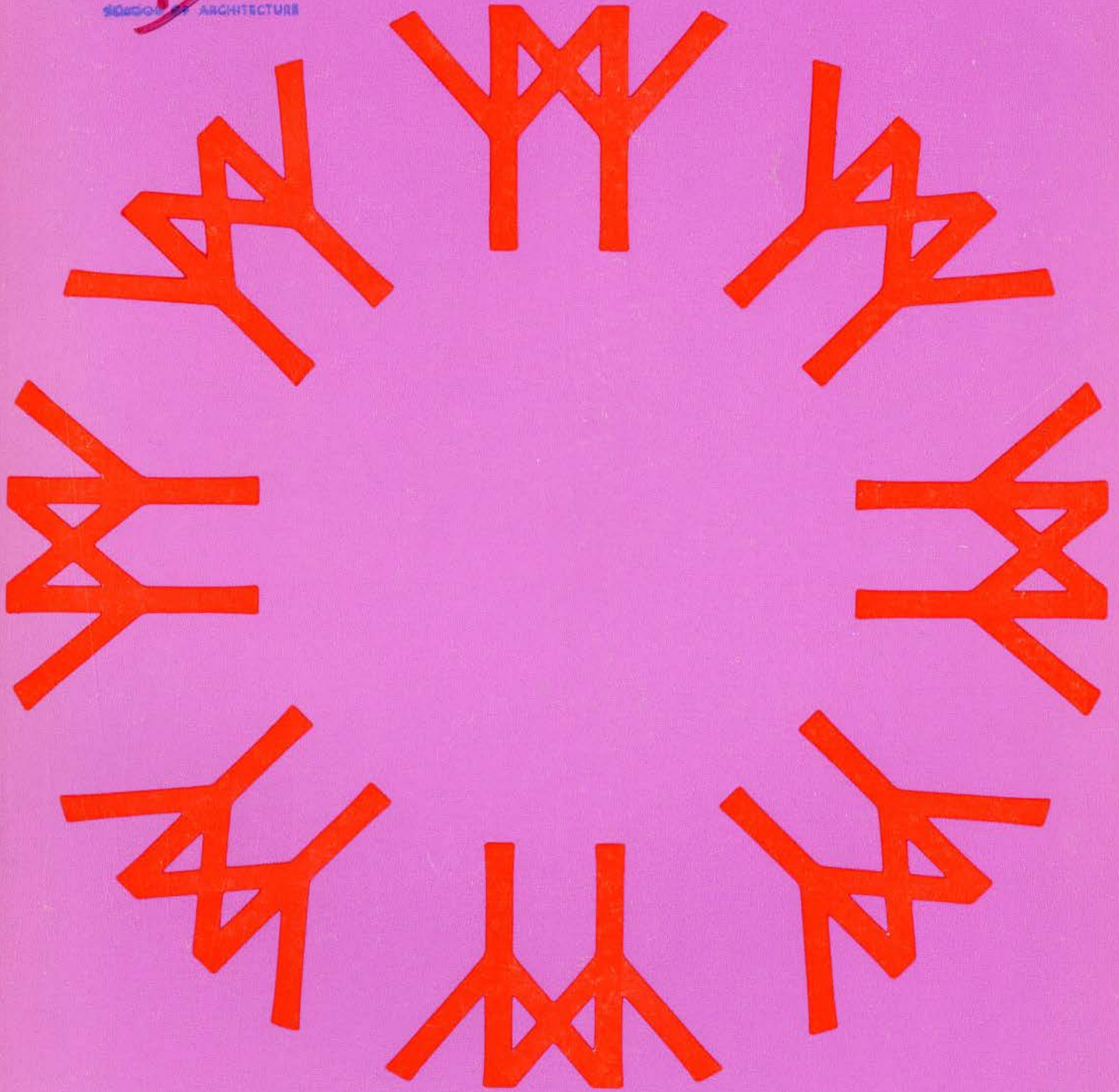


Architecture Canada

Journal RAIC / La Revue de l'IRAC : August / Août 1967



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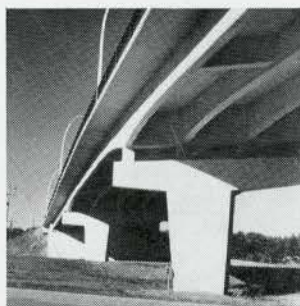
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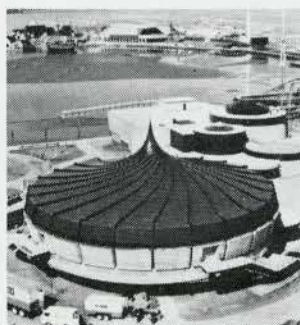
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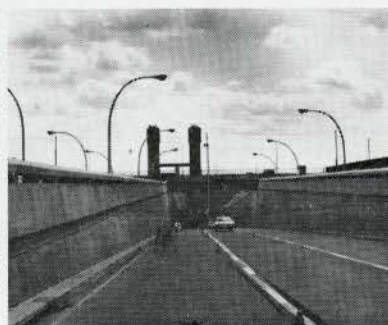
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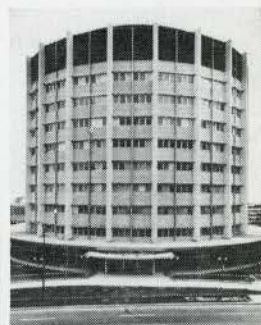
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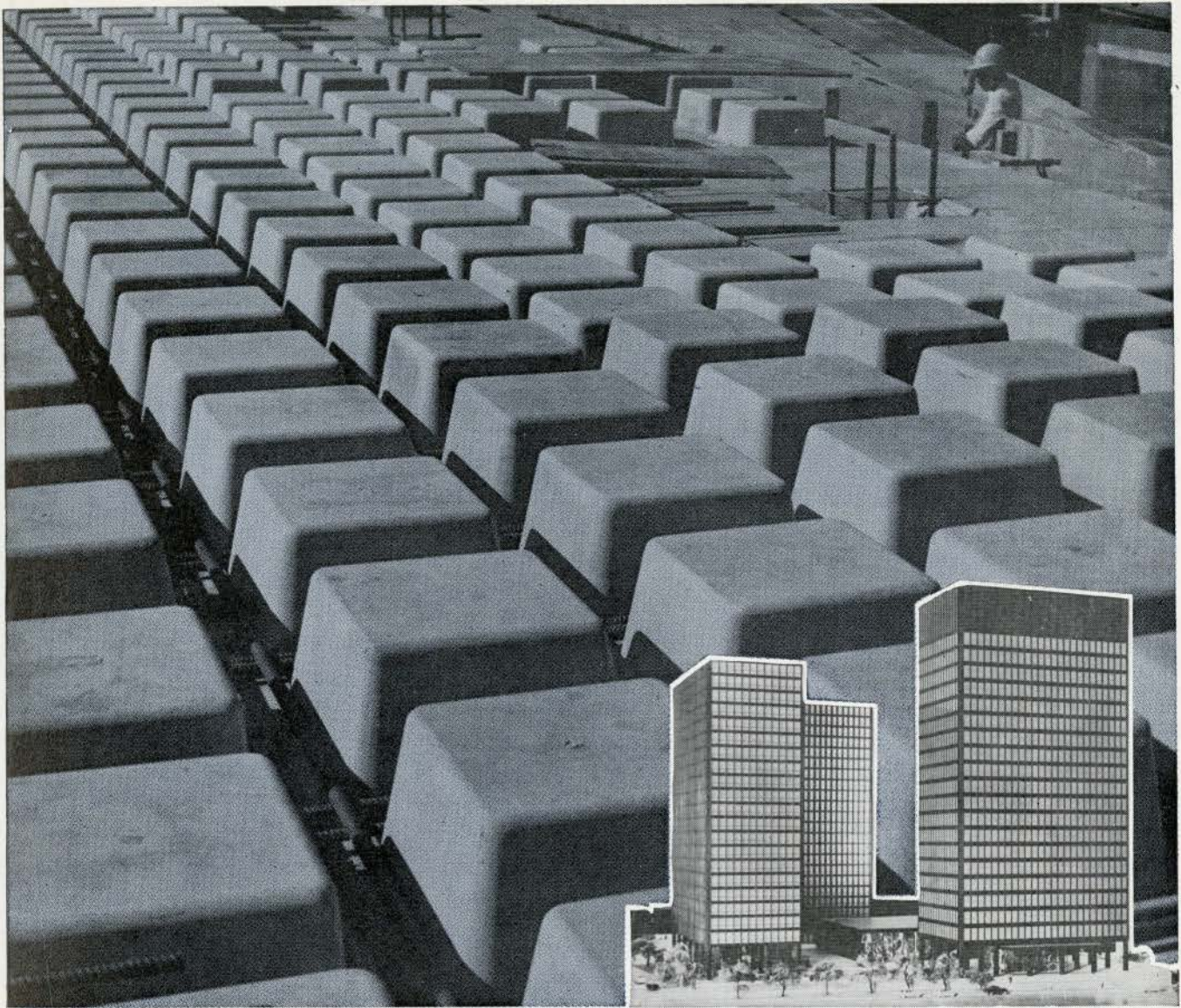
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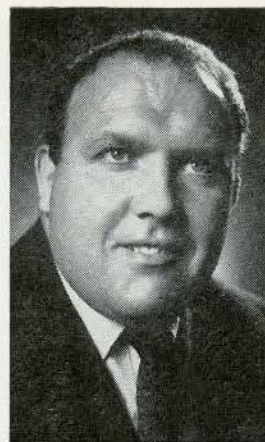
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K. C. Stanley

K. C. Stanley Appointed Chief Architect

Kelvin C. Stanley, FRAIC, formerly of Edmonton and Calgary, has been appointed Chief Architect of the Federal Department of Public Works, effective June 1st. He succeeds J. A. Langford (F) who was recently promoted to Assistant Deputy Minister (Design). For the past three years, Mr Stanley has been section head in charge of co-ordinating construction of 71 national and industrial pavilions at Expo '67 in Montreal. He is a graduate of the School of Architecture of the University of Manitoba in Winnipeg, where he received four scholarships and was awarded the Thesis Prize and University Gold Medal. He taught for two years in Alberta schools and for the same length of time at the University of Manitoba before entering private architectural practice in Edmonton in 1948. He left to take up Expo '67 duties in 1964. A 10-year member and past president of the Alberta Association of Architects, Mr Stanley is also a past vice-president of the Royal Architectural Institute of Canada, of which he became a Fellow in 1961.

Andrews Heads U of T Department of Architecture

John Andrews has been appointed chairman of the Department of Architecture in the University of Toronto's Faculty of Architecture, Urban and Regional Planning, and Landscape Architecture. He has been a member of the staff since 1962.

Professor Andrews won a Massey Medal this year for his part in the work on Scarborough College and was also a member of the architectural team in the firm of John B. Parkin and Associates which won a Massey Medal in 1964 for the design of the Toronto International Airport control tower.

Born and educated in Australia, he left in 1956 to study for his Master's degree in architecture at Harvard University. While there he developed his plan for a Toronto City Hall which took second place in the competition.

Tremblay Nouveau Directeur de l'École d'Architecture de Québec

Fernand Tremblay, ADBA, MIRAC succède à Noel Mainguy à la direction de l'École d'Architecture de l'Université Laval pour le prochain terme de 3 ans. M. Tremblay est professeur à l'École d'Architecture et un associé de l'équipe bien connue St-Gelais, Tremblay, Tremblay & Labbé de Québec.

Warnett Kennedy Resigns AIBC Directorship

Warnett Kennedy, the lively and articulate executive director of the Architectural Institute of British Columbia for the past nine years, is resigning to re-enter full professional life as a consultant architect and planner. The AIBC is looking for a successor. In a letter to the AIBC membership, President John M. Dayton said: "Those of us who have served on Council for part of the nine years that Warnett has served as our Executive Director will understand when I say that he will be irreplaceable; not only will his advice be missed but also his witty repartee both in and out of Council Meetings. His

value to the profession in public relations has been inestimable. I can only hope that we will continue to reap benefits of his public speaking engagements, even though he may no longer be our Executive Director."

1967-68 AIA Convention

Robert L. Durham, FAIA, of Seattle was elected President of the American Institute of Architecture at the 99th convention in New York in May. Registration at the convention totaled 5,120.

Charles A. E. Fowler (F) Halifax, immediate past president of the RAIC, was made an Honorary Fellow.

DBR Publications on Performance of Buildings

Copies of two new publications issued jointly by the Faculty of Architecture, Urban & Regional Planning and Landscape Architecture of the University of Toronto and the Division of Building Research, NRC are now



John Andrews

available. "A Study of the Performance of Buildings" K. W. Jaegglin and A. E. Brass, Ottawa May 1967, Order No. NRC 9352, price 75c, summarizes the results of a comprehensive study by the authors under the direction of Dr Thomas Howarth and Prof. W. G. Raymore and contains a check-list for use in inspecting buildings in service. The second publication, NRC 9364 price 10c is the check-list in a convenient pocket size. Pads of specially ruled forms are available free of charge for those interested from the Publications section, DBR/NRC.

John A. Russell Perspective '66

The 1966-67 issue of the yearbook of the School of Architecture, University of Manitoba, *Perspective '66*, is a memorial to the late Dean John A. Russell. Copies may be obtained by writing to: Ian MacDonald, Vice Stick, c/o Student's Architectural Society, Faculty of Architecture, University of Manitoba, Winnipeg 19, Manitoba. Price \$2.00.

Education Showplace

Members are invited to participate in the "Exhibition of School Architecture" at the Canadian Education Showplace, Automotive Building, Exhibition Park, Toronto, January 25-27, 1968. Write F. J. K. Nicol, MRAIC, ARIBA, Chairman, Architectural Advisory Committee, Canadian Education Showplace, 481 University Avenue, Toronto 2.

AIBC Seeks Executive Director

Executive Director required for Architectural Institute of British Columbia, located in Vancouver. Duties will include furthering the policy of the Institute under the direction of a President and Council, and the management of the Institute Offices. Office staff consists of an Executive Secretary and a steno-receptionist. Architect with administrative experience desirable. Salary commensurate with experience. Reply giving full particulars to Architectural Institute of British Columbia, Attention W. Rhone, 567 Burrard Street, Vancouver 1, B.C.

Masonry Structural Systems Conference

The International Conference on Masonry Structural System will be held in Austin, Texas, November 30 to December 2, 1967. Write J.F. Cutler CSCA Managing Director, 4824 Yonge Street, Willowdale.

Canadian Housing Design Council

Four architects have been named as members of the 1967 Canadian Housing Design Council, W.G. Leithead, FRAIC of McCarter, Nairne & Partners, Architects, Vancouver; James A. Murray, FRAIC, Toronto; Morley Blankstein, FRAIC, of Waisman, Ross, Blankstein, Coop, Gillmor & Hanna, Architects, Engineers and Planners, Winnipeg; Michel Le Blanc, MIRAC, Papi-neau, Gerin Lajoie, Le Blanc, Montreal.

CMHC Fellowships Awarded

CMHC Fellowships from \$3,000 to \$5,000 each for advanced studies in urban design and planning have been awarded to: R. M. D. Leblanc, C. P. L. Parisel, University of Montreal; M. G. Pollowy, J. G. Wanzel, J. W. Long, McGill University; J. W. Freeman, M. E. Kusner, University of Toronto; R. S. Frew, S. W. Wright, University of Waterloo; J. D. Theron, University of Manitoba; D. Rapanos, University of British Columbia; M. R. Jentys, H. D. Parnass

(Montreal), Harvard University; P. Batchelor (Vancouver) University of Pennsylvania.

Hough Receives ASLA Exhibit Awards

Michael Hough Associates Limited, Toronto has won two Honor Awards from the American Society of Landscape Architects for entries in the annual professional exhibit displayed at Atlanta, Georgia, in June. The awards were for Scarborough College, University of Toronto (Institutional Planning) and Jones and Firstbrook Residences (Public and Private Housing). The competition was open to all members of the Society.

Building Science Seminars on Acoustics

The 1967 DBR Building Science Seminars, "Acoustics in the Design of Building" will be held in Calgary October 17, 18 and in Ottawa October 30, 31 and November 2, 3. On the day between the two Ottawa sessions, November 1, there will be a guided tour of the Building Research Centre. Advance registration is required. Write L. P. Ruddy, Administrative Officer, Division of Building Research, NRC, Ottawa 7, Canada.

CPAC Conference

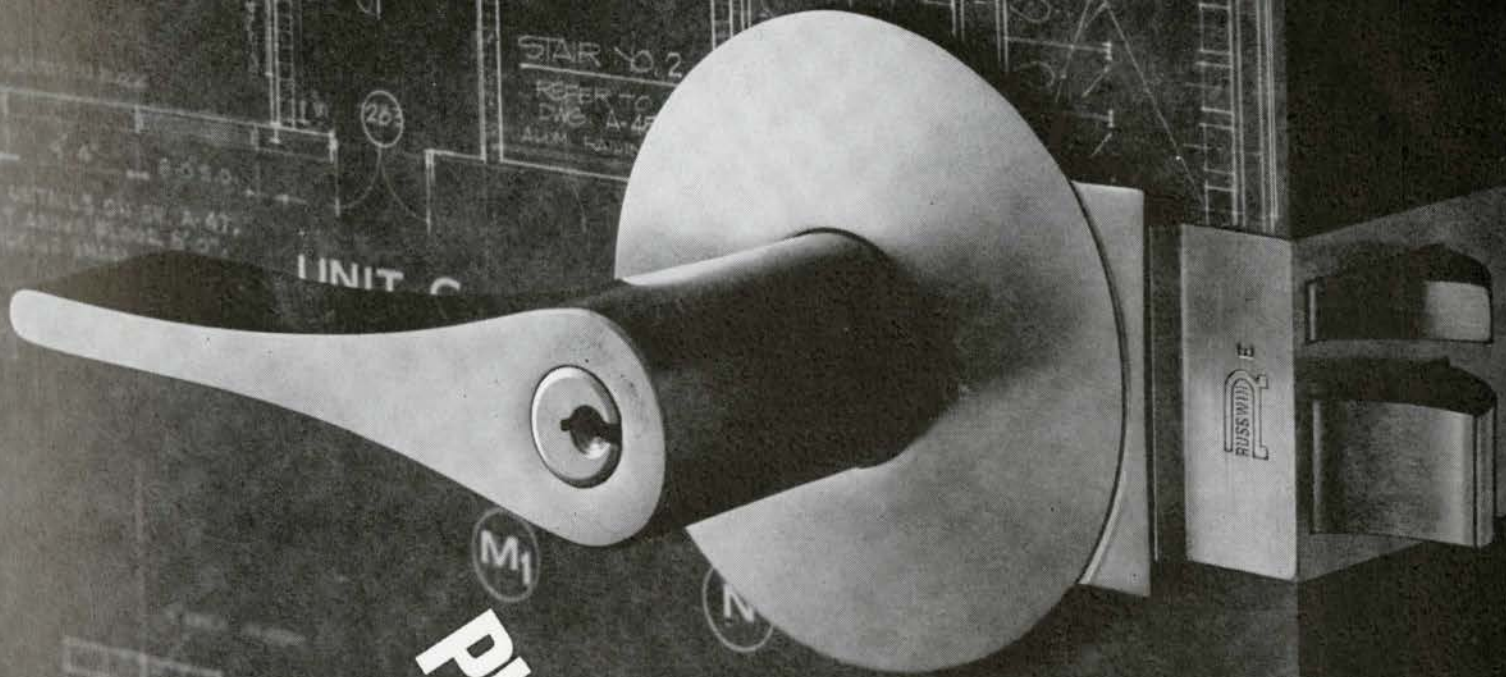
CPAC's Centennial Year National Planning Conference based on the theme: "Man in his Community: Today's Challenge" begins Sunday October 11th, in Ottawa. A visit to Expo follows on October 11-12.

MIT Appointment for Jung

Yusing Y. Jung, M.Arch., MRAIC, of the University of Toronto Faculty of Architecture, Urban and Regional Planning, and Landscape Architecture, has been appointed a visiting associate professor at Massachusetts Institute of Technology.

1967 Francou Scholarship Winner

Pierre Beaupré, Richelieu, P.Q. has won the 1967 Francou Scholarship. This \$2,000 annual award to a graduate of the University of Montreal School of Architecture is made possible each year by the will of André Francou.

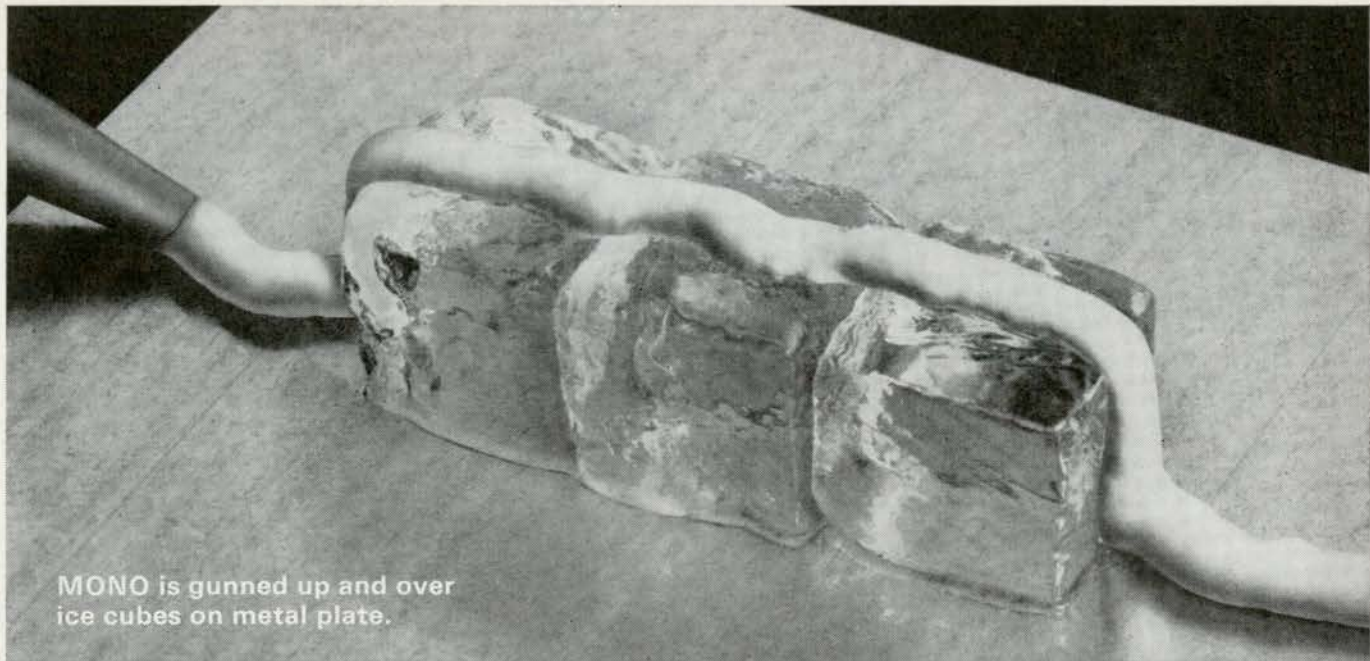


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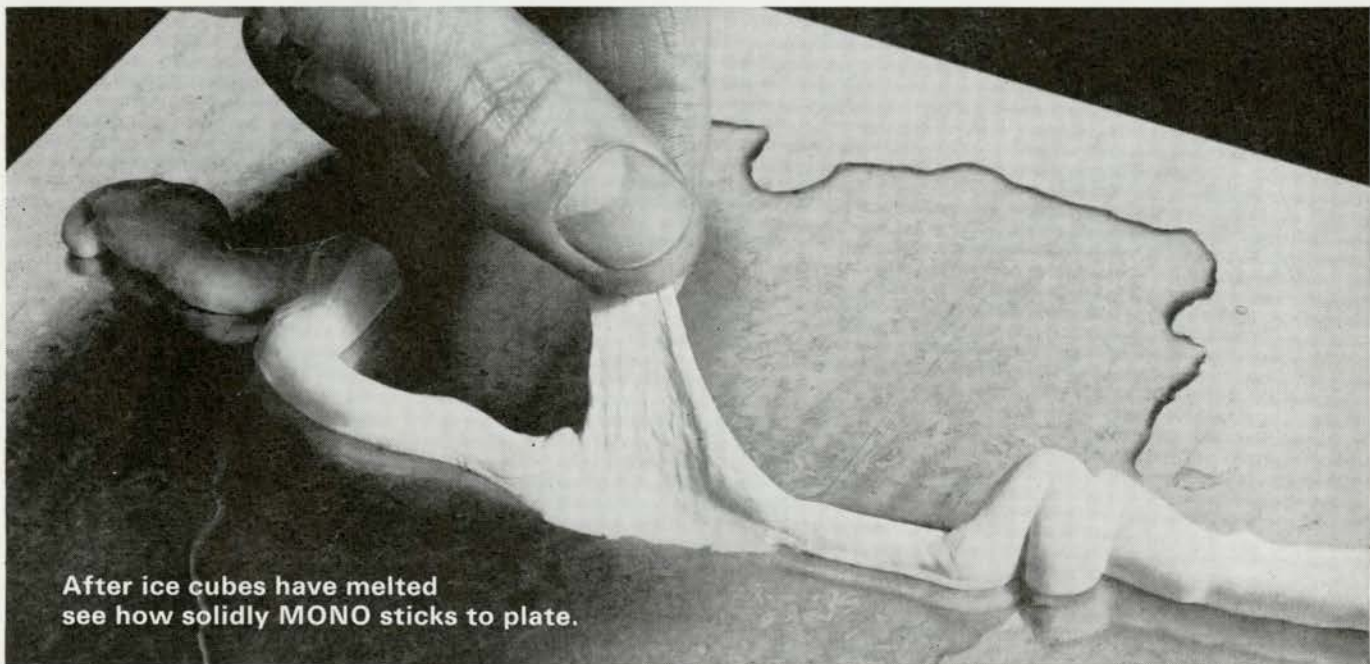
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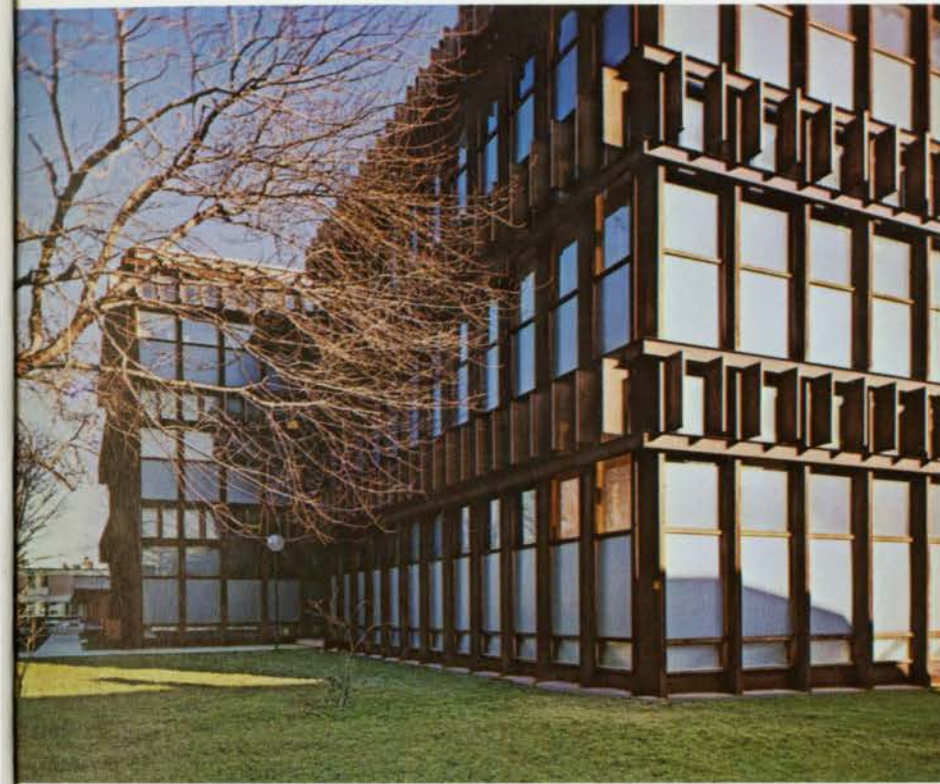
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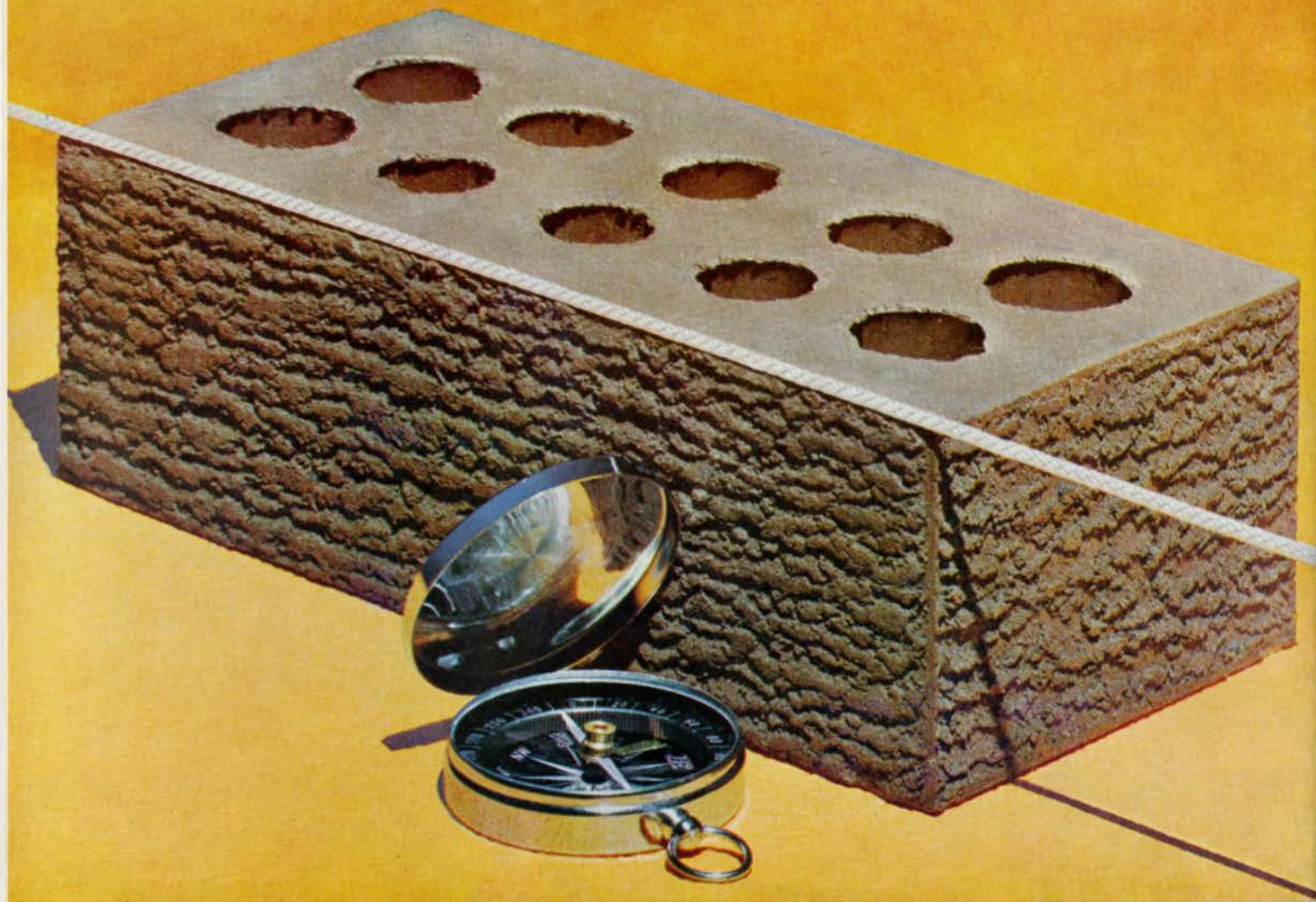
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This is the last in a series of three articles on the Artists and Expo

This potted review of impressions and perceptions is a pale compliment to those who endeavour for quality and expressiveness and have foresworn competition in favor of veracity and variety. An extravaganza of collected talent makes it totally irrelevant to ask "What is the best pavilion"? No matter what race, creed or persuasion there is something for every man at Expo. "To see is to believe" could never be more true.

Perceptions and Impressions

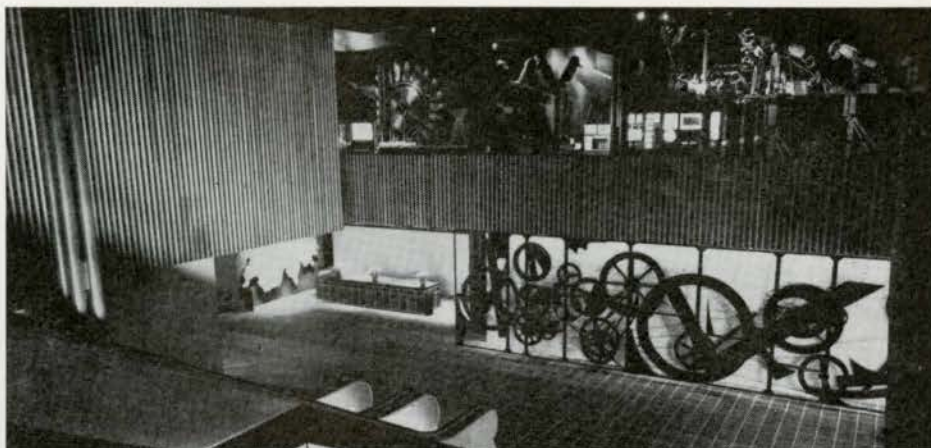
Expo '67 is an audio-visual show. Man has chosen to communicate to man with both fact and fantasy through ingenious harnessing of sound and celluloid. The two dimensional plane of photo images and literacy has become as outdated and boring as an old joke. The introspection of the printed page has been superseded and the onlooker is almost compelled to stop look and listen in an involvement with the projected ideas of film (wedded with kinetic sound) as a high art form. Drawn into the vortex of his own fate (Labyrinth) or watching the reenactment of the lives of others surrounded by floating image, real or surreal, the onlooker faces the stunning explorations of every point of human communication, intellectual and emotional. I doubt any living soul will have the time or be so inexhaustible as to face the full program of the filmmakers of Expo. Credits are innumerable. Even the artist has forsaken the static canvas for the dynamic mobile field of projections (Vedova of Italy). McLuhanism is provable in the instant where the extroverted literate form of film engages and involves to the detriment of the introverted printed word.

Impressions and Perceptions

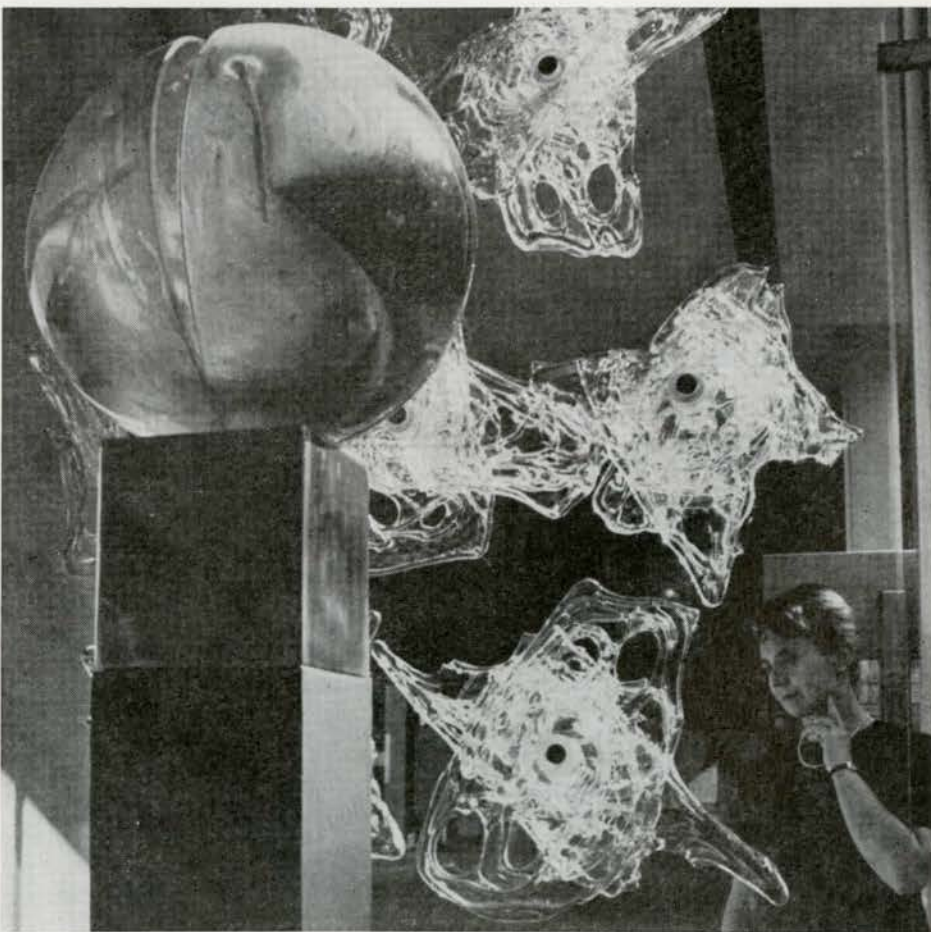
If artists are perceptive Expo may spell out the end of self-conscious egocentric art

1
Jean Tinguely's mobile mural in the Swiss Pavilion
Mural mobile de Jean Tinguely au pavillon suisse

2
"Alice in Wonderland" of glass in the Czech pavilion
"Alice au pays de la verrerie" du pavillon tchèque



1



2

Swirling wood forms in the Finnish section of the Scandinavian Pavilion by Wirkkala
Panneaux sculptés dans la section finlandaise du pavillon scandinave de Wirkkala



3

forms. For the pavilions, fine artist, designer, graphic artist or what have you, combine to form corps de ballet with choreography notated in contemporary material, plastics, glass, neons, metals, light and celluloid, to present a ballet of "ideas", forever I hope destroying the schisms in the arts caused by the debasements of advertising practices. Fantastic walls of glass, ghostly halls black and dark, peopled by luminous wraiths fabricated from white lace (Czech); waterfalls and glaciers, the products of welders torch and shining steel; constructivistic sculpture of chair parts; panels of swirling wood forms (Scandia), ceilings and walls which become a veritable forest of rug hooking (Swiss cafe); filamented glass "castles", chunky stanchions or mysterious blue walls separating the exquisite crafts of contemporary church artifacts, or cascades of color woven from spinners' yarn (Germany); plastic fountains, gaily papered mural decor (Canada); revolving structures (Switzerland); and a million other innovations defy delineation between art, design or display. Here the fine artist seems at ease and unselfconscious. He is nothing short of inspired in use of materials and quite at home with architectural scale. The corporate energy of the display halls puts to shame the isolate contribution of scattered exhibition.

Finally, the Halls of Expo ought to be also a source of inspiration for architectural interiors to the (I quote) "Grand Profession whose beautiful architecture is often beautifully irrelevant to the exhibits inside."

Perceptions and Impressions The Pavilions

Great Britain. . . A tongue in cheek "high camp" fairy tale of mod-Britain. High entertainment which probably amused its British entrepreneurs most of all.

USA. . . an historical occasion. . . an American understatement – All its eggs in one basket – the forty year old conception of "Bucky" Fuller brought to reality. Ironically this great "knock-down colosseum" was defeated in its purpose by being "welded" to save a quarter million dollars!! It's easier to go to the moon than have a good idea produced on earth!

Expo-The Honeycombs

Russia, Cuba, China. . . trilogy which proves that great or small sheer slanted propoganda is a bore. The tragedy is to see that art, unlike science, cannot be shackled to a socialist middle class mediocrity any more than to capitalist mediocrity. I weep to see the great traditions of Russian and Chinese arts and craft so enfeebled by these mundane offerings and vulgarities of manufacture from the worst possible European sources. Space ships and lightning rods of scientific origin and the carp were much more fun.

Israel. . . on the other hand propoganda sensitively treated and the true story of a people can be tolerated.

Czechoslovakia. . . this is an "Alice in Won-

derland" of glass, toys, lace and artifacts. The inventive artists proffer commercial wares with such imagination it puts the Danish warehouse of "good taste" to flight. That the public calls it great is a tribute to its sense of wonder and fantasy.

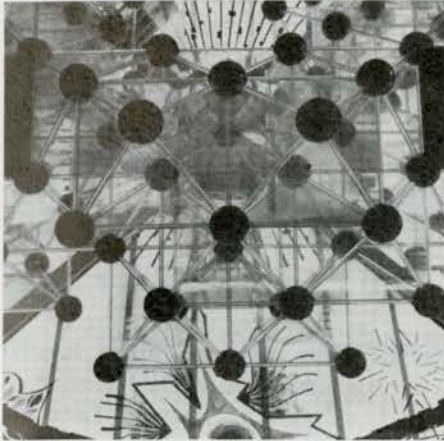
Japan. . . an expected masterpiece of industrialized good taste and sensitivity. With fascinating skill it weds old and new. Almost but not quite, one is bored with technical excellence when aesthetics start to fascinate.

Australia. . . this is the "sleeper" in more ways than one. An understatement in broadloom and in "good taste" from down under! !! Can it be? Originality is hard to assert at Expo but those talking chairs do it – a "soft sell" and a symbol of rest to spell out Australia's attractions. In such soporific conditions it seems irrelevant to add that what the chairs said was very little.

Quebec. . . the "dream" pavilion for designers – co-ordinated three-dimensional skill, inside and out where human "information" is subjugated to classic design order. The "infinite" ride in the elevators is a delightful surprise. Maybe the handclaps will come from initiates rather than the average but Expo has as I said, something for every man.

Ontario. . . in contrast to Quebec's sophistication it manages somehow with excellent stone sculpture-scape (if perhaps a little overwhelming for the roofscape) to convey conservative solidarity under its contem-

4
*Atomic structure in Canadian Pavilion
 Kaleidoscope atomique au pavillon
 canadien*



4

poraneous shelter. Michael Snow's women are a startling intrusion which I grew to like and to accept as normal as the other "people elements."

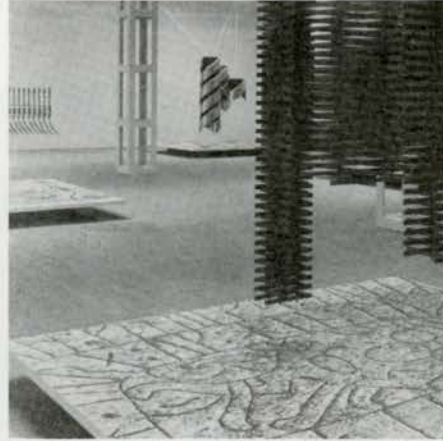
Canada... oh Canada – 100 years in one place, in six months! !! Too much maybe, but exuberance, if a trifle immature in spots, is there. Classic order is sent into catastrophic chaos with an abundance of ideas. Democratic carnival defies intelligent selection of the best, but Archambaults' courtyard people and the quiet sanctuary, starkly simple, are remembered as is also the strangely uncoordinated rooftop – "Katimavik" with its extraordinary vistas and cacophonous symbolic sculptures as weather vanes.

Scandinavia... the home of the professional craftsman where pride in the creative artist knows no division between arts, crafts and engineering. Here fine craft is no longer the leisure time plaything of adults.

Switzerland... A mechanical wonderland where art and exhibits are skillfully harnessed in a clockwork catacomb.

Italy... Italian panache in stucco, sculpture, architecture and display form a common womb for the story of past and present Italy. Here is surely the most amusing rooftop of the environment. . . Pomodora's David defiantly mocks the skyline with Fuller's Goliath like any other Italian urchin. Remembered is good food and the excitement of the Vedova catacombs of projections

5
*Compositions using chair parts by Paul
 Kjaerholm in Danish Exhibit, Scandinavian
 Pavilion
 Eléments de chaise utilisés dans un
 création originale de Paul Kjaerholm à
 l'exhibition danoise du pavillon scandinave*



5

Germany... tent or dome? ? ? that is the question, as Expo answers architectural problems of tomorrow. Germany's answer, the biggest "big top" ever is filled with ingenious display at all levels and if the giant circus lacks cohesion or a ringmaster it is made up for by individual imagination and talent. The presentation of industrial material in an art form of sculpture is very persuading – the story of an industrialized people through their graphic arts.

Mexico... forever "mañana" was still building weeks after opening date. Spanish passion and Indian imperturbability wedded exhibits old and new in heavy drama of spotlighting. Mexico's living belief in humanism breeds an observable indifference to intellectualized international urgency. Memory recalls also the less spectacular – *Greece* with simple ability through miniature courtyard says Now and Then.

Venezuela's classic box will be remembered in contrast to the touching presentation of less privileged countries whose naive offerings in art and industry are pathetic reminders of what poor educators the affluent western societies have been. We despoiled their vigorous and vital creativeness (remnants are tenderly preserved for exhibition) and in return for a dubious literacy and quasi-industrialisation they copied the ideal image we imagined we presented. Historically the travesty of artistic illiterates heading the moves of industrialized man will be too painfully evident. Expo is the first step towards remedial programming.

6
*Papier maché "Family group" by Astrid
 Zydower in British Pavilion. 43 of these
 figures tell a tongue in cheek story of
 British every day life.
 Groupe d'anglais en papier maché au
 pavillon britannique, créatrice Astrid
 Zydower. Conception humoristique de la
 vie anglaise en 43 figurines sorties tout
 droit des "Carnets du Majeur Thompson".*



6

Other small gems are an excellent building for international trade which will be remembered for the best stained glass modulation, (Marcelle Ferron) for laymen's architecture I have seen yet, and also for its excellent furnishings except where some of the banker clients had earnestly imposed their taste. The result, – more like "camping up" the period admired – late or early – crud, was mirthful to say the least. Labyrinth and the theme pavilions are pure Expo and a total experience. The commercial pavilions, after seeking the national wonders and delights tell an able and worthy story to support their various bias. Kaleidoscope, Judaism, the Christian and many others, including the horse laughs afforded by the unadulterated corn of Maine and Vermont or paper-pop of New York, tenderly remind one that as an individual one has been witness to an occasion in history when I believe an international attempt has been made for man to communicate with man through other terms more positive than trade or peace pacts. The Expo theatre, a pink mural typically De Niverville; the earnestness of the great international exhibition a veritable pyramid container of the world's artistic wealth; the total "feel" of Expo and Montreal are reminders that as an individual that I have been privileged both as an observer and simple exhibitor to be an Australio-Canadian at the first centennial birthday of Canada through the man made international island of Expo. Salute!

Anita Aarons

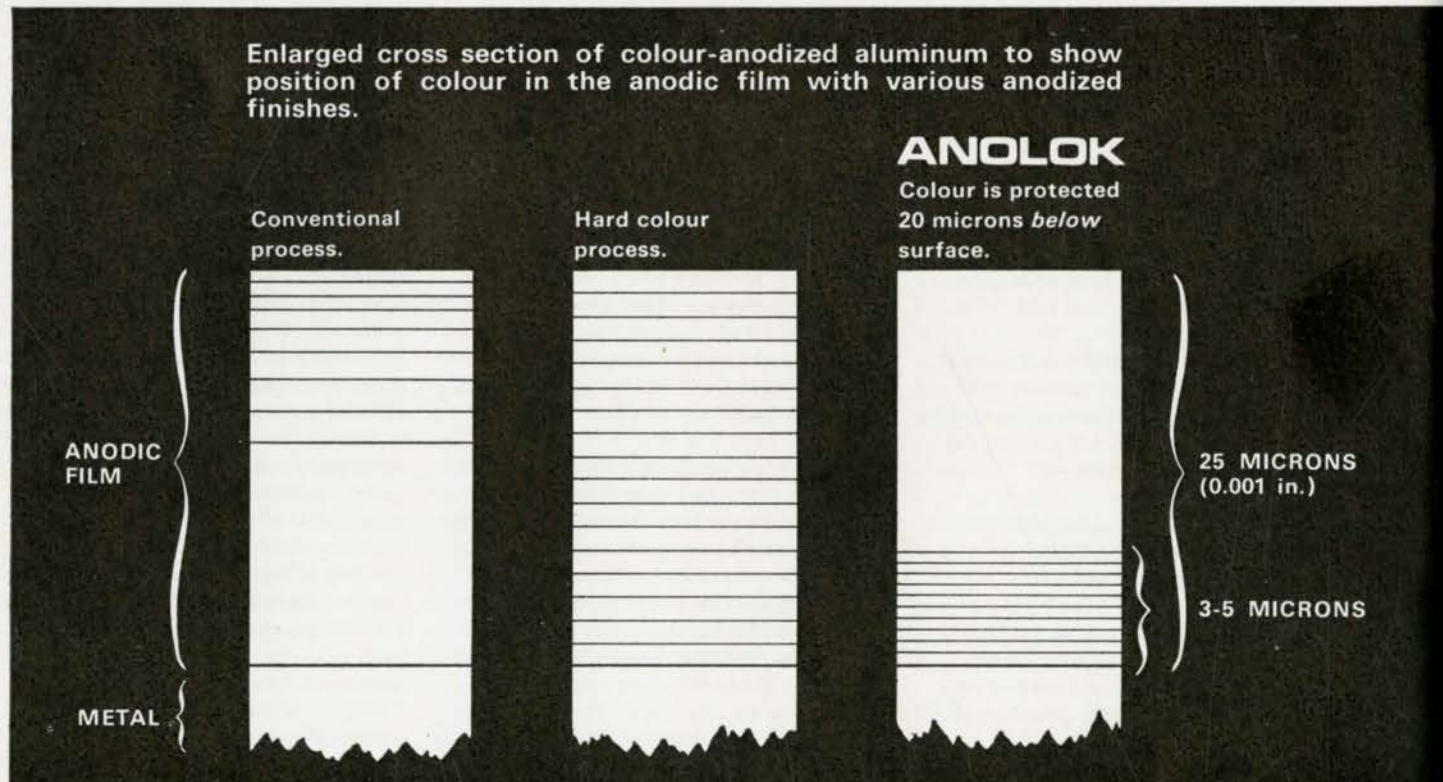
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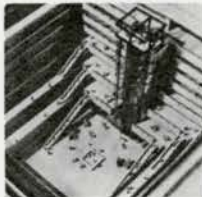
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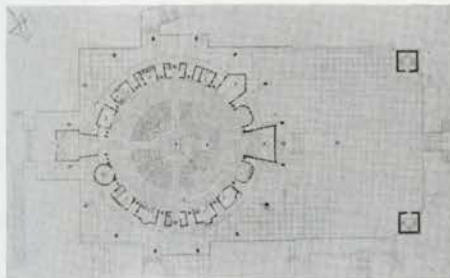


3



4

Two projects by Colin St John Wilson and Sir Leslie Martin appear in *Architectural Design*, June 1967: the Liverpool civic and social center (3, 4) and the National Library for the British Museum (1, 2). It seems Wilson has not got over the success of his Caius College building, Cambridge, and the civic center owes a great deal, inappropriately, to James Stirling's Cambridge History Library. In spite of this, the National Library is a real reversal in architecture for Wilson. In the Caius College building clear volumetric expression is made, the parts narrating the story of the building. In the National Library, all the spatial changes and relationships are enveloped in a huge space frame and glass superstructure.



5

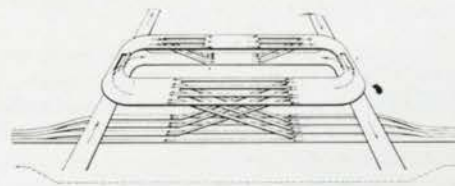


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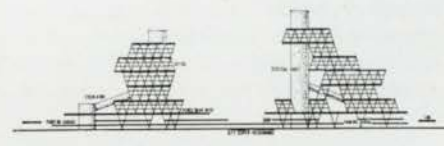
The June issues of both *Architectural Design* and *Architectural Review* publish Frederick Gibberd's Liverpool Cathedral. (5, 6) The *Architectural Review* also has an article by Nicholas Taylor, who writes about this overdesigned, whimsical building and, among other penchant criticisms, says "Gibberd's circular cliché feeds the popular misapprehension of the 'church in the round' at a time when the Renaissance idea of a geometrically central altar has been rejected for some years by the more imaginative Liturgical Movement architects."



7



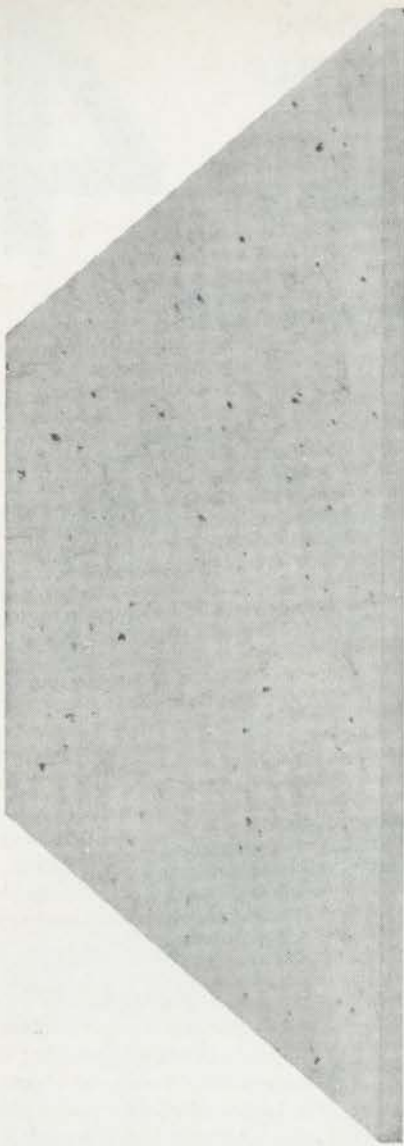
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9

The May issue of the *Japan Architect* has given wide coverage to Kenzo Tange's plan for the reconstruction of the earthquake destroyed Yugoslav town of Skopje. (7, 8, 9) The article is preceded by a review of Tange's work, under the heading "From Architecture to Urban Design"! Examination of the Skopje plan tells this story in a way in which the article does not intend. The plan for Skopje pays physical and aesthetic court to the preservation of those areas that were not destroyed by earthquake. The planning and life of the new scheme will however render the old town unimportant: the new locus of life, at a heavily emphasized transportation center, has been shifted away from the older center of the town.

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Page 39

Expo '67: Est-ce un succès? par Steven Staples, B.Arch.

L'Expo s'est ouverte il y a deux mois : assez longtemps pour avoir une idée de ses échecs et de ses réussites. Les pensées suivantes, non définitives, poseront plus de questions que de réponses et si elles encouragent un dialogue entre les professions, tant mieux.

Le but principal de l'Expo était de développer un ordre ou une structure ayant assez de cran pour pouvoir accepter une grande diversité de styles et d'éléments architecturaux (et non-architecturaux), tout en gardant une unité visuelle et fonctionnelle. Cette structure était composée de plusieurs "blocs" de construction :

1 Une hiérarchie de systèmes de transport déplaçant efficacement les visiteurs, leur permettant de comprendre différents éléments du site et leurs rapports aux moyens de l'expérience et de l'emplacement et le dessin des centres de transport.

2 Les pavillons thématiques, au centre des trois emplacements des pavillons, conçus comme points de repère visuels, intégrés aux arrêts de transports, exposant le visiteur au thème de l'Homme dans son Univers.

3 Chacun des quatre emplacements devait être développé en densité et différencié visuellement autant que fonctionnellement.

Les Problèmes du Succès

Le nombre de visiteurs attendus atteindra au moins 45 millions, soit 50% au dessus des prédictions. Ce succès est dû à "la bonne planification" et à deux autres facteurs : la publicité et les passeports de sept jours ou de la saison. Mais les foules inattendues ont produit des problèmes ; facilités de transport, de restaurants et de toilettes insuffisantes, les queues interminables à plusieurs pavillons. Les services ont été assez agrandis pour la bonne marche de l'Expo et avec quelques exceptions, on a du mal à voir que ces additions ne faisaient partie du plan original. A vrai dire, les solutions à ces problèmes étaient des solutions de dernière heure et auraient dû être intégrées au plan original dès le début. Le commentaire le plus intéressant est que l'Expo a été "bien conçue". Mes observations personnelles qui suivent, sont basées sur des

conversations et sur les buts cités ci-dessus.

Le réseau de transport

Ce réseau réussit partiellement en donnant au visiteur une idée de l'emplacement et des rapports entre les diverses parties. Comme prédit, l'Expo Express est utilisé tout d'abord à la première visite pour donner au visiteur une idée générale. Les cinq dessins reproduits montrent que parmi cinq étudiants en urbanisme, après un jour et demi à L'Expo, ils ont tous compris le rapport entre les trois majeures parties et ont montré que l'Expo Express est un élément dominant. Les commentaires de visiteurs empruntant l'Expo Express sont favorables à l'efficacité du système, sa vitesse, son confort et les vues. Les bruits (Hovercraft) et le mouvement (Minirail) etc. attirent l'attention et ces commentaires sont de même pour le Minirail, les piétons, et ceux qui se reposent. Les problèmes s'attachant au Minirail sont dûs à sa popularité et son manque de capacité. Au début, les visiteurs empruntaient le Minirail pour voir l'ensemble, plutôt que d'un moyen de transport. Le Minirail de l'Île Notre Dame est des plus réussi du point de vue de popularité, mais n'a pas réussi à implanter dans le visiteur une image des rapports spatiaux. C'est plutôt un "happening" un peu compliqué... mais je ne vois pas comment on aurait pu faire autrement. Un autre moyen de voir l'Expo est par bateau, mais les visiteurs ont hésité à en profiter, à cause du temps peut-être. Mais on doit se rendre à l'évidence ; le fait de voir d'en haut réhausse l'attrait de l'Expo.

L'attrait des Balades et des Pédicabs a causé quelques difficultés. Les foules et ces moyens de transport ne vont pas très bien ensembles et il se peut que des chemins séparés seront nécessaires. Les points de départ, de correspondances et de collections à l'Expo ont eu des résultats mixtes.

Les entrées à l'Expo, la Place d'Accueil et l'entrée à la Ronde sont particulièrement réussies, mais l'entrée du Métro ne l'est pas. En y arrivant, le visiteur ne sait pas où aller ; le Minirail l'attire, mais sa capacité est d'un dixième du Métro ; la congestion qui en résulte, pose un problème sérieux. En principe, la station de l'Expo Express à l'Île Ste Hélène aurait dû être bien plus

près de la sortie du Métro.

Le succès des pavillons thématiques est un peu ambigu en tant que point de mire. L'Homme explorateur est le plus réussi, non seulement parce qu'il est plus grand et se distingue visuellement par rapport aux pavillons qui l'entourent, mais à cause des terrasses, restaurants, fontaines, etc.

Lisibilité

Selon les critères de Kevin Lynch (Image of the City), l'Expo réussit admirablement ; séparée de la ville par le St-Laurent, définie par le fleuve en quatre parties ; contraste entre les pavillons et les parcs, les lignes définies des transports. L'Expo est lisible de l'extérieur et de l'intérieur. Cette indifférenciation facilement reconnaissable (qui saute aux yeux) contribue peut-être le plus à l'excitation générée par l'Expo.

L'Expérience Kinétique

Jusqu'ici, un élément vital manque ; la vie et le mouvement. La qualité du mouvement des déplacements est la synthèse de tout et on ne peut pas exprimer son effet ; c'est pour cela que le visiteur, même bien préparé, est étonné par la réalité. Ceci m'a sauté aux yeux lorsque j'ai pris des photos des systèmes de déplacement décrits ici. Ces photos montraient le transport à trois, quatre ou cinq niveaux sur le plan vertical, les différentes vitesses et directions sur le plan horizontal.

Conclusion

Une dernière question ; qu'est-ce que vous auriez fait autrement ?

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L'Opération de la Ronde à l'Expo '67 Consortium Richard Strong Associates- James Secord, Architectes-Paysagistes et Urbanistes Commentaires recueillis par Douglas Lintula, B.Arch.

En novembre 1963, la corporation nous a retenu en tant que planificateurs et architectes-paysagistes pour la Ronde. Le site de 135 acres était en cours de formation comme prolongation de l'extrémité nord de l'Île Ste-Hélène au delà du pont Jacques Cartier. En tant que conseil à la corporation, il nous fallait évaluer les usages possibles du site.

Tout ceci nécessitait une collaboration étroite avec l'Expo, les architectes, ingénieurs, artistes, urbanistes, sculpteurs et autres, employés à fournir les bâtiments, étalages et amusements.

"Nous sommes plutôt satisfaits du résultat. Bien que deux fois le nombre de visiteurs prévus a envahi le site, ce site marche bien en général. On s'y amuse. Conçue, il n'y a même pas trois ans, La Ronde est aujourd'hui un succès qui dépasse nos premiers espoirs.

Construite sur une nouvelle île, on a creusé dans le granit solide jusqu'à 40 pieds en dessous du niveau d'eau. Le granit récupéré forme la digue derrière laquelle on a posé le remblai ainsi créant le site. Les caractéristiques physiques du site ont été établies bien avant l'arrivée des urbanistes. Les problèmes étaient complexes, surtout lorsqu'il s'agissait d'organiser les déplacements des grandes foules refluentes. Notre intention était de créer assez de grands et d'intimes espaces permettant le déplacement intérieur des endroits bondés aux endroits tranquilles, ayant comme point de départ, L'Expo Express. Les foules commencent à se disperser à L'Esplanade; à gauche, le lac des Dauphins et la Terre des Pionniers; à droite, le Monde des Enfants et le Pavillon de la Jeunesse. Tout droit, le mall central, long de 1,400 pieds se terminant au Fleur de Lys, une deuxième place. Du Mall, on peut accéder à toutes les autres activités; à mi-chemin, on peut accéder au boardwalk allant autour du lac. "Le transport véhiculaire a été organisé de façon à déplacer les arrivants. A part les pédicabs et les balades, les terminus des Sky Ride et du Minirail se trouvent adjacents à l'Esplanade.

"Une de nos responsabilités primordiales était d'intégrer les diverses activités dans un emplacement fonctionnel et amusant. Les systèmes de transport et le Mall ainsi que les deux lieux aquatiques le font.

"Une autre considération importante était l'échelle de développement. Puisque la Ronde allait continuer après l'Expo, il fallait considérer les grandes foules de cet été ainsi que les petites foules de l'avenir." L'échelle de l'organisation était plus restreinte donc, mais suffisante, on pensait. Et puis, une fois les portes ouvertes, les foules étonnantes ont presque débordées les limites de l'emplacement. Cela marche quand même. On a été obligé d'ouvrir au public des endroits réservés aux employés, de changer quelques barrières "naturelles", de planter plus d'arbres. Malgré des problèmes résultant des foules inattendues, La Ronde fonctionne bien. Un fait inattendu; les bassins à l'entrée ont fini deux fois plus haut que prévu; résultat de la vitesse requise dans la construction de toute l'Expo.

"Faire les choses autrement? Bien sûr; on aurait fait le tout plus gaiement... quelques aspects sont trop sérieux. Mais, on y travaille toujours. On plante des fleurs

pour égayer des endroits ternes. En général, nous sommes contents. Ça bat son plein, et comment..."

Page 49 L'Architecture du Théâtre; vue d'un acteur par Peter Donat

Partout, les gens créateurs se font des soucis à propos des milliards de dollars dépensés chaque année pour le dessin de mauvais théâtres. Malgré les bonnes intentions, les gens du théâtre trouvent le plus souvent les pires résultats. Il faut absolument que les artistes, les architectes et les techniciens du théâtre de partout dans le monde oeuvrent ensemble, surtout au Canada, où nous voyons un des plus grands programmes de construction théâtrale qu'on a jamais vu. (G. Hamilton Southam, co-ordinateur du Centre National des Arts, en cours de construction à Ottawa) Récemment, j'ai assisté au Colloquium sur l'Architecture et la Technologie du Théâtre, tenu à Montréal. La liste des participants était impressionnante, des noms illustres, venant de partout. Toutes les professions étaient représentées il me semblait, sauf une, la mienne. Ces questions fondamentales formaient le point de départ des discussions: Pourquoi le théâtre? Quel théâtre? Où? Comment? Bien des points de vue ont été présentés, quelques uns épatants. Il y a eu un peu de discussion, mais généralement la conférence était trop vaste, les sujets trop étalés, les langues trop diverses. L'existence même de cette conférence est un aveu que le théâtre est en difficultés.

Depuis 20 ans, j'ai exercé ma profession d'acteur dans des salles paroissiales, aux gymnases, amphithéâtres, tentes, des scènes traditionnelles à la scène de Stratford. De plus en plus, depuis quelques années, je me suis rendu compte de la lutte pour trouver et garder un auditoire au théâtre. Pourquoi cette lutte? Pourquoi traiter le théâtre en parent pauvre? La question est "Qui en a besoin"? Si tous les théâtres de l'Amérique brulaient, moi, vous, quelques autres en feraient le deuil, mais est-ce que cela a de l'importance. Le cinéma le remplacera pour la poésie visuelle, la TV pour les reportages, et la radio pour tout ce qui est transmis par son. Alors, pourquoi dépenser tant d'argent pour faire vivre le théâtre? Je pense avoir trouvé la réponse, qui existe depuis des siècles, mais a besoin d'être redite peut-être, parce qu'elle porte directement sur nos relations futures avec les architectes et les techniciens.

Le théâtre est la seule occasion qui reste pour l'être humain de participer au rituel... L'essentiel d'un rituel est que l'auditoire et les acteurs participent ensemble à l'expérience. Une représentation théâtrale échoue si elle n'engage pas l'auditoire mais lorsque l'auditoire et les acteurs se sentent impliqués ensemble dans la même cérémonie, dans la même salle, c'est ça le théâtre. Je crois

que nous avons besoin de ce rituel et quelques unes des meilleures "expériences théâtrales" ne se trouvent pas forcément au théâtre, mais à l'Expo, par exemple, au festival de chants folkloriques.

"Colloquium '67" nous a montré plus que jamais l'état précaire du théâtre, et que nous ne pouvons pas prédire son avenir. Néanmoins, chaque nouveau centre de théâtre est une prédiction. Je trouve que nous avons tort d'investir des milliards de dollars dans d'immenses bâtisses qui doivent réussir en tant que théâtres parce qu'il le faut. Comment peut-on construire des théâtres lorsque nos idées du théâtre, ce que c'est et ce que cela signifie, sont si incertaines? Pour passer par cette étape transitionnelle, nous avons un besoin aigu d'architectes et de techniciens, pour nous aider à construire des théâtres expérimentaux dans cette période expérimentale. Il nous faut bon nombre de petits théâtres peu chers, extrêmement flexibles qui peuvent être montés et démontés facilement selon les besoins de la pièce ou de l'époque. Si la technologie détruit le rituel, il mourra tout seul. Si on expérimentait avec des formes flexibles du théâtre, on pourrait se décider à construire des formes permanentes, au lieu de construire maintenant des grands théâtres qui peuvent échouer? Ce qui fait marcher un théâtre, c'est la qualité des acteurs (et là encore, le théâtre a échoué). A quoi bon des théâtres qui coûtent 8 millions, si la qualité des représentations laisse à désirer? A moins que les écrivains, les acteurs, les directeurs et les dessinateurs ne reçoivent la formation et le développement à les rendre inspirés, nous serons tous... morts.

Page 63 Rapport des Juges de la D'études Pilkington Pour 1967

Les juges de la bourse Pilkington pour l'année 1967 étaient très impressionnés par la capacité des soumissionnaires. Le gagnant, M. Lewis Morse de l'université du Manitoba, a été choisi en raison de l'adresse avec laquelle il a traité un problème qui comprenait des aspects différents et un système compliqué de circulation. Le projet choisi par M. Morse est un distributeur-collecteur pour la ville de Saint John, Nouveau-Brunswick, dont le but est de réunir plusieurs systèmes de transportations en une seule structure à plusieurs usages. Dans l'opinion des juges M. Morse a montré une certaine appréhension des forces urbaines contemporaines dans le choix et la solution de ce problème. Son approche qui évite les diversions de style et la tentation d'introduction de fonctions sophistiquées, est particulièrement intéressante. La seule critique formulée par les juges est la façon dont il a traité le rapport entre l'habitation et les docks. De leur avis, l'habitation devait être comprise dans le projet, afin de donner une plus grande activité.

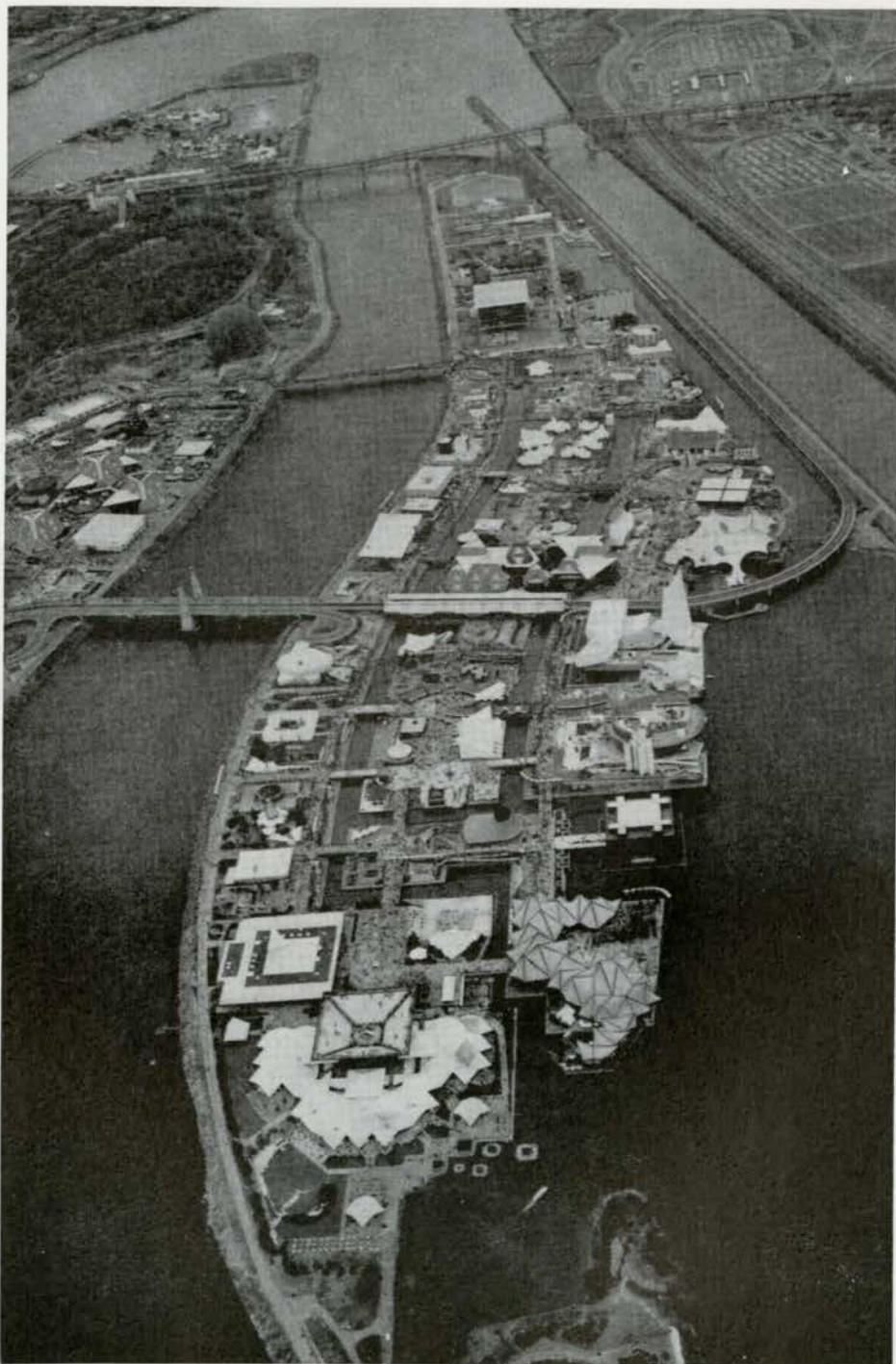
For a long time now we have been collecting writing about Expo '67, and the consensus of opinion among the architectural and art publications, the newspapers, the periodicals and the more esoteric magazines is that there never has been a World's Fair like this one. Its going to be a tough act to follow.

Questioned about what impresses them most, the visitors, according to official reports, say it is the architecture. Not all of it is good, of course, some is mediocre; but most of it is of a very high standard indeed. With an equally high standard in landscape architecture, street furniture, signage, transportation, numerous and exciting displays of sculpture and other works of art and fine craft indoors and outdoors, it is no wonder that Expo has already drawn half as many visitors again as was predicted. For what the visitor sees that pleases so much, the credit must go to the Expo Chief Architect's branch, its advisory committee and all the architects, planners, landscape architects, etc., from Canada and elsewhere who produced the final result.

We ourselves have published a good deal about Expo since 1964 and undoubtedly will continue with articles of special interest in the future. This, however, is our last major presentation. It begins with a photographic tour of Expo by Associate Editor Jack Diamond, followed by an article on the planning strengths and weaknesses as they have revealed themselves to date, written by S. M. Staples, CCWE assistant chief architect-planner, who described Expo's transportation network in our August 1966 issue. Mr Staples ends "Expo '67: Is it a Success" with the one big question 'what would you have done differently?' We invite comment.

One of the features of the fair is the La Ronde amusement area. Douglas Lintula examines how it is working at the end of two months of operation.

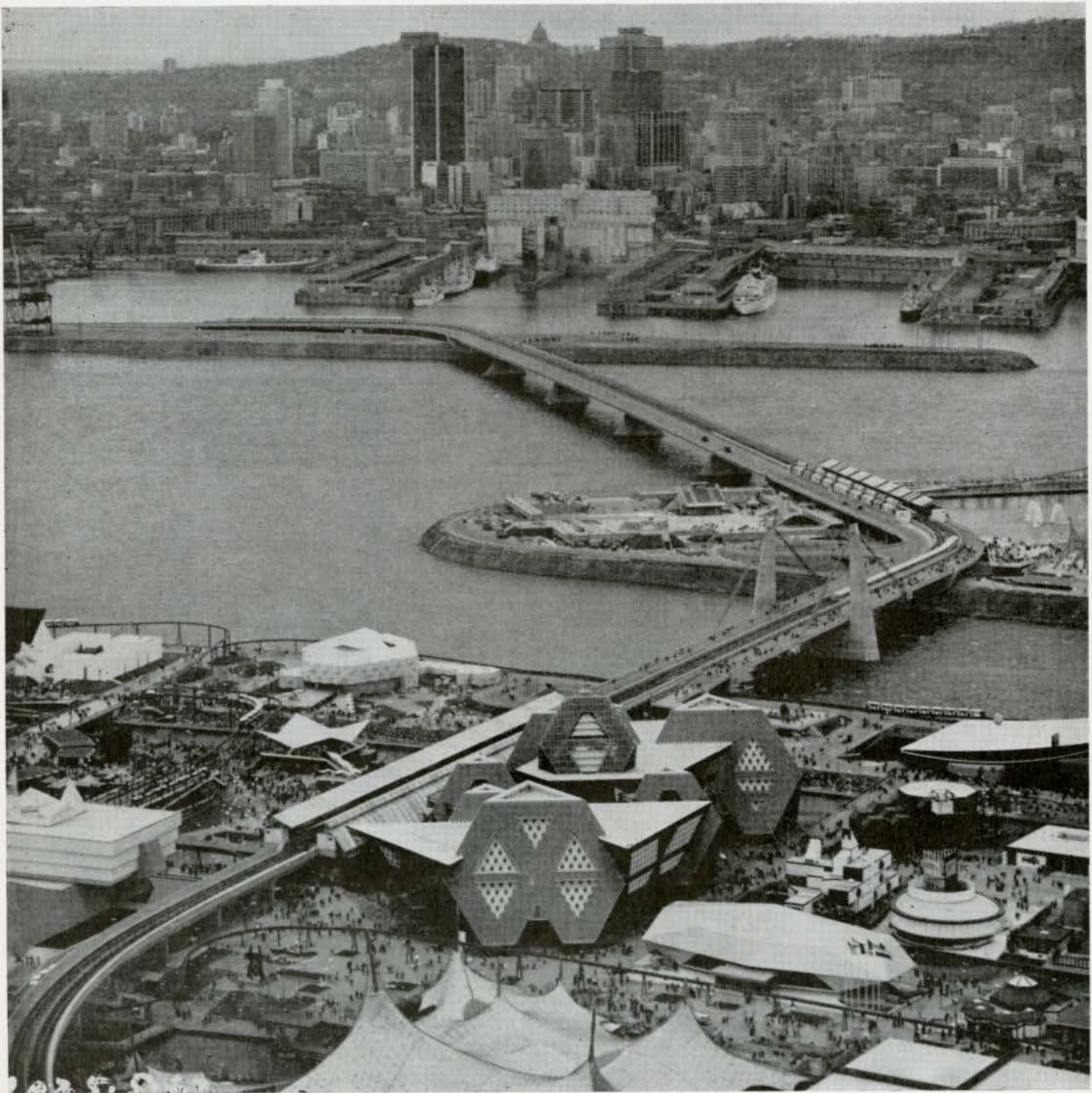
In her regular place in Section Three, Allied Arts Department Editor Anita Aarons takes a look at the films and exhibits in what she calls "The Honeycombs inside the Pavilions."



1
Man made Ile Notre Dame looking north. Aerial photograph shows density of development on the site, diversity of architecture and the extensiveness of water and land transportation systems

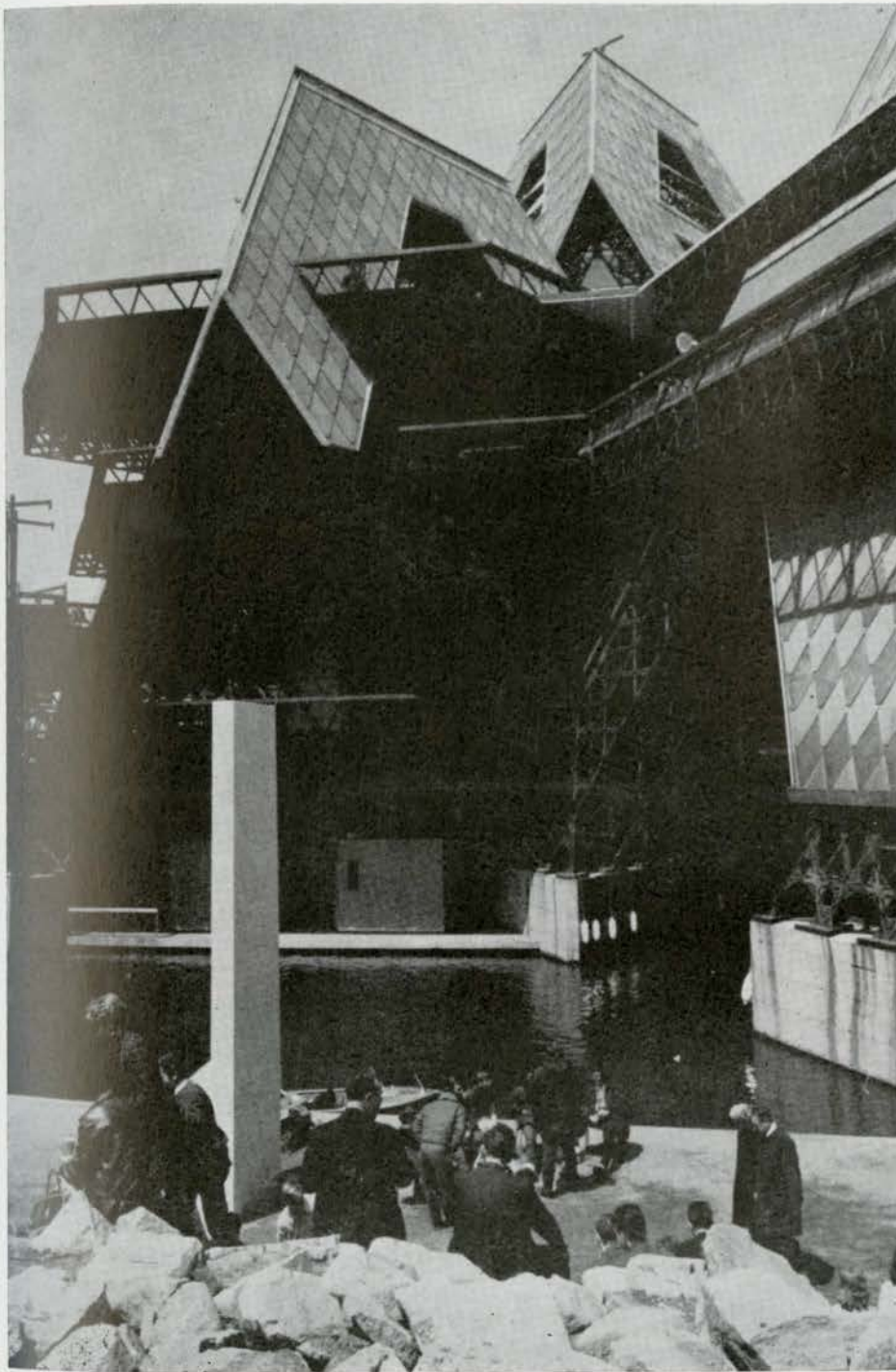
Man the Explorer Theme Pavilion on Ile Sainte Hélène and Expo Express line. Montreal's impressive skyline is in the background

Le Pavillon thématique de l'Homme interroge l'univers sur l'Île Sainte Hélène est relié avec Montréal par l'Expo Express



3

Easily recognized is the strong architectural design of the Theme Pavilions. Here, a close-up of Man the Producer built over the canals of Ile Notre Dame
Voici un aperçu du Pavillon "l'Homme à l'oeuvre", construit sur le canal de l'Île Notre Dame où se reflète également l'architecture caractéristique des Pavillons thématiques



3

4

Entrance to Man and the Polar Regions section of Man the Explorer Pavilion
L'entrée du pavillon l'Homme et les régions polaires faisant partie du sujet "l'Homme interroge l'univers"

5

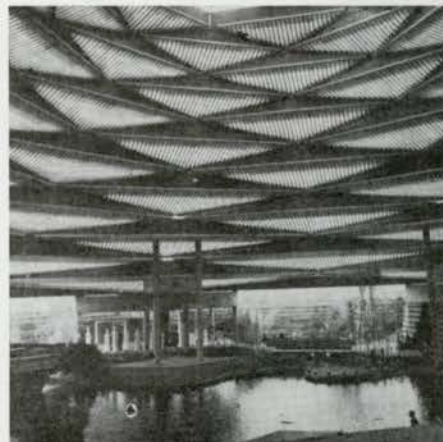
Cool and restful interior courtyard of Man in the Community Pavilion
L'intérieur de la cour du pavillon l'Homme dans la Cité

6

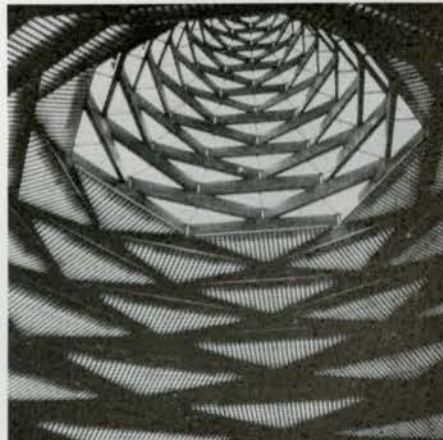
Looking up into the cone over the interior courtyard of Man in the Community Theme Pavilion
Vue sur le cône du pavillon "l'Homme dans la Cité"



4



5

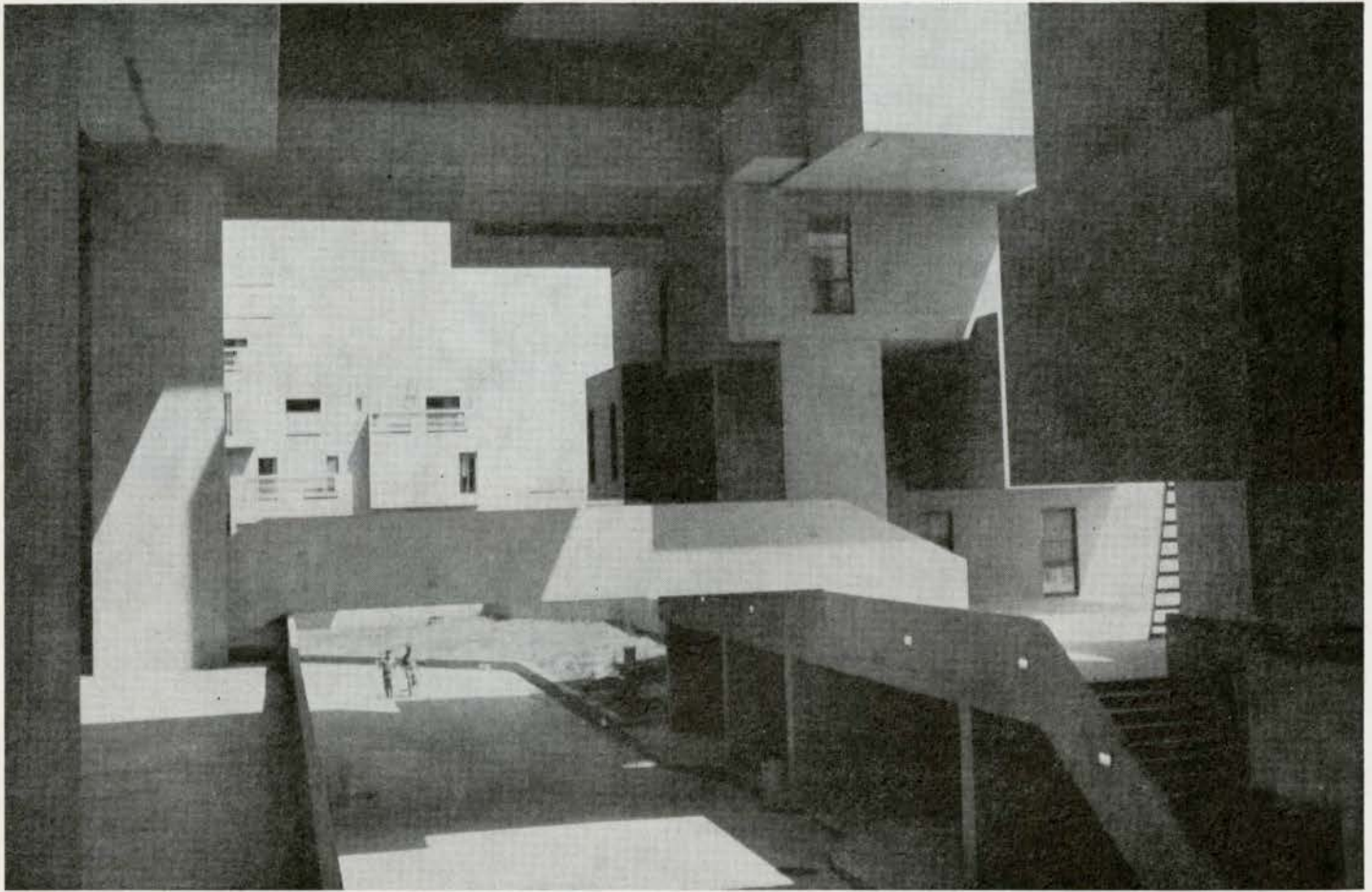


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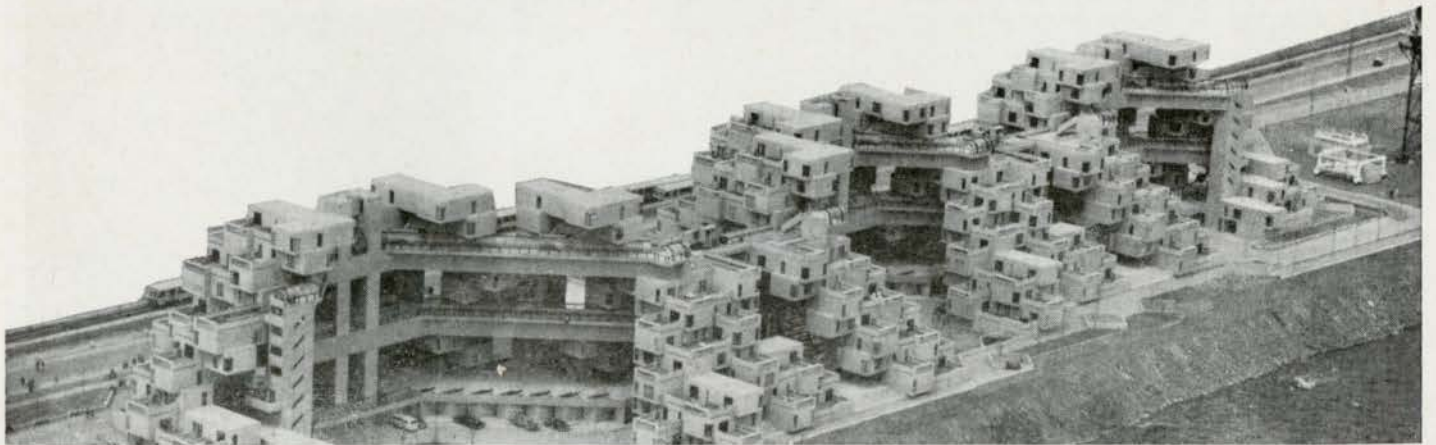
7, 8

Probably the most controversial piece of architecture at Expo '67 is Habitat. Some have called it the largest piece of Cubist sculpture in the world

Par sa conception audacieuse l'Habitat est considéré comme une oeuvre appartenant à l'école du cubisme



7



8

9

*The Czechoslovakian Pavilion won a prize at the Brussel's World Fair and would be one of the strongest contenders if prizes were to be awarded here
Comme à Bruxelles le prix d'excellence irait au pavillon tchécoslovaque*

10

*The Venezuelan "boxes", each side painted a vibrant color – exciting because of their simplicity
La diversité des couleurs sur les surfaces des cubes composant le pavillon vénézuélien lui donne un aspect vibrant*



10



9

11

The US Dome, the crowning piece of architecture, is seen from nearly every part of the site

Le dôme géodésique, chef d'oeuvre de l'architecture, est vu de partout

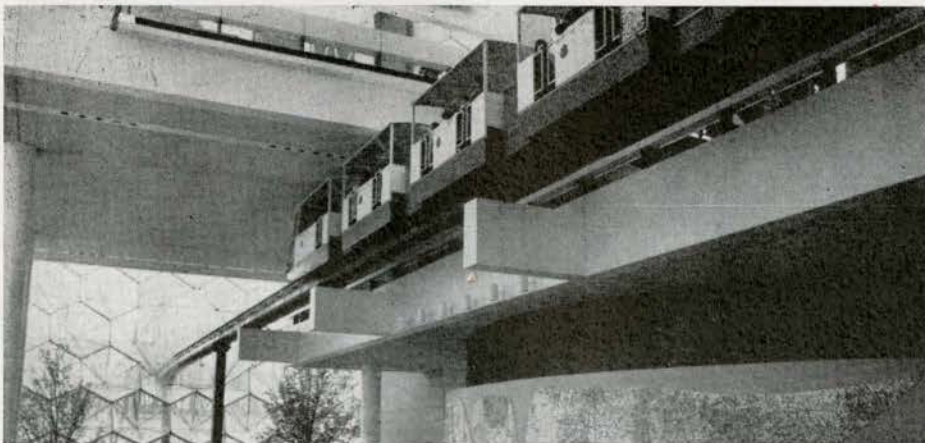
12, 13

The minirail runs through the US pavilion – a stroke of genius

Le minirail traversant le pavillon américain



11



12



13

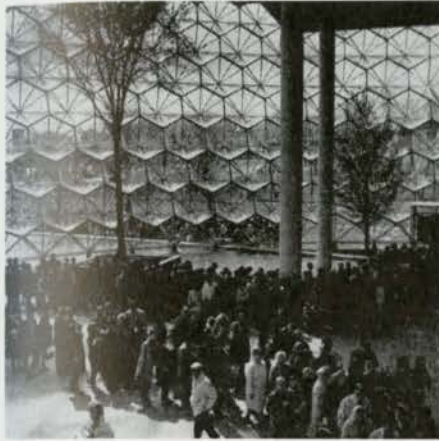
14
Line snaking through the entrance to US Pavilion

Une queue devant le pavillon américain

15
US Pavilion, the escalator is the world's longest

L'escalier mobile du pavillon américain est le plus long du monde

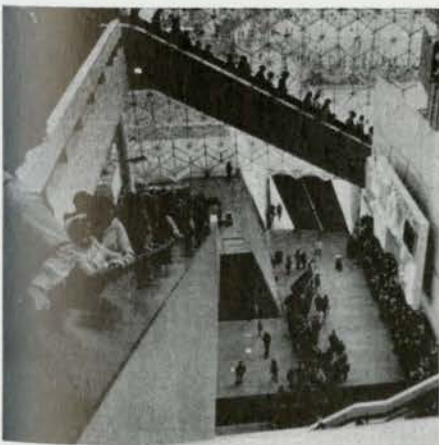
16
View from the top, 20 storeys up
Vue du 20e étage de l'escalier mobile



14

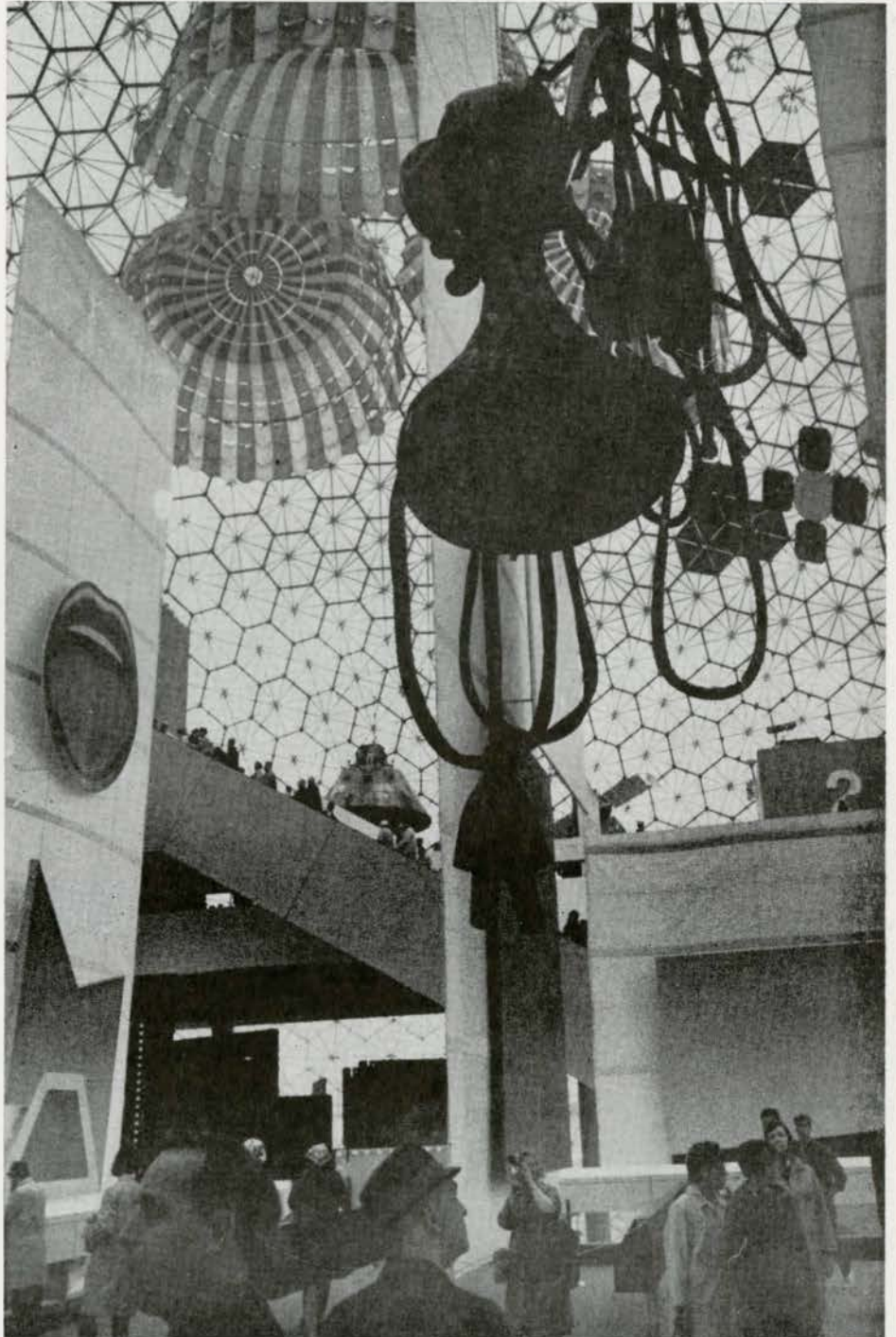


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17
US space exhibit under the top of the dome and Oldenburg's "Soft Fan"
Au sommet de la coupole se trouve une exposition lunaire

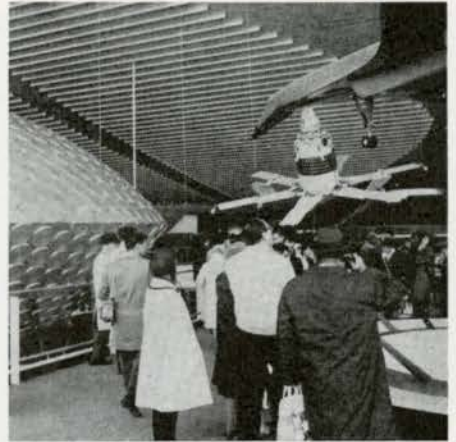
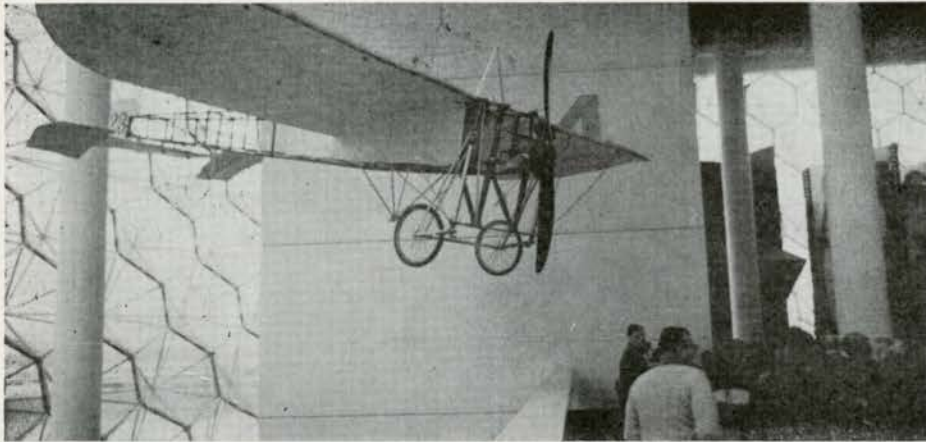


17

18
One of the old Hollywood "props"
dramatically displayed
Exposé spectaculaire d'un accessoire du
cinéma hollywoodien

19
Cosmos walk linking US and Russia
La passerelle du Cosmos relie les pavillons
russes et américains

20
Russian Space Exhibit
Exposition russe de ses réalisations
spaciales



18

20



19

21
*A popular form of relaxing
Sur le banc . . .*

22
*Thrill area of La Ronde. In the background,
the giant Gyrotron
La Ronde, parc d'amusement
A l'arrière plan on voit le Gyrotron,
manège spectaculaire*

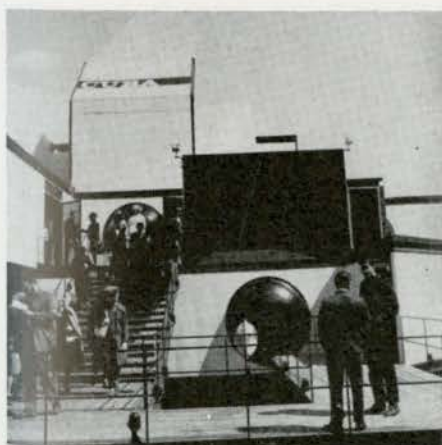
23
*Cuba
Le pavillon de Cuba*



21



22



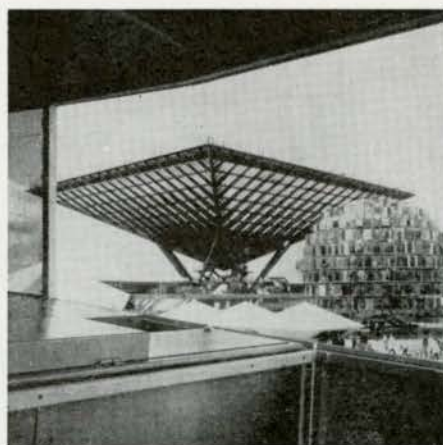
23

24
*The most photographed man at Expo.
One of the delightful figurative Belgian
sculptures*

25
*Sculpture belge, favori des photographes
25
The Katimavik and People Tree at the
Canadian pavilion seen from the minirail
Le pavillon canadien avec le Katimavik et
l'érable stylisé vu du minirail*



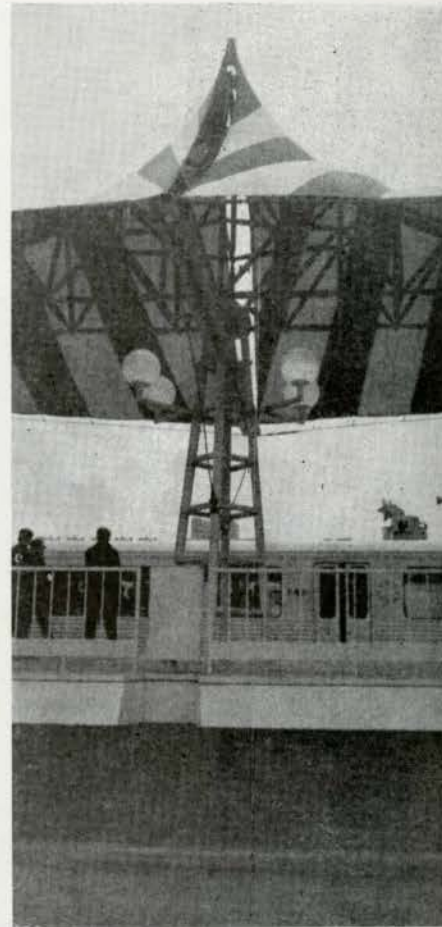
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26
*Expo Express stop, colorful and functional
Terminus de l'Expo Express*

27
*Landscape architecture
Divertissements*

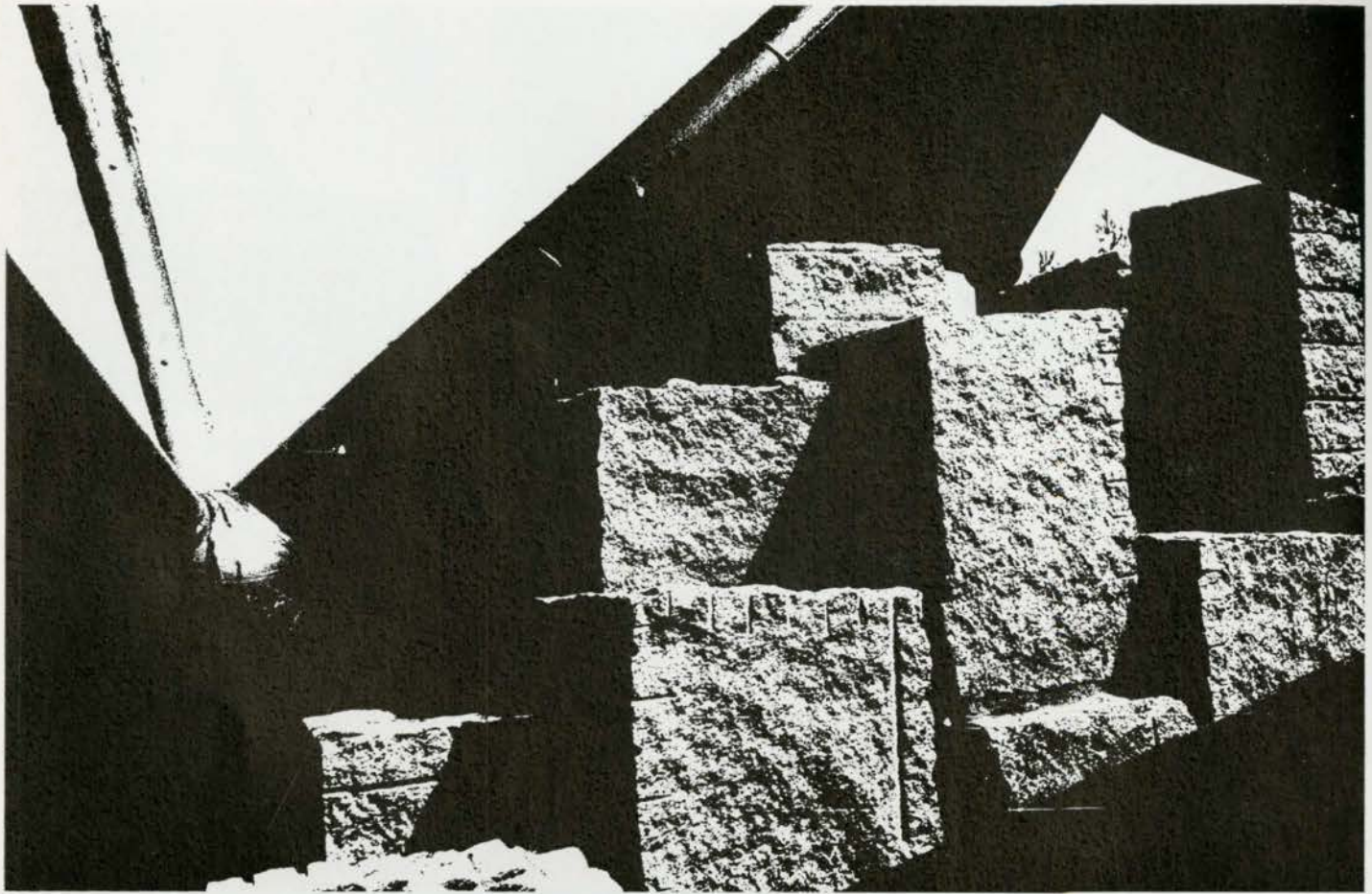


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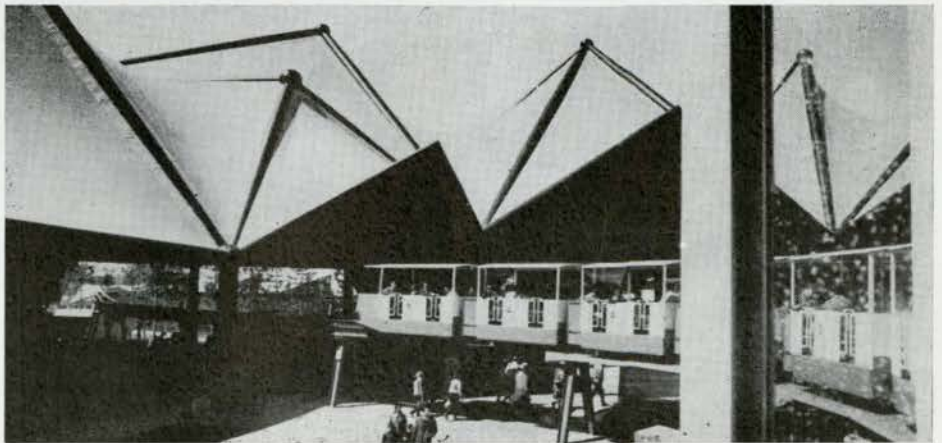
27

The Ontario Pavilion, a detail of the block foundation
Éléments de fondation du pavillon de l'Ontario



28

A pleasant pavilion with excellent use of space planning for crowds – Ontario from the minirail
Vu du minirail ce pavillon, d'une architecture hardie, a été conçu pour la foule



29

30

One of the more spectacular pieces of architecture, the German Pavilion. General view of this most successful tent
Vue générale sur le pavillon allemand qui par sa conception extravagante est une merveille de l'architecture moderne

31, 32

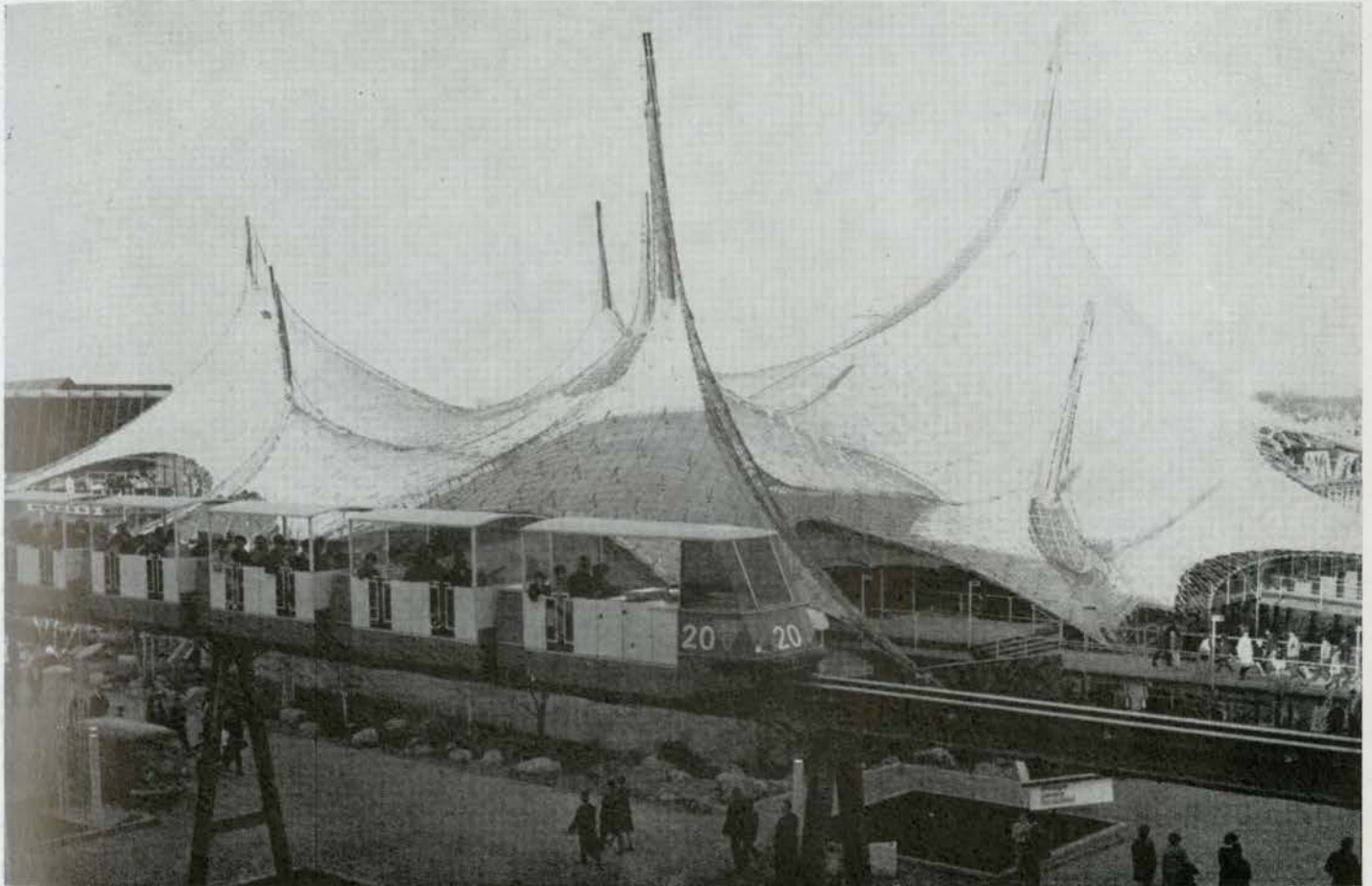
Interiors

A l'intérieur du pavillon

33

Close-up of cable anchor

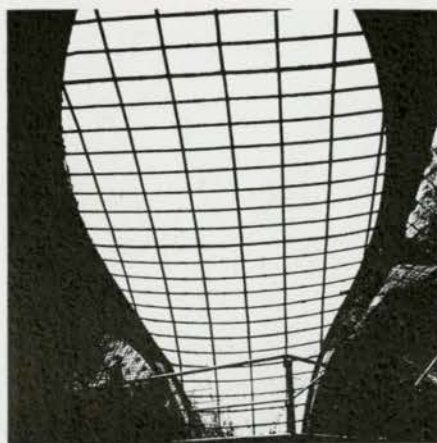
Vue de face de l'ancrage métallique



30



31



32



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34

French Pavilion
Pavillon français

35

These startling 20-foot people loom over
visitors to the British Pavilion
Etranges figurines apparaissent devant les
visiteurs du pavillon anglais

36

Exterior, British Pavilion
Façade du pavillon britannique



34



35



36

37

*The Quebec Pavilion by accident or planning reinforces the image of the French pavilion by reflection on its glassy walls
Les jeux du hasard ! L'image réhaussée du pavillon français par la réflexion du pavillon du Québec dans ses vitres*

38

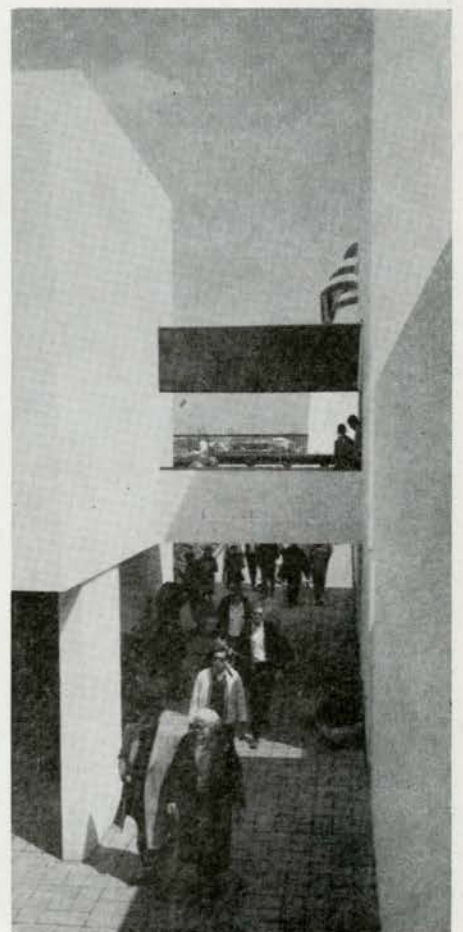
*Cafe at Italian Pavilion
Café au Pavillon italien*



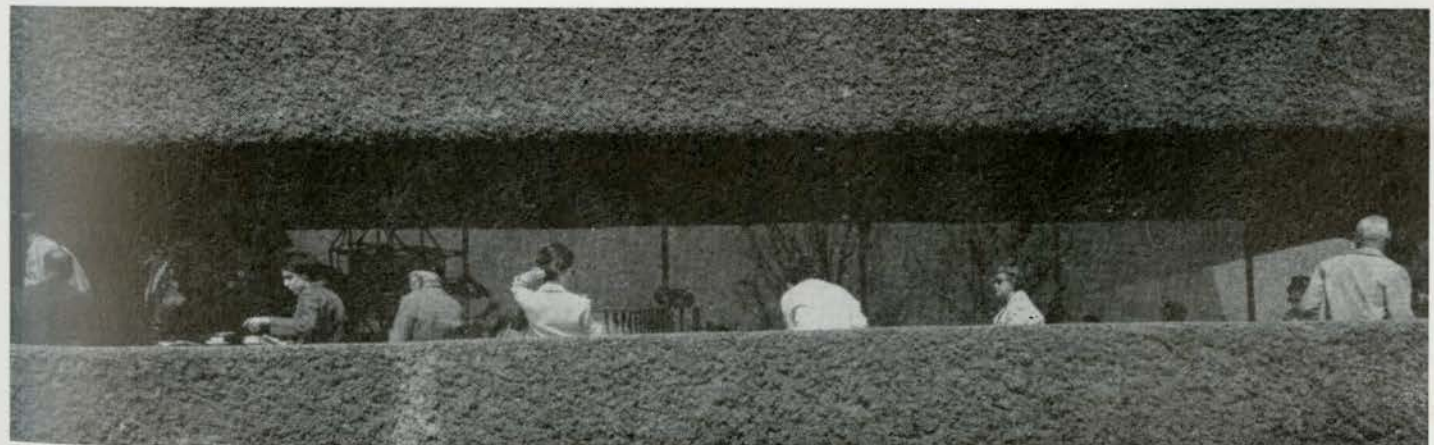
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39

*The Greek Pavilion captures the warmth of the homeland on an intimate scale
Le pavillon grecque a capturé l'âme du pays hellénique*



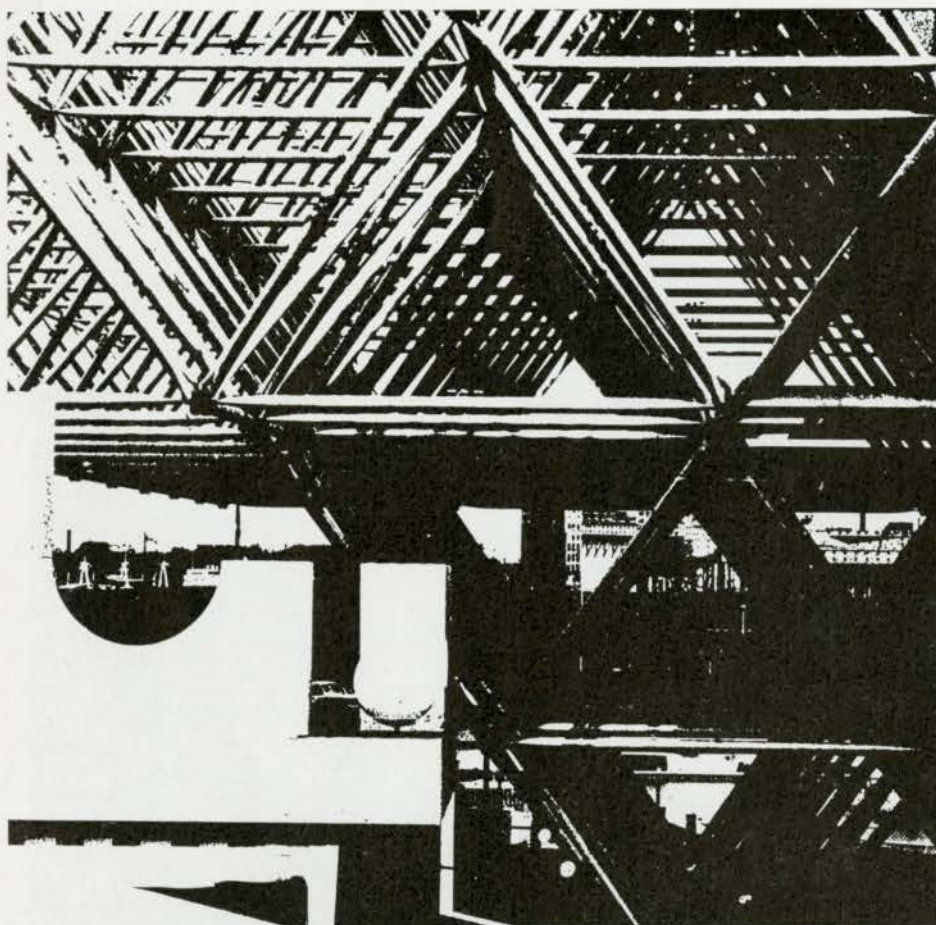
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Detail of Gyrotron
Détail du Gyrotron

41
Happy jumbled roofscape of La Ronde
Vue sur une toiture pittoresque de fête
foraine

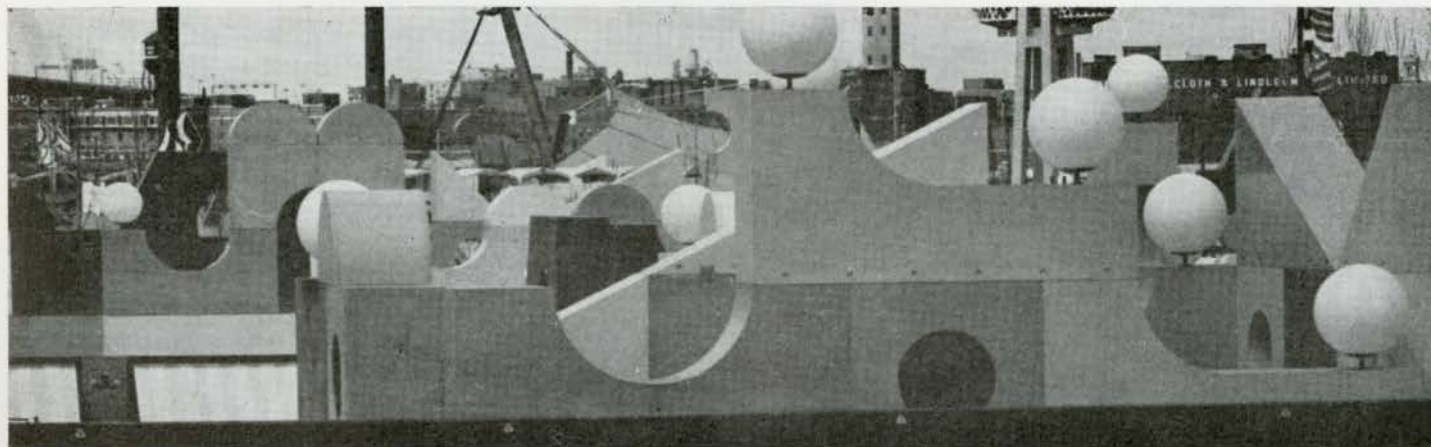


40

42
Yellow Minirail over La Ronde
Minirail surplombant La Ronde



42



41

Expo '67: Is it a Success?

1-3

Action photographs showing Minirail, water transportation and Expo Express at Ile Notre Dame

Pris sur le vif Minirail en marche, promenade en bateau et l'Expo Express à l'Île Notre Dame

S.M. Staples

Mr Staples is Assistant Chief-Architect-Planner for the Canadian Corporation for the World Exhibition. In addition to this article he has written on the transportation network at Expo in our August 1966 issue

Expo has now been open and in operation for about two months: enough time to have some idea of its failures and successes. What I have attempted to do is to set down some random thoughts, not definitive, which will raise more questions than they answer. And if what I have to say can stimulate some dialogue in the design professions, then so much the better.

The primary goal of the Expo plan was to develop an order or structure gutsy enough to be able to accept a wide diversity of architectural (and non-architectural) styles and elements, but at the same time to retain a visual and functional unity. The building blocks used in the structure were several:

1 A hierarchy of transportation systems which, as well as moving people efficiently, would allow visitors to comprehend the parts of the site and their relationship to the whole by means of the ride experience and the location and design of the transportation nodes.

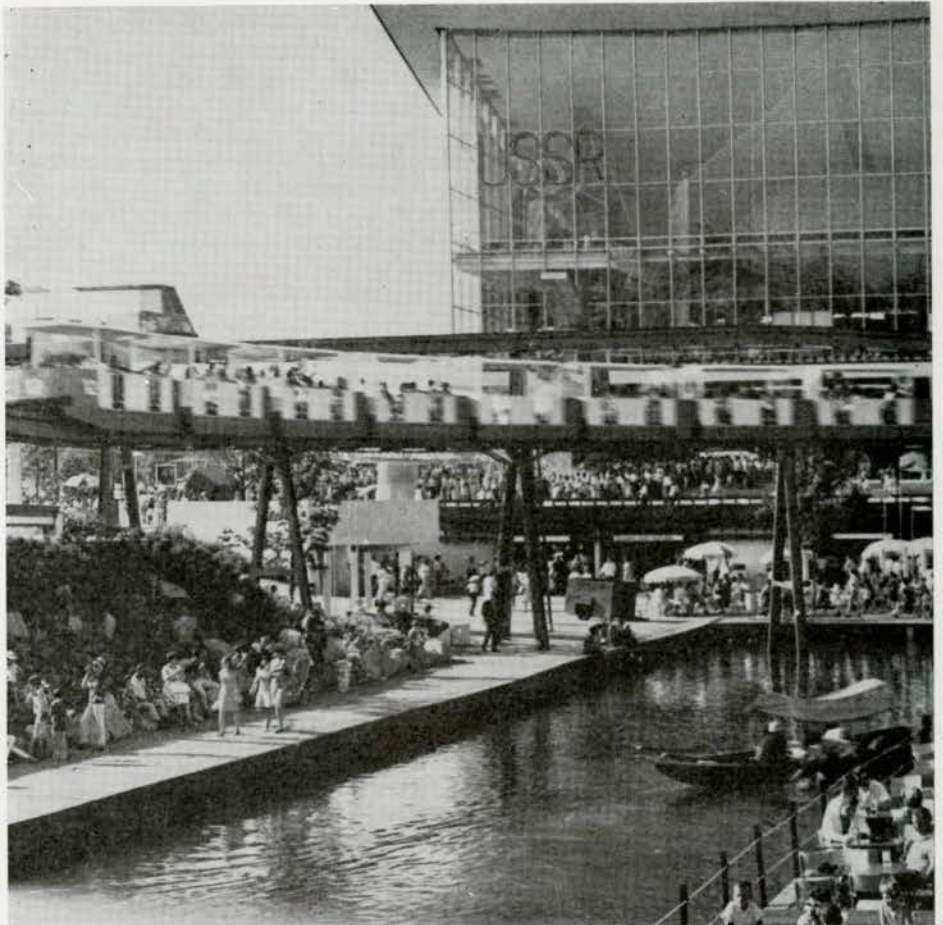
2 The Theme structures, at the center of the three pavilion areas, were to be visual reference points, and because of their close integration with the primary transportation stops, were to expose the visitor to the main story line of Man and His World.

3 Each of the four areas were to be densely built and visually as well as functionally differentiated.

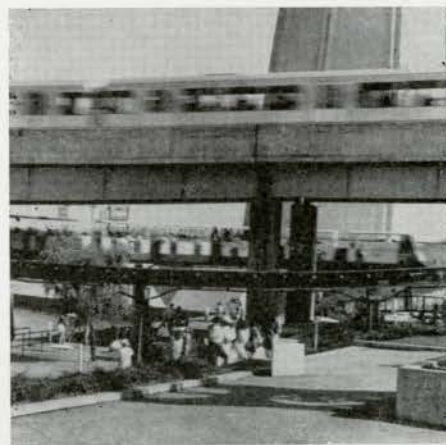
The Problems of Success

At the rate of visitors streaming to the Exhibition total attendance will reach at least 45 million or about 50% more than was forecast. It would be fine if this evident success could be attributed only to "good planning," but two other factors have contributed substantially to the success. The first is the tremendous publicity generated by the torrent of words in the North American press; the second is the imaginative entrance ticket device consisting of the seven day and season passports which enable visitors to return many times at no added cost.

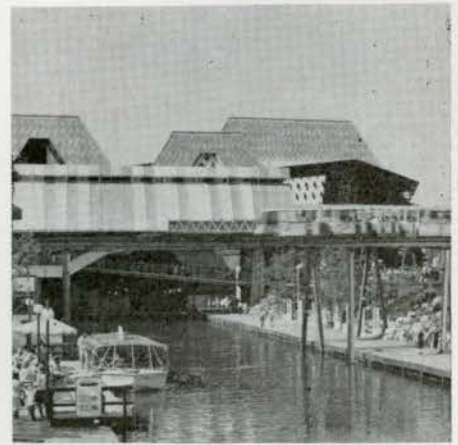
But the large crowds have generated problems of inadequate transportation,



1



2



3

Experiment to test five Expo visitors' image of the parts of the site and their relationship to the whole
Croquis de l'emplacement de l'Expo vus par cinq visiteurs

eating and washroom facilities and long lines at many pavilions. The service facilities have been expanded to an acceptable level and in such a way that the Exhibition works smoothly. With few exceptions only the closest observer can see that the additions were not an original part of the plan. This is testimony to the inherent strength and flexibility of the Exhibition's structure. But to be honest the solutions to these problems were only found at the last minute while contingency plans should have been ready for implementation as soon as the need for them arose.

This suggests a lesson applicable not only to the planning of Expo but also to urban planning. Planning is a choice among alternative means to reach a stated objective, but the plan chosen should also have built into it various options which will allow it to meet changed circumstances. This is not a new lesson, but a difficult one to put into practice for it requires struggling against administrative inertia and the well-nigh immovable objects of committed and approved budgets and plans.

The popular success is also evidenced by the few and minor complaints of visitors obtained in interview surveys conducted by the Expo Corporation. The average visitor interviewed in fact has to be prompted before he could come up with anything to complain about. The most interesting com-

ment, however, is that the Exhibition is "well planned". Unfortunately, the surveys have not yet probed into this statement to find out exactly what it means. Some guesses follow, based on personal observations and conversations and using the planning goals described above as starting points.

The Transportation Network

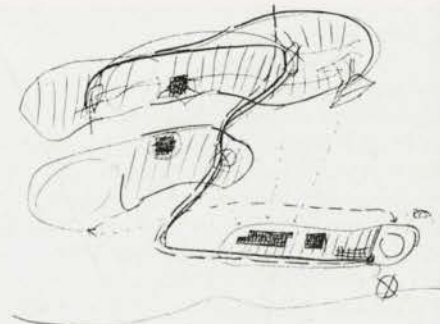
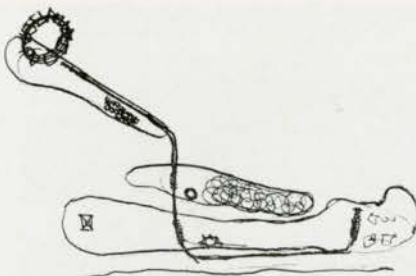
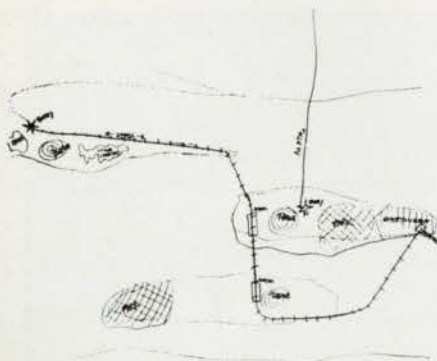
The transportation network is partially successful in giving the visitor an image of the parts of the site and their relationship to the whole. The Expo Express, as anticipated, is used by many persons first entering the the Exhibition for a partial or complete round trip. There seems to be a significant difference between the images retained by those who have and those who have not ridden the Expo Express. A primitive experiment was conducted which tends to bear this out. A group of five visitors, planning students, were given five minutes to draw the major elements of the Exhibition plan. The students had very little previous knowledge of Expo and had spent about a day and a half on the site. All had ridden the Expo Express, but only one had ventured as far as La Ronde, the amusement area. The five drawings are reproduced below and although there are differences of emphasis, all correctly reproduce the relationship between the three main exhibit areas and show the alignment of the Expo Express as a dominant element. Only the student who

been to La Ronde showed this area in the eight relationship to the others.

The sample was too small and the group too atypical for any valid conclusions to be drawn from the experiment, but it would be extremely interesting to see the results of a statistically sound and better organized survey. The hypothesis is that the results would be substantially the same.

Riding in the Expo Express one also overhears comments about the excellence of the system, comments about the speed, the comfort and the views to be had as the train moves along its path. Noise (the roar of the Hovercraft or band music) and movement (the Minirail, the Hovercraft) immediately cause most heads to turn. The same comment applies equally whether the visitor is in the Expo Express, the Minirail, walking or just sitting down, with the difference that his rate of movement or degree of enclosure will affect the degree of impact. A question for further investigation might ask whether this type of dynamic attention-getting stimulus increases awareness and memorableness of the whole.

That the Expo Express does not operate at its design capacity of 30,000 persons an hour, and that it is sometimes hot and crowded is unfortunate, but does not detract from its success in achieving its main objective.



The Minirail systems and particularly the most crowded one on Ile Notre-Dame have also had their problems, primarily in a conflict between capacity and popularity. As the waiting lines grew longer and longer, the decision was taken to compel visitors to get off the trains at two end stations rather than allowing them to get on and off where they wished. Before this decision, the average length of ride was one complete round trip with most riders using it for the ride experience rather than as transportation, at least during the earlier part of the day. Later in the day an increasing proportion used it to get back to the Metro station where they had entered the Exhibition.

There seems to be a consensus that the Ile Notre-Dame Minirail ride is one of the most memorable things at the Exhibition for the exposure it gives to all parts of the area it serves, for the experience of viewing from a height, of passing behind waterfalls, over people and lagoons and through the US dome. Comments besides those of the blanket "Wow, wasn't that great" variety, are usually about facets of the Exhibition which would not have been seen but for the Minirail ride. However, once the ride is finished and the rider has tried to get back to whatever sparked his interest, he normally has had to ask the way or study a map. The ride has not helped to build an instant image of spatial relationships but

has given information about the many pavilions and activities which "happen" along the route. That this is so may be the result of the immediacy and involvement with detail which is perhaps the most powerful characteristic of the Minirail ride. It may also be that the alignment, which crosses over itself twice in its five mile length, is just too complicated for people to conceptualize. However, I do not know that I would want to simplify it if I had to do it over again.

A curious phenomenon has been the relative reluctance of visitors to ride the boats on Ile Notre-Dame although the ride exposes them to a large percentage of all pavilions located there. During the very cold month of May perhaps there was an association in the visitor's mind between the water and the cold. In fact it was much warmer riding the boats in the sheltered canals than the elevated Minirails which were doing a booming business but exposed to winds sweeping off the St Lawrence. One must conclude that the simple act of elevating a ride tremendously enhances its attractiveness.

The convenience of the private automobile has ensured its continuing popularity and expanding use. The same factor of convenience is responsible for the success of the trailer trains and especially the three-wheeled Pedicabs. Their use at Expo has

resulted in a conflict between individual convenience and the comfort and safety of the mass. This conflict is manifested by competition between pedestrians and vehicles for limited space on the path system. Even if the expensive expedient of providing parallel paths for vehicles and pedestrians is resorted to, the inherent flexibility of the vehicles usually ensures that the one most convenient path is used for all. When crowding is such that the use of one path by two different traffic modes results in problems of safety and the breakdown of movement, the use of bypasses or parallel paths has to be enforced by regulation. Since designers usually are against the kind of mode mixing described here, the question may be asked as to what are the practical alternatives.

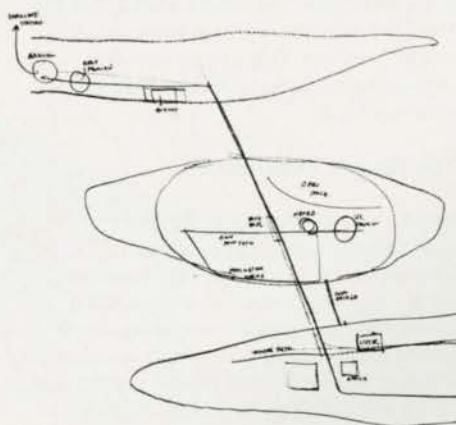
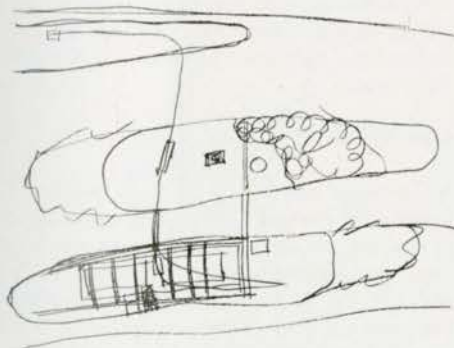
Nodes and Focal Points

A good node or focal point should perform its function of transfer, collection and dispersal efficiently and should be unique so that it is not confused with other focal points. At Expo we have had mixed results in their design.

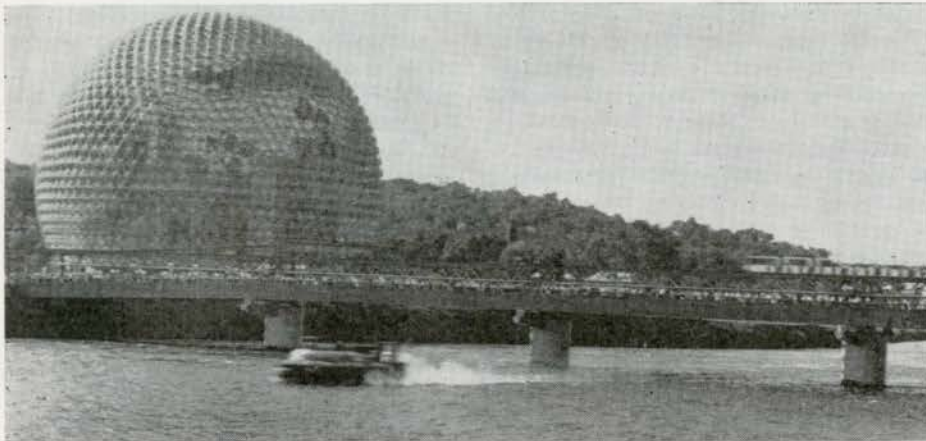
Of the three main gates or mediating points between the City and Expo both the Place d'Accueil and the La Ronde entrance are successful, particularly the Place d'Accueil. They both have the capacity to transfer the flow of visitors from one mode of movement to another; they do not present the visitor with too many confusing alternatives; and they are landmarks and visually distinctive.

The Metro entrance is unsuccessful: it is not a landmark and visitors arriving there are given no clear path to follow or viewing platform to use as a decision area; the Minirail is perhaps the most attractive activity close at hand and since it has only one tenth the capacity of the Metro a serious problem of congestion results where it is least desired. In discussions with visiting friends it was evident that those who entered at Place d'Accueil and took the Expo Express were much more at ease and could find their way around much better than those arriving by Metro.

In principle the Expo Express station on



*Hovercraft travelling St Lawrence River,
Minirail over Cosmos Walk
Hovercraft faisant la navette sur le Saint-
Laurent, Minirail sur la passerelle du Cosmos*



5

Ile Sainte Helene should have been much closer to the Metro entrance, although in practice the somewhat reduced capacity of the former may have resulted in greater problems than we now have. In the early plans these two nodes were adjacent to each other, but problems of geometry and cost made this impossible. There is some ambiguity about the success of the Theme buildings as focal points, specially Man the Producer on Ile Notre-Dame. To some it divides Ile Notre-Dame into two parts and inhibits movement from one part to the other. It is not sufficiently larger than other pavilions on Ile Notre-Dame to form a clear landmark. However, its central location and remembered association with the Expo Express station makes it useful for others as a reference point. Man the Explorer on Ile Sainte Helene is the most successful not only because it is large and visually distinctive in relation to surrounding pavilions, but also because it is a focal point of activity with a terrace cafe, restaurant, fountains and meeting point or the area's two major pedestrian paths.

Legibility

Kevin Lynch in "The Image of the City" asserts that legibility is of crucial importance for the visual quality of environment and he defines a legible city as: *one whose districts or landmarks or pathways are easily identifiable and are easily grouped into an overall pattern.*

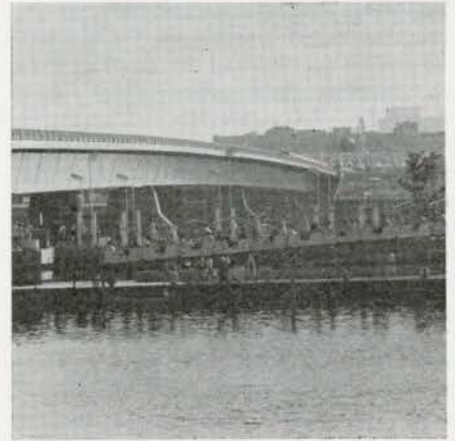
The Exhibition is clearly legible because it meets all of these criteria. It is strongly separated from the city by the St Lawrence which divides it into four parts with sharply defined edges; there is contrast between the densely built pavilion areas and the green parks; the path of the primary transportation, the Expo Express is clearly visible because it is elevated for most of its length and its bridge structures provide continuity between the four areas; and the Exhibition and its parts are legible from vantage points outside the Exhibition as well as when one is moving through it.

This unmistakable identity is perhaps the greatest contributor to the excitement that Expo generates. It is worth noting that the site itself was chosen by a politician and not by planners. Does this mean that politicians are better planners than the planners?

The Kinetic Experience

What I have discussed so far lacks one vital element: life and movement. The quality of movement that takes place on the site synthesizes all the planning involving transportation networks, focal points and building function. It is immensely difficult to describe the myriad simultaneous flows and activities in words, diagrams or photographs and this is why visitors who have read thousands of words about Expo are still unprepared for the reality.

*The canal, the Minirail and Expo Express,
Ile Notre-Dame
Le canal, le Minirail et l'Expo Express à
l'Île Notre-Dame*



6

This was brought home to me when I took a number of photographs of the movement systems for this article. These were exciting shots with movement at three, four or five levels in the vertical plane and flows at different speeds and in different directions on the horizontal plane. The photographs were clear, dull and static since the movement had been stopped. (The series of photographs shown (pages 39 and 72) is a little more successful in capturing the action.)

The Movement systems play an essential part in structuring the plan and enhancing its quality, more so than they do in an urban environment. The clear expression of a well ordered hierarchy of movement systems, using levels to differentiate function, is perhaps the main lesson that can be learned from Expo.

Conclusion

A number of questions have been raised in this article which concern the synthesis of the multiple elements of the plan into a dynamic operational unity. For someone with time on his hands it could be a fruitful experience to delve a little more deeply into these questions while Expo is still in operation.

One last question: What would you have done differently?

La Ronde in Operation at Expo '67

The Richard Strong Associates-James Secord Consortium Landscape Architects and Site Planners

"We were retained by the Canadian Corporation for the 1967 World Exhibition in November 1963, to act as site planners and landscape architects for all of La Ronde. At the time, the 135 acre site was just being formed as an extension of the north end of Ile Ste-Helene beyond the Jacques Cartier Bridge. Acting as consultants directly to the corporation, it was our job to evaluate program uses for the area and properly locate them; review all pedestrian and vehicular circular circulation systems; conduct all site planning services such as establishment of grades and the detailing of paving and horizontal surfaces; and design all the non-building elements such as planting areas, gardens, fountains, special seating areas and boardwalks. In addition we conducted a feasibility study for the 450 boat marina and then designed it. All of this work of course involved very close collaboration with both the Expo staff and the many architects, engineers, planners, artists, sculptors and other designers who were engaged to provide the individual buildings, displays and amusement areas.

"Our response, now that the area has been functioning for a while, is one of basic satisfaction. In spite of the overwhelming numbers of people - twice as many as originally anticipated - we have found that the site generally works very well. Some concessions have been necessary but no

The following is a commentary from the men responsible for the planning and much of the design of La Ronde, the amusement area of Expo '67, compiled by Douglas Lintula, B. Arch.

major ones. It's fun and gay and some terrific activities take place in it. We feel elated to see the plan, which was conceived less than three years ago, develop into a successful and active amusement area."

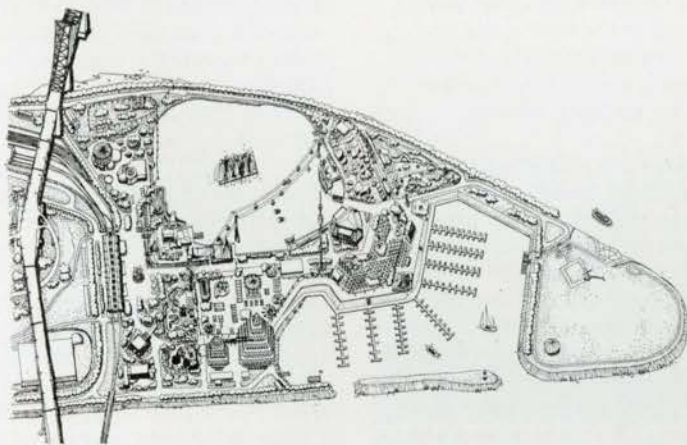
Like most of the Expo site, La Ronde was built on new land in the St Lawrence River. Ironically, its construction began with the destruction of the small island of Ile Ronde located just north of Ile Ste-Helene. Composed of solid granite rising ten feet above the water, it was blasted away to a depth of 40 feet below water level, leaving only a perimeter band of rock. Within this was created Dolphin Lake, the scene of much activity at today's fair. The granite itself was used to form La Ronde's perimeter seawall behind which fill was dumped to build up the site. By the time site planners were engaged, the main physical characteristics of the site had been established. Already determined were the basic overall shape, location of the Expo Express stop (the main point of public arrival) and the position of Lake Dolphin. These elements provided the general frame work within which planning proceeded.

"The planning problems were extremely complex as is always the case when you must organize the movement of large surging crowds of people. Our approach was to create enough intimate and large scale

spaces that there would be an inner action of movement allowing people to easily get away from the highly active areas in order to relax in more informal surroundings. The actual starting point, of course, for the organization of all this movement was the Expo Express stop, where most would enter the area including car and bus arrivals. At the other end of the site, some would land by boat, helicopter and hovercraft but only in small numbers."

The dispersal of crowds begins immediately at the Esplanade, the main arrival space. To the left, are the Dolphin Pool, Aquarium and Pioneerland; to the right, the Children's World and the Youth Pavilion. Straight ahead is the main mall designed to handle most of the traffic. It leads 1400 feet north down the center of the site and terminates with its intersection of Fleur De Lys, where a second plaza is located. From the Mall all other activities can be reached. At its midpoint, it passes by Lake Dolphin where it is possible to leave the Mall by stepping down to a boardwalk just above the water and continue on around the lake.

"We had hoped to bend the Mall when it reached the lake and make it into a wide sweeping boardwalk along the shore. The majority opinion however was in favor of continuing it in a straight line, as it does, in order to provide more direct access to some areas.



1
La Ronde



2
The Mall
L'Esplanade

When the fair opened people were all over
it like ants going everywhere
A l'ouverture, la foire fourmillait de visiteurs



3



4



5



6

The elevation rises, incidentally, to this point to provide a sense of arrival and a view of the lake's activities. The viewing terrace is nearby in case a person wants to stop and watch the water shows which are practically continuous".

Vehicular transportation was also organized to help to move people away from the arrival area. In addition to pedicabs and tour trains, both the Sky Ride and the Minirail have terminals immediately adjacent to the Esplanade. The Minirail, as elsewhere at Expo, offers a leisurely trip through all major areas while the Sky Ride gives a dramatic aerial view of the entire site. It takes the visitor up and over the lake by gondola diagonally across the site and brings him to the other end of the activity area near Le Village. Here, the second Minirail stop is close by to provide almost continuous moving transportation if desired. Another panoramic view is given by La Spirale, a tower brought from Switzerland, which takes visitors up to a height of 312 feet within an enclosed 60 passenger rotating cabin.

"One of our primary responsibilities was to integrate all the different kinds of activity into an exciting and functional area - the rides, amusement sections, water shows and so on. The Mall and the various transportation systems help to achieve this but the two water areas play an especially important part. Both the lake and the marina were developed as great areas of activity closely related with land functions brought right to the water's edge. In the case of the marina, the interaction is very informal; at the lake, it is much more concentrated with organized entertainment for audience viewing."

An important planning consideration was scale of development. Since much of La Ronde would be maintained after Expo was over, it was necessary to consider not only the large crowds of this summer but also the smaller numbers of people who would use it on a permanent basis. The result was a balance with a spatial organization somewhat smaller in scale than might otherwise have been adopted, but nevertheless satisfactory for the number of visitors anticipated. And then the flood gates opened wide.

"The crowds, of course, have been over-

whelming and have stretched the limits of the area to the breaking point. Still the people are moving well and the various transportation systems are working as planned. When the fair opened, the people were all over it like ants going everywhere even into service and staff areas that were not intended for public traffic - also into fountains and the planted tree areas which act as buffer strips between different functions. Some of this was in search of shade, of course, as every single tree was new and many just did not have their foliage yet. We also found that due to the crush of humanity, people just kept on moving through the rest areas and the highly visual places where it was intended that they stop, rest and look around.

"Some barriers, we found, were too subtle such as slopes, planting, and bollards connected with chains. It is always difficult to predict human behavior in a given situation but we did not want to channel and control movement within too rigid a framework. To remedy the situation, some previously closed areas have been opened up while others have been provided with more effective barriers."

Overall, La Ronde is gay and bustling with activity. Like the rest of Expo, it was assembled in remarkably quick time and is fully functioning in spite of the problems that have arisen.

"When you have to work so quickly, there are bound to be slip-ups. Take the overflowing pools at the entrance. They were formed and poured between inspection trips from this office and ended up twice as high as they should be.

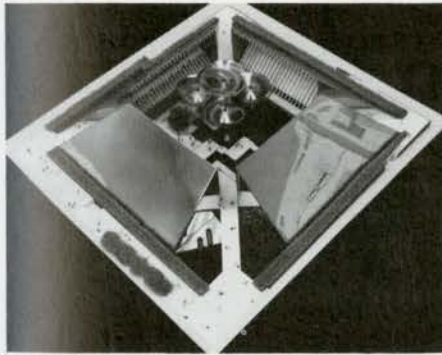
"Do anything differently? Oh yes, especially in a project such as this which is really like doing a huge stage set. If anything, we would be more light-hearted in our approach; some aspects are a little too serious. The process is still going on, however. Hundreds more flowers and other plants are being installed. (in addition to the 14,000 that were put in originally) in order to brighten up some of the areas that turned out too drab. Generally, we are very satisfied. The place really swings."

And it does.

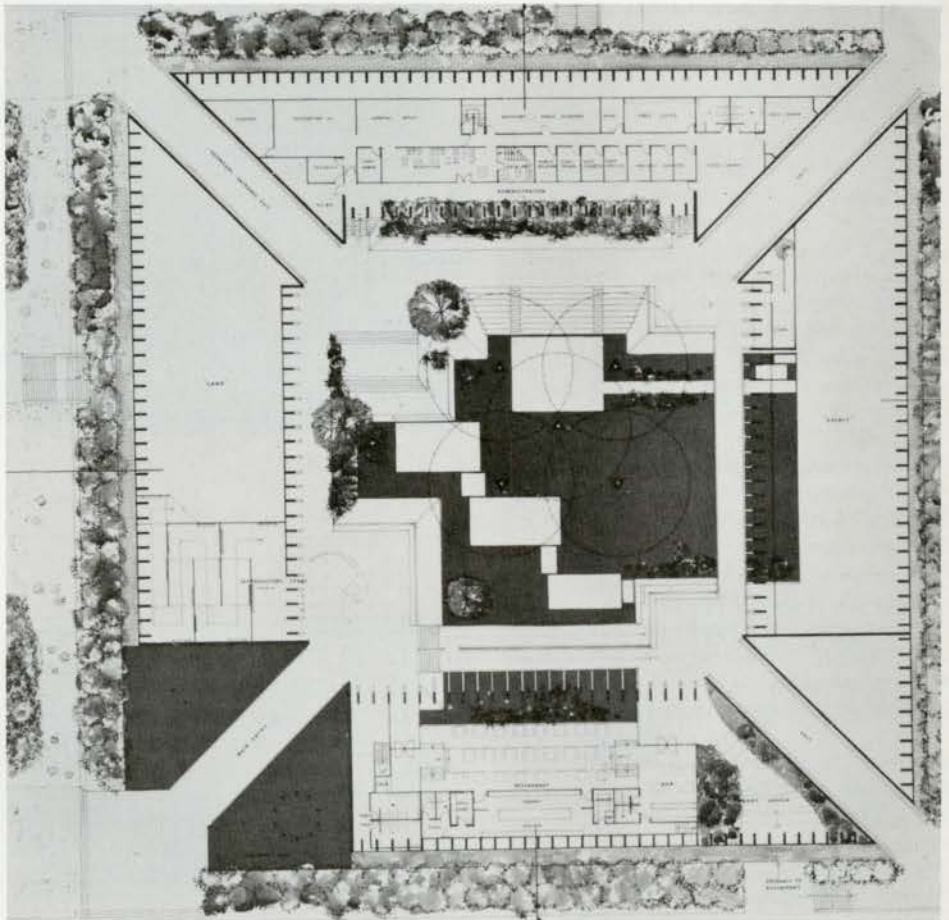
Competition for the Canadian Pavilion –
The winner and finalists with excerpts
from the Jury's comments on each
entry

Winning Design by Erickson/Massey

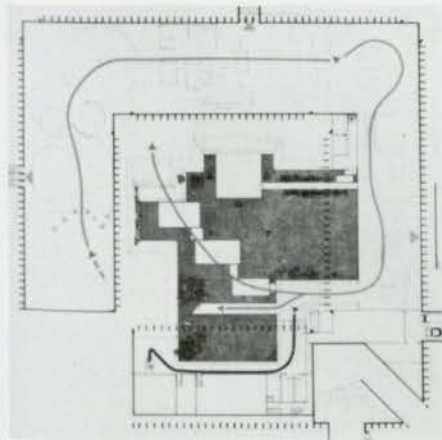
Absence of clear demarcation edges to the forms, surprise effect of slot entrances, sudden revelation and hint of a fantasy world within the mirrored walls, effect of mirror views in all directions, the attraction of rotating multi-colored spinners contribute to achieve a great subtlety of effect, enigmatic, arbitrary and transcendental — characteristic of Japanese aesthetics; excellent exhibit vehicle, allowing designers an adequate degree of freedom and latitude for even closer integration between the building and the story of Canada



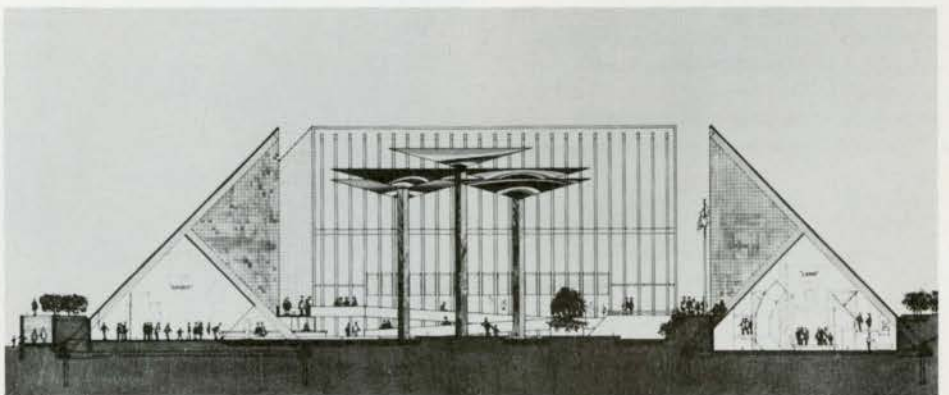
1 Model



3 Entrance Level Plan



2 Circulation



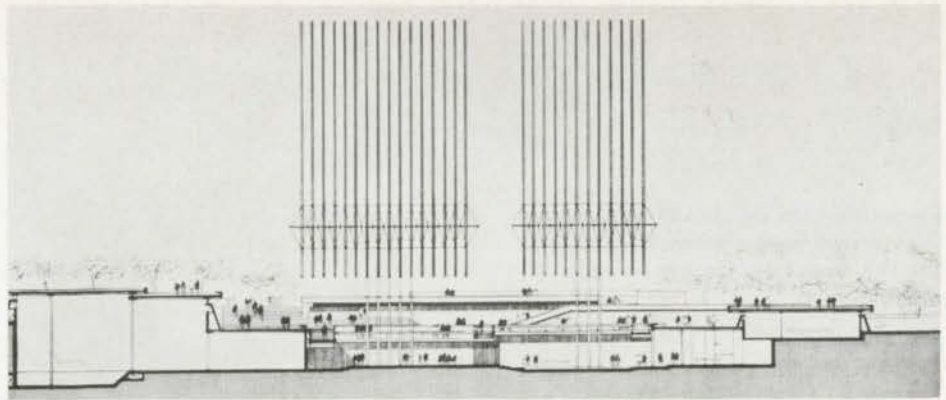
4 Section

Five Finalists in Canadian Pavilion Competition, Expo '70, Osaka

Affleck, Desbarats, Dimakopoulos, Lebensold, Sise

5, 6, 7

A bold, dramatic gesture created by the single large form almost floating over the site; weak monochromatic presentation and lack of adequate detailed information; competitor did not provide reassurance to the Jury on problems of structural stability, feasibility, noise and nuisances; insufficient detail provided to obtain a reasonably reliable cost analysis; pavilion being underground and, in effect, invisible, weakens Canada's identity and presence in Osaka

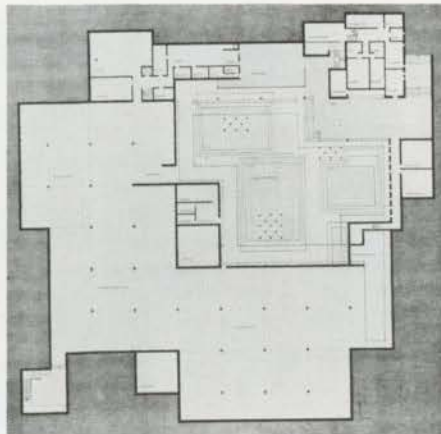


5 Section looking north

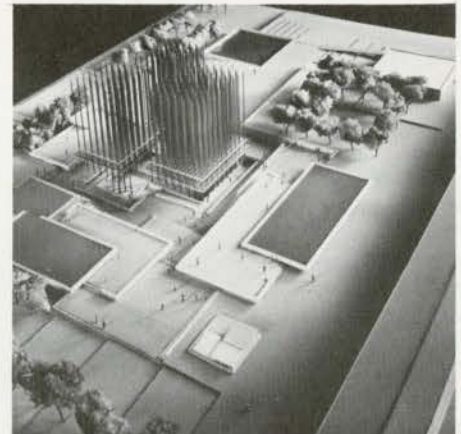
Marcel Gagné & Leonard Warshaw

8, 9, 10

Highly imaginative and original concept, strong sculptural qualities, powerful landscape image, identity from the distance, superb light modulation day and night, conscientious resolution of technological aspects, flexibility of space and form, alternate choices provided by systems approach; site development as shown restricts circulation to periphery outside the site with inadequate access, although the wall profile suggests all kinds of places for the public to enter



6 Main level plan



7 Model

John Gallop

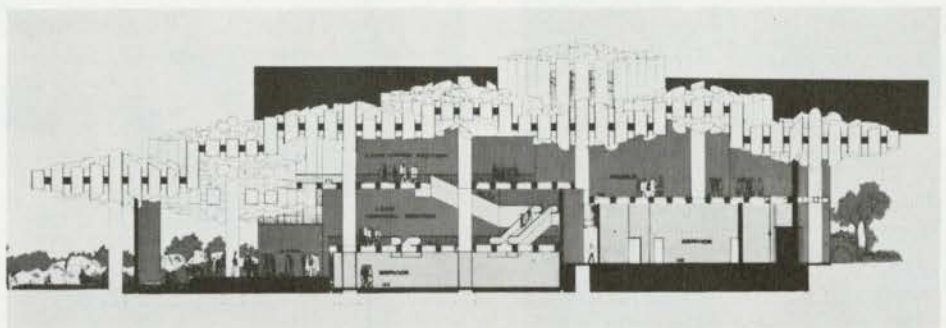
11, 12, 13

The Jury at Stage I felt that this design showed great promise because of the strong simplicity of the basic forms used, and skilful grouping, but was concerned about the over-simplification of the design as presented; presentation makes it very difficult to assess the result in architectural terms; sizes and shapes of the volumes and their composition have been altered significantly, less attractive than first design

Gardiner Thornton Davidson Garrett Masson & Associates

14, 15, 16, 17

Although technically functional and meeting all requirements with considerable skill, the Stage II design lost most of those architectural qualities attractive in Stage I; good circulation for exhibition areas and crowds, once on site, adequate spaces for exhibition purposes; suspended sculpture failed to enhance design, though its effectiveness for the functions intended was not disputed; space frame construction being used rather decoratively with somewhat fussy effect; flat plane of the upper roof unsympathetic to the sloping plane forms of lower buildings

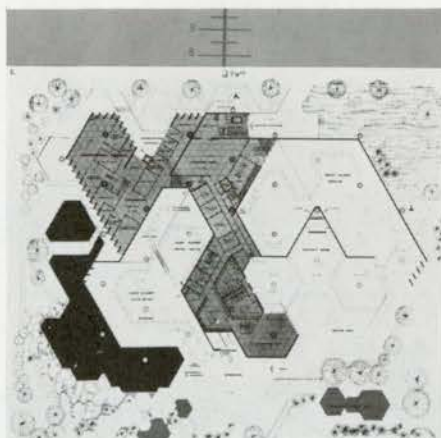


8 Section

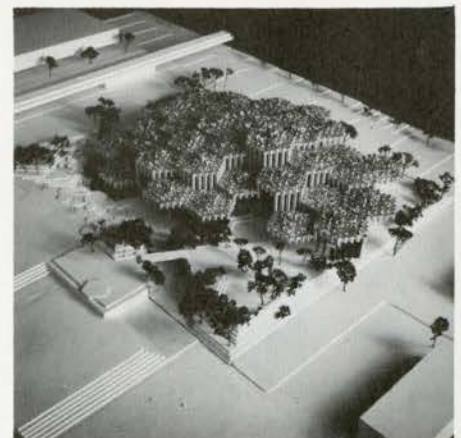
Ian Martin

18, 19, 20, 21

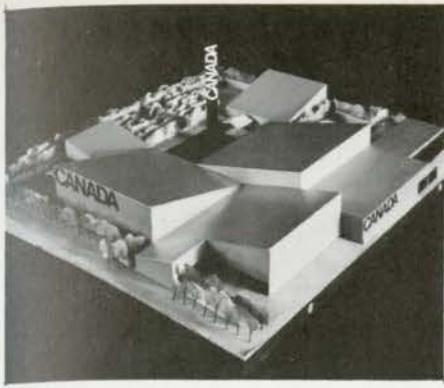
Sophisticated statement exercising great restraint and utilizing significant economy of means to achieve a beautiful effect; circulation and planning are excellent, great variety of neutral volumes and spaces for exhibition purposes; post and beam statement, although one which conveys a warm and human ambiance, is not entirely a suitable image for a major pavilion



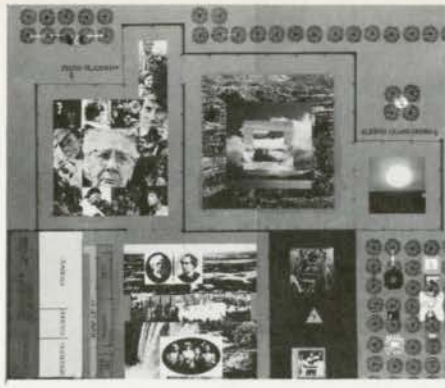
9 Plan, main floor



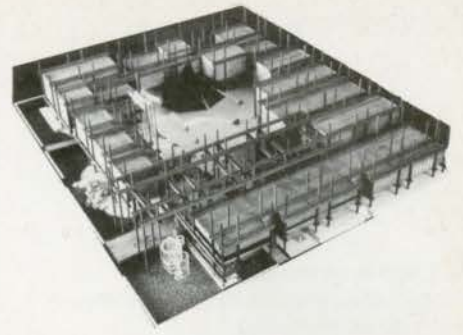
10 Model



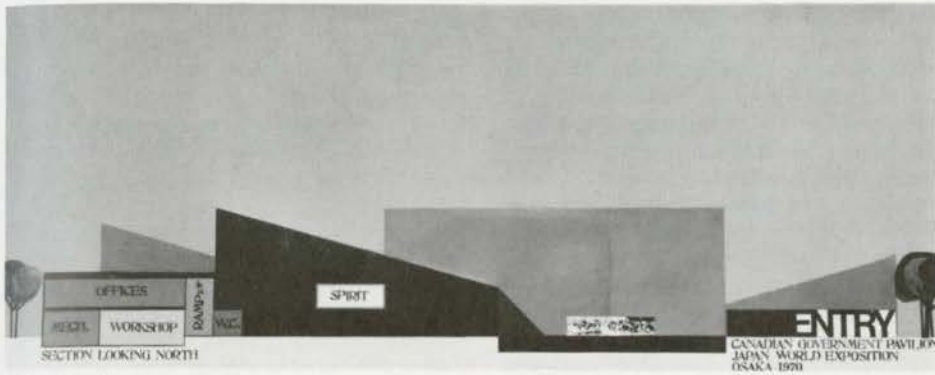
11 Model



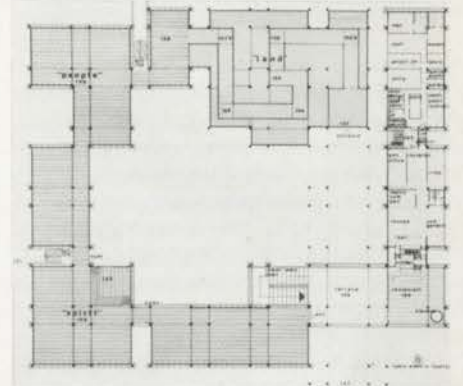
12 Plan



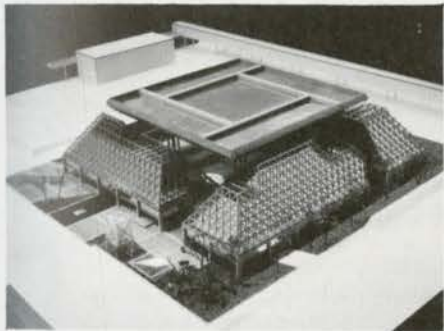
18 Model



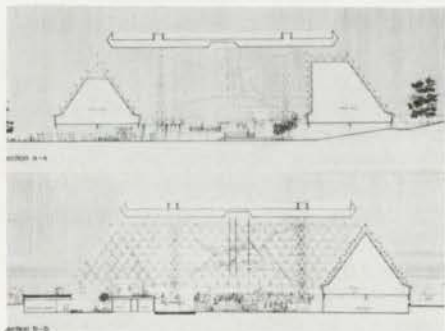
13 Section



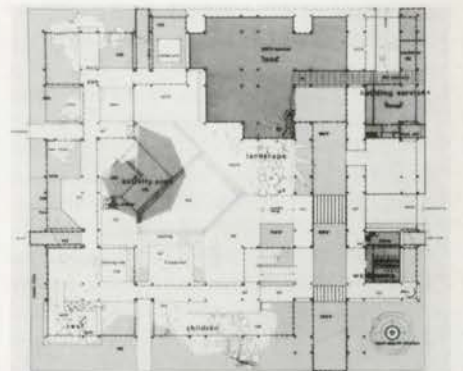
19 Exhibition level plan



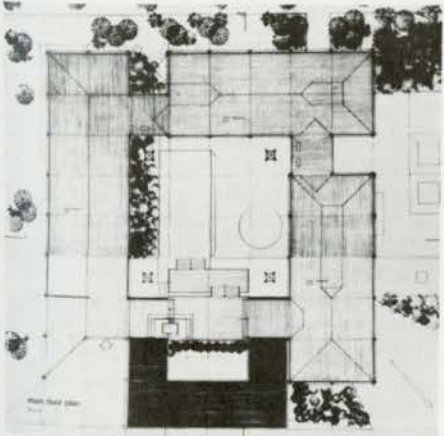
14 Model



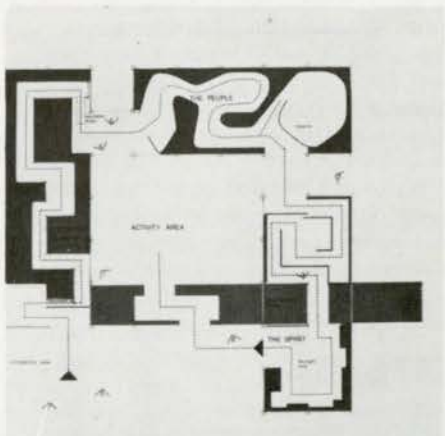
15 Sections



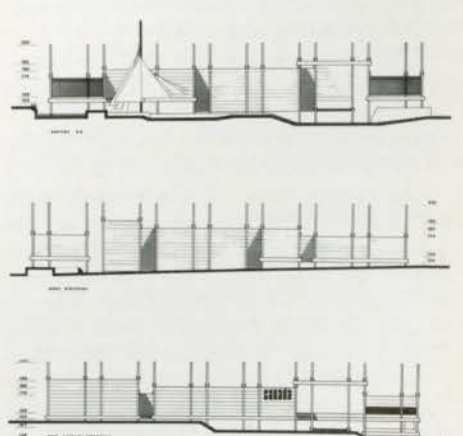
20 Activity Area Plan



16 Plan



17 Plan suggesting development of the story line



21 Section, Elevations

Stratford "Talk-in" Revisited

J. F. C. Smith, MRAIC

Mr Smith is an architect and former planner who concerns himself with the problems of urbanology

Doves and hawks made their appearance at the closing session of this year's Stratford Seminar on Civic Design, July 9-11.

The hawks? Delegates roused by the challenge of a future long talked about but now here. They urged that some form of political activism follow the deliberations – a sort of 11th hour attempt to master an environmental situation well nigh out of control. *The doves?* Those favoring the present policy of non-involvement, *ie* continuance of the seminars as a meeting place for representatives of many disciplines and interests, where experiences can be shared, ideas exchanged, and aims discussed without the necessity of doing anything in an organized way about them afterwards.

Who won?

Before answering that question, here's a bit of background:

The theme this year, "Habitat '77", dealt with the future of family living in an urban environment. The announcement stated that this will be a true seminar in the sense that while a provisional program is outlined, the pace, direction and content of discussion will be determined in large measure by the delegates themselves.

Whether this objective was achieved is debatable. Experience shows that audience participation is greatest when the papers to be given are circulated in advance and delegates come prepared – after a quick, on-the-spot briefing – to discuss them in round table fashion. This pattern was not followed at Stratford. As usual when papers are read, no time was left for anything like a "total immersion" – only a brief toe-wetting.

Keynote Speaker

Dr Albert Rose, Professor of Social Work, University of Toronto, spoke following the opening ceremonies on *Housing in the Social Environment*. In his thoughtful, impressively documented way, he scored many points. One of them made newspaper headlines – it was that Canadians are in the midst of a housing crisis that could last a quarter of a century. Even so, he said, the bulk of our population – perhaps half – must receive some measure of public assistance to

achieve the kind of housing it needs.

Dr Rose visualized greater concentration of high rise apartment buildings in Canada's metropolitan centers, and urged that more attention be paid to meeting community social requirements in such facilities. "Under the impact of strong economic and social forces," he declared, "there is a great opportunity once again for Canadian architects, civic and social planners, sociologists and social workers to help politicians make the decisions necessary to shape our urban environment in new forms which will overcome the sterility of the early postwar decades."

The next morning Irving Grossman, Toronto architect, gave a well rounded, precise, illustrated slide presentation, *The Environment: What Is And Can Be*. Examples shown ranged from Chinese sand-pit houses and Spanish hill villages to Edgeley, the new federal provincial town project northwest of Toronto.

Edgeley, for which Mr Grossman has prepared the master plan, is expected to establish new environmental standards and influence suburban growth patterns. The concept of a central community plaza is of special interest. A variety of functions will be gathered along a 1,000-foot pedestrian way, giving a physical and social focus to the development.

In the afternoon, Ephraim Diamond, president of Cadillac Development Corporation, Toronto, elaborated on a thought earlier advanced by Mr Alan Armstrong Executive Officer, Canadian Council on Urban and Regional Research, Ottawa *ie* that public ownership of land might be desirable. He pointed out that neither the air nor the sea is privately owned, but said he felt the land ownership tradition would be hard to change. Were leasehold land to be made available, he said private developers would have no objection to building on it, and could make a satisfactory profit doing so.

Shared Spotlight

The Monday afternoon session also featured William Teron. Builder of the satellite town of Kanata, near Ottawa, he is now associated with Canadian Interurban Properties, which is investigating construction of Kanata-

like projects outside other major cities.

There is need, he said, for developers to plan whole towns on a total design basis, with emphasis on a variety of accommodation and community facilities. Current financing mechanisms are inadequate, however, and do not encourage the undertaking of such projects. Long term federal loans at favorable interest rates are a "must", in his opinion.

The Ontario Housing Corporation came under fire from Mr Teron who said its projects were just as shallow as those of any private developer. "They aren't concerned with total environment," he said, "they're just looking after what is urgent."

OHC's well publicized HOME program received few kind words from Mr Diamond. He commented that he could not see how it offered any real solution to the housing problem. It would reduce down payments, but increase carrying charges and with them, income requirements.

The task of summing up fell to Dr Rose, the seminar's kick-off speaker. He confessed that he had heard nothing to change his views that adequate housing for all Canadians is at least a quarter of a century away.

It was after his summing up that the hawks and doves made their presence known. Basically, the doves' attitude appeared to be that what was important about the Stratford "talk-in" was that it existed at all, not what might be promoted as a result of it. On the other hand, the hawks expressed conviction that it was futile to go on, year after year, expressing hopes, restating problems, and updating statistics, without making common cause to try to transform objectives into realities.

Who won the debate? The doves or the hawks? Neither. It was the owls – the stolid, wise, non-committal majority who remained firmly rooted in their chairs and did not express themselves one way or the other.

Offstage, the ghost of Ian MacLennan, who last year warned Seminar delegates that nothing to improve physical environment "was going to happen until those who wanted it did something to make it happen," quietly sobbed. □

Theater Architecture An Actor's Point of View

Peter Donat

"Creative people everywhere are worried about the millions of dollars being wasted every year on wrong-headed theater design. Like the road to hell, the approach may be paved with good intentions, but in the end, theater people are all too often confronted with the worst possible results. It's imperative that theater artists, architects and technicians from every part of the world should put their heads together. It's especially imperative for Canada, where we are in the throes of one of the biggest theater building programs the world has ever seen."

(G. Hamilton Southam, Co-Ordinator of Canada's National Arts Center now under construction in Ottawa.)

I recently attended as an interested observer a "Colloquium On The Architecture and Technology Of The Theatre" held in Montreal during the week of June 19-26 in the new and, rather appropriately, still a-building Place Bonaventure. The roster of invited participants was impressive, including illustrious names from all over the world: architects, engineers, business managers, administrators, acoustical experts, lighting specialists, directors, writers, designers, and city planners. It seemed to me that every professional category, at one time or another, was clearly represented, except my own — the actor.

The program was organized by the Canadian Theatre Centre, which took as its framework for discussion the basic questions: *Why theater? What theater? Where theater? How theater?* Many points of view were presented, some terrific, some not. Some discussion occurred, but generally the conference was too big, the subjects too sprawling, the languages too diverse even when excellently translated, for the affair to be called anything but a grand failure in the right direction; it at least acknowledged by its very existence that the theater is in trouble. I have been acting professionally for over 20 years, in every example of theatrical architecture I could find in North America, from church halls and basements to basket-ball courts and school auditoriums to tents to arena stages to proscenium theaters large and small to the thrust stage at Stratford, Ontario. I have become more and more aware, especially in the last few years, of the intense struggle going on to enlist and hold theater audiences. The one question I feel we must all answer is

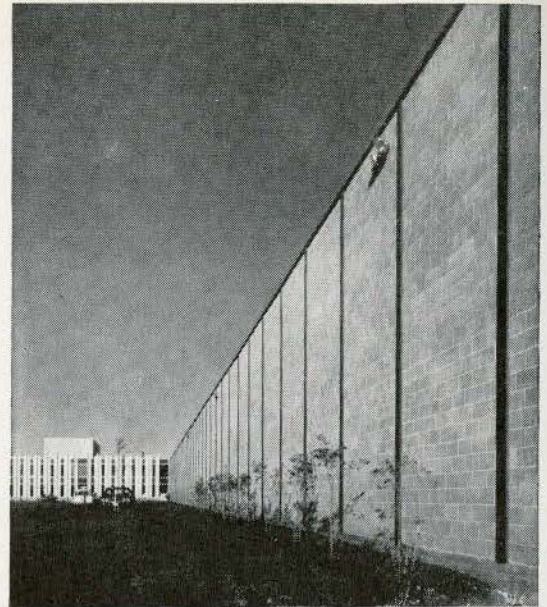
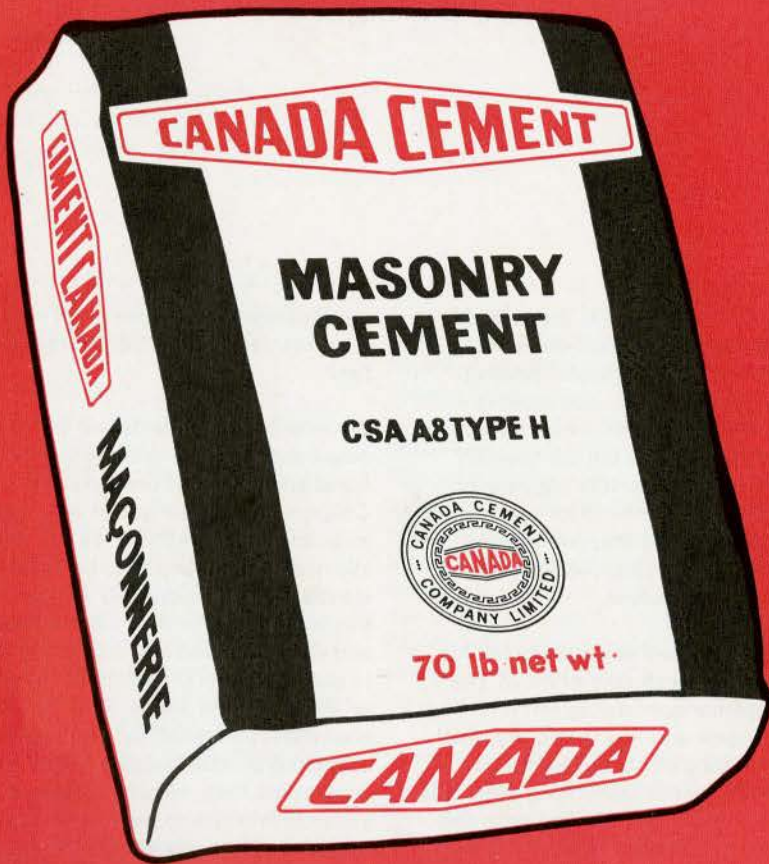
"Who needs it?" Who needs the theater? Motion picture is a beautiful, powerful and eloquent medium for visual poetry; TV is great for journalism; and radio is immensely effective for all things pertaining to sound. What is there left for theater? I feel I have the answer. It is not new or profound, it has been around for centuries, but perhaps it needs re-stating, and it bears directly on our future relationship with the architects and technicians.

Theater is the only real opportunity left for the human being to partake of *ritual*. The Church is another opportunity but it is limited by dogma and it is failing. By ritual I mean a gathering of human beings to witness a performance celebrating Man. It is the essence of ritual that the audience and the performers participate together, spiritually and emotionally; they share an experience; they are both essential. A religious Mass is nothing unless the congregation believes. A theatrical performance fails if it fails to engage the audience. Actor and audience are involved in the same ceremony in the same room at the same time. I believe people need this, want it, will seek it out without even knowing what it is or why. Perhaps it would be good to close or burn all our theater buildings. Then our present theater might be taught to us by the necessities of the human spirit. Some of the best "theater experiences" now occur in places like the entire Expo complex, and in folk-song festivals, and some of our most valid poets are the song-writers. But we need bigger experiences than this, greater poets than the Beatles. We need men and women with consummate skill, deep insights, and colossal targets. This is one area where the theater is failing.

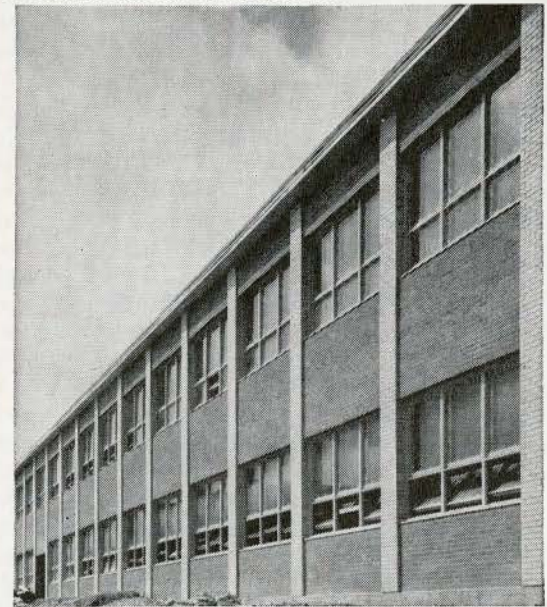
Theater, it cannot be denied, is in a precarious and unknown state, ready to take off in directions which we cannot yet sense or predict. "Colloquium '67" with all its talk and confusion helps to confirm this. Yet every new theater building and Art Center is a prediction. I think it is wrong to invest millions and millions of dollars in great, firm statements in bricks and mortar, which look years ahead and are committed to work because by God they just have to work . . . look at the blood, tears, toil, sweat and dollars it took to put them up! How can we possibly

put theaters up when we don't even know what theater is today, what it means, how it fits?

We now need architects and technicians desperately to help us through this transitional stage. One of the architects at the Colloquium stated that it is now possible to build almost anything we can imagine. We need a number of smaller theaters now, inexpensive and extremely flexible, so flexible in fact that they can be assembled and dis-assembled like building blocks to accommodate the needs of the play or the changing times. Why should a playwright be limited by a huge, heavy implanted theater building? Why can he not write a play, then we construct, or re-construct a theater in which to perform it? Why should the audience always be in front, or three-quarters around, or all round? What if, as Sean Kenny suggests, electronic equipment is needed, or a camera, or any special device heretofore undreamed of? Why can it not be incorporated temporarily into a building? Let's have the war between technology and the "live theater", if a war there must be. If technology destroys ritual, or tries to, it will die its own death. If it enhances ritual, all the better. In due time, after a period of experiment, trial and error, and great adventure, we would discover what kind of theater merits a permanent building, if any. And in the meantime, if money is saved, it could be invested not in any more bricks and mortar but in *flesh and blood*. Let's face it: when the chips are down, when all the arguments have been won, when all the decisions have been made and all the money has been spent, who is going to appear in that pool of light and make the place go or not go? . . . an actor. We may build 8 billion dollar theaters with hydraulic presses and electric motors and fantastic devices, we may even be able to fly the audiences home in their seats after the performance, but unless the talent occupying and performing in these theaters is first class (this is another area where the theater has failed), unless somebody has invested pretty heavily in the glorious uncertainty of talented people . . . unless performers and playwrights, directors and designers have been trained and developed until they are not good, not very good, not even excellent, but *inspired*, we are all . . . all of us . . . as dead as door-nails.

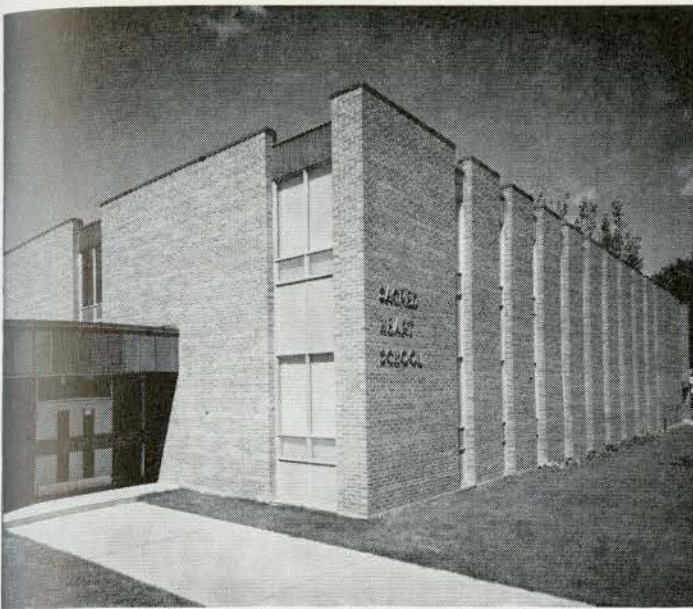


McLeods Warehouse, Winnipeg, Man. *Designer & General Contractor: Bentall Construction Co. Ltd. Architectural Consultant: A. Mudry. Masonry Contractor: Heymann & Schmidt Masonry Contractors Ltd.*



Verdun School Extension, Moncton, N.B. *Architects: Bélanger & Roy & Blanchette. General Contractor: J. Hebert Brown Ltd. Masonry Contractor: Arthur Leblanc & Son.*

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Sacred Heart Separate School, Peterborough, Ont. Architect: John Stuart Cauley. General Contractor: M. J. Finn Construction Ltd. Masonry Contractor: L. Berghout Construction Ltd.



M. Pollack Ltée, Ste Foy, Que. Architects: Eliasoph & Berkowitz. General Contractor: Ain & Zakuta Ltd. Masonry Contractor: Victor Parent Inc.



Ben Mor Towers, Peterborough, Ont. Owners: Ben-Mor Developments Ltd. Architects: Craig, Zeidler & Strong. Masonry Contractor: L. Berghout Construction Ltd.



Les Cinémas Ste Foy, Que. Architects: Eliasoph & Berkowitz. General Contractor: Ain & Zakuta Ltd. Masonry Contractor: Victor Parent Inc.

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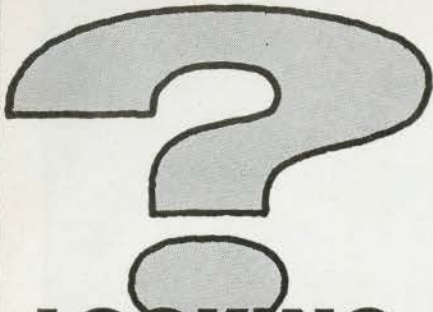


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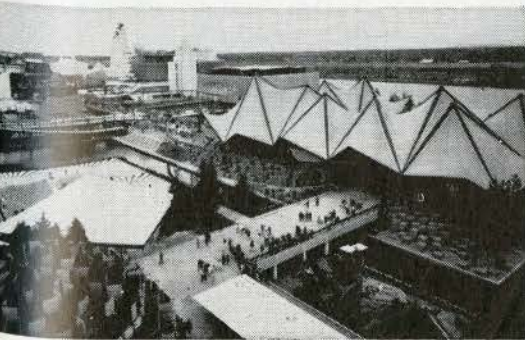
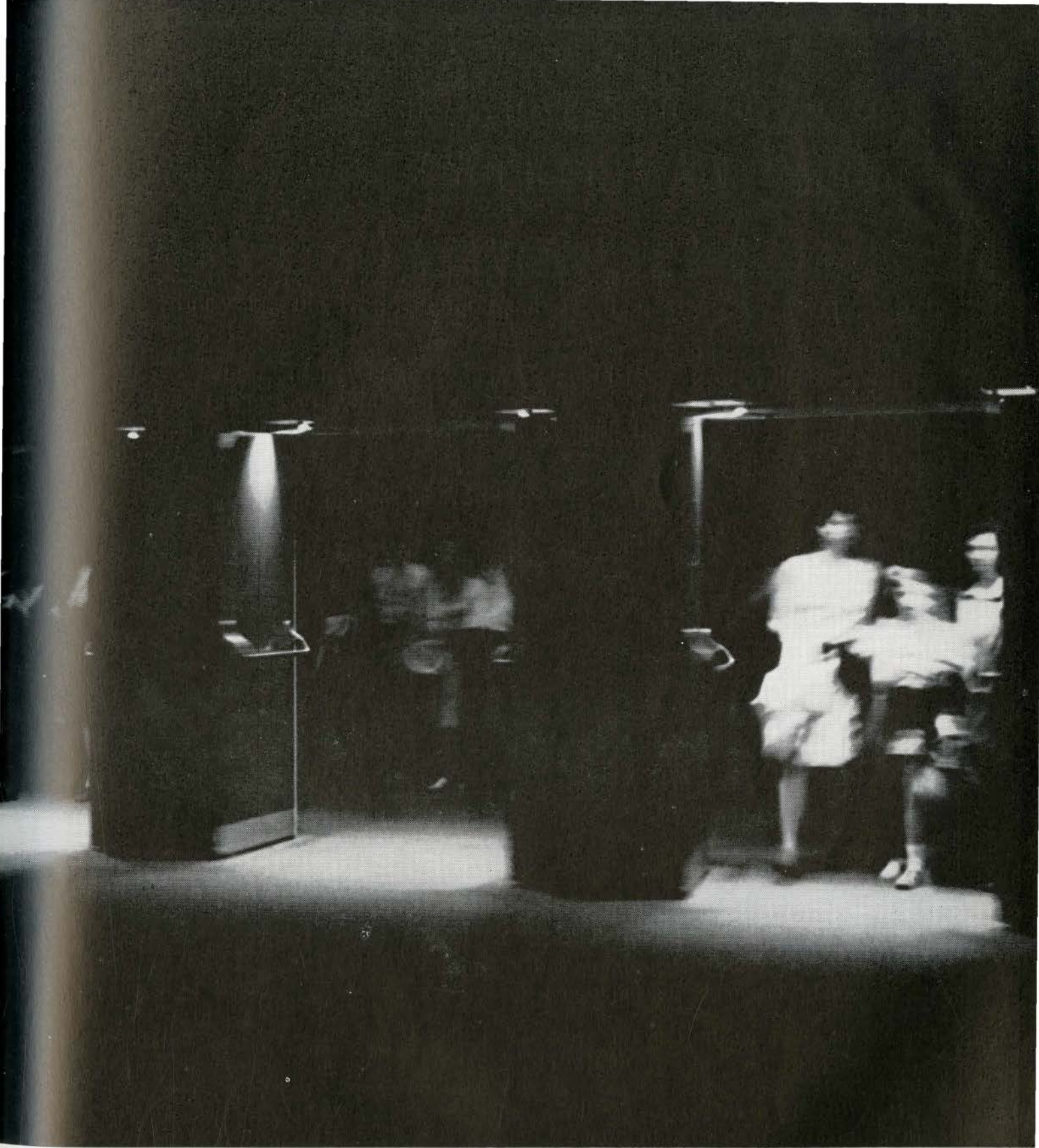
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modern door control at Expo



Each morning doors automatically open to the Expo visitor onslaught at the pavilion of The Telephone Association of Canada (Project Architects: David, Barott, Boulva of Montreal; Design Architects: Gordon S. Adamson & Associates of Toronto). This installation is one of twenty-six at Expo utilizing trouble-free LCN standard door closers for exterior and interior use.

LCN door closers, manufactured in Canada by LCN Closers of Canada, Ltd., 1083 Rangeview Road, Port Credit, Ont.



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R. G. Cripps, B.Arch., MRAIC

Mr Cripps is a partner in the Toronto architectural firm Weir, Cripps & Partners

In the secondary school, with its more sophisticated atmosphere and its dedicated physical instructors, the Olympic attitude to sport usually prevails. Expensive and to some extent specialized equipment is often purchased, catering to a select and expert group. The more communal, socialistic function of the gymnasium and its equipment is suppressed by the instructors, favoring the local Frank Merriwell who may someday bring Olympic laurels to his old school.

Normally, the elementary school physical training program is informal and social rather than specialized; functional rather than sophisticated. In such an atmosphere, training programs are usually aimed at involving as many pupils as possible, as much as possible. The one exception to this seems to be the universal preoccupation with basketball—a game having a relatively small number of players, and requiring a large court if played seriously.

The list of equipment given below has been selected with the generally accepted policy of maximum involvement in mind. The layout enables minor basketball, or volley ball, or other team sport to be played in one half of the gymnasium, while several apparatus set-ups can be used in the remaining half. The layout and number of standard floor sockets ensures good flexibility of use and the badminton court serves the extra-curricular program. Where such community activities are particularly important, gymnasium dimensions of approximately 60' x 52' allow two badminton courts to be laid out, transverse to the long axis of gymnasium, with only minor disadvantage to other activity areas.

As far as equipment layout is concerned, the ideal gymnasium has no windows or doors. Doors are always with us, and placing of doors should whenever possible take equipment positioning into account.

A conference with an equipment manufacturer at sketch stage can obviate interference with equipment layout.

Sash should be non-existent or high. The increased popularity of climbing frames hinged on the wall necessitates a design check of frame height against sill height.

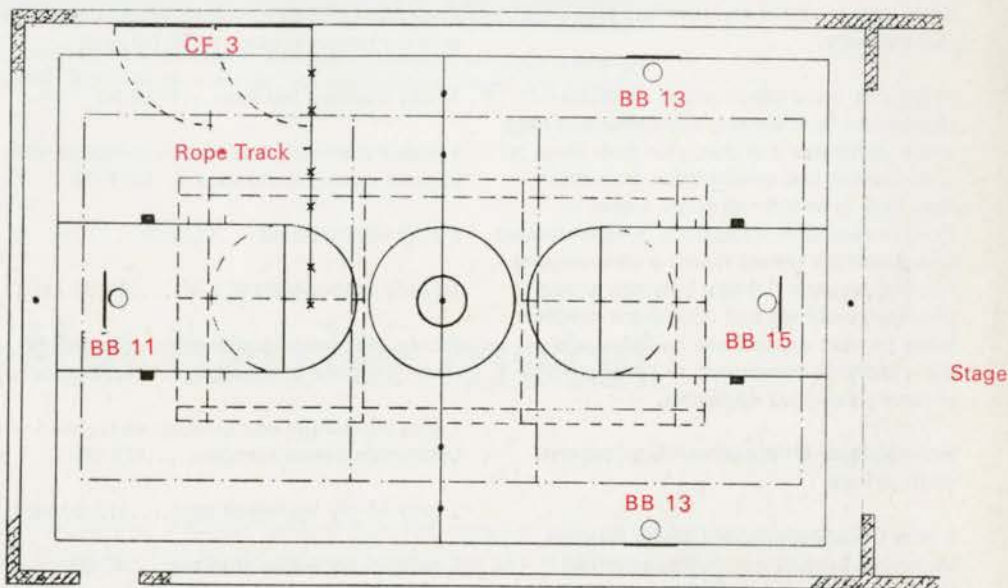
Wall-mounted basketball backstops should be fixed with through-wall or built-in fastenings. Practice backstops of adjustable-height type are a good idea; cost difference is not great, and far better use is enjoyed by the most junior grades.

Overhead fixing of equipment is simplified if ceiling is open-structure type. The mounting of ropes, rope tracks, suspended backstops etc., is probably easiest on exposed steel

joists. Exposed pre-cast concrete presents few problems, if equipment layout is taken into consideration in the design stage.

All protuberances such as sash operators and thermostats should be set over six feet off the floor. Clock, light fixtures and thermostats require guards. Masonry door jambs should be bull-nosed, and door hardware selected with an eye to ribs and elbows.

A glance at the equipment list below will give a good idea of required storage room space. This space should not be skimped. The ire of a sports-oriented principal is even harder to face than that of an engineer



LEGEND

- (Solid line)
- - - (Dashed line)
- · · (Dotted line)

- Gym size 45' - 0" x 70' - 0"
- 1 Basketball court 40' - 0" x 64' - 0"
- 1 Volleyball court 30' - 0" x 60' - 0"
- 1 Badminton court 20' - 0" x 44' - 0"
- 2 Practice Volleyball courts
- 7 Volleyball/Badminton sockets

with a cramped boiler room. Doors to such storage should be overhead type, to prevent least possible interference when moving equipment. The storage room should have adequate shelves and bins for balls, bats, and minor equipment, and these need not be locked if the storage room door is lockable. Storage of mats is made easier by the use of unit mats (see list below). Such mats can be easily stacked when stored taking up little floor space and obviating the task of hanging, and can be zippered together to form as large a mat as required.

Change rooms should be afforded if at all possible. This equipment can be very simple – pigeon-hole racks of plywood, allowing each pupil in the school a space approximately 5' x 8" x 12" deep, and enough hooks for about 40 pupils at a time. Stuff with sneakers and ventilate very well, mechanically.

In general, most construction contracts provide for floor sockets and basketball back stops, and leave it at that, plus floor lines. It is suggested that specification go further than this, to include all major pieces of fixed or moveable equipment. A co-ordinated equipment list should match a co-ordinated training program. Liaison between school principal, architect and equipment supplier helps prevent expenditure on little-used or too expensive equipment, or the acquiring of poorly designed apparatus.

Schedule of Gymnasium Equipment, with prices

1 only Ceiling suspended swing forward basketball backstop complete with #51 fan shape plywood backboard, regulation goal, not and manual winch. . . . \$800.00

1 only Wall mounted fixed basketball backstop complete with #51 fan shape plywood backboard, regulation goal and net. Unit extended 7' from wall. . . . \$200.00

2 only Wall mounted height adjustable basketball backstops complete with #51 fan shape plywood backboard, regulation goal and net. Units extended 2'6" from

wall and adjusting 7' to 10' in height. . . . \$350.00 each

7 only Combination deep floor bronze, or aluminum volleyball/badminton sockets. . . . \$20.00 each

1 only Hinged combination climbing and beam frame consisting of two hinged sections 8' deep by 10' high, one height adjustable reversing beam, one CF-IHL horizontal ladder and one CF-IBS beam saddle. . . . \$900.00

1 only Retractable rope track complete with six climbing ropes. . . . \$550.00

2 only Multi-purpose junior balance benches complete with bench hooks. . . . \$82.00 each

2 only Multi-purpose junior-balance benches without bench hooks. . . . \$65.00 each

1 only Vaulting bar box. . . . \$132.00

1 only Pyramidal vaulting box complete with internal caster mechanism. . . . \$215.00

1 only Spring board. . . . \$112.00

16 only Fold-a-mats 4' x 4'. . . . \$43.20 each

2 only Aluminum combination volleyball/badminton end standards. . . . \$34.00 each

1 only Aluminum combination volleyball/badminton center standard. . . . \$26.00

2 only 15 ply Volleyball nets. . . . \$12.00 each

1 only 20 ply Badminton net. . . . \$8.00

Total. . . . \$4,860.00 □

Estimating

Overall costs of the items under the heading of Fittings, Fixtures and Special Equipment are variable and dependent upon the type of building and the inclination of the building owner and his architect. The only way to price them accurately is to assess each

item separately, as has been done in the preceding article for gymnasium equipment. However, as mentioned last year, at the time of preparing the preliminary estimate the number and extent of fittings and fixtures usually has not been considered and so some other way has to be used to arrive at a reasonable price for them. The following figures are a representative range of costs per square foot of the gross floor area which might be used for different types of buildings:

- 1 Office buildings – prestige .18 per SF gross floor area
- 2 Office buildings – speculative .07 per SF gross floor area
- 3 Hospitals 1.20 per SF gross floor area
- 4 Public Schools .56 per SF gross floor area
- 5 High schools 1.00 per SF gross floor area
- 6 Vocational schools 1.10 per SF gross floor area
- 7 Apartment buildings .83 per SF gross floor area
- 8 Factories – light industrial .06 per SF gross floor area
- 9 Factories – heavy industrial .65 per SF gross floor area

F. W. Helyar



Lead frame surrounding the photo of a staircase in Montreal's Chateau Champlain symbolizes the role of lead in modern buildings as a barrier against moisture, noise and vibration.

Lead - the barrier metal

In a hundred different situations, lead is the most effective barrier against vibration, noise, water, weather and radiation. Pools and planters become impervious when lined with lead; machinery and entire buildings rest on cushions of lead which absorb vibrations; silence prevails where doors, ceilings and partitions are lined with thin lead sheet; lead roofs and flashings lock out wind and rain, and lead shields "X" and gamma radiation in industrial and medical environments.



For comfort, safety, stillness, dryness, silence- specify lead.

Yorkdale Shopping Centre Simpson's Courtyard

John B. Parkin Associates, Architects.
Victor Gruen Associates,
Interior Designers.

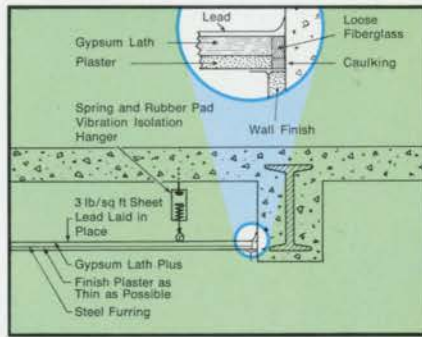
Keeping the water *in* ornamental pools and planters and indoor swimming pools is a job for lead, and the *really sure* way to provide *permanent* protection for surrounding areas and lower floors.



Le Chateau Champlain

D'Astous & Pothier, Architects.

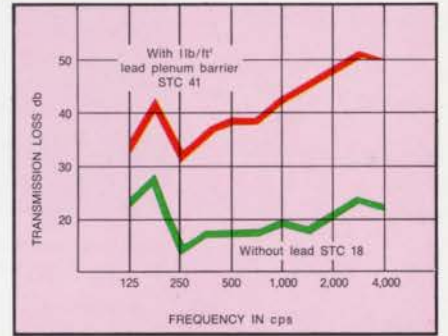
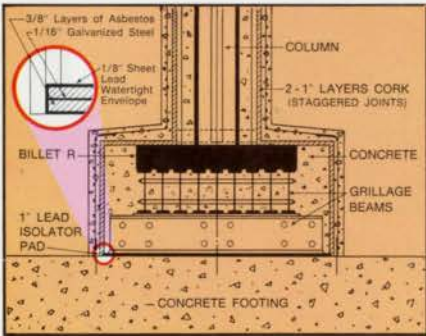
Guests in Montreal's new 600-room luxury hotel enjoy complete quiet even on floors immediately below mechanical service areas, thanks to the intervention of lead. The schematic drawing below shows typical floor-ceiling construction in these spaces.



Montreal General Hospital

Robert P. Fleming, Architect.

Recent alterations to The Montreal General Hospital, Radiology Dept., involved lining 7 rooms with lead sheet as a radiation barrier. Lead glass, lead-cored doors and lead window frames were also specified to shield hospital staff and patients from "X" and gamma radiation.



Place Ville Marie

I. M. Pei & Partners, Architects.
Affleck, Desbarats, Dimakopoulos,
Lebensold, Sise, Associate Architects.
Bolt, Beranek and Newman, Inc.,
Acoustic Consultants.

Development of Montreal's large downtown projects proceeds above a network of railway tracks and subway tunnels, existing and proposed. Isolating buildings from street and railway vibrations is a job that must be done well — and it's a job that's regularly entrusted to lead asbestos antivibration pads.

Sun Life Building

John B. Parkin Associates, Architects.
Weather-proofing modern office buildings is one of the important architectural uses of lead sheet. Lead is both highly durable and capable of retaining a quality appearance over a long period of atmospheric exposure. It is especially valuable for keeping costly, difficult maintenance to a minimum.
Flashings on Toronto's Sun Life Building will undoubtedly pay off in terms of long life and low maintenance costs.

Toronto Dominion Centre

John B. Parkin Associates and Bregman & Hamann, Architects.

Ten tons of lead sheet have already been installed as plenum sound barriers in tenant space at Toronto Dominion Centre. Other uses of lead sheet are for filler panels, for interior partitions, for vertical sound barriers in the plenum, for special acoustical doors and for convector barriers. The effectiveness of lead in this application is shown in the graph above.

For design and specification information regarding lead sheet in particular applications, contact Cominco Ltd./Marketing Services/630 Dorchester Blvd. West/Montreal 2.



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the trig new **"DECOR" LOCKER**

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Modern has always been the word for Westeel-Rosco Lockers. As the leader in the industry we take pride in announcing our new Locker for 1968.

It offers architects crisp, smart styling to blend with school interiors. And superior built-in protection of personal effects.

It offers school administrators over-the-years economies through modest original cost and minimum maintenance cost.

Here is what you get when you specify the new Westeel-Rosco "DECOR" Locker:

★ **A NEW DOOR**

We have eliminated the pan-type door entirely. The new "DECOR" door is fully enclosed at no extra cost. It is flush outside and inside, with no exposed parts to invite tampering. Because of its highly rigid construction it cannot twist out of alignment.

★ **IMPROVED LATCHING**

New, positive, grip-tight latching with no moving parts. Door opens easily, latches firmly, quietly. Extra strong, tamper-proof assembly to assure security.

★ **LOCKING**

Three locking methods — padlock, key lock, combination lock — in recessed lock pocket, which incorporates rigid pull handle.

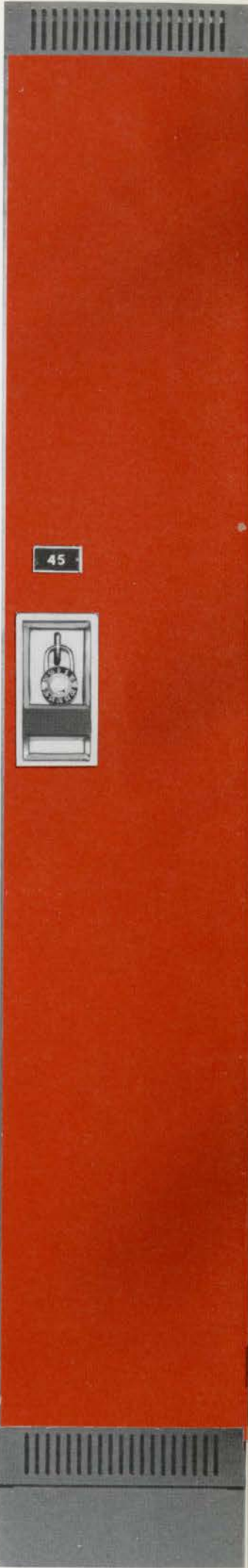
★ **NEW NUMBER PLATES**

Inset into door face, above lock pocket, at correct visual height. Easy-to-read horizontal block numerals, protected by clear plastic face.

★ **VENTILATION**

Proven, free-flow ventilation, fully vents locker from bottom-to-top, no dead-air pockets, keeps interior fresh, clean-smelling the year around.

The new "DECOR" Locker meets every architectural requirement for school design and construction. You can specify it with confidence. For further details see back of this page.



STANDARD SIZES

| WIDTH INCHES | DEPTH INCHES | HEIGHT INCHES |
|--------------|--------------|---------------|
| 10 | 12 | 72 |
| 10 | 15 | 72 |
| 10 | 18 | 72 |
| 12 | 12 | 72 |
| 12 | 15 | 72 |
| 12 | 18 | 72 |
| 12 | 21 | 72 |
| 15 | 12 | 72 |
| 15 | 15 | 72 |
| 15 | 18 | 72 |
| 15 | 21 | 72 |
| 18 | 18 | 72 |
| 18 | 21 | 72 |

Standard equipment includes hat shelf and three single wall hooks. A double ceiling hook is available as an optional extra. A coat hanger bar is an optional extra on 18" and 21" deep lockers only.

Finished in baked enamel in colour selected from the Westeel-Rosco Locker Colour Chart.

OPTIONAL EXTRAS

INSET BASE: for free-standing installation. Base is 4" high and prevents scuffing of locker face at floor level.

SLOPING TOPS: to discourage untidiness. Easy to clean.

BRIEF CASE HOLDER: a deterrent to overloading the floor of the locker and placing undue strain on the door due to jamming.

COAT HANGER BAR: as a substitute for standard equipment.

OTHER EXTRAS: padlocks, key locks, combination locks.



WESTEEL-ROSCO

"DECOR"

DOUBLE TIER LOCKER

The double tier locker is one answer to the limited space problem. It provides for the accommodation of two in place of one, doubling the capacity of the locker area.

Each section is approximately half that of a standard 72" locker. Other dimensions (i.e. width and depth) are the same.

STANDARD SIZES

| WIDTH INCHES | DEPTH INCHES | HEIGHT INCHES |
|--------------|--------------|---------------|
| 12 | 12 | 36 |
| 12 | 15 | 36 |
| 12 | 18 | 36 |

Standard equipment includes three single wall hooks. NOTE: There are no shelves in double tier lockers.

SUGGESTED FORM OF SPECIFICATION

NOTE: Paragraphs 1 to 4 would comprise a short form of specification. If longer form is required, add paragraphs 5 to 9.

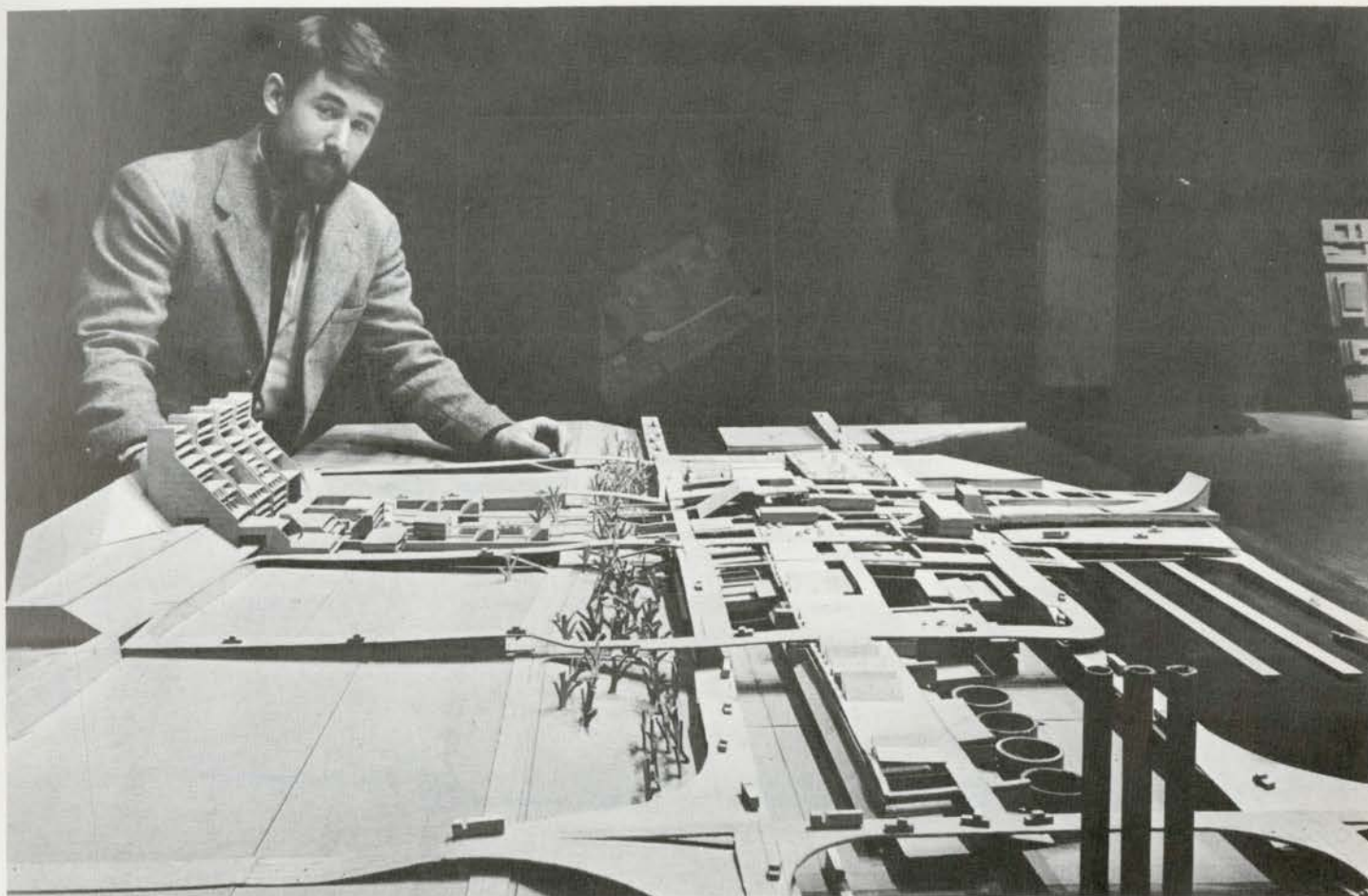
- Supply and install Metal Lockers as called for on plans. Same shall be Westeel-Rosco "DECOR" type lockers.
- Size shall be " " wide, " " deep, " " high, and (where installed in corridor recesses) shall be metal trimmed across the top and down each battery end with No. 22 US gauge metal trim, not less than 2" wide vertically and 1½" wide horizontally. (Or, if free-standing) shall be equipped with inset metal base 4" high, finished in charcoal grey enamel. (NOTE: shop drawings showing details and plans shall be supplied if so specified.)
- Lockers shall be prepared for (state whether master key cylinder lock, padlock, or combination lock). State if locking device to be supplied by manufacturer.
- Lockers to be numbered as required and finished with two coats of baked enamel. Locker body shall be W-R-L standard grey; door colour shall be Colour No. as shown in Westeel-Rosco locker colour chart.
- Doors shall be fully enclosed and shall be made from cold rolled prime steel sheet, not lighter than No. 20 US gauge for the outer face nor 26 US gauge for the inner face, with vertical side edges not less than 1¾" and with channel reinforcing at top and bottom. Inner face on 15" and 18" wide lockers shall be formed with a stiffening rib. All doors to be hung on three hinges. (If double tier lockers, change to read: "All doors to be hung on two hinges".) Balance of locker not lighter than No. 24 US gauge steel.
- Door frames shall not be lighter than No. 16 US gauge cold rolled steel of a box channel shape strongly welded and smoothly finished at each corner.
- Extruded aluminum keeper shall be rigid and strong firmly attached to door frame. Grip-tight latching and keeper shall be readily replaceable. Two rubber bumpers to be located on lock side of frame approximately 1½" from top and bottom of door.
- Lockers shall be equipped with one hat shelf (single tier lockers only) and three single wall hooks, (or) with one double ceiling hook (an extra) and three single wall hooks. Coat hanger bar (an extra) available on 18" and 21" deep lockers only.

WESTEEL-ROSCO LIMITED

ALL-CANADIAN  CANADA-WIDE

HALIFAX, QUEBEC, MONTREAL, OTTAWA, TORONTO, LONDON, FORT WILLIAM, WINNIPEG, REGINA, SASKATOON, CALGARY, EDMONTON, VANCOUVER

24M-6-67



Report of the Jury

The Jury for the 1967 Pilkington Scholarship was impressed with the high standard of the submissions. In most cases the problems selected were large and complex in nature demanding for their solution considerable competence. The eventual winner, Mr Lewis Morse of the University of Manitoba, is commended by the Jury for the way he has handled a problem of this nature involving many functions and a complicated circulation system.

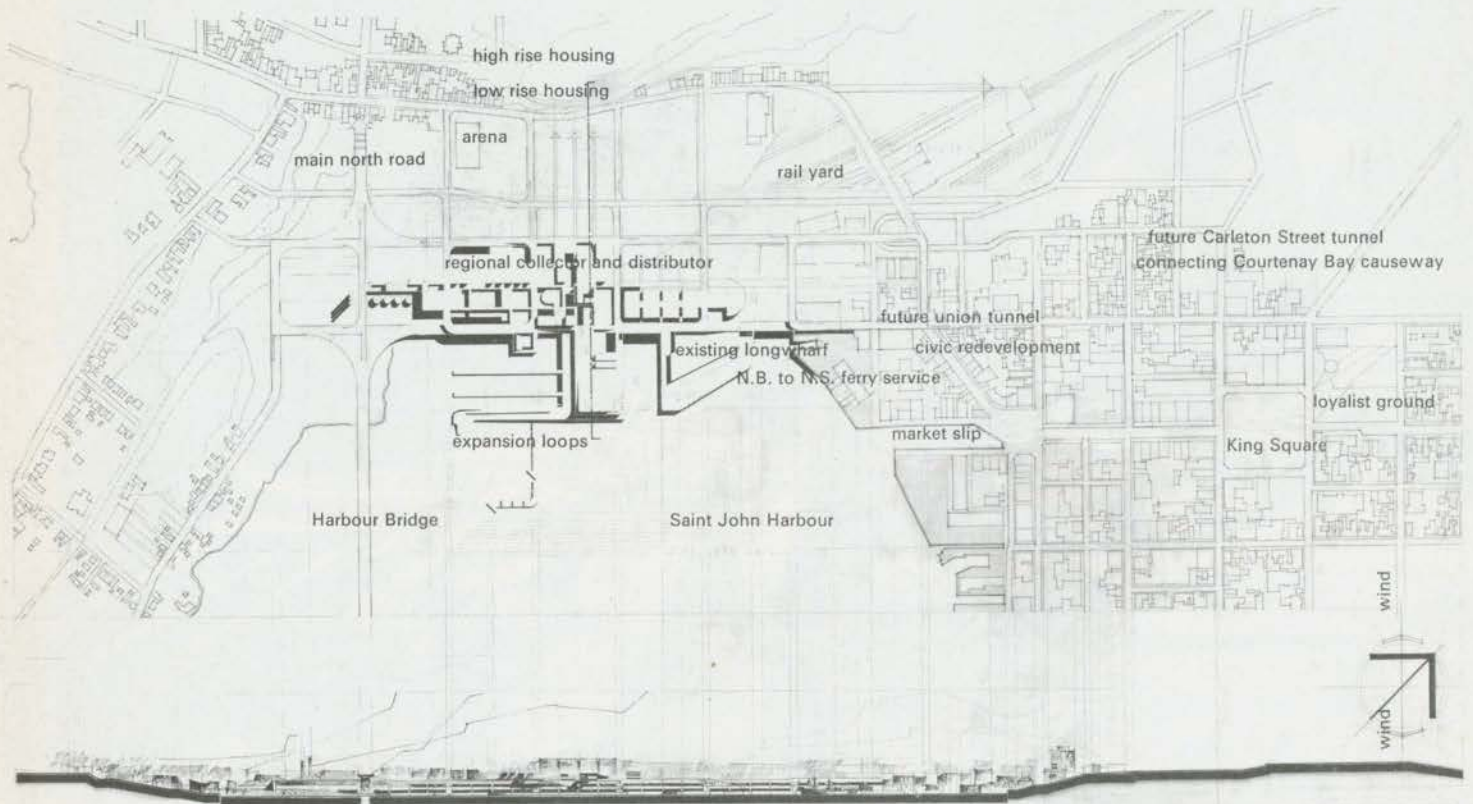
The project chosen by Mr Morse is a Regional Distributor and Collector for Saint John, New Brunswick, the purpose of

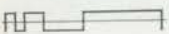
which is to bring together in one multi-purpose structure on the Saint John water front various transportation systems, warehousing, handling and marketing facilities for the region, showrooms, manufacturing space, office space, a small naval establishment and recreational facilities for seamen and longshoremen. In addition to this some housing is provided nearby.

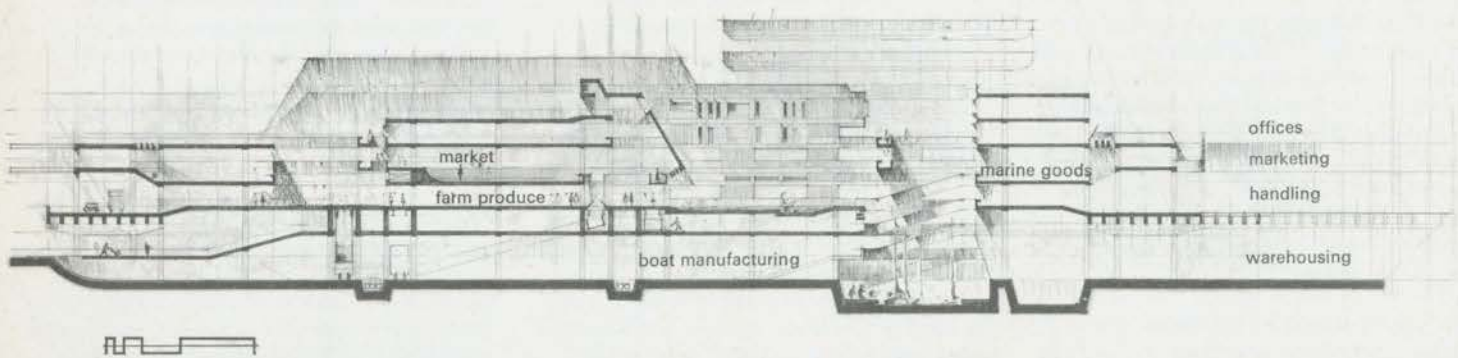
The Jury felt that Mr Morse had shown a spirit of concern with contemporary urban forces in the choice and solution of this problem. The complicated interrelationships of various circulation systems and functions have been ably solved and joined to the existing circulation patterns in the city. It is a highly urban solution which exploits the

harbor site and its many activities to create an exciting three dimensional development. Mr Morse is particularly commended for the directness and consistency of his approach avoiding both stylistic diversions and the temptation to introduce more sophisticated functions which would not be in character with the robust nature of this development.

The Jury's only major note of criticism of this ably presented scheme concerns the relationship of the housing to the dockside facilities. It felt that the housing might have been integrated into the scheme in order to provide a greater continuity of activity throughout each day.




Site plan



Section



CIRCULATION OF TRAFFIC
a homogeneous distribution effected by one-way alternate routes



CONTINUOUS VOLUMES
a system should give organization to such continuous volumes as handling, interior streets and parking areas



DISCONTINUOUS VOLUMES
a system should give organization to such singular volumes as shops, restaurants and offices



NON-FOCUSING GRID
a grid with even distribution and several points of concentration



FOCUSING GRID
a grid with one point of concentration



STRUCTURING SYSTEM
the activities of all people from longshoremen to tourists should be integrated with the other movement forms, not only rail, ship and vehicular movement, but also the mechanical and service movement. singular or groups of functions should be free to form desirable relations. singular or groups of people should be allowed the same freedom of spontaneous association.



FORM DETERMINANTS
organizing features, chiefly circulation form a weave which gives order to the location of singular shapes. the activity of the people and vehicles create a pattern, they get their form from their use, the climate and the shapes of tradition in Saint John.



VERTICAL CIRCULATION
the possibility for vertical circulation occurs at the points of intersection, by controlling the means of access, type, intensity and growth of the function is determined.



LOW RISE
this organization yields greater possibilities of handling goods, community and exchange, without losing the human scale.



HIGH RISE
more suited to segregated disciplines.



CLIMATE CONTROL



VIEW FROM HOUSING



RECTANGULAR
above is the abstraction of a weave which allows for homogeneous distribution of traffic.



RADIOCENTRIC
the radiocentric grid centralizes interaction but isolates growth.



VARIATIONS OF RECTANGULAR
1 for settlement on prairie
2 for settlement around a mountain
3 for coastal settlement



LINKAGE
when connecting two or more settlements, the direction of their lines need not be the same, above is linking of 1, 2 and 3.



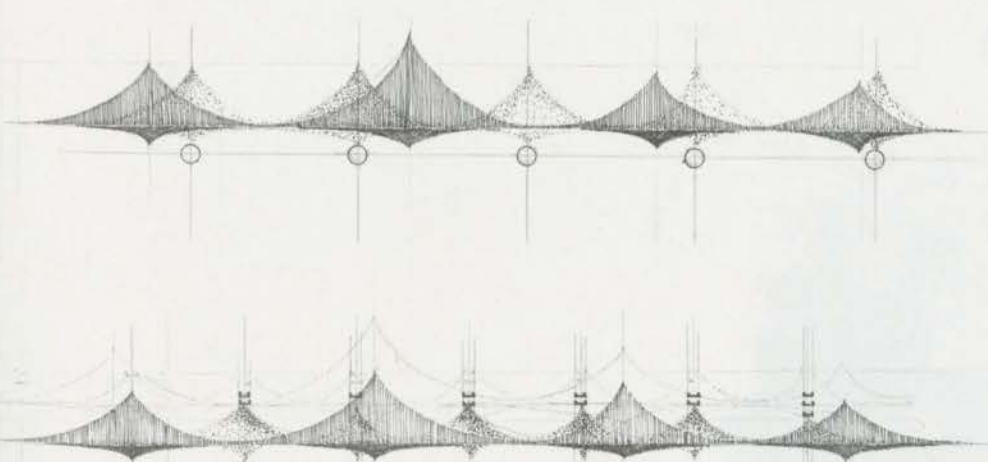
CHANGE FROM CENTRE TO OUTSKIRTS
there is less need for straight lines at the outskirts of a settlement with a rolling topography, however as density increases and circulation become more complex the lines become straight.



EXISTING TREES OF APPROACH
existing networks tend toward a tree like pattern, this overcasts downtown arteries.



APPROACH DIVISION
a weave working in reverse to the tree suggests a more even distribution.

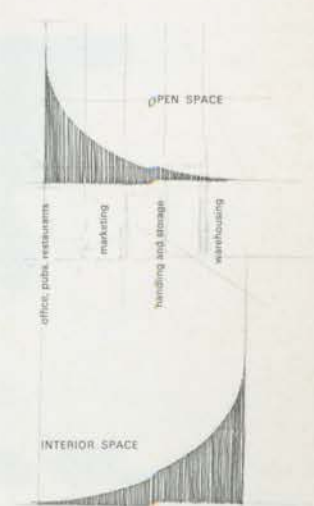


MOTIVATING CHANGE IN CITY FORM
Change in the physical form is motivated by controlling circulation lines. A gradual shift from the present concentrations may

be desirable. Air rights and easement rights are shown above as aids in the transition.

VERTICAL ZONING

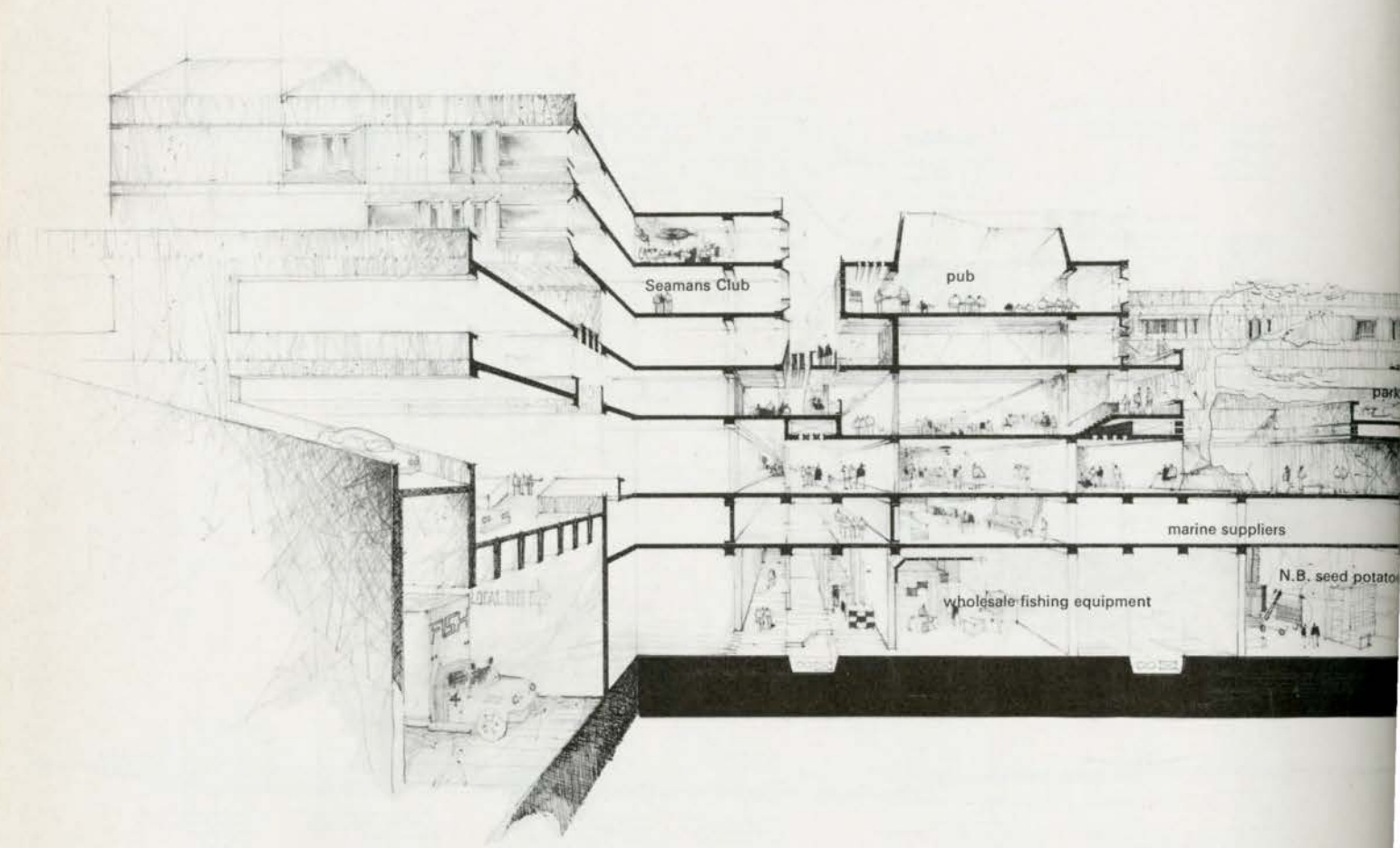
determined by:
the relationship of functions
the relationship to handling and storage
the need for open space
the need for interior space



OPEN SPACE

INTERIOR SPACE

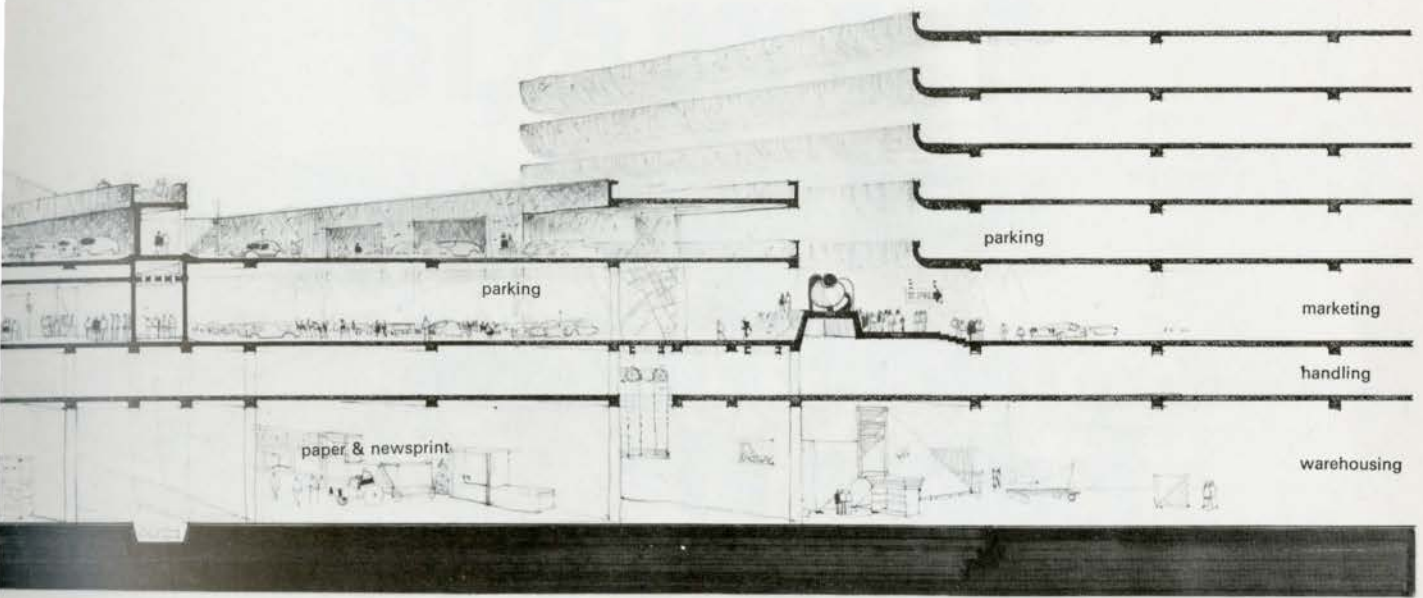
office, pub, restaurant
retailing
handling and storage
warehousing

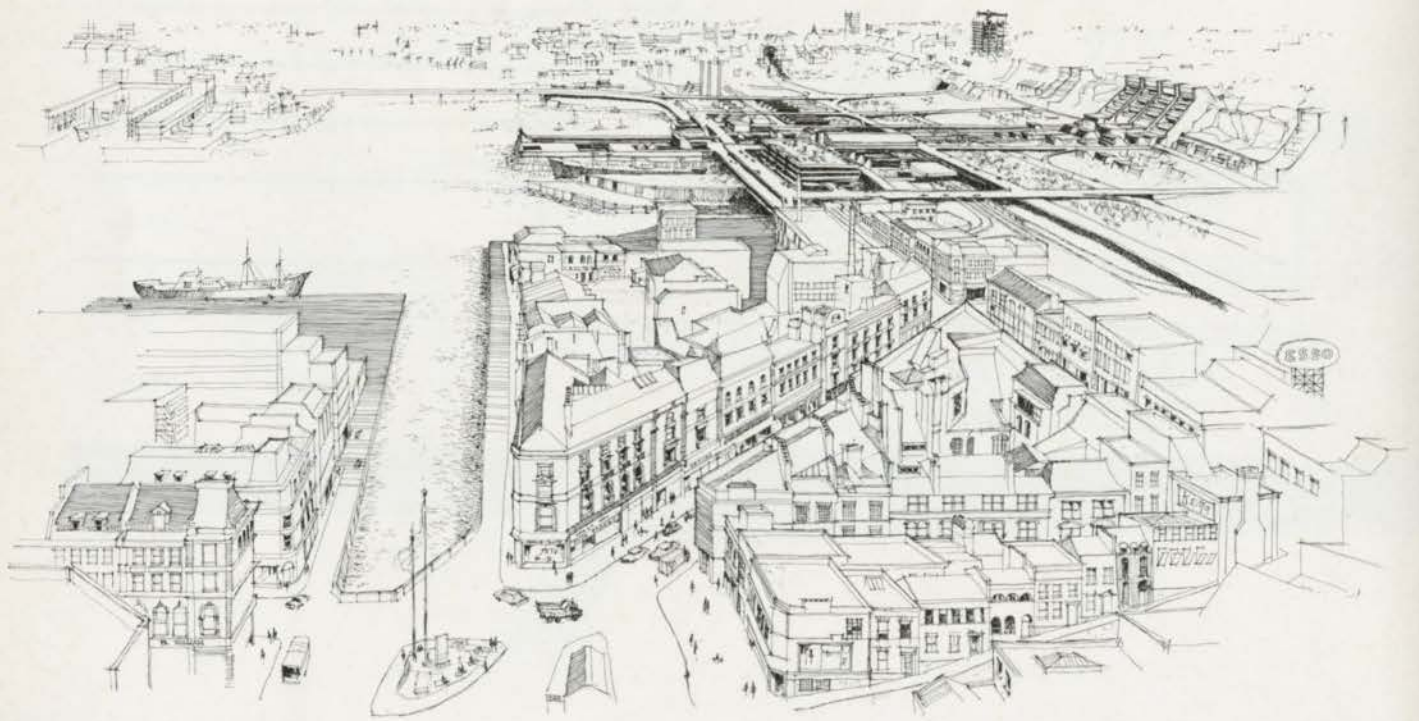


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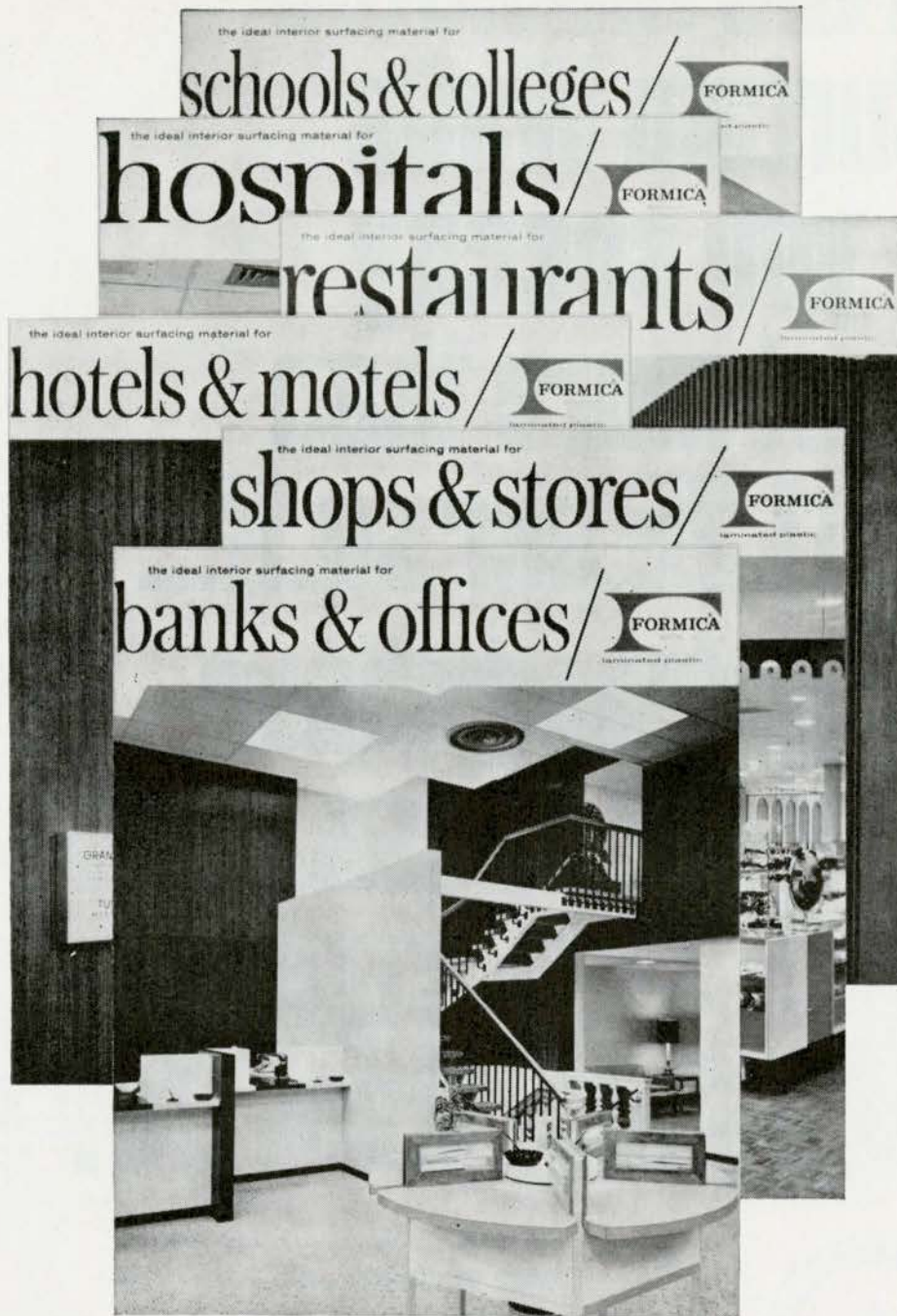
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The Editors :

Early in December 1966, immediately after our return from an exploratory visit to Japan and as soon as our competition timetable was established, Professor Kenzo Tange was formally invited to participate in the judging of the proposed competition. Based on the timetable which provided for judging in the middle of March for Stage I and early in June for Stage II Professor Tange accepted our invitation to act as a member of the Jury. During the latter part of December 1966 a final draft of the Competition Conditions was submitted to the Royal Architectural Institute of Canada for approval. After a study of this draft the Council of the Province of Quebec Association of Architects expressed grave concern about the amount of time allotted in our timetable for the first Stage of the competition and, after many meetings and prolonged discussions with all the parties involved, the Council of the Royal Architectural Institute of Canada made a strong recommendation that the deadline in Stage I be extended by at least two weeks; everybody concerned being aware of the fact that such a change in dates jeopardized the participation in the Jury of not only Professor Tange but also some of the other members.

As soon as the decision was made to extend Stage I, and consequently Stage II, by two weeks the revised judging dates were communicated to Professor Tange, who informed us that, although the new dates appeared to conflict with some of his scheduled commitments in Japan and the USA, he would do his best to fit in with our new timetable and hoped to be able to give us a definite answer some time in March. In the end his efforts to re-arrange his commitments and join us during the judging of Stage I came to naught and the following extract from a letter addressed by Professor Tange to the Director of the Canadian Government Exhibition Commission will serve to make the situation abundantly clear:

"As I have informed Mr Britton in Canadian Embassy at Tokyo, there are two international conferences that we organized. One of them was held at San Francisco from March 29 to the evening of March 31 and the other is to be held from the evening of April 3 to April 6 at Hakone (3 or 4 hours' distance from Tokyo). Before the date of Jury had been

changed, I was willing to participate in it and after I was informed of the new dates, I have been considering the possibility of my visiting Ottawa. Trying to change the date of our meeting at San Francisco, I could not write a definite answer to Mr Britton earlier than the beginning of March. As the meeting has participants from New York, San Francisco and Tokyo, it was impossible to change it. Even after that, I was endeavoring to arrange my schedule to visit Ottawa between two conferences, but again I found it quite impossible. I am awfully sorry for troubling you by the delay of my answer because of these reasons".

In view of the fact that we did not know until the last minute that Professor Tange would be unable to appear there was no time to appoint a substitute member of the Jury as stated in the Competition Conditions. We realize that Professor Tange's absence was a source of disappointment to many competitors and you may be sure that no one regretted his absence more than the other members of the Jury who all looked forward greatly to the opportunity of meeting Professor Tange and working with him during the judging of the competition.
*Z. Matthew Stankiewicz
Professional Advisor Osaka 1970*

The Editors :

I have followed with great interest the several announcements in *Architecture Canada* about discussions between the RAIC and the Public Archives of Canada on the establishment of a National Architectural Archives. In my present position I am responsible for the administration and development of the Provincial Museum, Provincial Archives and Provincial Historic Sites programs. In addition, I am a member of the RAIC, registered in British Columbia. In consequence, I have for some time been greatly interested in the development and documentation of historical resources including buildings and structures, especially in regard to my own jurisdiction in Alberta.

You may be interested to know that some time ago we started to assemble a collection of architectural records relevant to Alberta, including architectural drawings, documents, photographs and early catalogues, etc. In addition, we have been undertaking a photo-

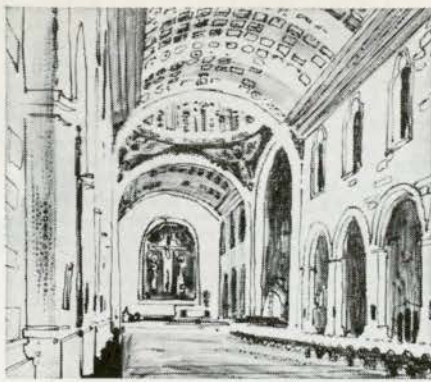
graphic documentation program especially of historic buildings in danger of demolition. We have also been tape recording interviews with old timers on subjects relevant to buildings and we of course have the two extensive and outstanding photographic collections of Ernest Brown and Harry Pollard — two very early photographers in the province. For some time we have been giving consideration to an inventory of historic structures in Alberta and in 1968 we expect to commence this program. We will also be expanding the aforementioned programs including contract work for measured drawings on buildings where architectural records no longer remain, and expanding our collections of artifacts.

I would also like to indicate that a substantial part of our new \$9 million Provincial Museum and Archives of Alberta project, to be opened later this year, is devoted to a separate wing for the Provincial Archives.

I entirely support the idea of a National Architectural Archives insofar as it preserves architectural records which might otherwise be lost. Nevertheless, it is important to remember that many records, although of general interest to the federal institution, may be of greater provincial and local interest, especially if they relate to buildings which stand or have stood in the province.

I feel strongly that any approach to architects should therefore present a clear alternative that archival items should either be deposited in a provincial archives or in the Public Archives of Canada and that whichever way a decision is made, the archives concerned will undertake a full exchange of information and, if possible, provide copies for each other.

Personally, I would prefer to see the Public Archives of Canada as a repository for buildings of outstanding national importance and especially acting as a clearing house for information on architecture in Canada and as a repository for copies of film and photostats, while the originals remain within the provinces. Above all, however, I feel that the alternative places for deposit should be placed clearly before the architectural profession.
R. O. Harrison MRAIC, Director, Provincial Museum and Archives of Alberta



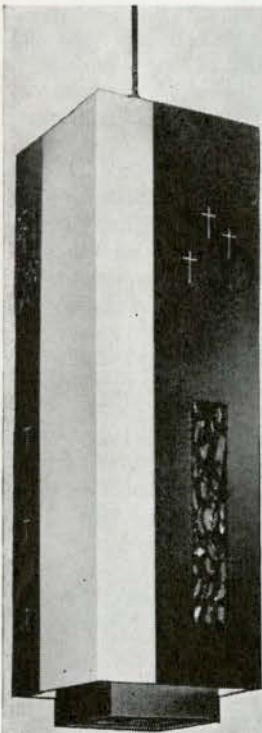
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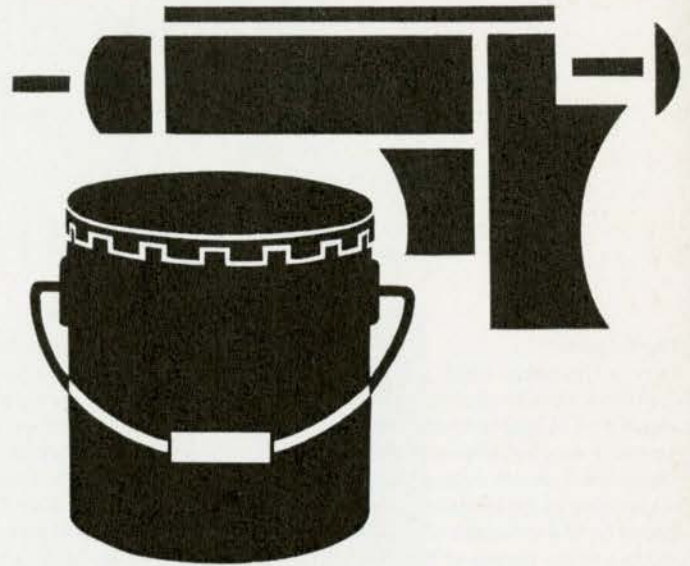
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Practice Notes

William Noel, MRAIC, ARIBA has been made a partner in the Toronto architectural and engineering firm of Shore & Moffat and Partners.

Registrations

The following were admitted to membership in the Ontario Association of Architects: Donald J. Bielesch, Agnes Boros, Irving Caruso, Lionel L. Ferguson, Robert Frew, G. K. H. Haas, Peter J. Haensli, Robert Johansen, James A. Kennedy, Leon T. Kulynych, Jerry Kurland, Dharam P. Malik, Tawfik K. Nassim, Joseph Pacek, Bernard Rosen, Yani Sakiris, Norbert J. Schuller, Ihor Stecura, James G. Sykes, Peter Tutton, Austin W. Uiska, Andrew Vecsei.

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Architect, MRAIC, ARIBA, seeks position of responsibility and opportunity with progressive growing B.C. or Ontario firm. 17 years Canadian experience, design oriented, several awards for housing project work, full details upon request. Box No 143 c/o *Architecture Canada*.

Versatile engineer seeks position with firm of architects, age 35. Experienced in civil, mechanical and electrical work. Design spec. writing, critical path and supervision. Location immaterial, permanency essential. Reply to Box 144 c/o *Architecture Canada*.

Graduate Bachelor of Architecture, Steathclyde University (Glasgow) with 2 years experience in Glasgow and London, 23 years old, single, seeks position in architectural office in Toronto, will commence work immediately. Reply, Brian C. Lodge, Apt 1604, 77 Howard St, Toronto 5.

Fully qualified and registered architect from New Zealand seeks employment in Canada. Ten years experience since registration (ANZIA): three years in New Zealand Government Architect's Office, two years private practice, five years administration building construction firm. Age 36 years, married with four children. Arriving late October 1967. Reply to P.O. Box 6143, Wellington, New Zealand.

Indian draftsman, 4 years experience, arriving in Hamilton or Toronto, seeks position in architectural office. Contact Mohender Kumar, Amand 144-R; Model Town, Karnal Haryana, India.

German overground building engineer (grad) age 23, coming to Canada in October 1967, wants a job working in design and construction code. Write to Lars K. Hennings, Bauerweg 35, 22 Elmshorn, West Germany.

B.Arch. from New Delhi Associate of Indian Institute of Architects, four years experience in India and UK seeks job in Canada from August or September. Please write to M. M. Sharma, 81 Purser's Cross Road, London, SW 6, England.

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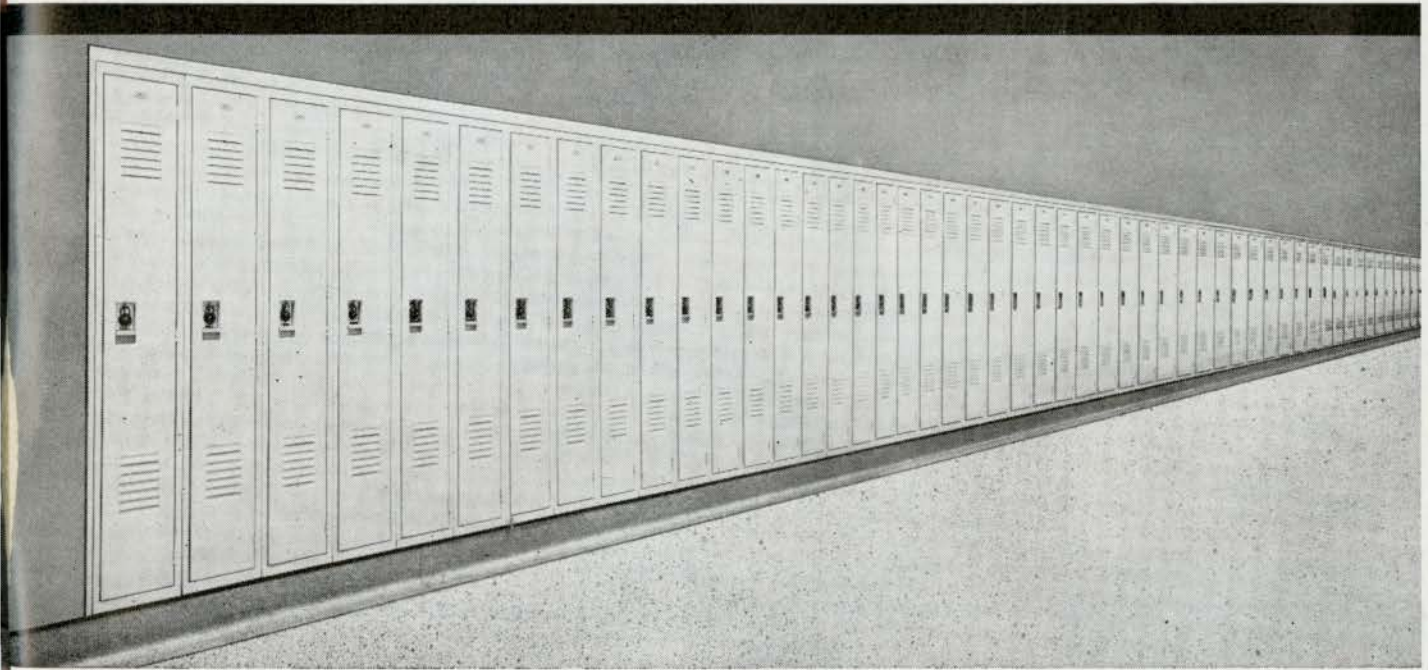
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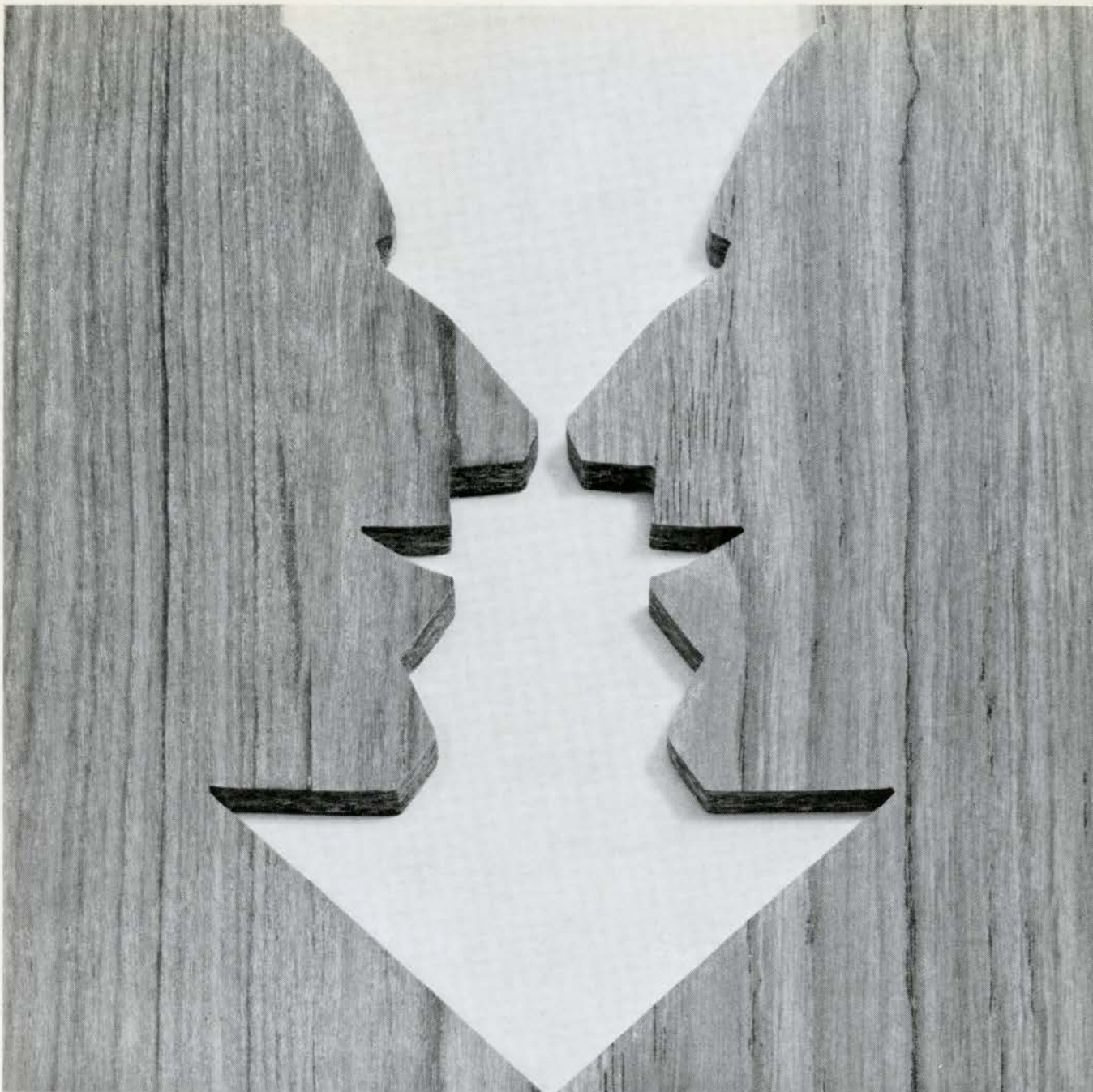
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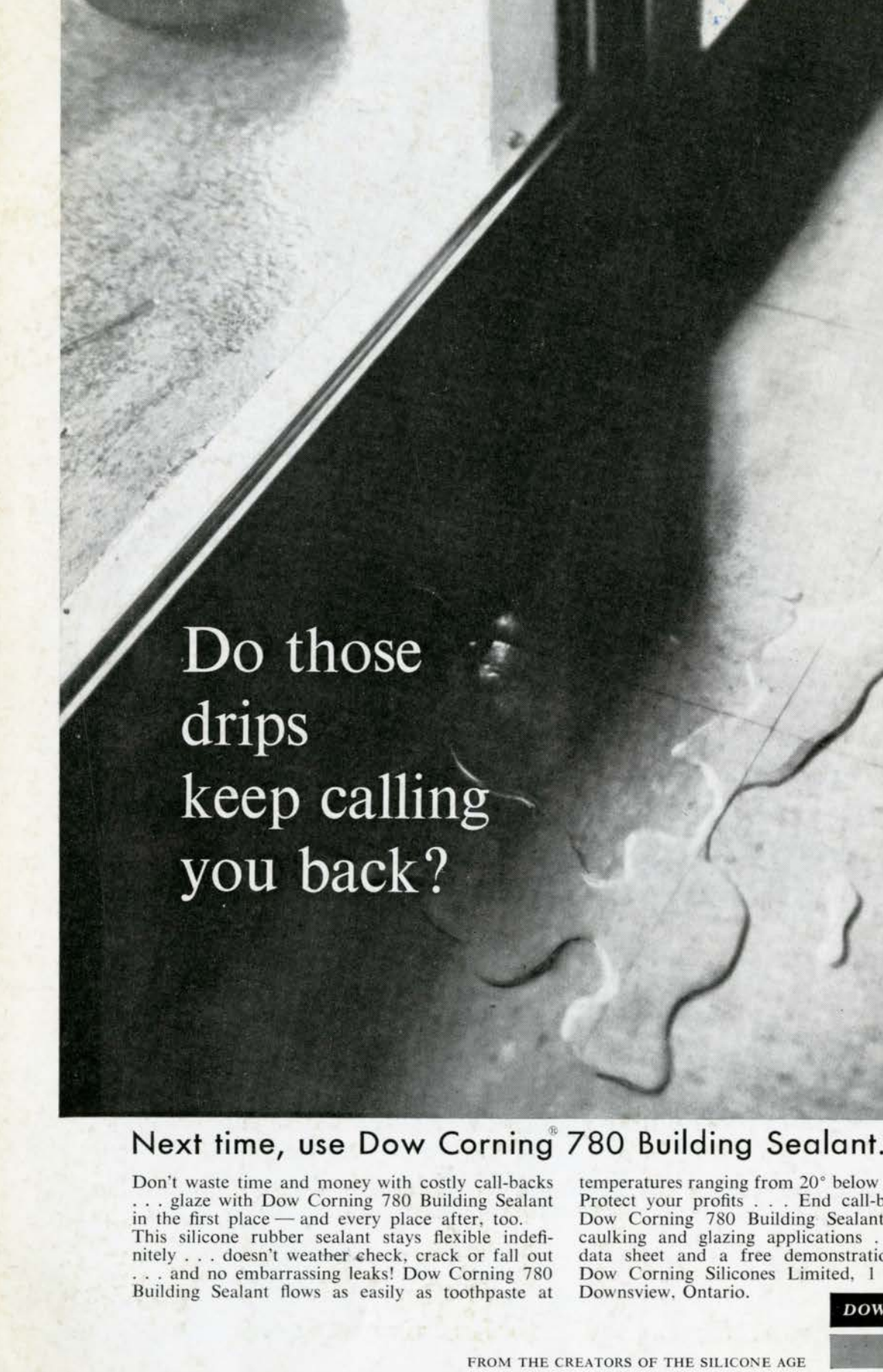
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