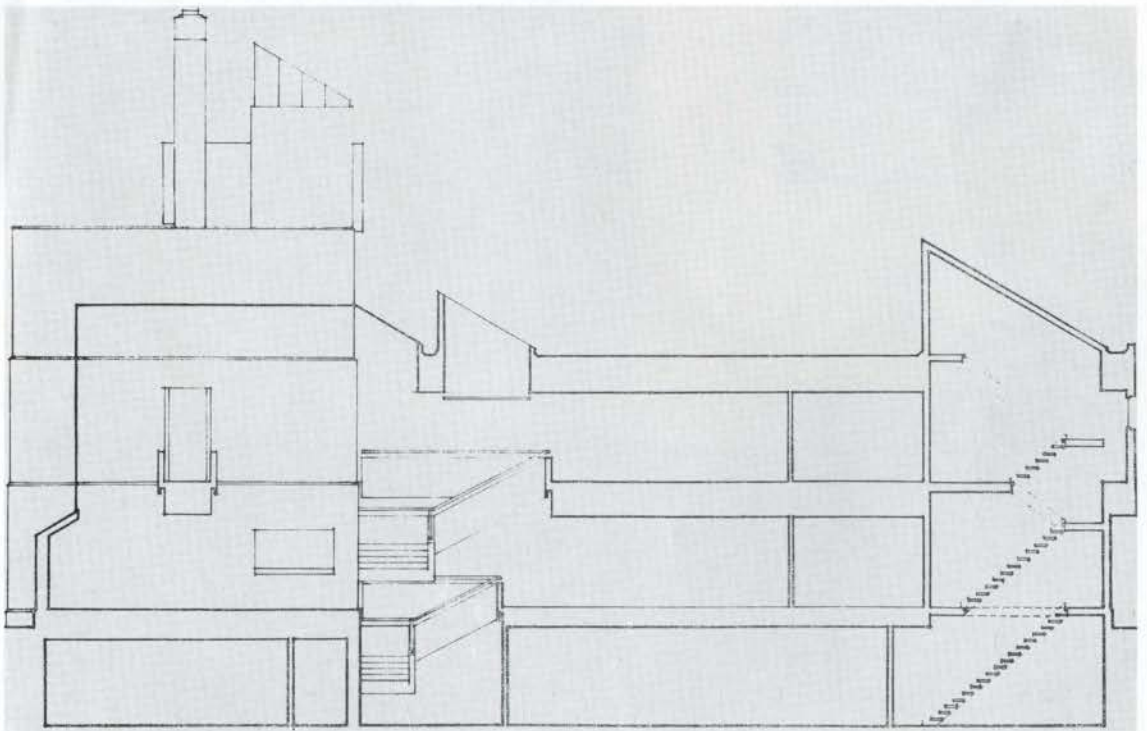
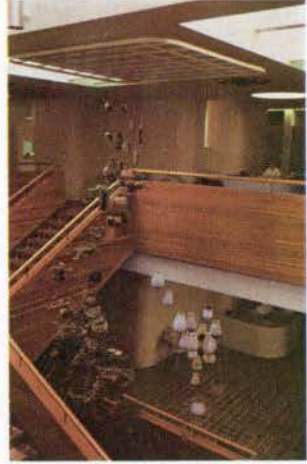


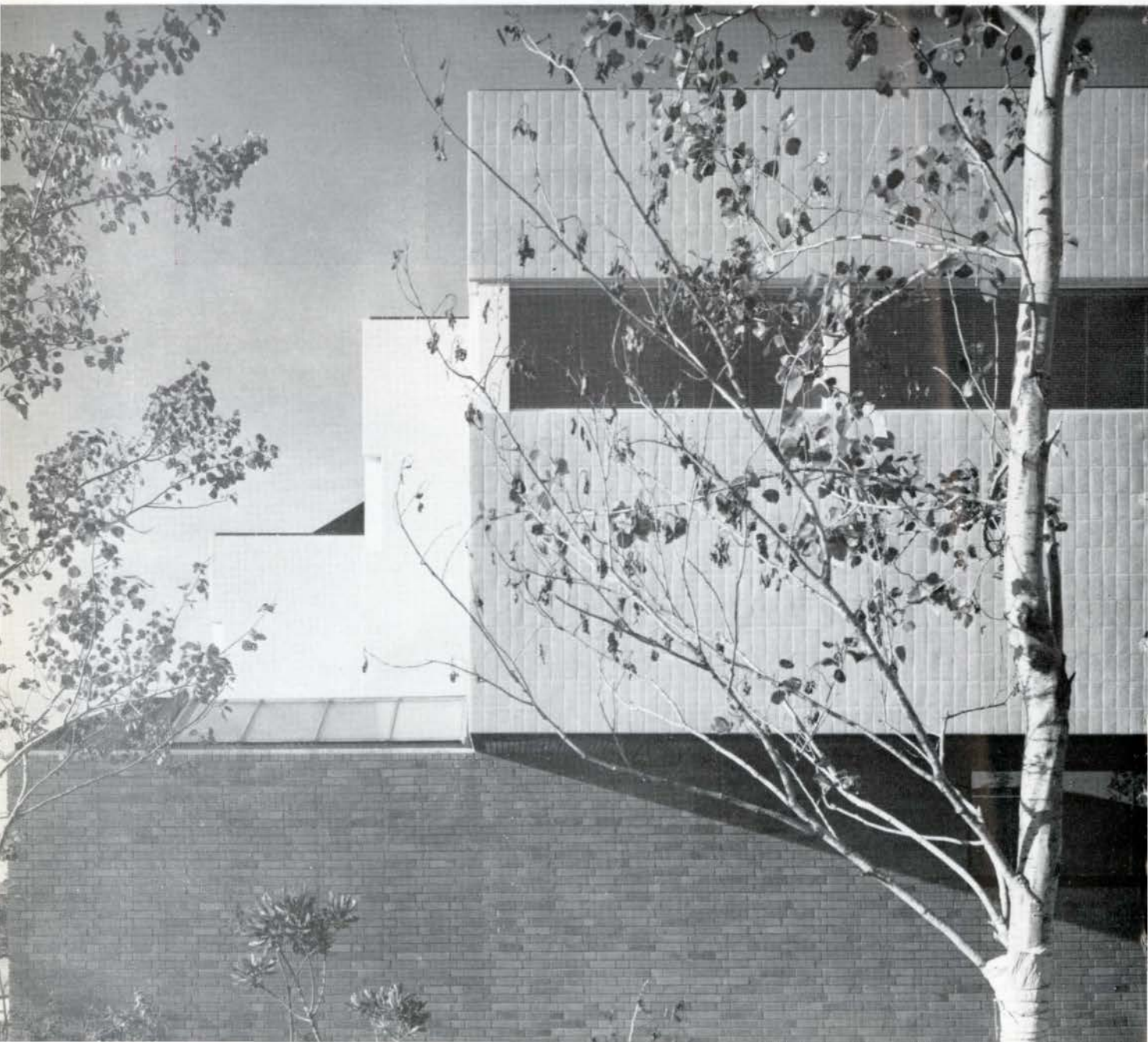
SECOND FLOOR PLAN



FIRST FLOOR PLAN

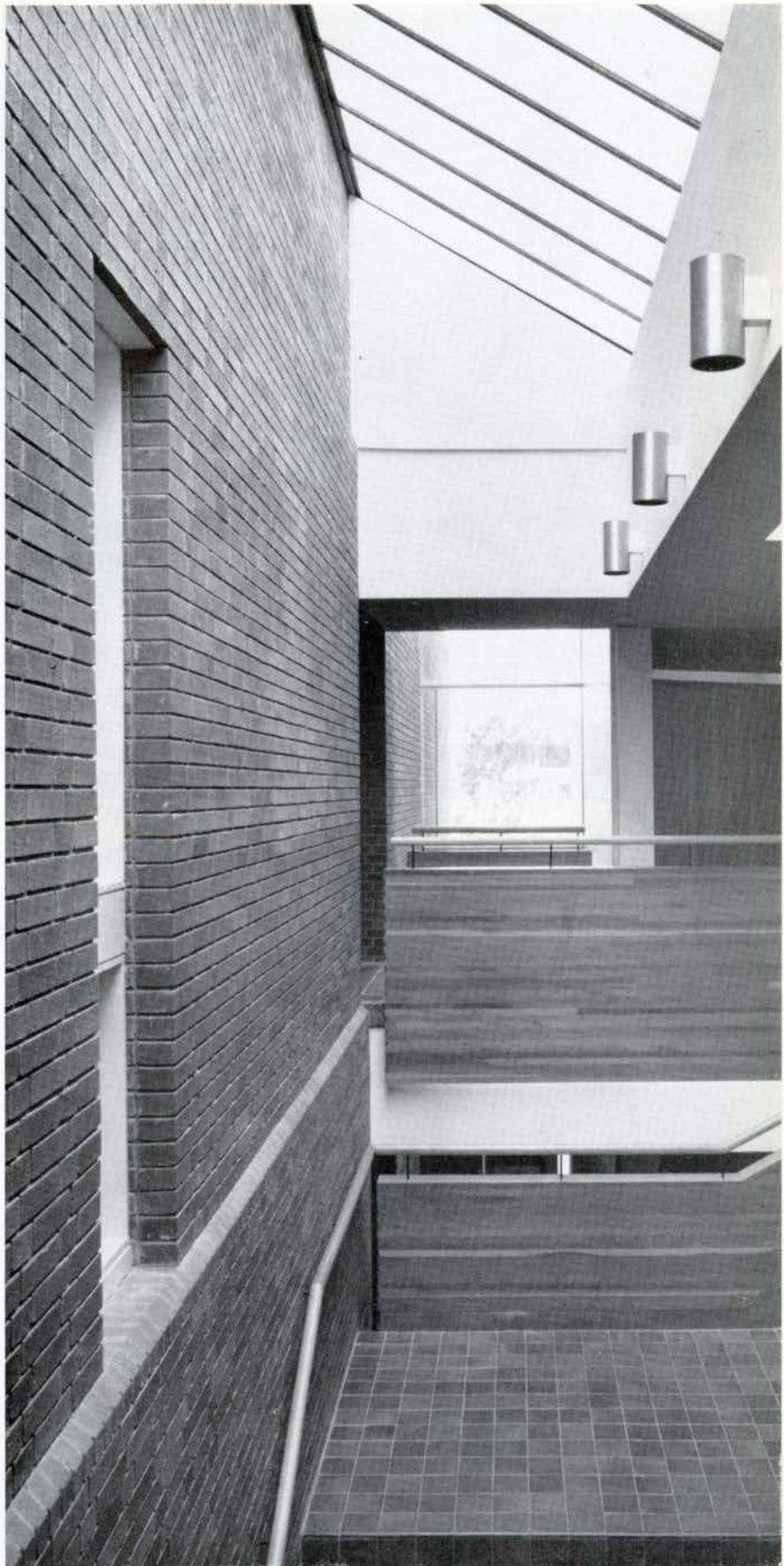




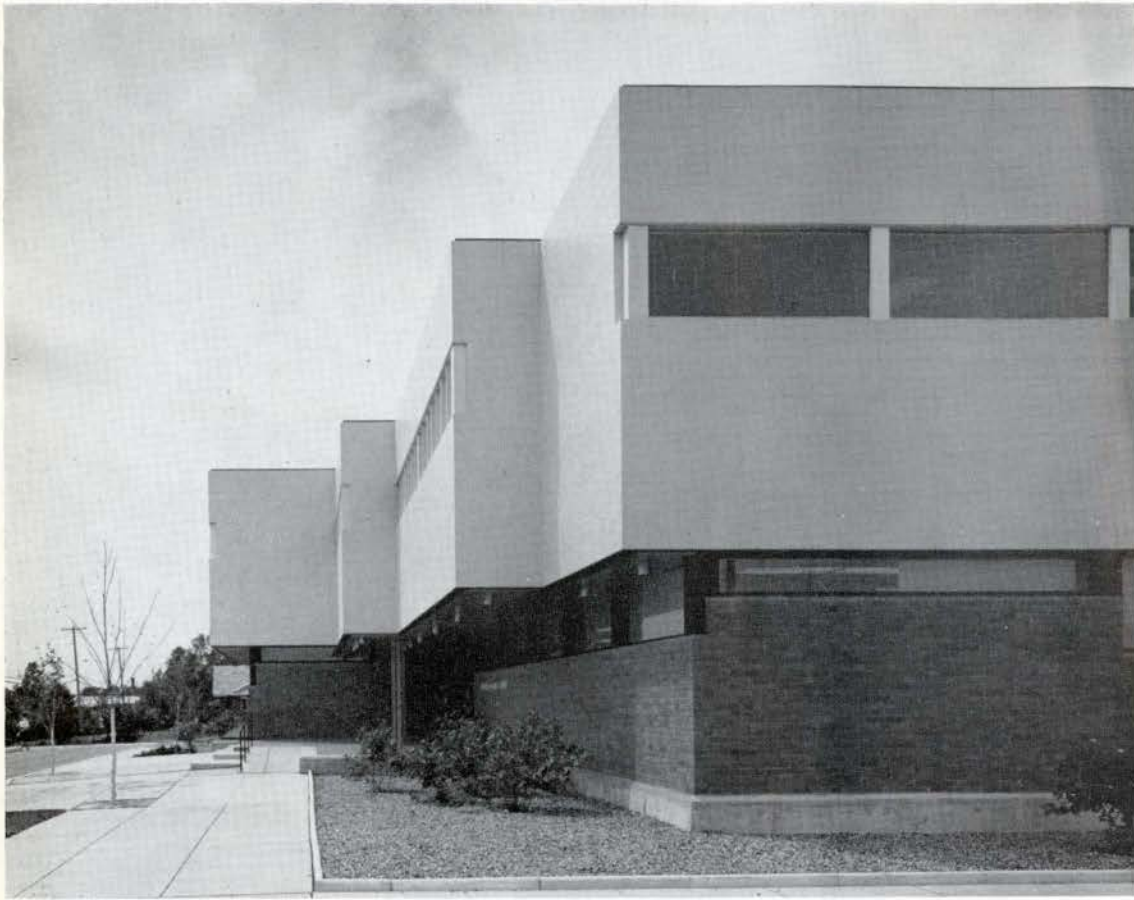




In the three storey section, which the public rarely sees, load bearing brick walls are used. The two storey section is steel framed. Waiting areas are colored to help in patient identification. On the exterior, materials used include brownish brick and white glazed tile; and for the interior, acoustic plaster ceilings, Welsh quarry tile and vinyl-asbestos floors. Walls are of brick, vertical fir panelling or plaster. The stairwell balustrade is laminated fir with oak handrail. Main entry doors are bronze and glass.







*There is something  
of a nautical  
atmosphere present*











## The Group Health Centre at Sault Ste Marie

by Hans Elte

The Health Centre at Sault Ste Marie, Ont., is probably unique of its kind in Canada. It is equally unique in the sense that, persons whose health is being cared for are the very persons who made possible the building and equipment of the physical plant, through which care and treatment are being given.

Such a conception of a medical centre on this basis is not original. Centres of a similar nature have been built in the United States and Europe, but the erection of this building at Sault Ste Marie was inspired by lack of sufficient doctors and adequate services.

It was built by the Sault Ste Marie and District Health Association, initially three local unions of the United Steelworkers of America. That organization, in a spirit of optimism, had come to the gradual realization that the solution of comprehensive health care lies not only in providing the service, but also in not having to reimburse the patients for the cost of such services when available. By providing all its subscribers with one all-including contract, it eliminates the need for much costly accounting and other services, thereby reducing the cost to the patient, and improving the efficiency of the service provided.

This structure is intended, among other purposes, to ensure a basis for the future development of the association, and, it is hoped, will ultimately serve groups other than steelworkers, and meet broader community needs for group health facilities. It is also intended to ensure that the pro-

viding of medical care will be subject to complete professional control.

A medical director, retained by the association, is responsible for the recruitment of physicians and surgeons, and the establishment of machinery for what may be termed self-government of the medical group. At present the Health Centre serves 17,000 persons.

Another site near the hospital was originally proposed for this centre but doctors objected to such proximity, and as a result, the association had to look for a different one and finally selected a location in the suburbs.

The building is designed specifically for the group practice of medicine and is very well equipped with facilities for the purpose.

Quite distinct from the customary layout of most health centres, which generally have one particular attribute in common — conservatism, with the unconscious clinging to the known or traditional — the floor-plans here demonstrate a remarkably liberal conception and standard, yet with an acceptable method of overcoming conservatism, and have led to improved techniques of layout. Fortunately, imaginative layouts tend to be accelerating in action, and cumulative in result.

Three groups of consulting and other rooms on each floor, are associated with their own waiting rooms and, the efficiency of this planning is reflected in more natural, comfortable and human conditions for the patients awaiting medical care.

It is perhaps in the interior rather than in the exterior that this building attains its value. Its interior atmosphere, particularly on the second floor, is indeed charming, attractive and inviting. Among the agencies of atmosphere is light, and light here is brought about by vertical as well as penetrations and handsomely conceived skylights, together with light from artificial sources of nearly the same strength. It has played a major part in stimulating this remarkable space, resulting in an atmosphere of sheer lucidity, which incidentally, no photograph nor film could accurately portray. Its designer had been roused by a love-affair with light.

Over many medical institutions both large and small, there still hangs, in a rather remote way, something of the cloud of gloom always present in the ancient "maison de Dieu," a place where there was little hope for life, a place where one could go to die rather than to get well.

There is no doubt that it has been the great merit of this architect that he has been able to make a most capable attempt to reverse the symptoms of this phenomenon. Whilst walking through the building, it is manifest that he had a bold flair for the unusual and, a marked perception for the poetical. Poetry is descriptive here, and demonstrates and proves the need for a reconciliation between ways of thinking and ways of feeling, something so tragically lacking in most styles of modern architecture.



As one progresses through the building, one cannot refrain from indulging in speculation on human behavior, and this thought returns intermittently yet with great persistence. There is a level at which most architects, just like fictional writers, are prepared to accept the functional character of their commission, with the kind of cold sense it embodies, as a half value in the Cause of a larger context. The other half concerns their devoted efforts to surround the former with brilliant creations, though sometimes it seems as if these are too obviously contrived.

Yet there are signs of a kind of creeping nihilism elsewhere in architecture. The examples, influences and disguises are many, and come mostly by way of imponderable winds. Its manifestations portray something like "pop" art, an art of gesture without traditions and belief, and concerned exclusively with outer-reality and immediate experience. Its products are works of no great compulsion and, because of their lack of affinity and communication to the general public, become works of great loneliness.

The first impact of this building is of an increased mobility, generated by its plans and section. Yet, not all the virtues so inherent with the interior have come to the outside, and some doubt is experienced about its general form and quality. There is something of a nautical atmosphere present, for such a relationship is suggested by the large white mass, vertically undulated, which seems to flow

plastically over a dark reddish brown base, recalling a liner's upper structure, cantilevered over its lower deck.

Some doubt is also felt about the selection and application of several colors and materials, and whether so heavy a base (in color as well as in material) tends to deny this structure the elegance, the graceful equilibrium, the increased plastic appearance and additional power it so well deserves.

There is much evidence that structures (in the widest sense of the word) gain considerable visual strength and representation when carried out in one single material. The white sculptural dwellings of the Greek Isles, the red and brown hill towns of Italy, the cathedrals of western Europe, the brick architecture of The Lowlands, the wood structures of Japan, the reinforced concrete edifices of Perret, le Corbusier, Nervi and Maillard, all bear witness to this phenomenon. They all have that emphatic quality, so characteristic of their image, which places them so deservedly among the fine and interesting buildings of the world. And, the apparent magic here, is, that the color impression conveyed is because of the material employed.

It is felt that the aesthetic conception, on which the Health Centre is based, would likewise have been enhanced if the building had either been carried out in one single construction material, or obtained a uniform treatment in color. Here it appears as if the final result had been depreciated by the regrettable oversight of using several materials and structural

ambiguities, so favouring the substitution of a less decisive form.

In like manner, it may be necessary to look at another side of the picture, at those factors and trends which have been inimical to the development of the elevations of the upperstructure, and which seem to have hampered solutions to problems in the realm of thought and perception. This applies here to the way the undulated upperstructure has not been aesthetically defined. The floating upper part has been divided into several sections of a three-dimensional nature, but the sequence of the volumes thus created does not contribute to, nor stimulate, the success of a visually acceptable rhythm of a poetical or perhaps even a musical nature.

In spite of these criticisms, it is evident that a conscious discipline has been imposed in the unusual conception of this interesting building. In many ways it tells us the tales of two victories, one of a remarkable social achievement, the other of architecture once more brought a step closer to humanity.







# Some Considerations of Floorscape

by Michael Hough



The paved surfaces on which we tread every day of our lives have a considerable influence on how we react to our environment, and it is unfortunate that so little care or thought is given to their design. It is on the ground that we establish our pedestrian circulation, our roads, our gathering spaces and sitting areas. Paving accentuates the form and function of a space; it may infer the limits of space; it controls movement and spatial sequence; it defines the character and quality of a space by its texture, color and materials. It is important in relating a structure to the landscape, and one structure to another. The constant repetition of bland asphalt and concrete surfaces is not only visually sterile but generally fails to answer the functional problems of use.

Paving should be expressive of various scales of travel. The vehicular scale is one of speed, efficiency, smoothness; the hum of rubber tires on an uninterrupted asphalt surface where detail is of no importance and roughness a hindrance. The pedestrian scale is one of slow, rather jerky movement, where richness of color, texture and detail are of the utmost importance. People react to paved surfaces in three ways — through the senses of sight, sound and feeling. The reliance on one sense alone (sight) is often an inadequate way of expressing a design idea. The numerous signs we read every day which tell us what to do are an expression of this total reliance on sight, and an admission of failure in design. Paving materials should do the job of the sign, either by reinforcing it or eliminating it. For instance, our roads are overloaded with signs telling us what to do: *slow*, *children*, *speed limit 30 m.p.h.*, *pedestrian X*, etc. The total reliance on vision results in tedium and danger at points of



friction between pedestrians and vehicles. Since the sense of feeling may be experienced through the whole body it can be useful in automobile travel where the smoothness of asphalt is replaced by a rough surface such as cobbles, which induces a sharp change in the vibrations of the car. Crosswalks would be much safer if the road surface changed to rough cobbles or ribbed concrete for a hundred feet in the direction of approaching cars. Three senses would thus be employed rather than one to warn the motorist of approaching danger; *ie* sight, sound and feeling. Similarly, why shouldn't "Slow Down" signs be reinforced or even replaced on occasion by a rougher road surface, making travel over a certain speed uncomfortable and inconvenient. The use of different colored asphalts to denote turn off lanes, intersections, parking areas, etc., would begin to create functional definition on the pavement itself, as well as much needed visual interest.

At the scale of the pedestrian the problem is less fraught with danger than it is with petty annoyances, such as the unsightly "last resort" attitude of the diagonal pipe rail fence which stops one from cutting corners, or the nasty little signs saying "Keep Off the Grass", "No Admittance", "No Dogs Allowed". Paving materials are sensed through the feet and our reaction to different surfaces depends to a great extent on the kind of footwear worn. The visual elements of paving are no more important than the response to the feeling of comfort or discomfort underfoot and the facility with which a high-heeled shoe can negotiate a surface. Thus rough, smooth, crunchy or soft surfaces may be used to guide and direct pedestrian traffic, to induce movement, to slow it down, to divert it or channel it in a particular direction. Asphalt used for a winding path has the quality of movement and continuity. It presents no obstruction to the feet and is smooth and gentle to walk on. Surfaces such as exposed aggregate concrete, wood, brick or cobbles, having no directionality, will tend to suggest a slowing down of movement, a gathering space, or a place to stop and sit down. Rough, uneven stones or crunchy gravel will tend to discourage movement onto forbidden areas, thus achieving by design what the sign tries to do through a lack of it.

In Canada the problem of climate influences the design of the floorscape.

Snow, for instance, is most efficiently removed from smooth, hard surfaces, and since in winter there is little inducement to linger outside, snow is cleared along specific circulation routes. Thus paved spaces may respond in design to winter usage with major circulation routes and adjoining sitting and gathering areas made up of contrasting textures and materials. Glare and heat from large uninterrupted paved surfaces are unpleasant, and create unfavorable microclimatic conditions. Since the Canadian climate is one of extremes of heat and cold the optimum size of a space has to be considered in the light of the microclimate that will be induced by exposure to sun and wind. Similarly the paving materials must be considered in relation to the shadow cast on them from buildings, canopies or trees, and the various colours and textures that can be used to counteract heat and glare. The selection of materials is dependent upon the action of frost and the winter use of salt. For instance, weak concrete, trowelled to a smooth surface, tends to spall if subjected to salt. Small rounded exposed aggregates come loose due to frost action.

Other elements occurring in paved areas, such as manhole covers, metal grilles at the base of trees, catch basins, areaway grilles and so on, should be considered as a part of the floorscape and integrated into the overall design. Many of these elements have an innate richness and character which can greatly enhance the visual pattern of the floor while having a basically functional purpose.

These are a few of the considerations that affect the floorscape. Good pavement design is not an unnecessary luxury, it is a functional response to the need to control movement and circulation and the requirements of climate. It is an integral part of architecture. If the design of the floorscape responds successfully to these conditions the pure enjoyment of rich textures and surfaces on the ground begins to have some significance.

*Michael Hough, ARIBA, is a graduate in architecture from the University of Edinburgh, and obtained a Master of Landscape Architecture degree from the University of Pennsylvania in 1958. He is lecturer in landscape at the School of Architecture, University of Toronto and engages in private practice. He last contributed to the Journal on his landscape plan for Scarborough College (Journal, July, 1964, Page 66.)*

1 (page 55) *Manhole covers and metal covers for service ducts should form a part of the design of the floor*

2 *The gathering space, off the main circulation route. A change in materials consistent with the change in function between congregating people and moving traffic*

3 *Asphalt is a plastic material indicative of flowing lines and continuous movement*

4 *The "last resort" attitude of diagonal pipe rail fence*

5 *The problem of worn grass verges solved by eliminating the grass. An encouragement to keep to the sidewalks by the use of a rough texture unpleasant to walk upon*

6 *Rough textured stones as protection for the base of street trees*

7 *The circulation route and the less active spaces associated with it, expressed by a change in materials. Contemporary applications of this idea have relevance in the Canadian environment*

8 *The vehicular road. The change in function and therefore speed of the vehicle is logically expressed and reinforced by the change in materials*  
*Photos by the author*





2



6



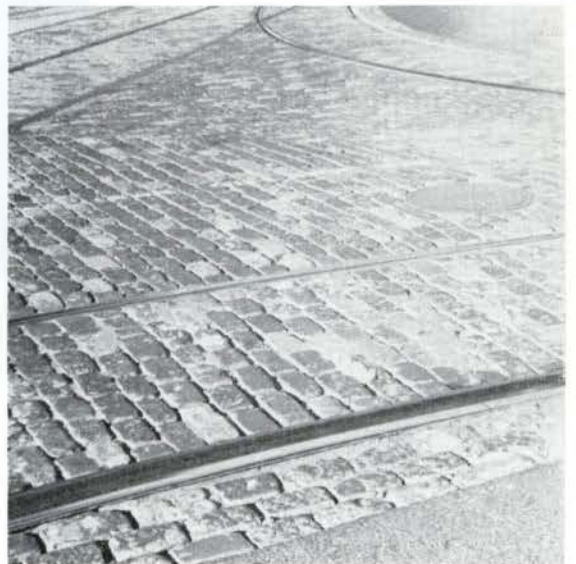
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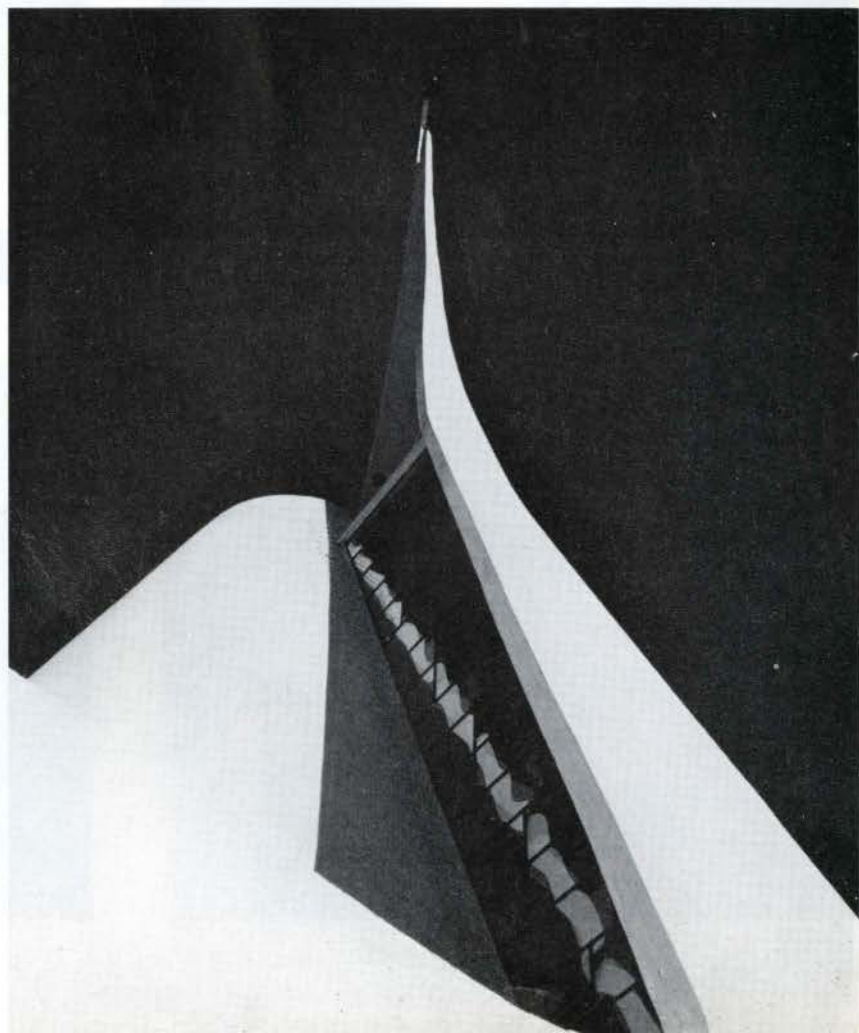
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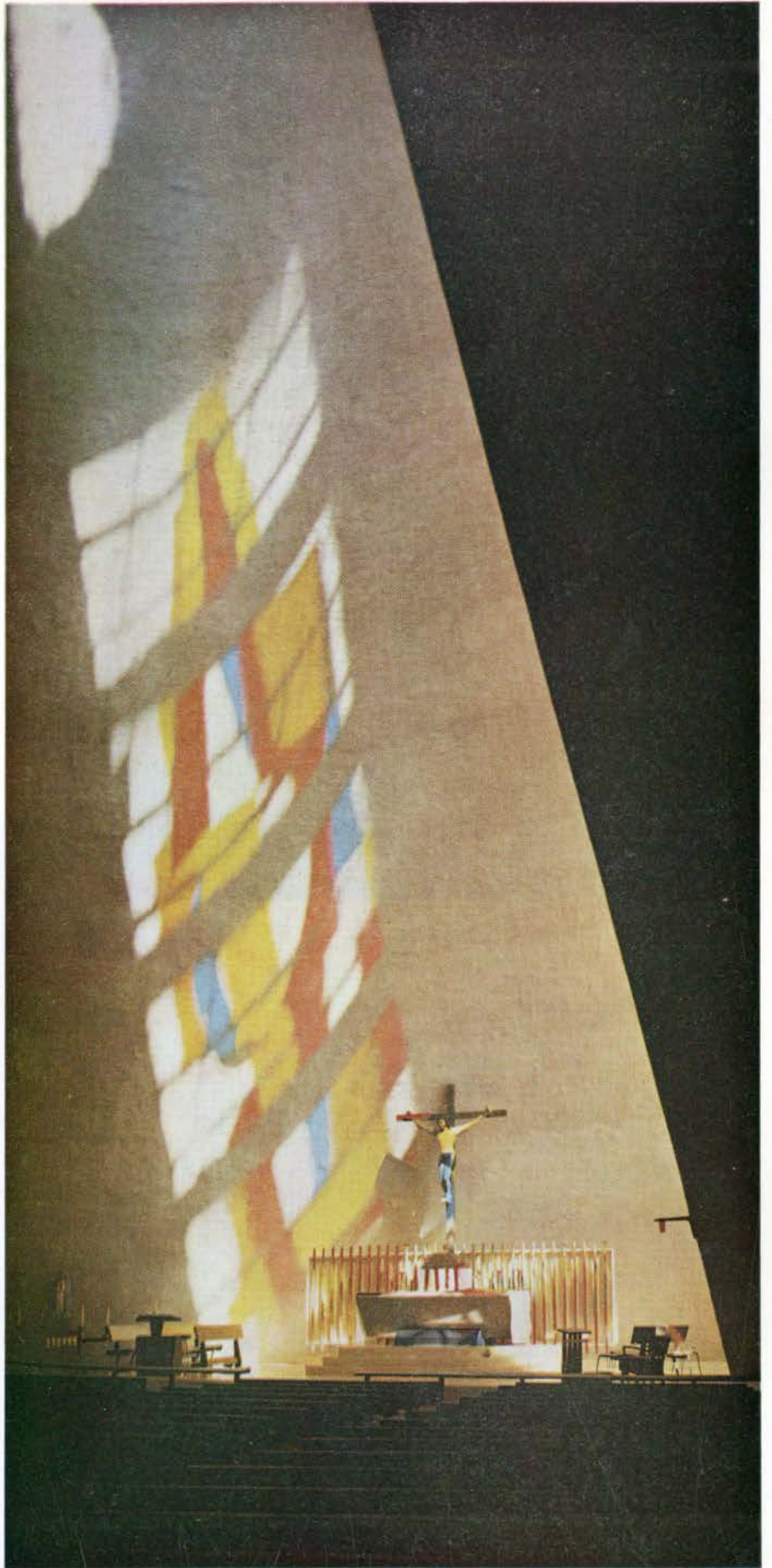
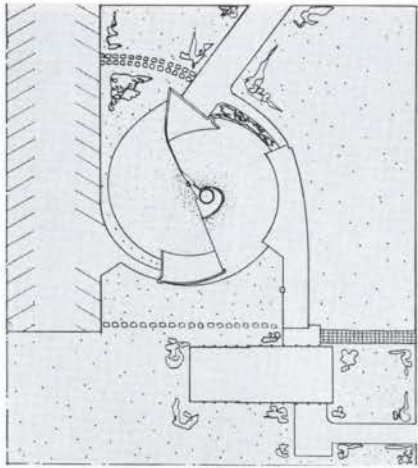
## Eglise Notre-Dame de Fatima Jonquiere, P.Q.

Architectes / Desgagné & Côté

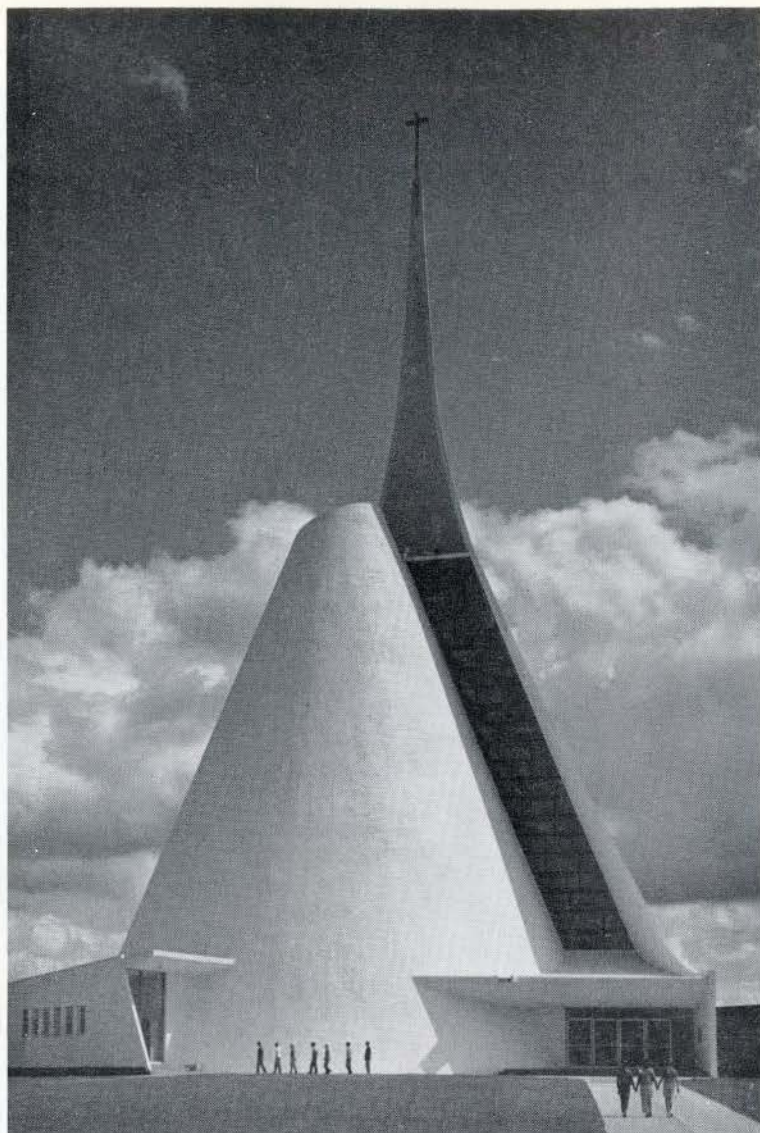
Ingénieur en charpente / Louis Lemieux  
Propriétaire / La Paroisse Notre-Dame de Fatima  
Entrepreneur général / Dufresne & Racine Inc.  
Photographie / Ellefsen











Cette église desservant une paroisse catholique romaine, contient environ 800 places. En annexe, se trouvent une sacristie, des bureaux et le presbytère. En sous-sol seront aménagées des salles de réunion.

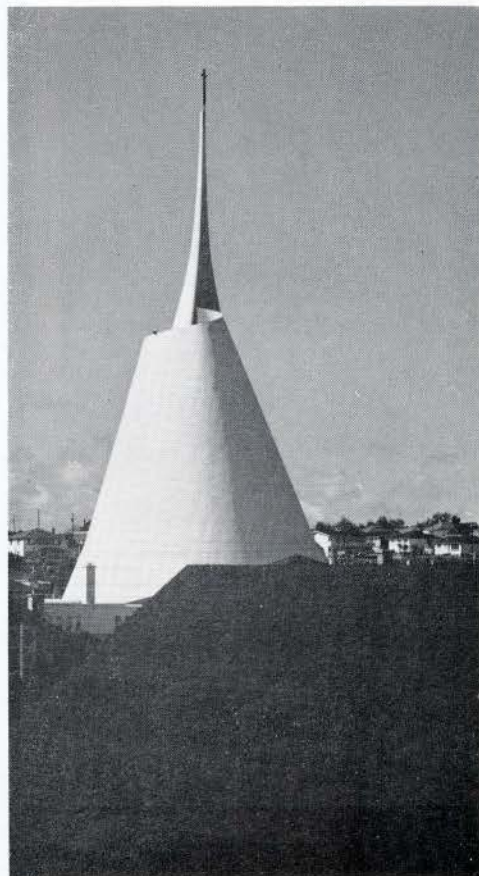
Essentiellement, la structure se compose d'une coque de 4" d'épaisseur en béton projeté GUNITE.

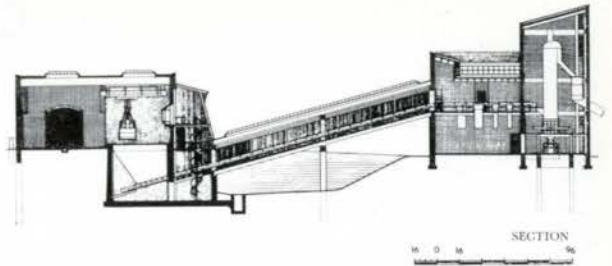
Sur la surface intérieure, l'isolation Thermique et acoustique est assurée par une épaisseur de 3" d'amiante projeté.

A l'extérieur, on a appliqué sur la surface de béton 2 couches d'Hydrocide Color-coat de Sonneborn.

L'autel est en granit rouge poli, les bancs, confessionnaux, table sainte et autre boiserie sont en merisier teint.

Revêtement de sol en mousse plastique "Walk-Ease".





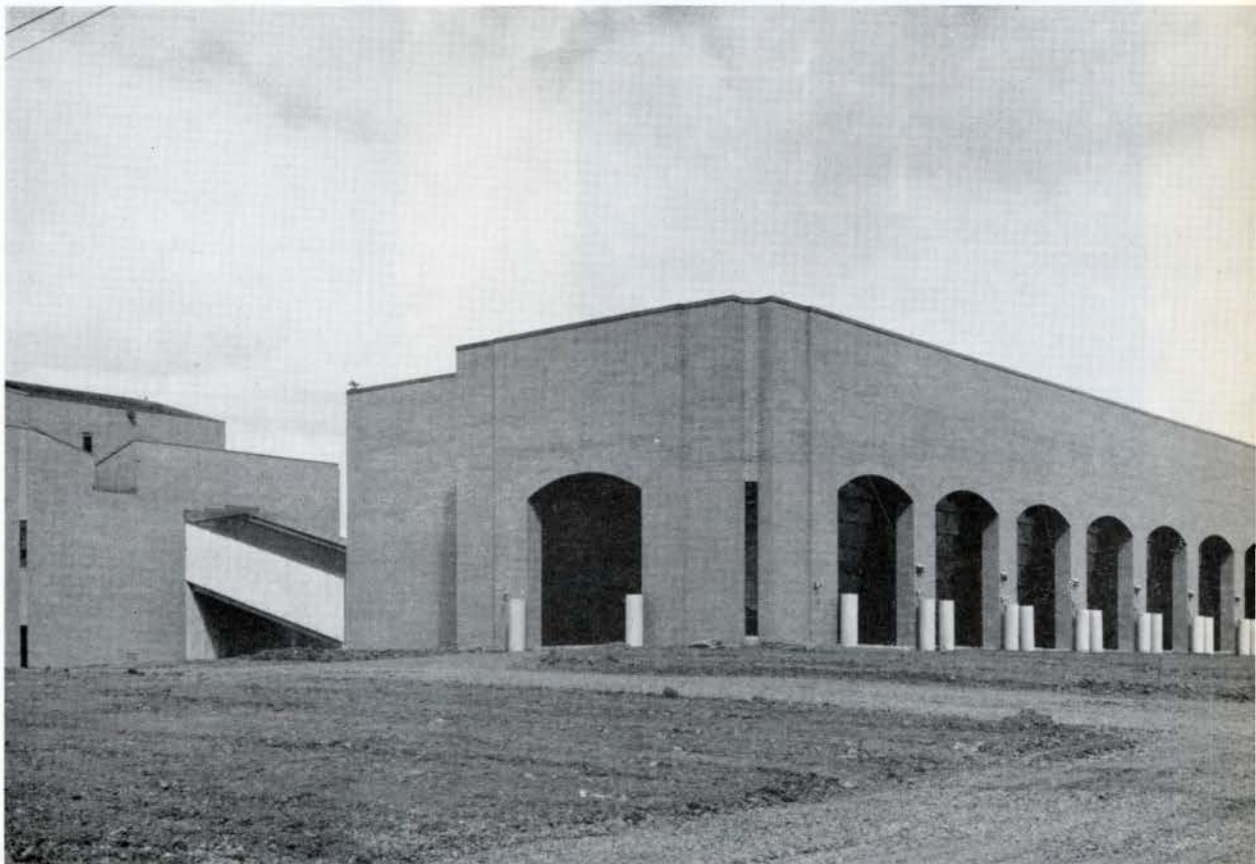
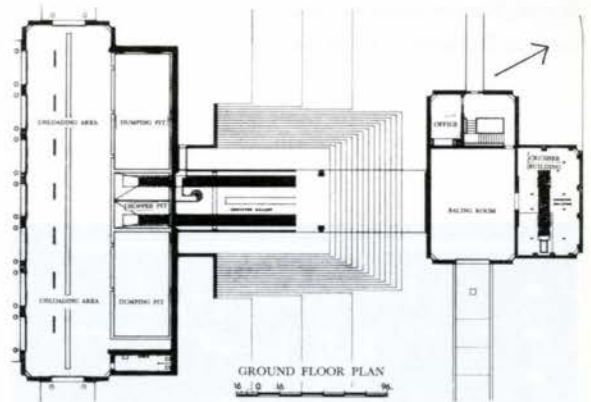
# Sanitary Refuse Collectors Reduction Plant Ville d'Anjou, P.Q.

Architects/Bland, LeMoyne, Edwards, Shine

Consulting Engineers/  
Beauchemin, Beaton, Lapointe

Owners/  
Sanitary Refuse Collectors Inc.

General Contractor/  
Quémont Construction Ltd.

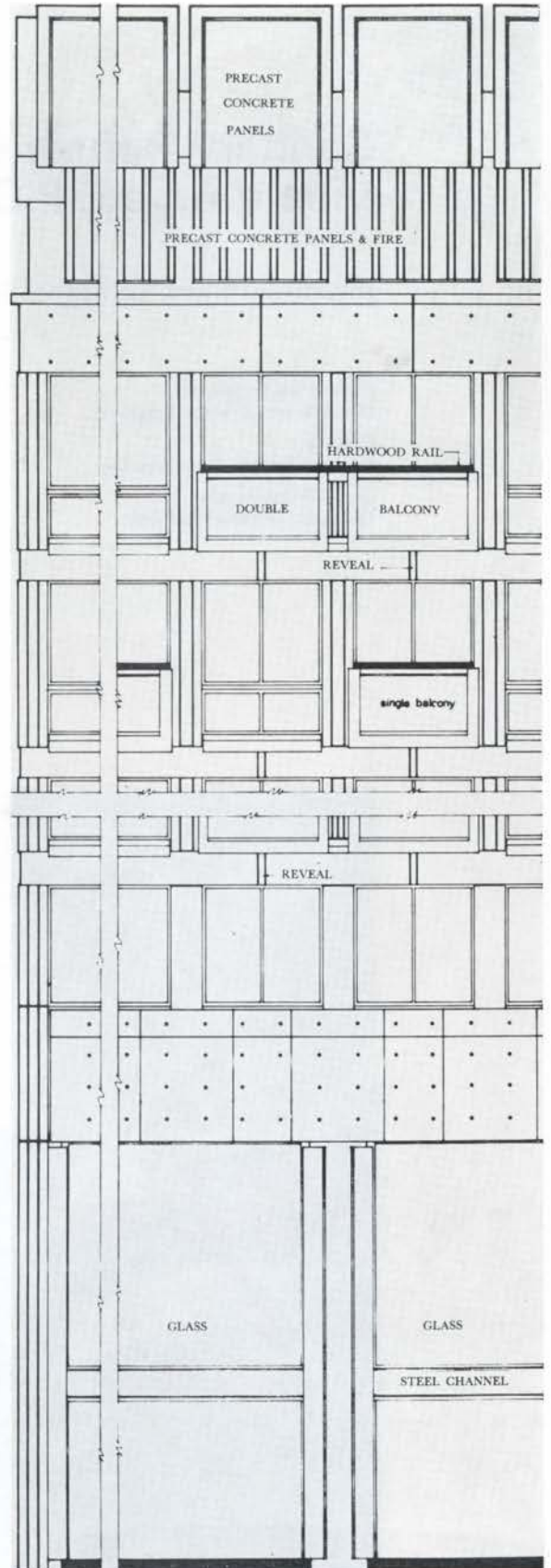
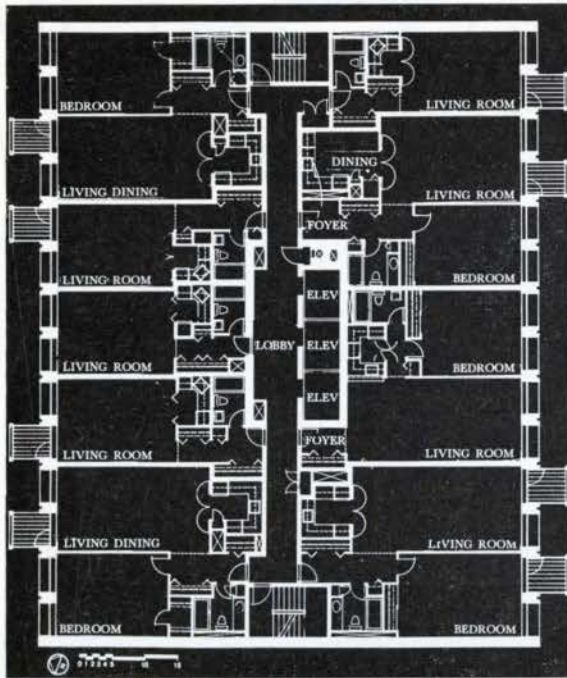


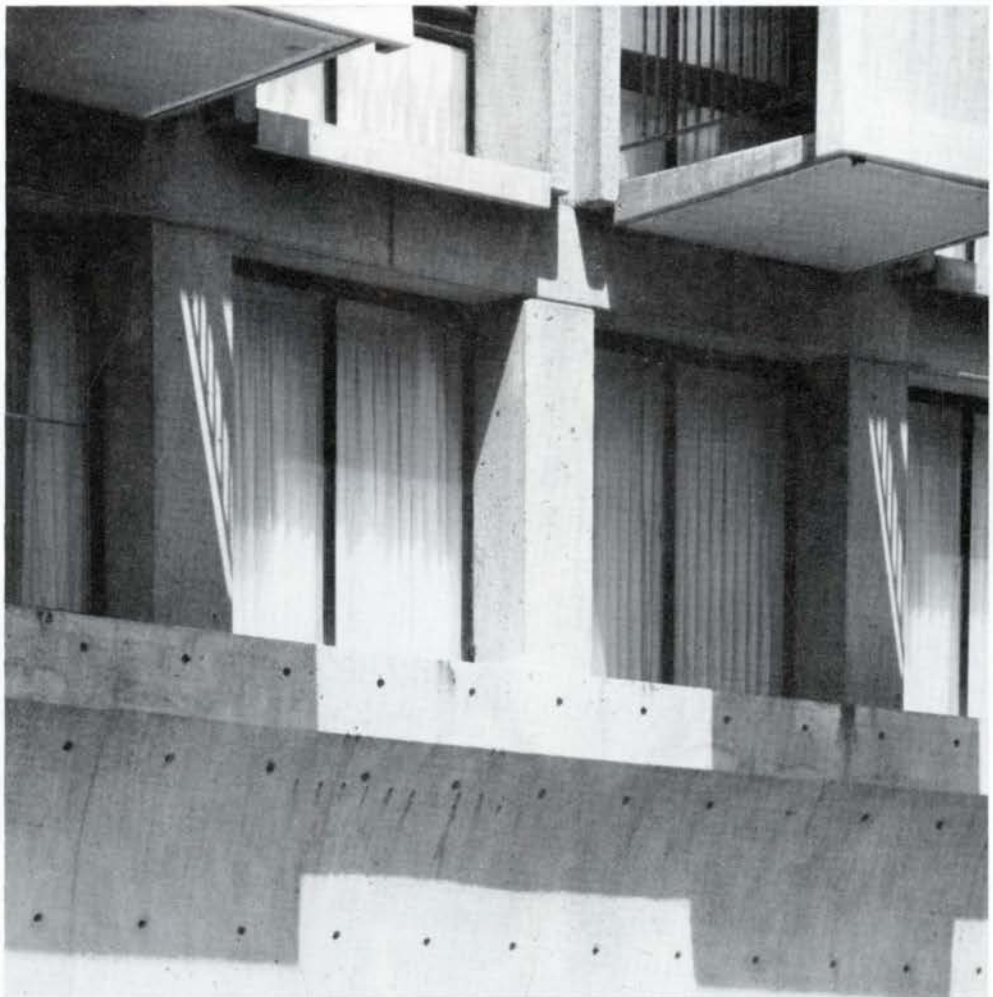


# Cantlie House/Apartment Hotel Montreal, P.Q.

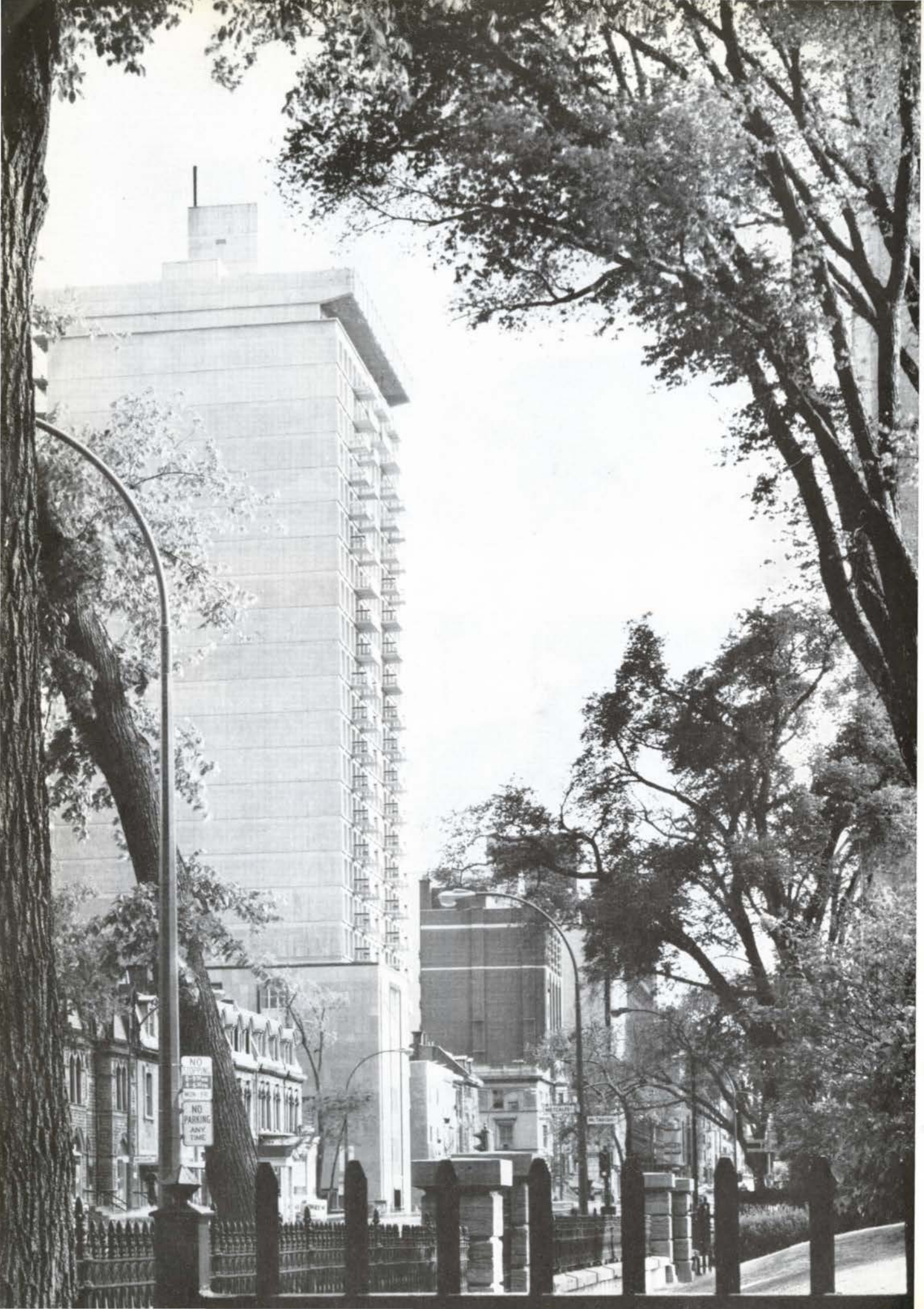
Architect/Ian Martin

Consulting Engineers  
Structural/Shector & Forte  
Mechanical & Electrical/Brais, Frigon & Hanley  
Owner/Raman Investments Ltd.  
General Contractor/Ain & Zakuta











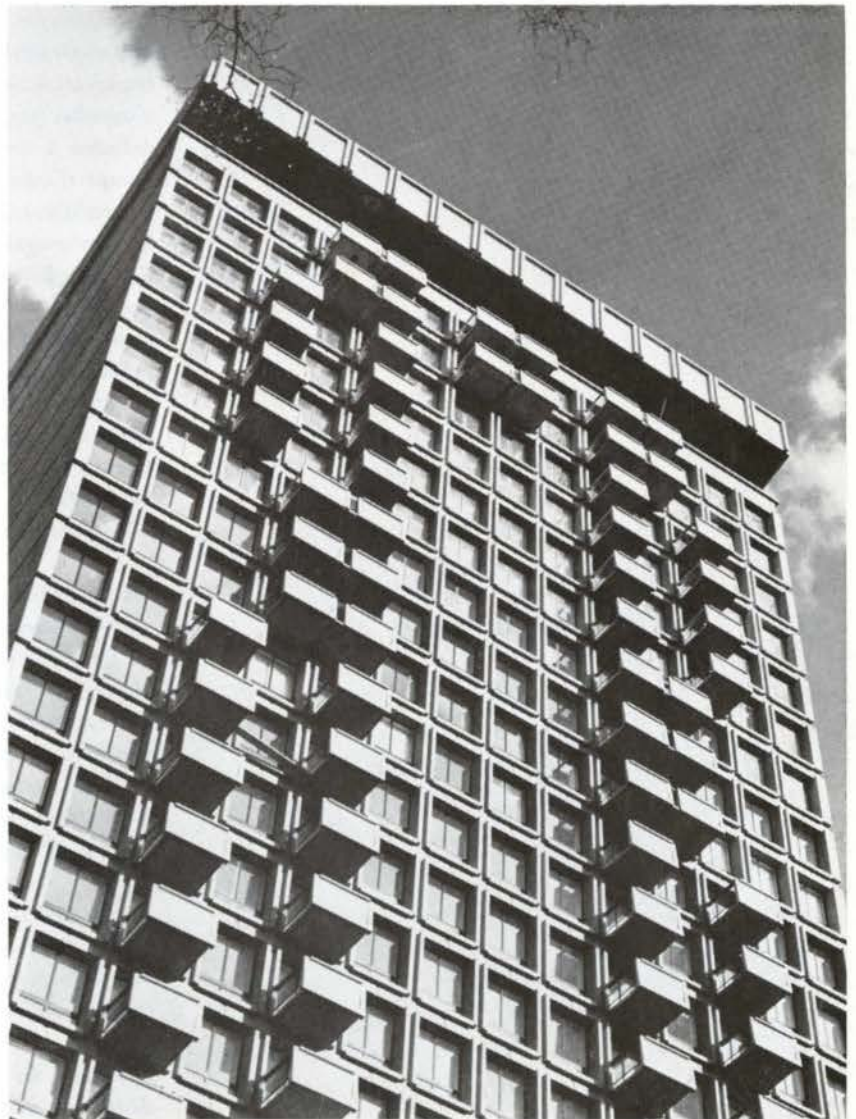


#### MATERIALS

The exposed concrete structure was sand-blasted to soften the texture and appearance of the concrete, and to bring out the natural coloring of the concrete, which is similar to the tone of the beautiful old sandstone buildings in the vicinity. The balcony fronts, window sills and the parapet panels are precast concrete of the same mix as the poured concrete, thus unifying the external coloring and texture of the building. At ground floor level, exposed aggregate was used on the main columns and the plaza, and the same material was used on the core wall in the main lobby. The windows, which extend from the ceiling to a 6" high baseboard, are double-glazed units set in painted galvanized steel sash. The perimeter baseboards were designed to offset only the cold-wall effect of the windows; the actual heating and cooling of the apartment is done by fan coil units within the apartments thermostatically controlled in each room.

#### ACOUSTICS

Lightweight concrete block, plastered, is used around all stair wells and elevator shafts. Partitions between apartments are of steel studs mounted on isolation pads; one side is plaster on expanded metal lath on pencil rods on resilient attachments, the other side is plaster on gypoc lath on resilient attachments. The partitions within the apartments are two-inch plaster. This system was used to create two varying density membranes to stop sympathetic vibrations, thus increasing sound reduction. The system was tested on the site and compared with other constructions. The results showed that not only was this a more economical system due to its weight, but that it compared favorably with other systems.





# La contribution des pays hautement industrialisés à l'architecture des pays en voie de développement

*Extrait du rapport par J. P. Vouga, architecte, DPLG, FAS, SIA, président du Comité de liaison des Commissions de travail de l'UIA, Lausanne, au 7e Congrès de l'Union internationale des architectes, La Havane, 1963.*

## *Préambule*

Par le choix du thème du VII<sup>e</sup> Congrès de l'UIA, les architectes du monde entier entendent montrer la responsabilité de premier plan qu'ils ont assumée jusqu'ici et qu'ils continueront à assumer pour promouvoir partout l'amélioration des conditions d'existence des hommes.

Dans tous les domaines de la planification, dans toutes les phases de l'exécution des programmes, l'action de l'architecte s'inscrit dans la vie sociale de l'homme. Elle crée à la fois le cadre et des conditions de sa vie privée, de ses activités, de sa récréation et de son hygiène.

A tous les niveaux des sociétés organisées, local, régional, national, continental, international, les architectes, par leur volonté concertée aident à jeter les bases d'une société harmonieuse.

Devant les problèmes immenses que pose aujourd'hui au monde l'éveil à l'indépendance des pays naguère encore coloniaux, devant l'étendue des misères que cette prise de conscience fait désormais apparaître au grand jour mais que la liberté nouvellement conquise ne peut à elle seule résorber, l'ambition du thème semble dépasser quelque peu le cadre des congrès précédents de l'Union internationale des architectes.

D'innombrables institutions groupées au sein des Nations Unies n'ont-elles pas abordé ce sujet avec une ampleur de documentation et de moyens sans comparaison avec les possibilités d'une organisation telle que la nôtre? Les Nations Unies elles-mêmes n'ont-elles pas, tout récemment encore<sup>1</sup> donné la plus large diffusion à une série de recommandations rédigées par un groupe d'experts hautement qualifiés? De nombreuses expériences d'assistance bilatérale ne sont-elles pas déjà en cours et ne conviendrait-il pas de faire confiance à leurs promoteurs?

En affirmant pourtant leur volonté d'orienter désormais leurs propres travaux vers ces problèmes, les architectes seront donc conscients qu'un écueil les guette: celui de vouloir refaire eux-mêmes — mais mal — le travail accompli par les gouvernements et par les Nations Unies; celui de se livrer sans moyens adéquats à des enquêtes statistiques dans des domaines où les travaux des institutions internationales donnent pleinement satisfaction.

C'est donc dans un autre sens que leur action s'orientera.

On ne répétera jamais assez, en effet, que le rôle des architectes, de leurs associations locales, régionales, nationales comme de l'UIA est de rappeler sans relâche que les progrès de la technique et de l'économie ne sont pas une fin, mais un moyen.

Les architectes auront donc toujours à coeur d'humaniser les doctrines de la planification, d'en mettre en évidence les facteurs sociaux et psychologiques, de faire en sorte en un mot que les nouveaux milieux dans lesquels vivra l'homme soient aptes, sinon à permettre la pérennité de traditions qui peuvent être révolues, du moins la création de traditions nouvelles dans lesquelles il affirmera sa dignité d'homme.

Une autre face de l'activité multiple des architectes, la face complémentaire, consistera à mettre l'accent sur les tâches concrètes, à suggérer des expériences pratiques, à tirer surtout des

<sup>1</sup> Rapport du groupe spécial d'experts de l'habitation et du développement urbain, Nations Unies, New York 1963.



actions déjà en cours, les conclusions précises qui permettront le progrès immédiat.

### *L'enseignement de l'expérience des pays hautement développés Généralités*

Comme l'ont demandé les organisateurs du congrès de La Havane, les pays développés qui y participent ont exposé, parfois longuement, parfois plus brièvement, leurs expériences les plus valables.

Ces expériences sont toutes relativement récentes. Comme on le verra plus loin, elles sont très diverses et très difficilement comparables. Mais elles ont ceci de commun que les pays qui les ont conduites ont atteint, la plupart au cours du siècle dernier, le degré de développement économique à partir duquel il ne s'agit pour eux que d'exploiter plus judicieusement et surtout d'une manière plus équitable le potentiel d'activités agricoles et industrielles qu'ils se sont constitué.

Leurs difficultés actuelles sont certaines, quelquefois considérables. Elles sont dues en partie à l'accroissement démographique que valent aujourd'hui au monde les progrès de la médecine et de l'hygiène.

On relève d'ailleurs à ce sujet que les difficultés des pays en voie de développement sont gravement accrues par le fait que la poussée démographique de l'époque moderne se manifeste pour eux au moment précis où ils devraient vouer tous leurs efforts à leur développement économique. Elle va même jusqu'à la paralyser complètement, accentuant l'inégalité choquante de la diffusion de la science et de la technique.

Pour être de nature très différente, l'expérience des pays n'en est pas moins d'autant plus valable qu'elle s'accompagne d'une réelle volonté d'assistance technique effective dans le cadre de la coopération internationale.

### *Expériences en matière de planification régionale Expériences sur le territoire national*

La planification, au sens où l'ont entendu les auteurs dont nous analysons les exposés, "englobe l'ensemble des activités... dont le but est une évolution de la société vers un maximum de prospérité et de bien-être". En théorie, il peut y avoir autant de formes de planification qu'il y a d'activités à planifier: planification économique, planification sociale, planification physique. Une planification, à quelque échelle que ce soit, n'a de sens que si chacun de ses aspects fait partie intégrante de l'ensemble. C'est toutefois à la *planification physique*, à l'*aménagement des territoires* que se réfèrent nos auteurs.

Il est d'autre part évident que la planification connaît une autre forme d'interdépendance: la cité doit tenir compte des intérêts de la région, la région de ceux de l'Etat et réciproquement. L'action des planificateurs se déroule dans un perpétuel échange de données recueillies à tous les niveaux et dans tous les secteurs.

### *Expériences dans des territoires de pays en voie de développement*

Deux sections nationales proposent à notre analyse des expériences acquises dans des territoires d'outre-mer. Leur intérêt

est de premier ordre étant donné la largeur de vues avec laquelle elles sont présentées. Le rapporteur s'efforcera de ne tenir compte que des aspects purement géographiques des problèmes, sans aucun égard à leur arrière-plan politique.

Les rapporteurs français présentent trois exemples de développement régional en cours depuis plusieurs années.

Dans le territoire d'*Abidjan* (Côte-d'Ivoire), le rôle de la capitale économique et administrative étant acquis, la distribution des centres régionaux, groupés sur un réseau de communications existantes n'étant plus mise en discussion, le développement s'est porté surtout sur l'équipement des centres secondaires en édifices communautaires tels qu'écoles, dispensaires, sièges d'assemblée, éléments indispensables à l'éducation du plus grand nombre et à l'élévation du niveau social de l'homme. Nous reviendrons, plus loin sur les intéressantes expériences acquises en matière de logements et de techniques de construction.

Enfin l'expérience de *Niamey*, capitale du Niger, est avant tout la construction d'une vaste unité de voisinage dont nous parlerons au chapitre suivant et qui trouve sa justification dans le fait que la cité est complètement coupée du fleuve Niger par des terrains inoccupés mais aisément utilisables.

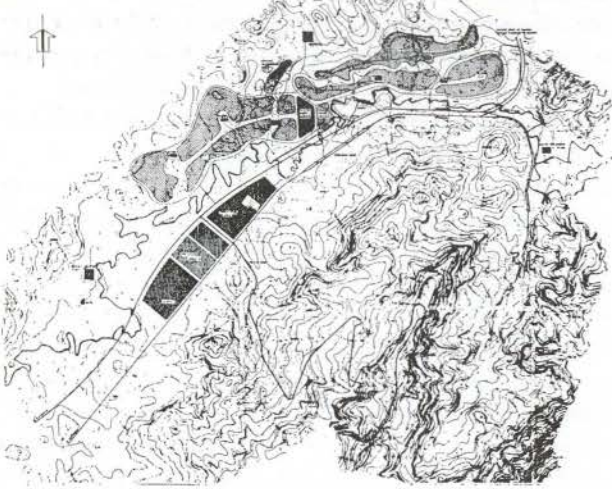
Nous croyons pouvoir citer ici, pour leur rapport étroit avec le thème de cet congrès, quelques principes énoncés par le rapport de la section française:

"Il est possible d'affirmer qu'une économie du travail et particulièrement du travail qualifié peut triompher des conditions naturelles les plus médiocres. Ce qui revient à dire que la formation des hommes est essentielle. Il en a bien été ainsi dans les Etats industrialisés qui ne sont parvenus à la richesse et au bien-être qu'après être passés par de longues périodes d'épreuves"... "Il est nécessaire de mobiliser la pensée et l'énergie, ce qui implique une continuité dans l'action. La formation de contre-maîtres, de chefs de chantier, de chefs de fabrication, d'auxiliaires médicaux... devra être largement accrue en vue d'assurer le développement et l'application des "idées enchaînées" qui constituent un plan de développement économique et social." Cette harmonisation des actions doit se déployer dans des objectifs successifs où figurent, dans l'ordre de leur urgence, les problèmes d'énergie, le ravitaillement en eau, l'irrigation et l'épuration des eaux usées, l'hygiène, l'élaboration enfin de méthodes de construction adéquates.

Enfin, "l'éducation de la masse est en cause. Elle doit prendre un caractère propre tenant compte non seulement de la population, mais de sa dispersion. La vulgarisation agricole et le développement des communautés rurales pour lesquelles l'habitation reste l'abri et l'outil sont l'objet de méthodes appropriées de diffusion et d'assistance technique...".

De son côté, la *Suède* nous offre une contribution de choix aux thèmes en discussion. Avec méthode et sens pratique, des urbanistes suédois ont entrepris l'étude d'une région inexploitée du *Libéria* la région minière du Nimba. Ce vaste projet, entrepris dans le cadre d'un accord bilatéral d'assistance technique et d'aide financière est en voie d'exécution. Il fait preuve d'une parfaite connaissance des conditions existant au Libéria et d'une sûreté de choix qui laissent bien augurer du succès de l'opération. Nous reviendrons aux chapitres suivants sur les aspects de détail de la réalisation. Il convient ici de la voir sous





l'angle de la planification régionale et de relever quelques-uns de ses aspects.

Le projet prévoit:

1. La cité de *Nimba* dont la population dans l'étape ultime sera au total de 14000 habitants dont 2300 employés et ouvriers de la compagnie minière et 630 employés de l'administration civile.
2. Le port de *Buchanan*, destiné à la manutention des minerais, avec un personnel respectivement de 350 et 100 employés et ouvriers et une population totale de 2500 habitants, non compris le port de pêche existant.

Les emplacements respectifs des deux cités sont à proximité des lieux de travail mais choisis en fonction des sites qui se révèlent très heureux. Le relief permet des plans du plus vif intérêt, largement conçus, variés, organiques. Les quartiers résidentiels, bien reliés entre eux, ont tous leur caractère propre. Les aires de travail sont judicieusement placées; les centres urbains et locaux sont au bon endroit; l'équipement est irrémédiablement étudié: station de pompage, station d'épuration, traitement des déchets, ravitaillement en énergie, routes rapides, dévestitures, voies ferrées, hôpital, sports. Tout concourt à un sain équilibre.

Il reste à envisager l'aspect social du projet et à relever son étroite dépendance d'une seule entreprise industrielle à laquelle tout le financement est lié. Certes, le sort entier des deux cités sera en cause si l'entreprise ralentit son rythme de production ou simplement modifie ses objectifs.

N'est-il cependant pas rationnel de créer, en premier lieu, les logements et leurs installations connexes à proximité des lieux de travail? N'est-ce pas le meilleur moyen de concourir au développement des régions déshéritées que de fournir au travailleur à la fois un emploi et une habitation permanente? On retrouve cette préoccupation dans le rapport déjà cité des experts des Nations Unies. Il ne saurait donc être question que l'employeur se désintéresse de cet aspect essentiel. En revanche, la mesure dans laquelle la liberté et les aspirations personnelles de l'homme n'en sont pas affectées demeure à nos yeux le critère essentiel. Ce souci qui doit guider les urbanistes sera toujours la clef de leur vision particulière des problèmes de la planification.

### Expériences faites dans des pays en voie de développement

Il nous reste à parler de deux expériences faites en Afrique par des architectes français et suédois.

La ville de *Niamey* (Niger) disposée paradoxalement à une notable distance du fleuve Niger a entrepris une vaste opération de développement qui porte notamment sur un plateau dominant le fleuve au sud-est de la ville et où seront édifiés, outre les quartiers d'habitation, un certain nombre d'installations et de constructions telles que promenades et jardins publics, hôtels de tourisme. On remarquera les faibles densités qui sont respectivement pour ce terrain d'ensemble et pour l'habitation seule de 95 et de 130 habitants à l'hectare. Ces densités semblent à la mesure des conditions de vie sur place.

Les deux cités de *Nimba* et de *Buchanan* (Libéria) dont nous avons déjà parlé, ont fait l'objet de très intéressantes réalisations d'un groupe d'urbanistes suédois. Nous avons déjà dit l'intérêt du plan directeur des cités. La disposition des édifices résidentiels nous paraît à son tour logique et rigoureuse encore que la multiplication des pavillons de trois à quatre types seulement fasse naître une impression d'ennui que seule contrebalance la végétation tropicale. La construction est particulièrement dispersée avec 29 habitants à l'hectare.

Avec cette réalisation prend cependant corps, sous nos yeux, avec une richesse de documentation exemplaire, une forme authentique de cité nouvelle africaine dont l'exemple mérite d'être étudié avec le plus grand soin et dont il serait souhaitable que des enquêtes sociologiques approfondies nous donnent, ces années prochaines, une plus utile connaissance.



PLAN

0 5 10 METERS



### *Expériences en matière d'habitation*

Nous ne pensons pas devoir donner aux deux derniers chapitres l'importance des deux premiers et cela pour les raisons suivantes :

1. Le thème d l'habitation et celui des techniques de construction ont fait l'objet des congrès précédents de l'UIA, mais ne sont pas le thème du présent congrès.
2. L'abondance de matière présentée notamment par les pays d'Europe orientale, constitue une documentation de premier ordre qu'il sera précieux de consulter et dont nous avons tenté de donner un aperçu dans le tableau No 2. En donner un commentaire serait — nous semble-t-il — nous orienter dans une voie où d'autres sont mieux outillés que nous pour éveiller l'intérêt et provoquer d'utiles réactions.
3. Toute analyse comparée de cette documentation conduirait extrêmement loin et nous éloignerait considérablement de notre objet qui est le progrès de l'architecture dans les pays en voie de développement.

En revanche, nous accorderons une place aux considérations qui accompagnent les exposés français, suédois et japonais parce qu'elles sont indiscutablement en mesure d'apporter un concours précieux aux pays que nous sommes en mesure d'aider.

### *Formes d'habitat*

Les expériences françaises d'Abidjan et de Niamey, dont nous avons déjà parlé, nous ont paru extrêmement enrichissantes. C'est ainsi que le problème est traité très différemment dans les villes où les autochtones sont en mesure de s'adapter à de nouveaux types de logements et où il est donc possible de rechercher des types de construction réalisés en fonction du seul climat, alors que dans la brousse les coutumes locales influent tant sur la recherche de l'implantation que sur le choix de ces matériaux.

Les types d'habitation constituent en ville une gamme qui peut comporter comme à Niamey :

- a) des habitations "en dur" en immeubles de trois étages ou même plus élevés;
- b) des logements moyens à rez-de-chaussée avec cour intérieure fermée rendant possible une densité élevée puisque la parcelle est de 200 m<sup>2</sup>, mais assurant une intimité suffisante;
- c) des logements simples du même type mais réduits dans leurs dimensions à 144 m<sup>2</sup> (12 x 12 m.) ou même à 96 m<sup>2</sup>;
- d) des "logements" de type extensible composés à l'origine d'un terrain nu, mais entièrement équipé, quelques murs et des nattes clôturant la parcelle, un bloceau constituant l'amorce des stades suivants. Le logement peut s'agrandir par des acquisitions successives ou par les soins du locataire lui-même.

Dans la brousse, les expériences désastreuses faites en laissant les habitants utiliser eux-mêmes imparfaitement des matériaux nouveaux ont conduit à effectuer des recherches visant surtout les techniques de construction. Les Suédois ont, pour leur part, mis au point, au Libéria, des pavillons à toitures largement débordantes et à ventilation transversale dont les techniques de fabrication présentent plus d'intérêt que le pavillon lui-même.

Enfin, les Japonais sont aux prises avec des problèmes de climat, qui se retrouvent dans certaines régions sous-développées et surtout avec les problèmes des tremblements de terre. On sait qu'ils ont résolu ce problème par des constructions légères en bois, d'un raffinement inégalé. Mais les incendies font des ravages et les Japonais étudient de nouvelles structures de bâtiments à plusieurs niveaux, adaptés à leur mode de vie. Il est intéressant, à ce point de vue, de citer une de leurs conclusions qui peut servir de règle pour d'innombrables autres cas :

(La manière de vivre est la base du plan du logement. La manière européenne s'est graduellement implantée avec les nouveaux équipements de type européen. C'est donc le rôle de l'architecte japonais de soumettre cet équipement à la manière de vivre propre à la tradition et au climat japonais.)

Nous pensons n'avoir rien à ajouter à cette excellente position de principe.

### *Expériences en matière de techniques de réalisation*

Ici encore, les renseignements recueillis nous éloignent de notre but plus qu'ils ne nous en rapprochent. Il nous faut tout de même relever certains dangers, maintes fois signalés, mais toujours actuels.

Nous voulons parler du danger de laisser la technique l'emporter sur la qualité du logement et sur la satisfaction des besoins essentiels de l'homme. Entre les pavillons de banlieue aux expressions disparates, économiquement et architecturalement irrationnels et les écrasants quartiers de blocs, monotones dans leur forme comme dans leur disposition, se trouvent précisément les habitations heureuses, variées dans leurs volumes, groupées autour de larges espaces, conçues pour être exécutées rationnellement dans une unité de technique permettant toutes les formes de la préfabrication sans être influencées par elle.

Il se trouvera toujours assez d'économistes et de financiers de tous milieux pour imposer aux architectes des concessions de tous ordres, pour que les architectes puissent se dispenser d'être eux-mêmes les porte-parole des écrasantes contraintes techniques et économiques et pour qu'ils s'acharnent au contraire à évoquer sans cesse le respect de la dignité humaine.

Cela rappelé, il est cependant intéressant de connaître plus en détail celles des techniques nouvelles qui sont plus particulièrement adaptées aux pays en voie de développement.

A dire vrai, la misère est telle dans certaines parties du monde qu'il peut paraître vain de se demander quelles techniques pourraient être appliquées lorsque tous les moyens font défaut...

Il est pourtant remarquable que cette situation de départ est souvent moins dramatique que celle que provoque le mauvais usage de certains matériaux. La forme la plus efficace d'aide à apporter est donc avant tout celle qui consiste à donner aux habitants des conseils pour la mise en œuvre des matériaux simples qui sont à portée : terre, bois, bambous, tôles, amiant-ciment, agglomérés de ciment. Ces conseils devront veiller particulièrement à assurer l'isolation thermique par des matériaux de faible inertie et la ventilation par des solutions simples. Des moniteurs devront être formés; des coopératives pourront distribuer les matériaux ou prêter l'outillage néces-



saire. Mais il faut garder à l'esprit que la plus grave pénurie, celle qui rend avilissante la vie dans les bidonvilles ou dans les favelas n'est pas celle des habitations, si désastreuse soit-elle, mais certainement celle de l'équipement urbain et que la première chose à faire sera dans tous les cas, de pourvoir au ravitaillement en eau potable et à l'évacuation des eaux usées, y compris leur épuration (ar les pays d'Europe font aujourd'hui l'expérience désastreuse de la pollution des eaux publiques, par les égouts non régénérés), à la distribution de courant électrique, et à la construction de chemins de dévestiture décents.

Il n'est pas interdit dès lors de penser à certaines techniques nouvelles qui pourraient se substituer aux techniques ancestrales ou les améliorer. C'est ainsi que la préfabrication à pied d'œuvre de panneaux porteurs en béton poreux mise au point au Libéria par les Suédois semble fort judicieuse. C'est ainsi également que la livraison de pièces d'ossatures préfabriquées comprenant portes et fenêtres ainsi que chevonnage, mais laissant à la construction traditionnelle le soin de fermer les vides et de couvrir le toit par les moyens du pays a fait également ses preuves depuis longtemps, notamment dans les programmes scolaires.

Il n'est sûrement aucune autre méthode à généraliser que celle de l'observation attentive et du bon sens. Elle devrait permettre de libérer l'homme de la pire misère concevable, celle du logis.

### *Conclusions*

Toutes nos observations ont montré à l'évidence que les enseignements les plus valables, ceux qui ont en particulier le plus d'intérêt pour les pays en voie de développement sont ceux de la planification physique, de l'aménagement des territoires. Toutes les autres activités ne peuvent que s'inscrire dans les éléments de la structure conçue par l'aménagement.

C'est donc par quelques remarques concernant la planification que nous souhaitons conclure. Nous emprunterons les premières au rapport de nos amis hollandais:

"La planification est manifestement une opération rationnelle, mais la pensée et l'exécution rationnelles ne commencent que lorsque la planification accepte comme points de départ un certain nombre de données pouvant être elles-mêmes absolument irrationnelles."

C'est pourquoi la planification doit "approcher les problèmes de la façon la plus large possible", se rappeler que le plan, si étendu soit-il, fait toujours partie d'une unité spatiale plus vaste à laquelle il doit s'intégrer, "tenir compte de l'histoire, de la culture et des particularités psychologiques et physiques de la population", afin de "créer un milieu où l'homme puisse vivre". La planification, doit "utiliser au maximum les conditions naturelles existantes" et se rappeler que "tout bon plan est unique et ne peut servir de modèle à aucun autre".

"La recherche socio-économique ne doit pas être là pour de seules enquêtes préparatoires . . . mais les enquêteurs doivent demeurer intéressés aux travaux."

Un plan, en fixant des structures, doit leur laisser "un caractère assez ouvert pour choisir entre plusieurs possibilités en ce qui a trait aux détails".

Enfin, il est indispensables d'instituer "un organisme qui co-

ordonne les tâches préparatoires . . . ait (si possible) la libre disposition des terrains et jouisse d'une certaine mesure d'autorité relative à leur affectation".

Ces excellents principes nous paraissent valables où que ce soit dans le monde. Les Nations Unies, pour leur part, se sont penchées sur les problèmes et, dans le rapport que nous avons déjà cité, étudient les formes que pourrait prendre l'assistance aux pays en voie de développement. Il nous semble nécessaire d'apporter quelques vues complémentaires à ces pages. Tout y est, en effet, décrit comme si le monde se divisait en pays susceptibles d'apporter une aide et en pays susceptibles d'en recevoir. Cette vision est manifestement trop simpliste. Innombrables sont les pays où vivent à la fois des collectivités prospères et des populations misérables et que des circonstances particulières empêchent apparemment de mener à bien le développement de leurs propres régions arriérées.

Une tâche urgente ne serait-elle pas de déceler et de dénoncer les causes de ces inégalités et des inhibitions qui semblent en amener la persistance? Ne saurait-on y parer par les moyens qui sont précisément ceux de nos congrès: prise de conscience de l'interdépendance de plus en plus totale des régions entre elles; information étendue des plus large couches de la population; appel à la collaboration des élites; éducation des masses laborieuses?

Puisque l'architecte ambitionne la responsabilité du cadre et des conditions dans lesquelles se déroulent les activités et les loisirs des hommes, il n'a droit à aucun repos aussi longtemps que ce cadre et les conditions seront ce qu'elles sont. Une rencontre consacrée par l'UIA à l'architecture dans les pays en voie de développement ne peut prétendre à un succès plus grand que celui de faire naître à l'échelle nationale d'abord et à l'échelle mondiale ensuite, une solidarité agissante, basée sur une forte connaissance des problèmes, mais aussi sur le respect de la dignité humaine.

# Management Practices

## Organization

by James W. Vair

(No. 5 in a series of bi-monthly articles)  
*Mr Vair is a vice-president with The Thorne Group Ltd., Management Consultants.*

The old adage that "a partnership is a poor ship to sail in" is often true, unhappily. Nevertheless, many professional partnerships today are not small, and their business success is attributable largely to the development of an effective response to the challenge of increasing size.

In the preceding article which dealt with the subject of long-range planning, the relationship between the internal organization structure of the firm and its environment (in terms of the various economic and competitive challenges it faces) was outlined briefly. For the sake of simplicity, this problem was reduced to the question, "do you have the right people in the right positions?" keeping in mind the goals which the firm wishes to attain, both this year and in the long-run.

This relationship between goals and organization cannot be overemphasized, for the form and character of an organization is clearly dependent upon its purpose. It may be noted, however, that the question will probably not arise until the firm has attained a certain size and various frictions and dissatisfactions start to appear. What causes these cracks in the organization structure? The reasons are not hard to find. An organization does not grow of its own accord as the practice enlarges, like the hide of an animal which automatically expands to fit the form it encloses. Typically, at some point in the transition from a small to a large firm, a critical stage is reached in organizational procedures. Most frequently, the firm attempts to struggle along under its former cloaks of authority with the mistaken assumption that it has simply become a larger version of the entity it was five or ten years ago. The senior partners of the firm, who may have grown up in the practice, probably know of only one procedure: direct personal control of all activities. The intensifying conflict of the demands for internal administration and the provision of direct and personal service to clients can lead to nervous collapse on the part of the principals, grumbling and dissatisfaction on the part of the badly managed associates and working staff members and, needless to say, a deterioration in the quality of client service.

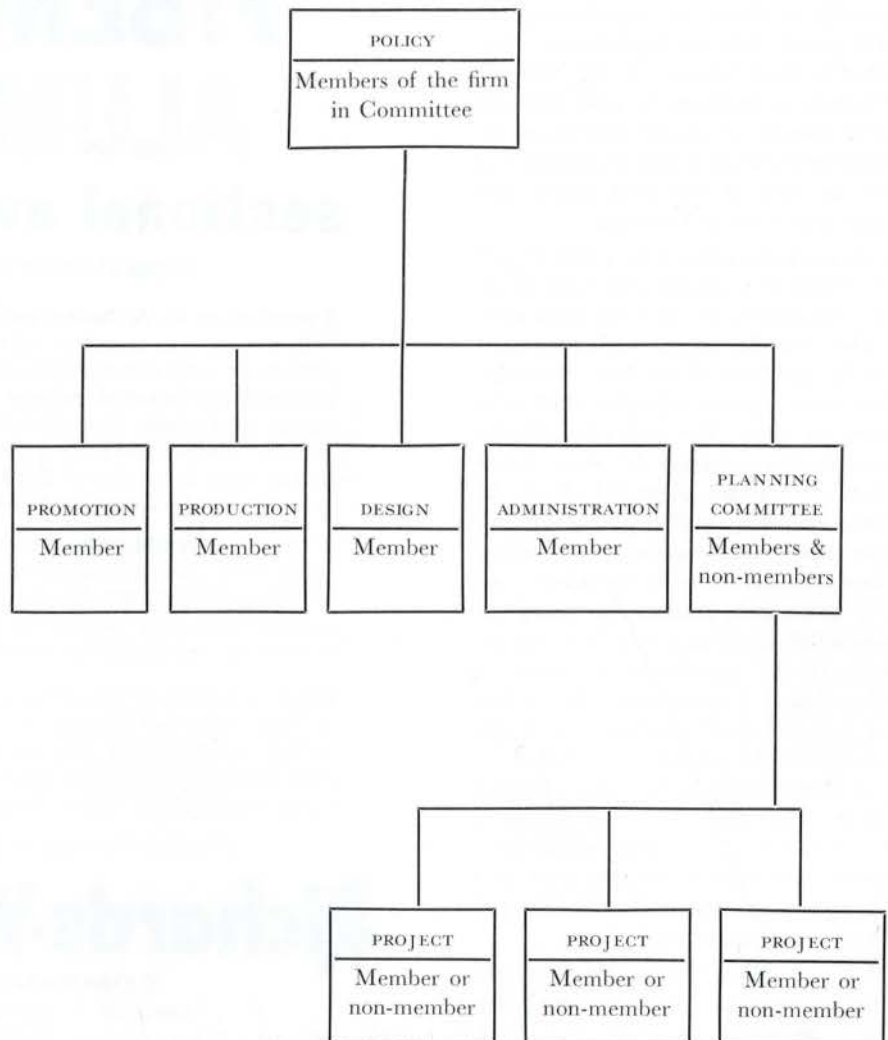
It is to be hoped that before this crisis becomes acute, the principals will think through the problem and come up with a set of objectives forming the basis for

a sound organization. This dispassionate and clinical analysis of the problem should produce a list of points somewhat along the lines of the following, although different firms will obviously place more or less emphasis on each point, and quite

possibly, some will discover several others that are not mentioned . . .

1. The members of the firm wish to be freed from administrative routine and be allowed to participate more fully in the practice of their professions.

ORGANIZATION CHART FOR A GROWING FIRM



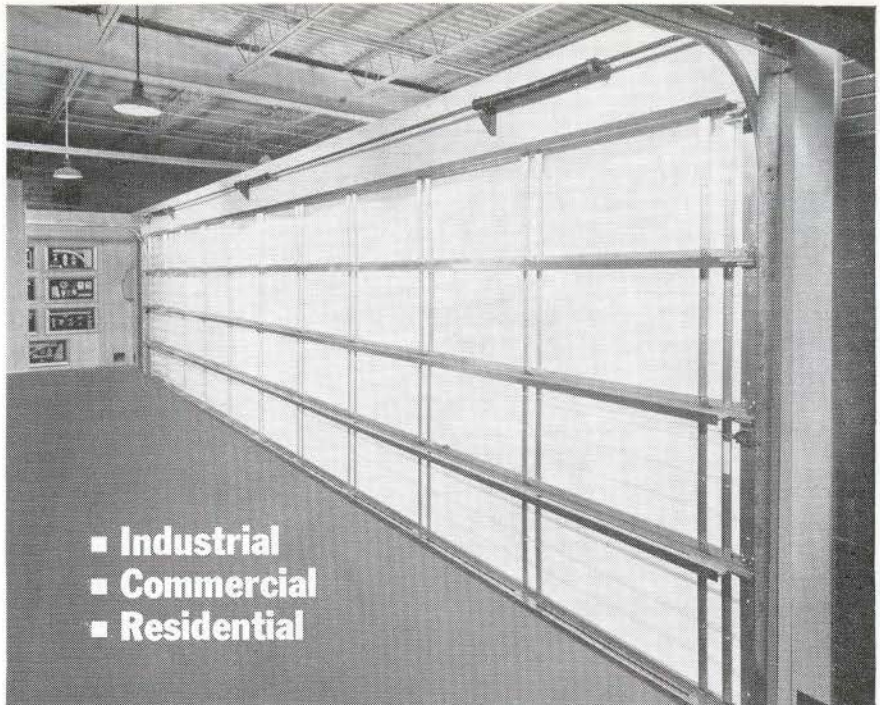


2. The members of the firm desire to create buildings of sound design and unquestionable integrity which will discharge the professional obligation of the firm to the client, the community, and the firm itself.
3. The members of the firm wish to exercise tightened control over their professional and administrative employees in order to ensure the achievement of professional work of high quality at a reasonable cost.
4. The members of the firm wish to encourage their employees in the practice of their professions; to strive constantly for the optimum utilization of their abilities and experience in order that these employees may find a high degree of job satisfaction, while at the same time advancing the reputation of the firm.
5. The members of the firm wish to work in good faith and harmony among themselves in order that each member may find his work rich and challenging.

Having established these objectives, it is possible to design an organization that will permit their accomplishment — but what is good “design” in this context? To quote an architect, “it arises from the able solution of clearly understood requirements, tangible and intangible; it is the outcome of the most honest and appropriate use of materials.”

I do not believe that most architects are interested in a lengthy discussion of organizational theory. It is the application rather than the theory which is germane to the problems of the firm. Nevertheless, some general principles need to be kept in view. For example, effective organization requires: (a) short simple lines of communication; (b) clearly defined authority and responsibility; (c) functional specialization; (d) logical inter-relations between functions; and (e) the totality concept, or doing the whole job of management. The appearance of the organization structure (in chart form) is unimportant, for as long as it meets these requirements, it will accomplish its objectives. However, as was stated earlier in this series (*Journal, May, 1964, page 27*), one picture is sometimes worth a staggering amount of prose. Accordingly, we may refer to a simplified organization chart at this point to illustrate the concept.

Firstly, it should be noted that the chart exemplifies the “functional specialization” mentioned in point (c) above.



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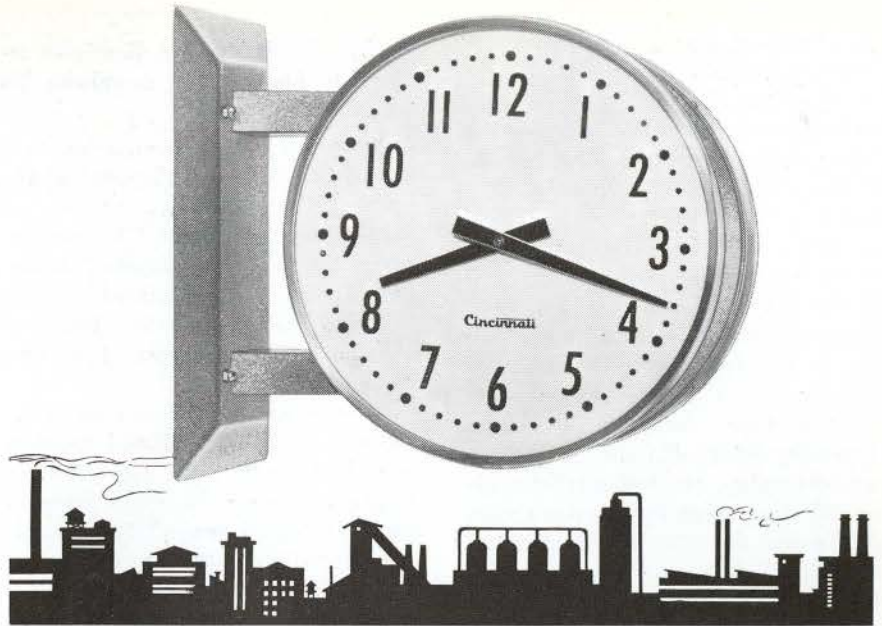
Each box, of course, requires a detailed position description or write-up which spells out the functions, duties and relationships involved.

Secondly, the allocation of the *administration* function to a member of the firm may not be feasible in the circumstances. Generally speaking, there seems to be a negative correlation between professional ability and administrative competence, and unless one of the partners shows a talent as well as a pronounced inclination for this function, it is advisable to appoint an outsider as general manager, (business manager, controller, or whatever title is most acceptable) to assume effective responsibility for the internal service functions of the firm. What this involves was outlined in some detail in the first two articles in this series and need not be restated here.

Thirdly, it is implied that each project will have a project manager. If the project manager is a non-member of the firm, he will, of course, be expected to consult with the member of the firm who was the original contact with the client upon major matters, but in all other respects, the project manager will have authority to make final decisions. The appointment of project managers appears useful for many reasons. It is necessary to allocate responsibility for each project in the interests of good design and economical operation. It is also desirable to encourage and test the senior employees, for it is from them that the future members of the firm will emerge. There is very little altruism in this proposition, for the broadening of the base of responsibility will allow the firm to accept more work and to do it more effectively, and hence more profitably. Also, the continued existence of the firm represents the best security for the future available to the present members. It appears, therefore, that both professional responsibility and enlightened self-interest indicate the necessity for the position of project manager.

#### SUMMARY

Contrary to popular belief, a formal organization is not a straight-jacket which stifles initiative and frustrates the growth of a concern. Rather it is a medium which should enable all the individuals associated with a firm to work together as effectively as they would work alone. In fact, if properly conceived and executed, it produces an entity the whole of which is greater than the sum of its parts.



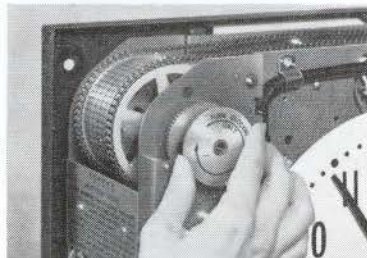
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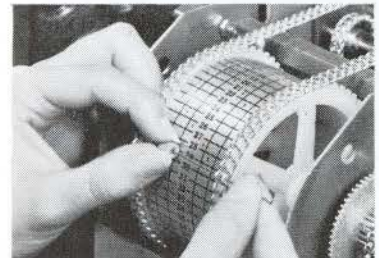
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(Continued from page 9)

1964 RAIC GOLD MEDAL WINNERS

RAIC Gold Medals for 1964 were awarded to the three graduates pictured below, Bruce Anderson, Lawrence A. Redpath, and Richard G. Henriquez.

Montreal born Bruce Anderson, 1964 graduate of McGill University with distinction in architecture, won as well as the RAIC Medal, the Lieutenant-Governor's Medal for the highest standing in the final year, The Turnbull Elevator Co. Ltd. prize for the best technical paper, the Hugh McLennan Travelling Scholarship and the Pilkington Scholarship. Mr. Anderson has made several trips through Europe, one a result of winning the 1959 RCAF National Model Aircraft Contest.

Lawrence A. Redpath of Montreal, 1964 graduate of UBC in architecture, also has been awarded this year's RAIC Gold Medal. Prior to this award Mr. Redpath won the 1962-63 Northwest Plaster Bureau scholarship and the Atlas Asbestos Co. prize in 1961-62. He has studied not only at UBC, but at McGill University, where he received his Bachelor of Mechanical Engineering, and at the Sorbonne, where he studied French civilization. Mr and Mrs Redpath and their two children live at present in Vancouver where Mr Redpath is employed by Rhone and Ireland.

Another winner is Jamaica born, University of Manitoba graduate Richard G. Henriquez. In 1964 Mr Henriquez was awarded as well as the RAIC Gold Medal, the Bachelor of Architecture Thesis Prize, and The Manitoba Association of Architects Book Prize. He came third in the 1964 Pilkington Awards. During his undergraduate years he won five scholarships and numerous prizes in

architectural design. Mr. Henriquez returned to Jamaica after completing his final year at university.

ELEVES-FINISSANTS DE LA CLASS DE 51EME, 1963-64, ECOLE D'ARCHITECTURE UNIVERSITE DE MONTREAL

Pierre Bergeron, Gabriel Charbonneau, Julien Dallaire, Paul Faucher, Marie-Louis Fortin, Jules Gauvreau, Emile Gosselin, Gilles Lavigueur, Jean-Paul Marchand, André Tellier, Jean-Guy Theoret, Jacques Trudel.

Prix speciaux et bourses ont été: Medaille de l'institute Royal Architecture du Canada; Jean-Guy Theoret, Bourse de voyage, American Standard Co. Ltd.; Roger Leblanc, Prix A. Faustin Ltée; Jean-Claude Marsan, Bourse Dominion Oilcloth and Linoleum Co. Ltd.; Claude Gagnon, Prix Compagnie Nationale de Fenêtres Ltée; Marius Bouchard, Prix Fernand Prefontaine; André Boudrias, Prix Domtar Co.; André Boudrias.

UNIVERSITY OF TORONTO SCHOOL OF ARCHITECTURE 1964 GRADUATES

Armstrong, N. A., Bielech, D. J., Blozowski, M. Z., Bruce, A. S., Cragg, R. C., Dickson, L. W., Easton, D. R., Graham, R. A., Greenfield, R. H., Kamada, T., Kennedy, J. A., Kirst, F. J., Meipoon, K., Mohaupt, W. C., Schuller, N. J., Shepherd, P. W., Steele, R. E., Thierry, N. J., Thom, M. F., Track, R., Usika, A. W., Wakayama, M. P., Walker, B., Wong, N., Hume, G., Kemp, A. L., Willoughby, G. M., Smith, C. J. M.

CANADIAN LUMBERMEN'S ASSN ANNOUNCED \$31,500 HOUSE DESIGN COMPETITION

A competition for the design of a single family house with prizes totaling \$31,500 has been announced by the Canadian Lumbermen's Association. The winning

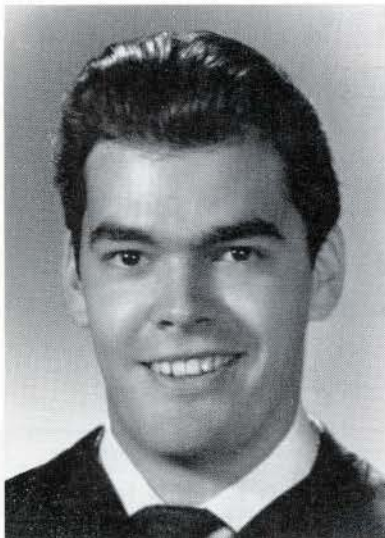
design will become the Association's principal exhibit at the 1967 World Exhibition in Montreal. In addition to seeing his project realized at Expo 67, the winner will receive a first prize of \$10,000. Second prize will be \$5,000 and third, \$2,500. There will also be 20 honorable mentions of \$500 each, and four special prizes of \$1,000 each for, respectively, best use of Eastern hardwoods; best use of Eastern softwoods; best idea for new uses of these woods; and best design submitted by a student.

The competition, which has been approved by the RAIC, is open to members of the RAIC. Architectural students in recognized schools of architecture in Canada, and draftsmen employed by architects also are eligible, but are required to associate with a registered architect if requested to prepare working drawings of his design.

The professional adviser is S. A. Gitterman, MRAIC, MTPIC, and all communications should be addressed to him c/o Canadian Lumbermen's Association, 27 Goulbourn Avenue, Ottawa 2. The Jury consists of E. R. Alexander, Barrie, Ont., President of the National House Builders Association, André Blouin, MRAIC, Montreal, S. D. C. Chutter, General Manager, CCA, Ottawa; D. E. Crinion, MRAIC, ARIBA, Chief Architect and Planner, CMHC, Ottawa; Edouard Fiset, AIRAC, Chief Architect for Expo 67; Mrs. A. F. W. Plumtre, Ottawa, President of the Consumers Association of Canada; and Paul Rudolph, FAIA, Chairman of the Department of Architecture, Yale University. Last date for registration is July 1, 1965; last date for questions is July 30, 1965; closing date for receipt of entries is October 30, 1965 and judging will take place

(Institute News Continued on Page 82)

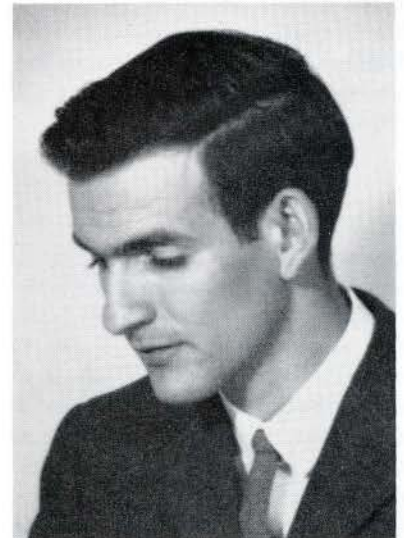
Bruce Anderson



Lawrence Redpath



Richard Henriquez





Architecture is concerned with esthetic and functional arrangement and treatment of all constructed spaces in which man lives. In the broad sense of the term it deals with the economy of environment.

Several words in this statement imply creativity, which is the essence of any artistic endeavour. In turn, creative insights are based upon a prepared mind, schooled and experienced in some special area of thought. In addition, whether it is a question of business success, artistic fulfillment, or their combination in professional service, creativity is compelled to seek new answers to problems, old or new. Today, this means research. Research for architecture, therefore, includes fundamental studies of design as defined by the functions of various building types as well as by our total sensory environment in and about them. In turn, these imply exploration of the emergent behavioral sciences to explain how man acts and reacts as an individual or group-client, as one or many who use architectural space and the services which provide it. The factor of esthetics cannot be limited to appearance alone. It is not superficial visual excitement but signifies design of the whole sensory environment.

Research for architecture is not new but has been undertaken only in fragmented projects without coordination, with wastefully inadequate exchange of information and without evaluation of the total program for coverage, depth or adequacy of results.

Only by responding to these needs can we build toward the long-range objective of useful, authoritative information. This is not in any sense a call for centralized direction of research activities, which we believe cannot and should not be dictated, but for a co-ordinating, evaluating, disseminating operation—an effective stimulus and source of knowledge to be made available for the improvement of the shelter of man and his activities.

Those architects who have made the effort or who have had an opportunity to break out of national isolation have found much to learn from work abroad. No nation has a monopoly on architectural intelligence or skill and, as industrialization builds and rebuilds in other countries, there will be an increasing number of new solutions to old and new problems that we should all know about. Our first task is to operate effectively at home but we cannot afford to look away from these ever closer horizons. We must inter-

change information for mutual growth. It may be doubtful that this can be done entirely on a paper-exchange basis. The communication of fundamental concepts and applications in this complex field of environment has always required personal inspection and interpretation. Still another aspect of a comprehensive program for research in architecture is the need for trained personnel. It is hoped that the profession and the schools of architecture will recognize this mutual responsibility. It is two-part: those students with the interest and ability must be identified and trained—and the architectural office and university school must be ready to afford recognition and status and financial reward commensurate with the great contribution to professional knowledge these people can make.

Research for architecture is not building or construction research. It will not result directly in a better window, curtain wall or other product. It is not laboratory work on cement or glass or basic research in the properties of plastics or the corrosion of metals. These are not the area of the architect—but such studies and development should be in answer to the architect's needs and problems. Research for architecture, then, is not directly concerned with building materials, products or construction technology—much as we need better curtain-walls, not biased by attempts to market as much stainless steel, plate-glass or baked enamel as possible. We are often, unfortunately, only assembly-designers of the products other people find profitable to manufacture.

The architect's contribution to building is to bring it into improved relationship to human beings. We know very little about this. We have learned certain things about the dimensions and capabilities of the normal human frame and its muscles, fatigue and conditions in which we feel comfortable. Buildings and the space between and around them, constitute our architectural environment. Human beings, as individuals or groups, constitute our sociological and psychological environment. We have the technical means of producing any desired combina-

*Reprinted from Review of the International Union of Architects, No 29, May, 1964*

tions of conditioned space: conditioned for visual, thermal, acoustic, tactile or other sensory effects and functions. What do we want to do? What do we need to do to meet the client's program, including perhaps his unspoken need for beauty?

Research for architecture, therefore, is concerned with the essence of your own professional responsibility—the matters which are especially the problems of the architect which no one of lesser training can be expected to comprehend or to be able to see as a whole. It is aimed at the designed integration of the entire environment and must include study by competent consultants, with architectural guidance, of the behaviour of human beings as well as their physical capabilities. It must find out more about space, scale, and other design factors, as well as requirements of various building types. Planners of schools need to learn much more about children and how they learn. Planners of hospitals need research on therapeutic environments.

Another aspect of research for architecture is that of the architect's relationship to his client and the various sociological and psychological factors involved in interviews—finding out the client's true needs, advising him, and similar matters concerning management of projects.

Research for architecture, then, is for professional and public benefit. It is basically concerned with people just as the architect's concern in fire is rightly for human life rather than preservation of property.

We are convinced that research for architecture is a fundamental need of our profession, and an activity which is almost too late to avoid encroachment by other groups which have come on the scene with partial training, partial ethics, and part of our rightful work.

*Mr Pawley is Professor of Research for Architecture at the School of Architecture and Fine Arts, University of Southern California, Los Angeles. From 1950 to 1963 he was Research Secretary of the American Institute of Architects.*

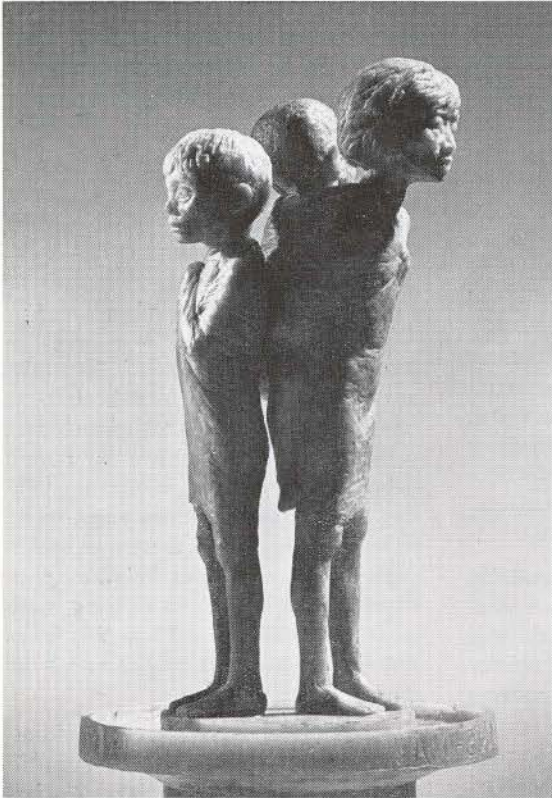
# Research For Architecture

by Eric Pawley



# Features

## Sculpture Competition Toronto

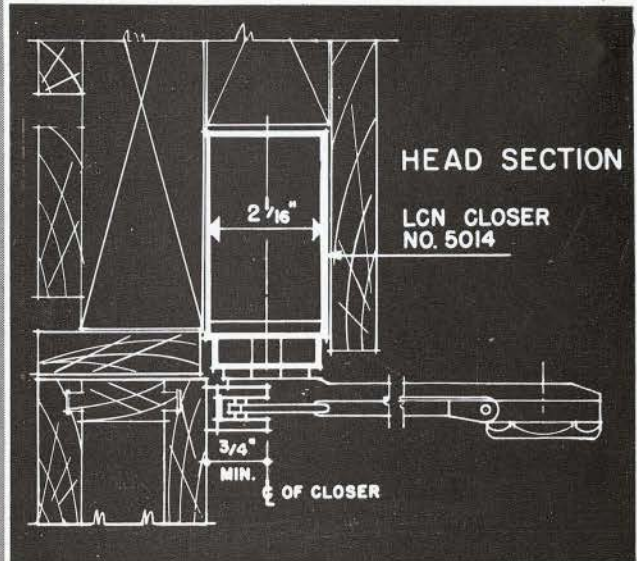


For those whose awareness of Lothian Mews has been collected from its many published descriptions, its image of attractiveness and success must seem exaggerated. Yet it is an attractive place; its pleasantness being created by the use of the space formed by the architecture; the shops, looking on and down from all sides of the court. There is intimacy and variety for the pedestrian: art gallery, imports, a toy shop and a cafe. In the summers, there are the sunshades, the cold sound of water and the tourists, probably from Don Mills. In winter, people are there like sparrows clustered at a warm eave; the water still sounds from the fountain. This fountain is a low wide circle with a wooden seat on its circumference. It is now to become a "donation box". In the centre will stand this sculpture, the winner of a competition held by the Canadian Save the Children Fund. It was chosen by a jury composed of Allan Jarvis, Francis Loring, Mrs Catherine Porter, Chris Yaneff and Boris Zerapha. The sculptor is Jack Harman, of North Vancouver, a past student at the Vancouver School of Art and the Slade and Hammersmith Art School.

In its very contrasted surroundings, this piece should express clearly the Fund's motives.

Y.H.

*Entrance to Lobby,  
Valhalla Inn,  
Islington, Ontario,  
George A. Robb—Architect.*



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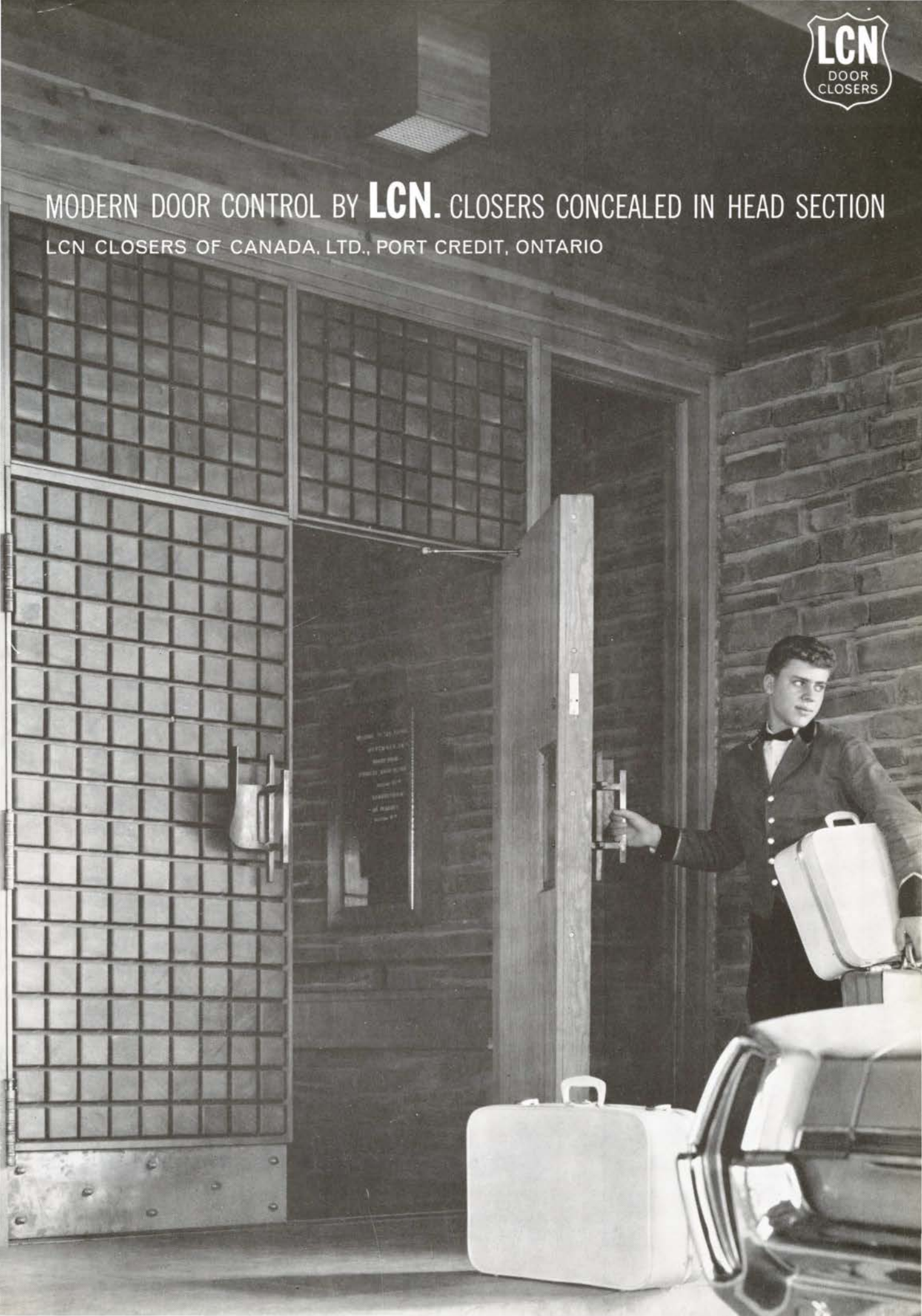
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(continued from page 78)

November 30. Registration forms and conditions in both English and French may be obtained from the professional adviser.

CANADA COUNCIL ANNOUNCES 1965-66  
SCHOLARSHIPS, FELLOWSHIPS  
AND GRANTS

The Canada Council has announced a number of scholarships, fellowships and grants tenable in 1965-66. Full details may be obtained from the Scholarship Section of the Council at 140 Wellington Street, Ottawa 4, but those available include: 30 awards of \$1,500 for pre-master's degree scholarships, one year or less, renewable, also tenable outside Canada, but without travel allowance; 225 pre-doctor's degree fellowships of \$2,000 plus travel allowance, where necessary; 60 short term grants in aid of individual research projects of \$1,500 for post doctoral scholars and other members of University staff; 50 arts scholarships of \$2,000 plus travel allowance, where necessary, in Canada and, in some circumstances, abroad. In addition, the Council may make available up to 15 non-competitive awards to specially qualified candidates who because of unexpected opportunities cannot wait for regular competitions. Value is equivalent to awards in either categories.

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BRITISH COLUMBIA

Applications are invited from Graduate Architects with ability in design and sketch presentation.

Duties include acting on behalf of Architect Planner; assisting Planner, Building Committee, Consultants, and Architects in the co-ordination of design for building projects; and preparing sketch studies and reports for future projects.

Interviews will be held by arrangement. Examples of design and sketch presentation required.

Apply in writing, giving full details and salary expected to the Director of Personnel, University of British Columbia, Vancouver 8, B.C.



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