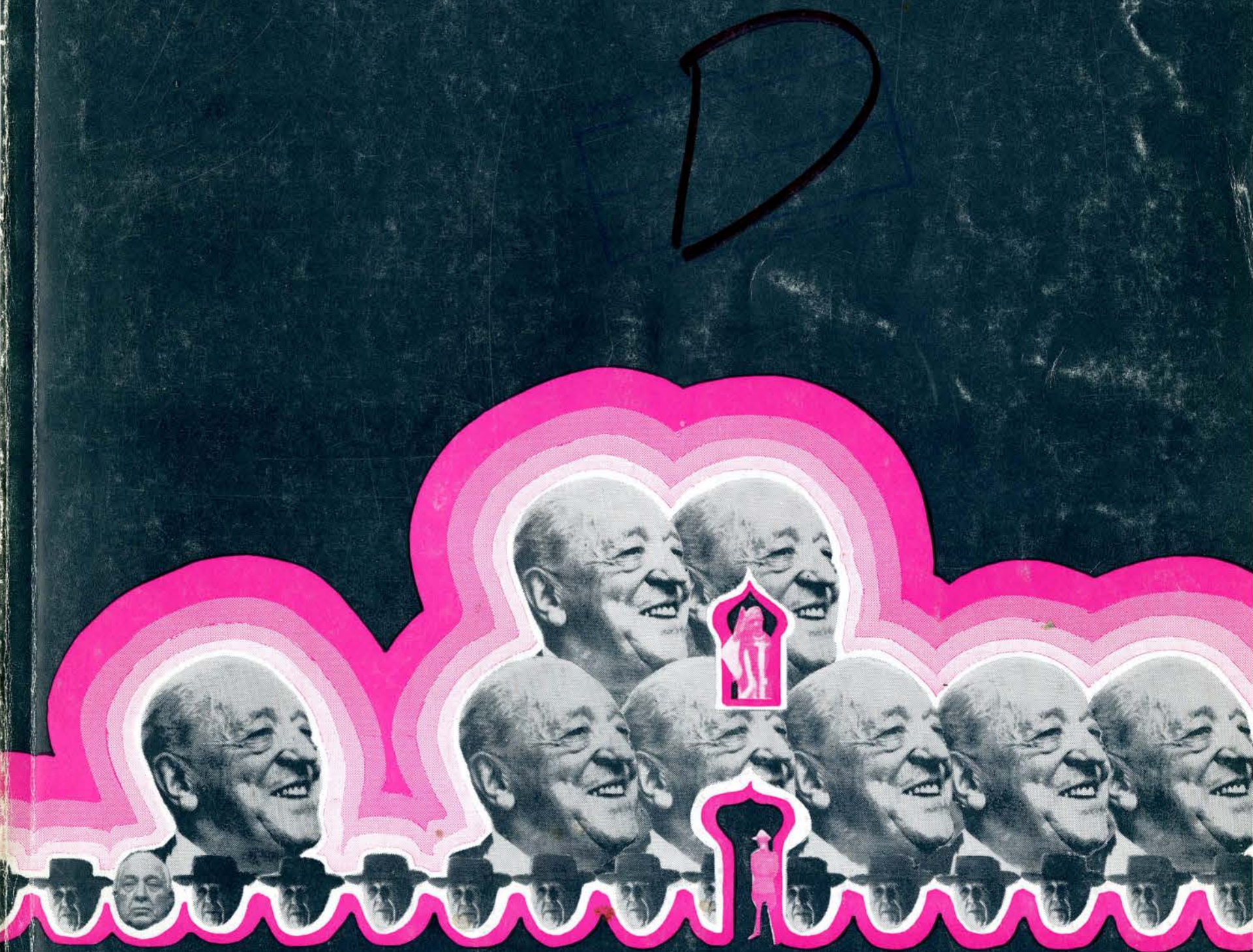


Architecture Canada

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Journal RAIC/La Revue de l'IRAC





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Head Office
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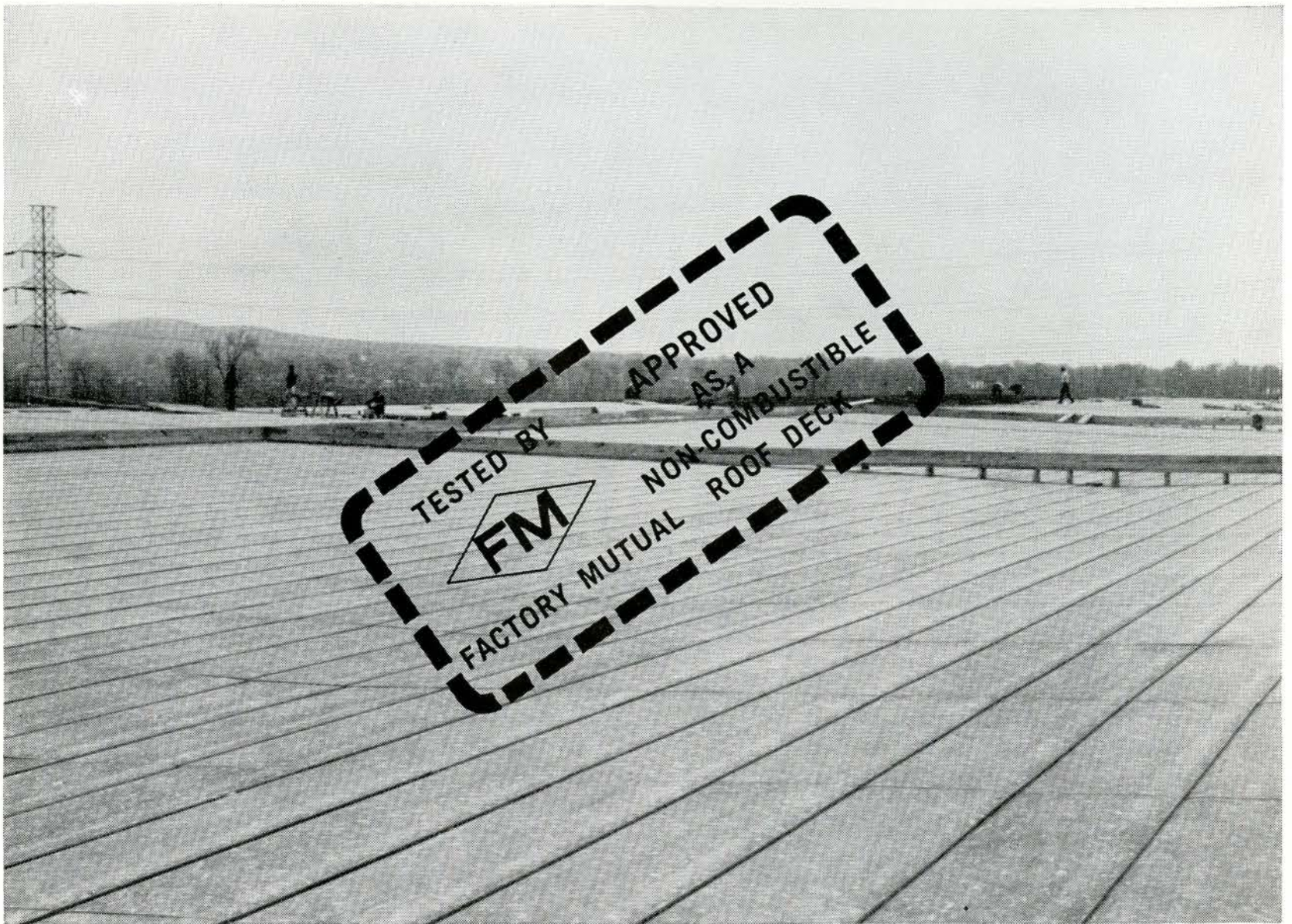
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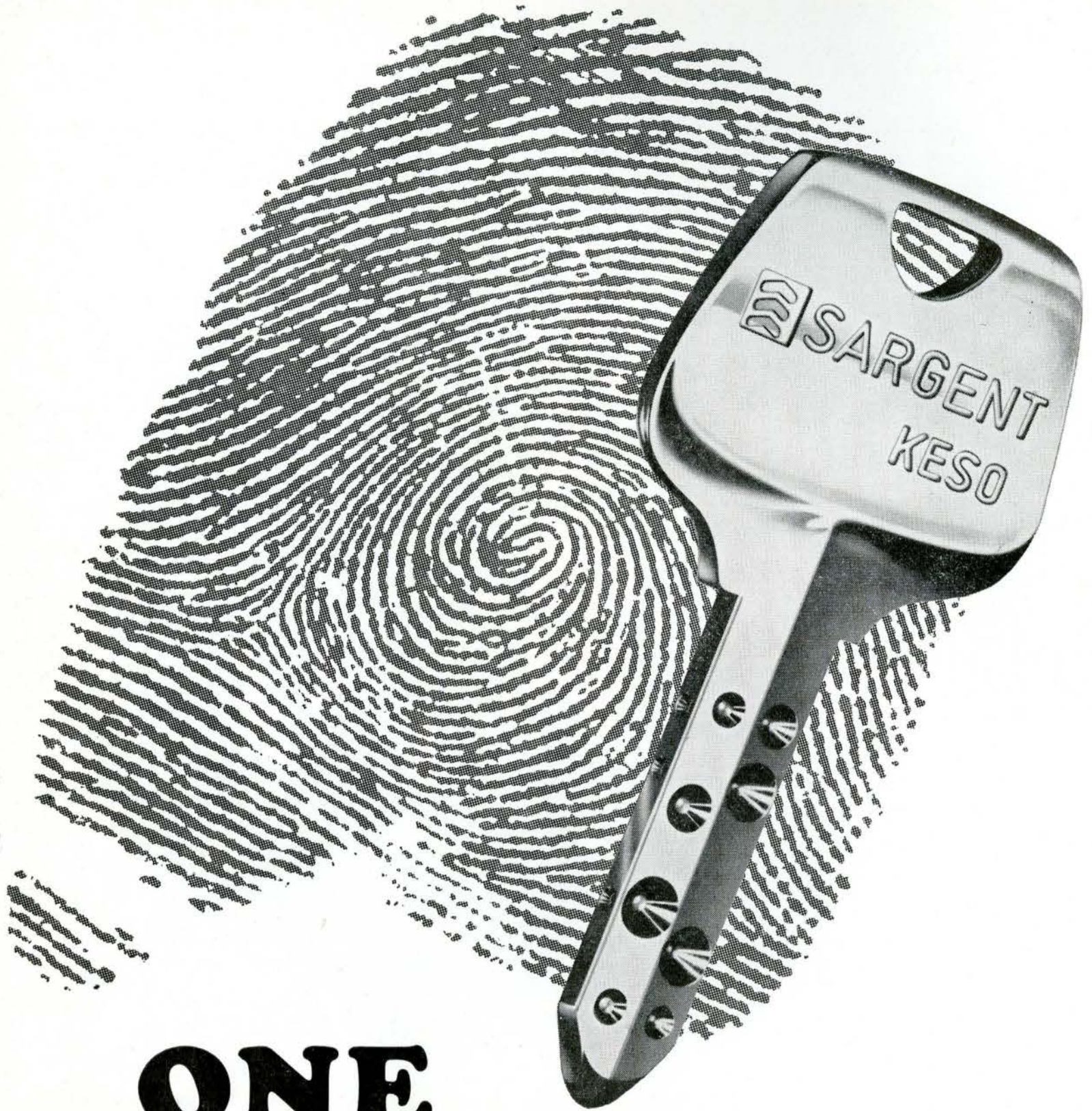
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RAIC-AIA 1969 Chicago Convention

The program for the RAIC/AIA 1969 Joint Convention in Chicago June 22 - 26 will stress the problems facing the architectural profession in North America over the next five years, and consideration is now being given by the RAIC section of the Convention Joint Committee to Canadian participation in the seminars and workshops. The RAIC section met in Toronto, October 24, to discuss program participation and other aspects of convention activities. Shown in the photo above, left to right, are D. G. Laplante, Department of Industry, representing the Government of Canada; Maurice Ho'dham, RAIC Executive Secretary; Walter Bowker, Managing Editor, Architecture Canada; Mrs Frank Nicol, ladies' committee; Frank Nicol, chairman; N. H. McMurrich, (F), President RAIC; Wilson Salter, (F), RAIC Director of Professional Services; Prof. W. G. Raymore, (F), representing College of Fellows; Peter Goering, convention hospitality centre; and Gerald Davies, convention exhibits.

1968 Pilkington Scholarship Award Goes to Late R. B. Jackson Memorial Fund

As a result of the death of Winnipeg-born architect Richard B. Jackson in a road accident last June, almost immediately after he was named the winner of this year's \$4,000 Pilkington Travelling Scholarship in Architecture, arrangements have now been made to disburse an amount equal to the value of the scholarship partly to his family

and partly to a memorial fund established in his name.

Pilkington Glass Limited has announced that it has accepted a recommendation from the seven Canadian schools of architecture which are responsible for conducting the competition, to allocate \$1,000 to Mr Jackson's mother, Mrs Ida Helen Jackson of Winnipeg, and \$3,000 to the Richard B. Jackson Memorial Fund.

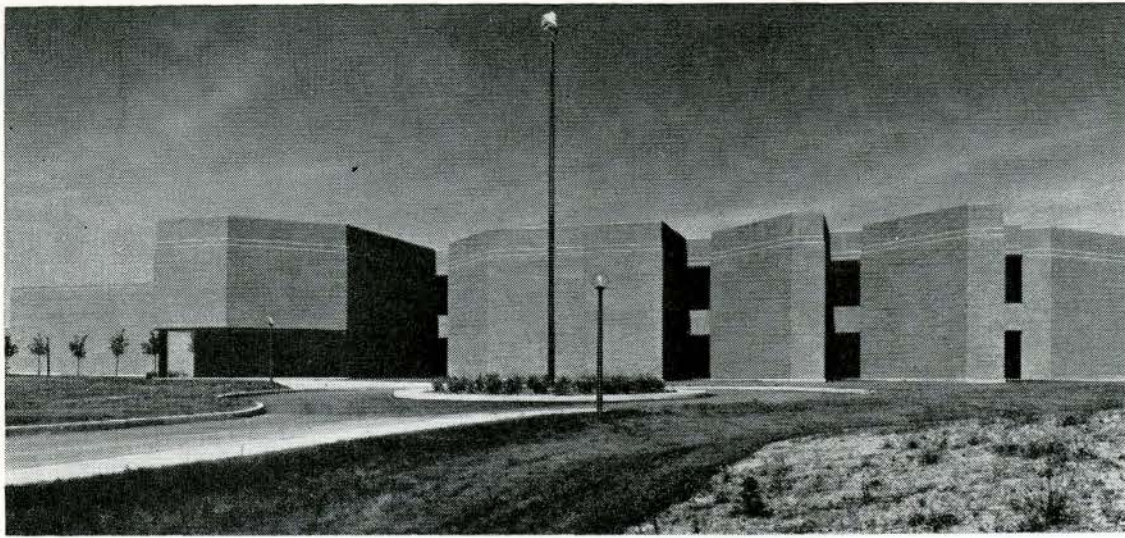
This fund, already in existence, was established by the University of Manitoba shortly after Mr Jackson's death. Its objective is to provide for scholarships and bursaries for future promising students.

OMRC Annual Design Awards

One Award of Excellence and six Awards of Merit have been made by the Ontario Masons Relations Council in their 1968 Architectural Design Awards. The Award of Excellence went to the Greb Administration Building in Kitchener (1), architects Jack Klein & Henry Sears. Awards of Merit were as follows: Toronto Branch Laboratory, Northern Electric Co. Ltd, Bramalea (2) architects Gordon S. Adamson & Associates; Thomas A. Stewart and Auburn Vocational Schools, Peterborough (3) architects, Craig Zeidler & Strong; Gateway Boulevard School, North York (4) architects, Raymond Mandel/Boigon & Heinonen Associates; Church of Mary Immaculate, London (5) architects Murray & Murray; Charles R. Sanderson Library, Toronto (6) architects, Pentland, Baker and Polson; and Central Services Building, University of Waterloo (7) architects Shore and Moffat and Partners.



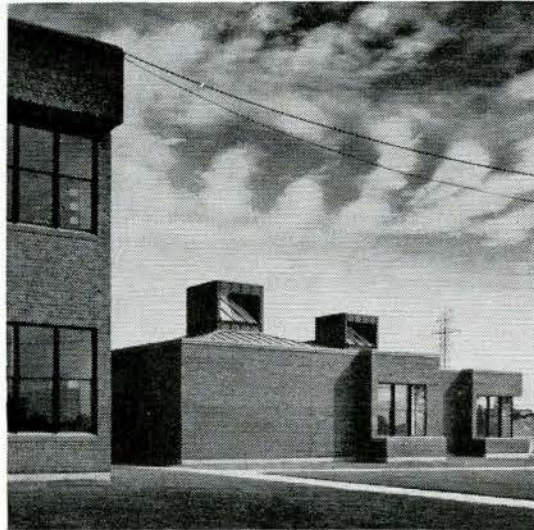
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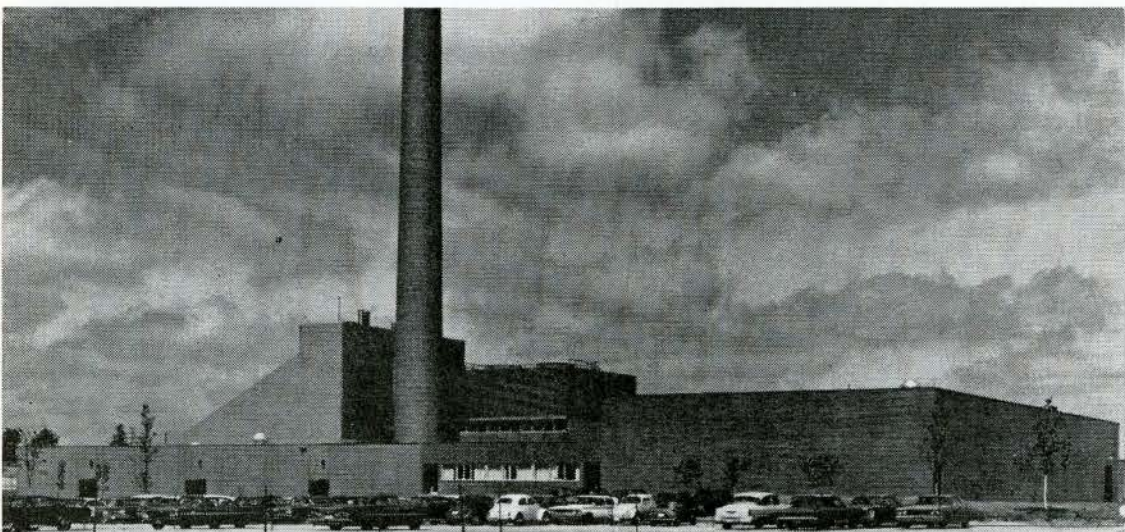
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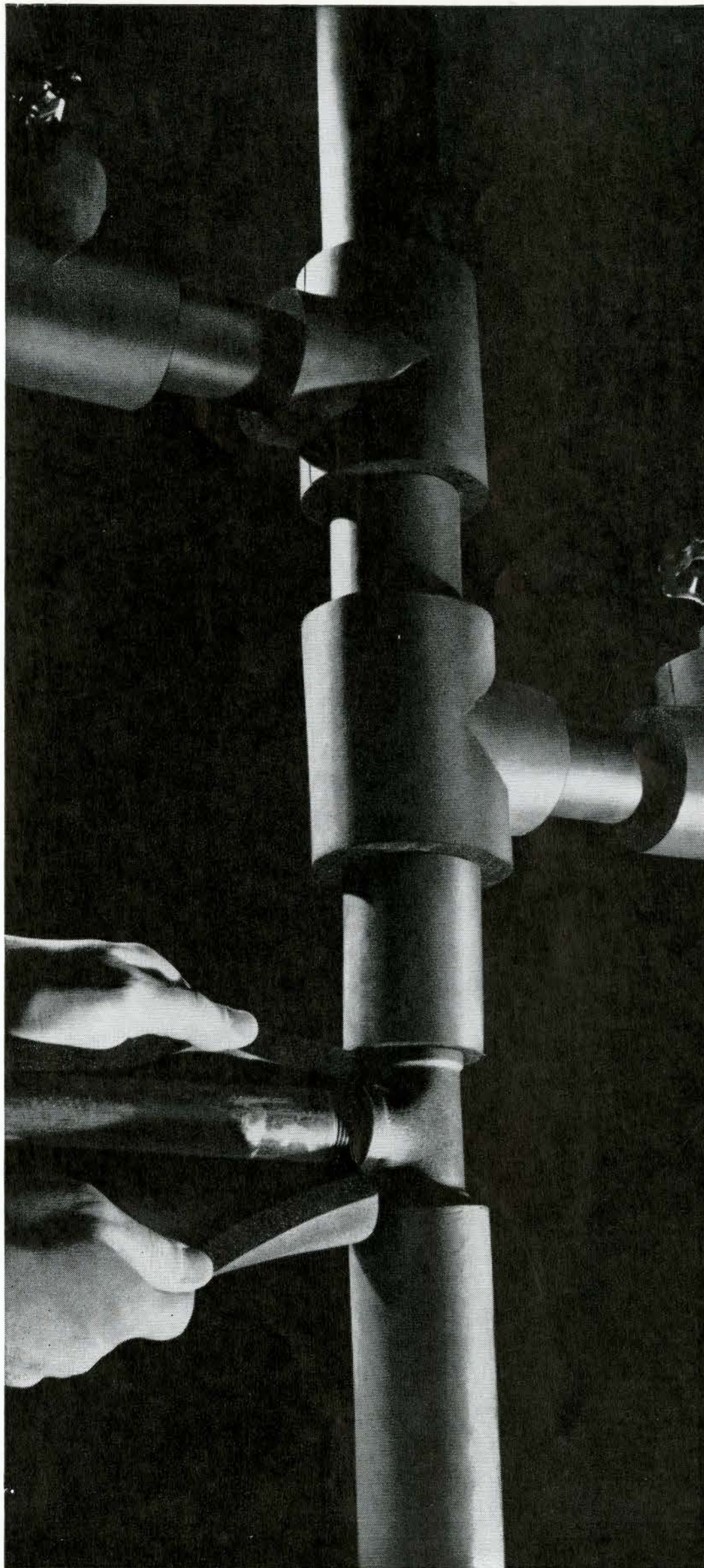
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RAIC Improves Committee Organization

Proposals to improve the organization and effectiveness of Institute committees put forward at a meeting of chairmen of standing committees and RAIC officers in Toronto September 14th received general support from RAIC Council at the September 15th-16th meeting in St John's, Newfoundland. Geography and limited financial resources always have been inhibiting factors in the functioning of committees in the past, and will continue to be in the future. The answer seems to be smaller, more compact committees appointed, where practical, on a regional basis. Centrally located executive groups, keeping in touch with less easy to reach members by correspondence, would then be able to act quickly when situations so require.

An immediate result of the new policy was the disbandment of the Standing Committee on Public Information (its functions will now be carried on by the Officers, Council and the newly appointed RAIC Director of Professional Services, Wilson Salter (*F*), and the establishment of a Standing Committee on Architectural Services for Federal Government Work. The new committee, which will be headed by C. F. T. Rounthwaite (*F*) of Toronto, will work closely with top level representatives of federal government departments and agencies on performance standards for architectural services, standard procedures, consultant relationships and professional fees.

The proposed draft revision of RAIC By-laws was approved by Council. The draft has now been sent to Provincial Associations and, the new By-laws are expected to come into effect January 1st, 1969.

The September Council meeting was the first Institute event to be held in Newfoundland, and Council members were given a warm welcome by the Newfoundland Association of Architects as well as by the Newfoundland government. Premier Joseph Smallwood visited the Council in session and also attended a reception and dinner tendered by the Newfoundland Association.

The Housing Task Force

Henry Sears, Toronto, has been appointed chairman of a committee to work with President N. H. McMurrich (*F*) on the RAIC contribution to Transport Minister Paul Hellyer's Housing Task Force. Mindful of the fact that the Task Force has received more briefs than it has time to hear formally at its sittings, and because members of the architectural profession already are involved in other submissions, Mr Sears' committee recommended that RAIC participation not take the form of another brief. President McMurrich has therefore written Mr Hellyer advising him of the formation of the 6th committee and the decision not to prepare an RAIC brief, and offering instead the assistance of the committee, expanded if necessary and including the services of the Headquarters staff, to analyse those briefs received by the Task Force which deal with the qualitative aspects of housing.

L'Amélioration du Comité d'Organisation de l'IRAC

Les moyens d'améliorer l'organisation et l'efficacité des comités de l'Institut proposés à une réunion des Présidents des Comités permanents et des officiers de l'IRAC à Toronto, le 14 septembre, ont reçu l'approbation générale du Conseil de l'IRAC à la réunion tenue à St. Jean, Terre-Neuve, le 15 et le 16 septembre.

La géographie et les budgets limités ont été toujours des facteurs limitant le bon fonctionnement de ces comités dans le passé et continueront d'exister. La solution semble rester dans la formation de comités plus petits et compacts, régionaux où possible. Des groupes exécutifs centraux correspondant par écrit avec des membres plus lointains pourraient agir promptement au besoin.

Un résultat immédiat de la nouvelle politique a été la dissolution du Comité permanent de l'Information publique (ses fonctions seront remplies dès lors par les officiers, le Conseil et le nouveau Directeur des Services Professionnels, Wilson Salter, (*F*), et l'établissement d'un nouveau Comité permanent de Services architecturaux aux Travaux pour le Gouvernement Fédéral. Le nouveau comité, dont le Président sera C. F. T. Rounthwaite, (*F*), de Toronto, travaillera étroitement avec de hauts représentants des ministères et les agences du Gouvernement Fédéral sur les normes de performance relatives aux services architecturaux, les procédures standards, les rapports des conseils et les honoraires professionnels.

L'ébauche des révisions proposées aux Statuts de l'IRAC a été approuvée par le Conseil. Cet ébauche vient d'être envoyé aux Associations provinciales et les Statuts devront être mis en effet le premier janvier, 1969.

La réunion du Conseil du mois de septembre a été le premier événement de l'Institut tenu en Terre-Neuve et les membres du Conseil ont reçu un accueil chaleureux de la part de l'Association des Architectes de la Terre-Neuve. Le Premier, Monsieur J. Smallwood, a rendu visite au Conseil siégeant et a assisté également à une réception et un diner offerts par l'Association de la Terre-Neuve.

Henry Sears de Toronto a été nommé Président d'un Comité devant travailler de concert avec le Président, N. H. McMurrich, (*F*), à la contribution de l'IRAC à l'Enquête sur l'Habitation conduite par le Ministre du Transport, Paul Hellyer. Etant donné que l'Enquête sur l'Habitation a déjà reçu trop de soumissions pour permettre leurs présentations formelles aux sessions de l'Enquête et que des membres de la Profession d'Architecture sont déjà impliqués à d'autres soumissions, le Comité de Monsieur Sears a recommandé que la participation de l'IRAC ne prenne pas encore la forme d'une autre soumission. Le Président McMurrich a écrit à Monsieur Hellyer le prévenant de la constitution de ce Comité et au lieu de préparer une soumission, lui offrant l'aide du Comité, agrandi au besoin, ainsi que les services du personnel du Siège Social pour l'analyse des soumissions reçues par l'Enquête traitant des aspects qualitatifs du logement.



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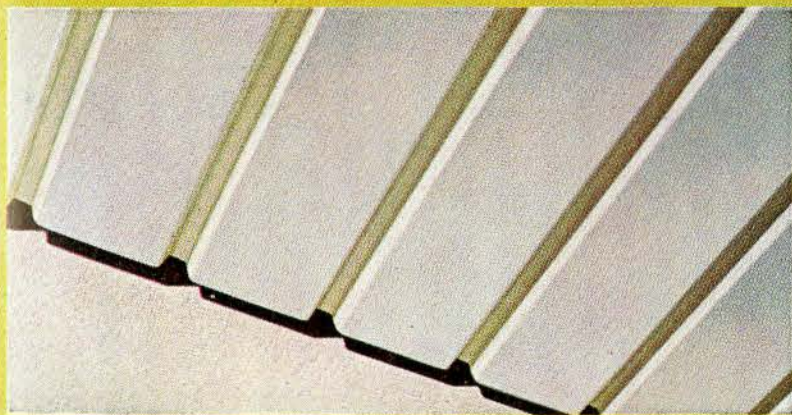
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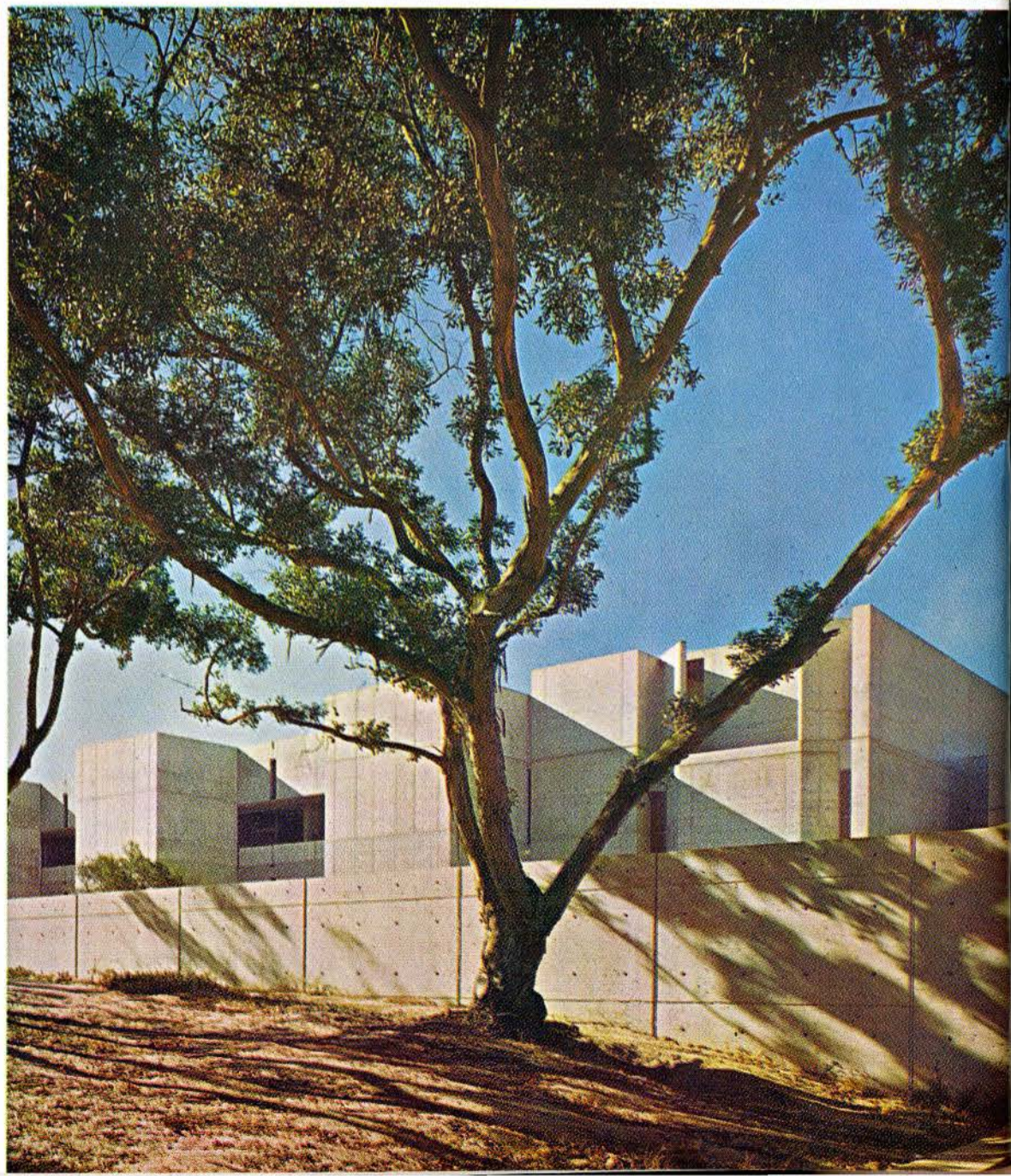
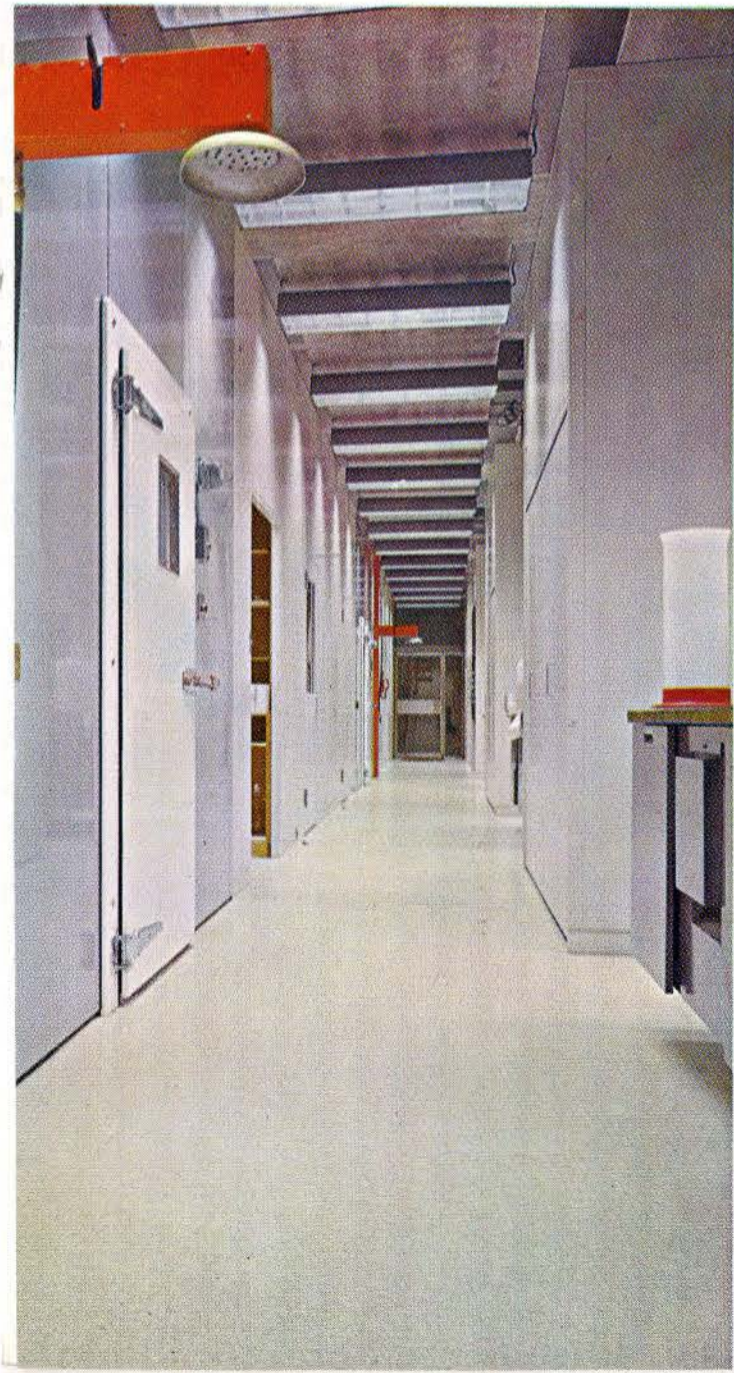
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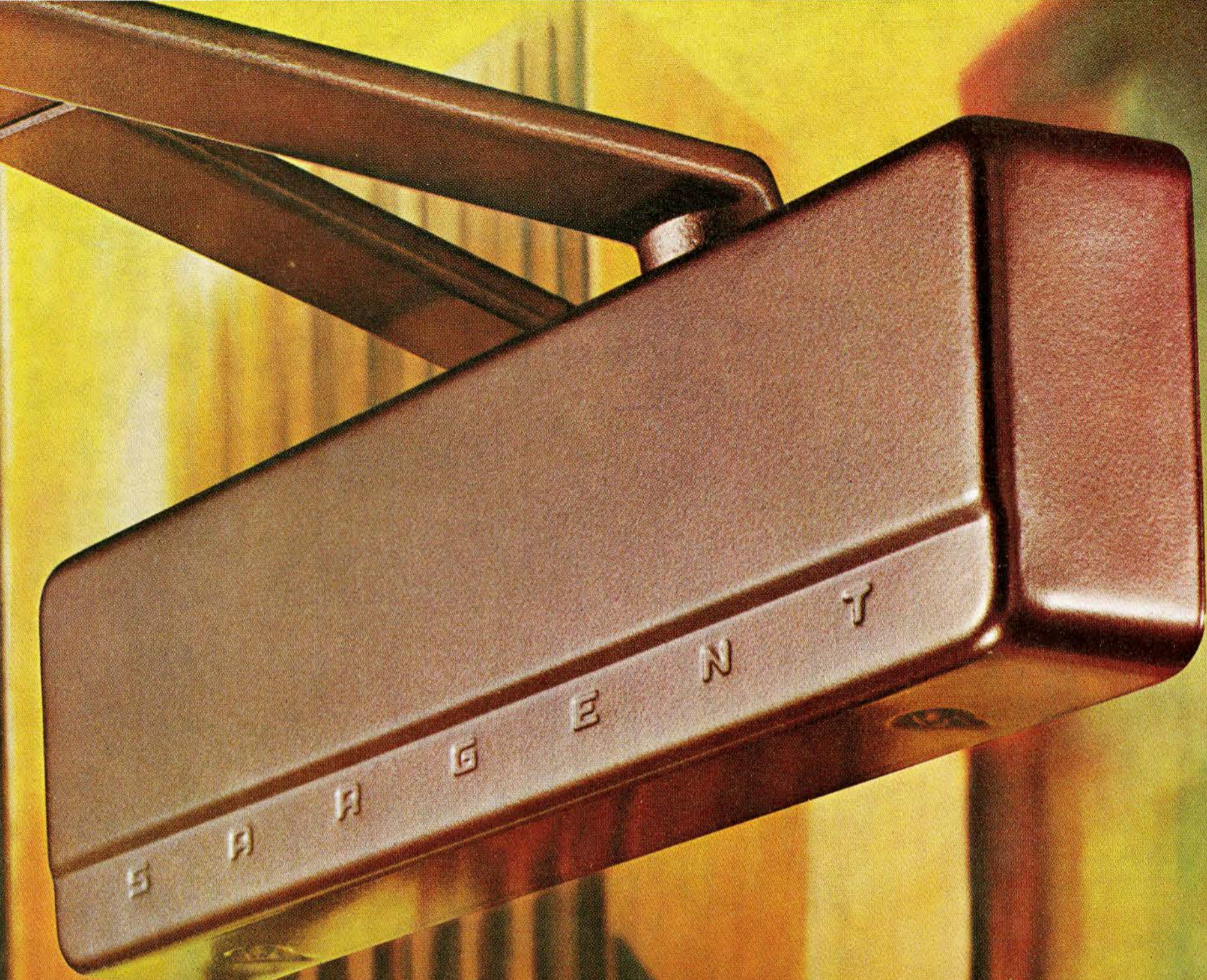
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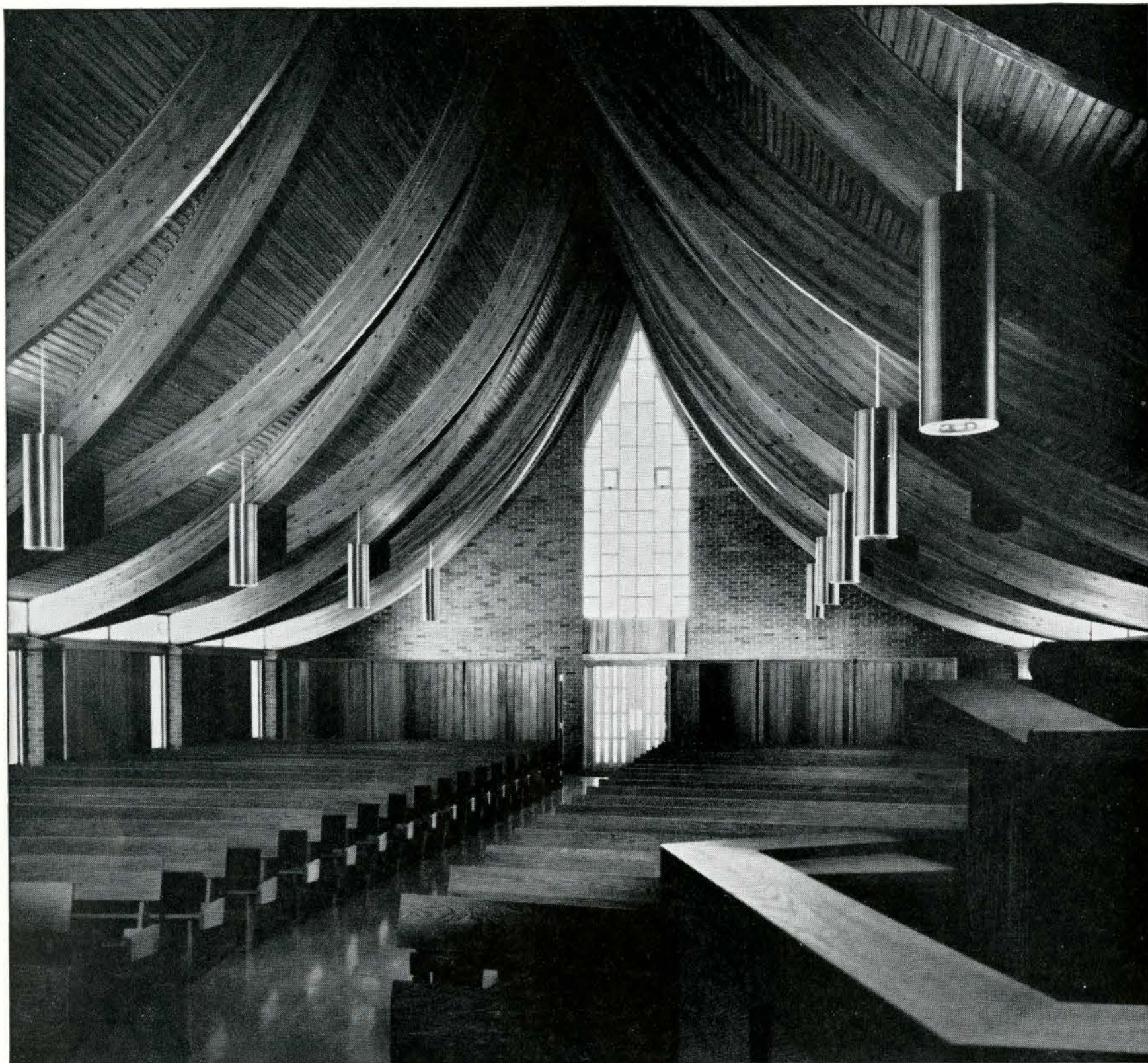
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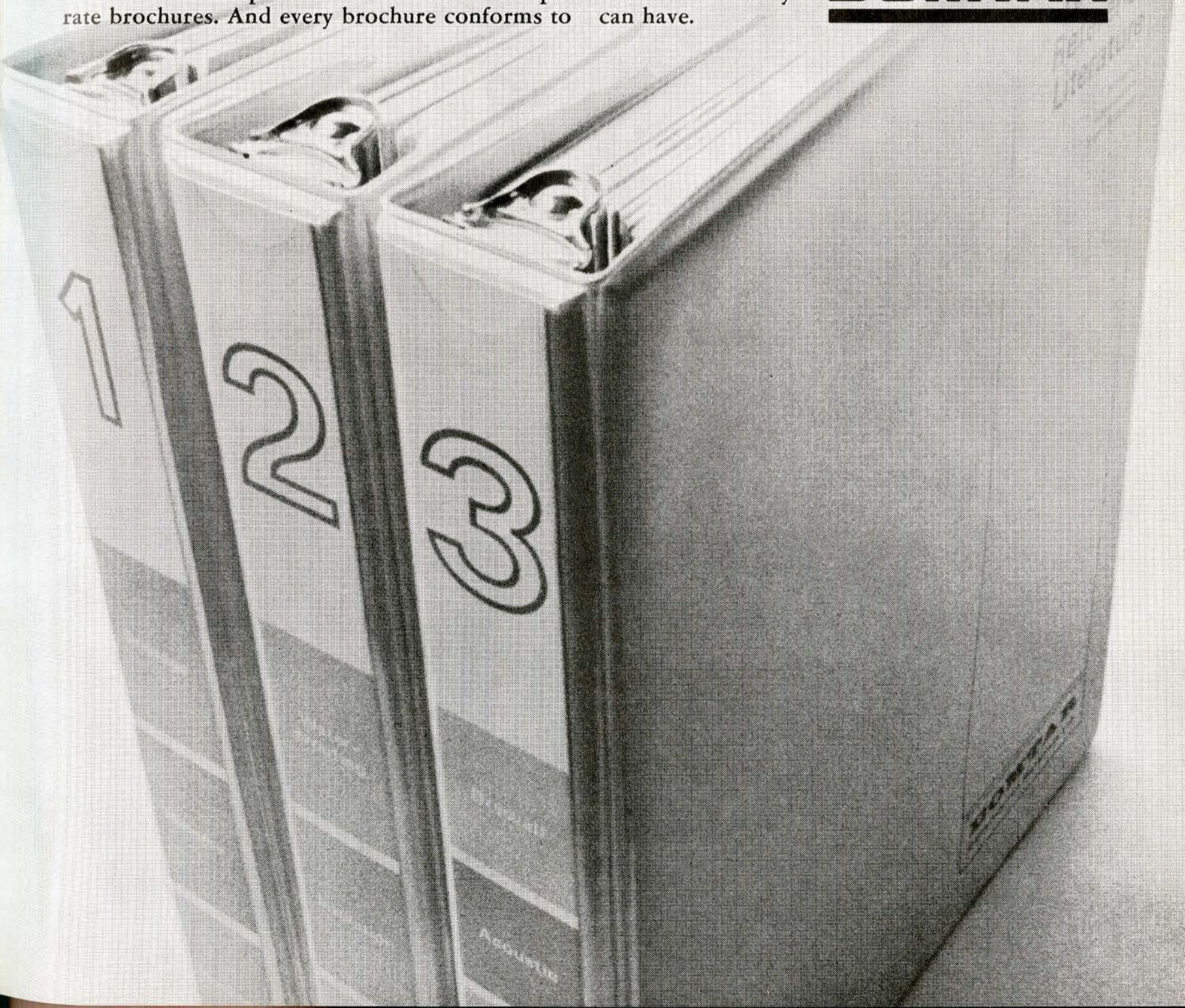
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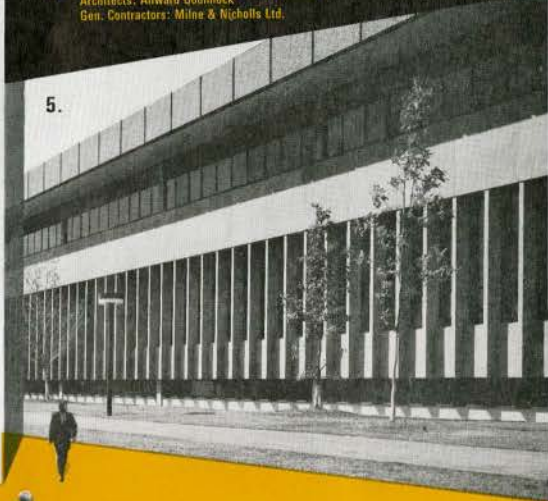
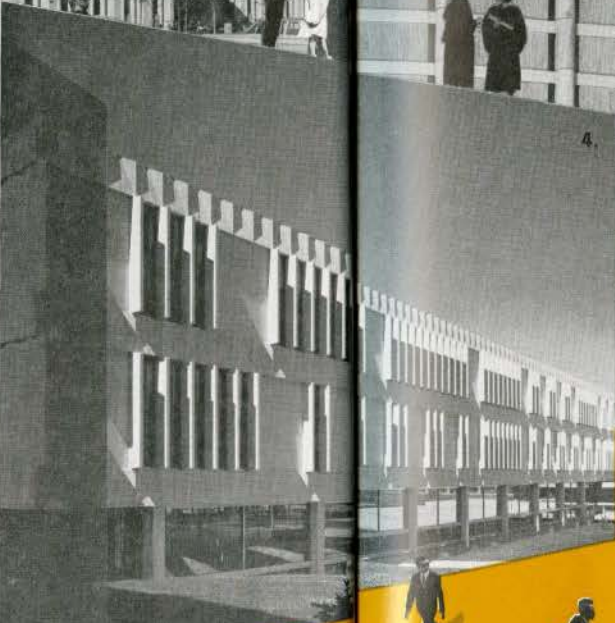
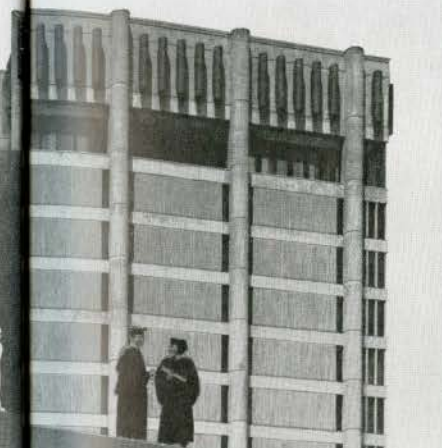
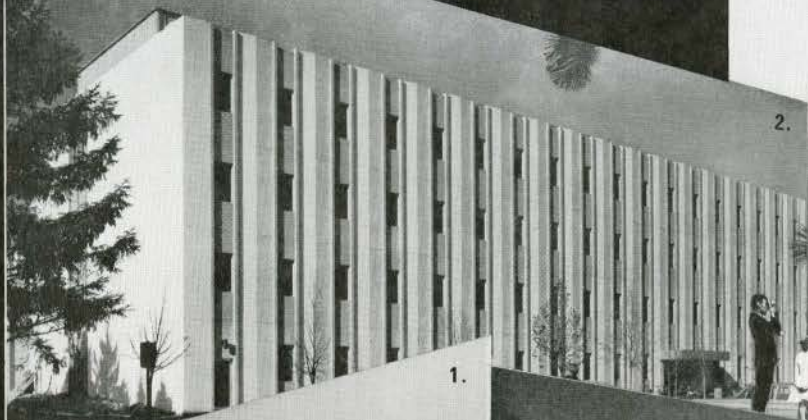
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- 2. **Senior Sciences Complex, McMaster University, Hamilton**
Architects: Wm. R. Souter & Associates
Gen. Contractors: Robinson Yates Corp. Ltd.
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Architects: U.P.A.C.E.
Gen. Contractors: McNamara Construction Co. Ltd.
- 4. **Arts and Humanities Bldg., Laurentian University, Sudbury**
Architects: Marani, Rounthwaite & Dick
Gen. Contractor: Janin Bldg. & Civil Works
- 5. **Atkinson College, York University, Toronto**
Architects: Allward Gouinlock
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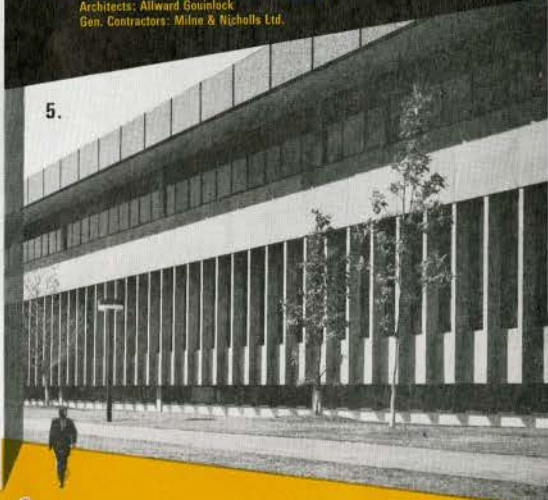
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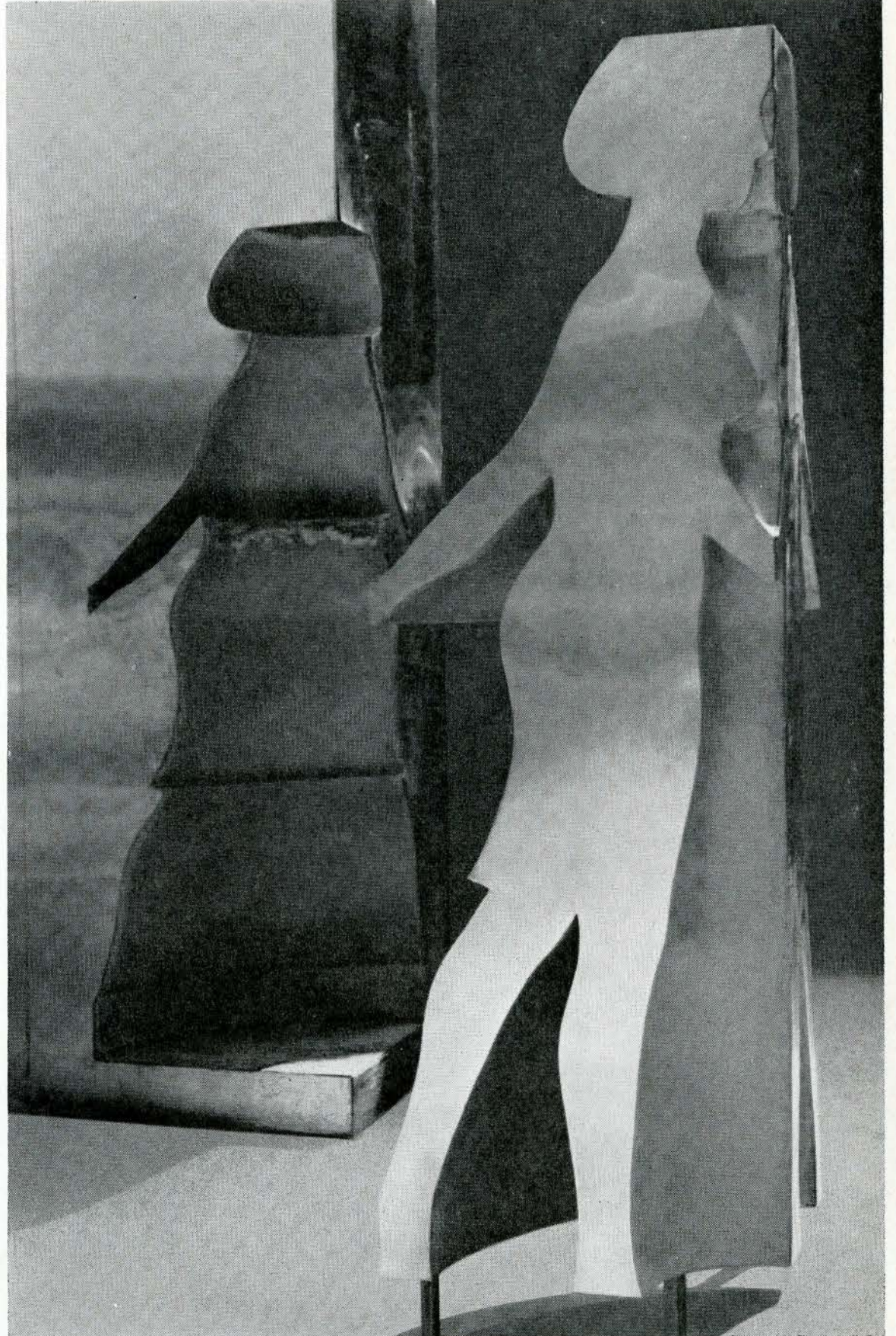


1
this



2
1
*Bronze pioneer sculpture by John B. Weaver
at Alberta Museum and Archives*

or this



3
2.3
*Expo commissions by John Ivor Smith
and Michael Snow*

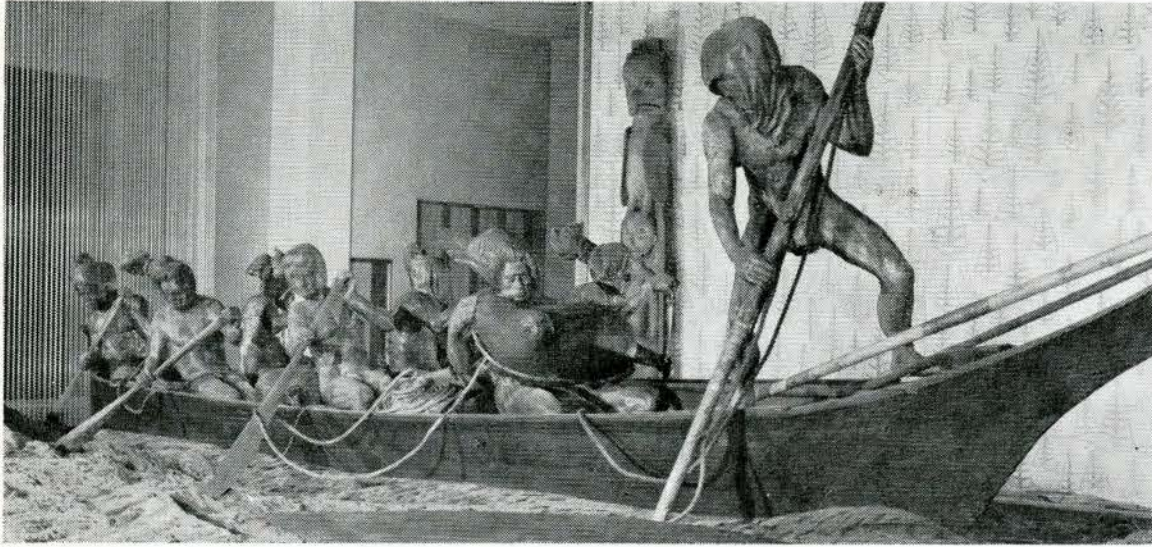
4, 5

Nootka whaling scene by Lionel Thomas (art advisor for the project), at Provincial Museum, Victoria, BC, and "The Story Teller" by O. Holmsten, Alberta Museum and Archives Building, Edmonton
Nootka scène baleinière, par Lionel Thomas, au Musée Provincial de BC, Victoria, et "The Story Teller" par O. Holmsten, au Musée Provincial et Archives d'Alberta

6

Fountain by Ted Bieler, Ontario Pavilion, Expo '67
Fontaine par Ted Bieler, au Pavillon Canadian, Expo '67

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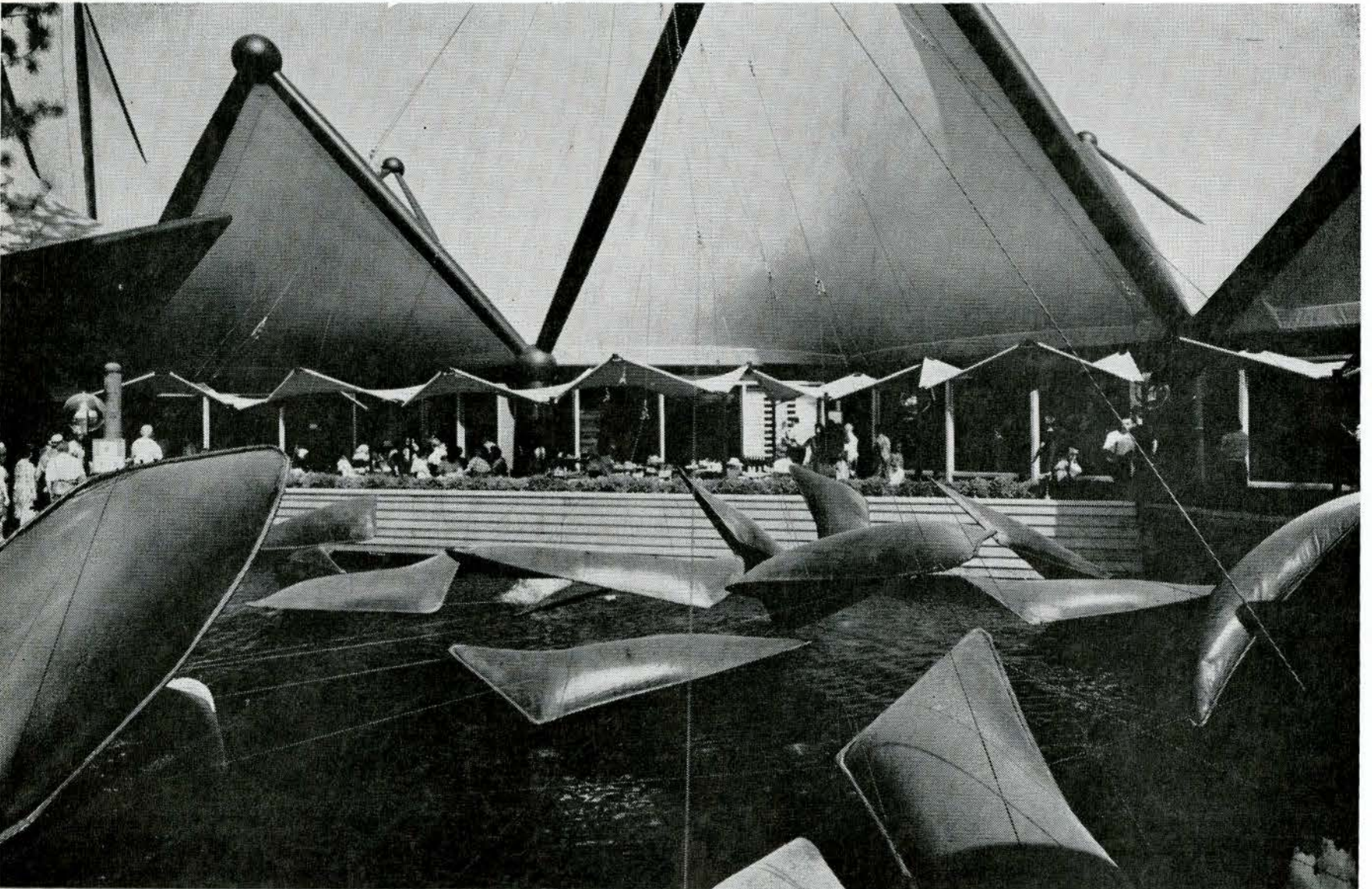
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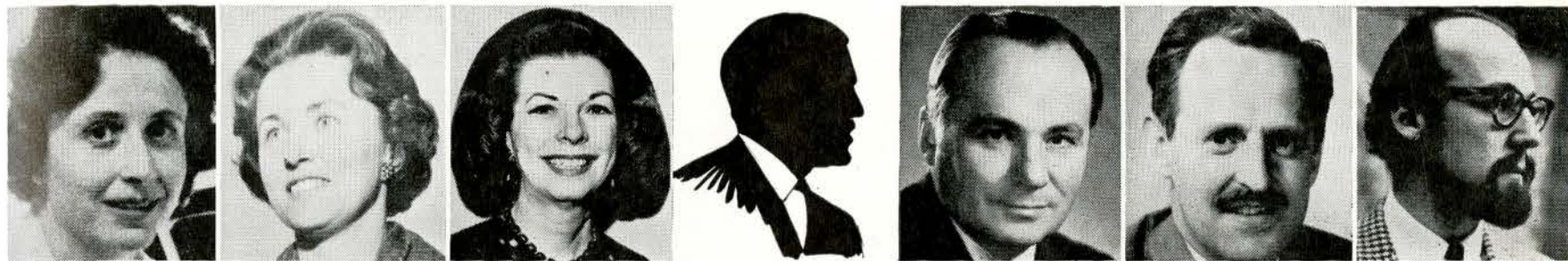


6

"Six Canadians prominent in the visual arts have been appointed to the advisory committee to assist in the implementation of the federal government's fine art policy for public buildings". — Press Release from DPW

Left to right: Mira Godard, Director of the Agnes Lefort Gallery, Montreal
 Nancy Robertson, Director of Norman Mackenzie Art Gallery, Regina
 Dorothy Cameron, Toronto Art Consultant of national renown, Adviser on art to Canadian Council
 Guy Viau, Deputy Director of the National Gallery of Canada, Ottawa
 Richard B. Simmins, Vancouver Art

Consultant, formerly director of Exhibition Extension Service for National Gallery of Canada
 Stuart Allen Smith, Director of the Beaverbrook Art Gallery, Fredericton, N.B.



Mira Godard Nancy Robertson Dorothy Cameron Missing Architect? Guy Viau Richard Simmins Stuart Smith

The determination of the Federal Department of Public Works to overhaul unsatisfactory procedures is evident by the formation of this most important committee. However, there is a danger that the architect-designer has once again lost a valuable initiative — this time, the right to hire and fire his own artist. In public buildings fair trial has found the architect, for whatever reasons, along with other "trusted advisers" (some of whom are well known if not esteemed artists) to be lacking in stewardship. Regrettably for at least two known projects, the artist-adviser saw fit to allow himself a lion's share of the commission — in neither case did the results warrant such audacity.

However, negative muckraking of past experiments is unnecessary. Publication of projects good, mediocre and calamitous is sufficient to draw attention to positive avenues for the future. Having solved the problem of "who", it will be the committee's task to see that the "how" has a quality of reality which will give the projects a sense of worthwhile endeavour to all concerned.

Points for Consideration

1 The new committee must endeavour to coerce the architect into a sense of his own importance in projects at an early stage of planning and not to see the experiment as just an allotment of monies to be spent "later on" on art. Particularly in works which are to be integrated the architect needs to have a sense of empathy with the chosen artist. The earliest participation in the project for the artist is preferable. Regrettably however, I must point out that even perfect procedure will not guarantee success. Distinguished artist and distinguished architect just have a better chance of harmony in functioning as co-partners at

the conceptual stage.

2 Purchase of work for final decor should not preclude the designing architect from making proper provisions early, on the type of art to be housed. He should create space and vistas compatible with the objects and not have art treated as an item of "interior decoration".

3 The committee should always be regarded as a liaison and aesthetic agent as valuable to the architect as his structural engineer. Together they should solve the problem of suitable art for the architectural occasion.

4 Charged by the Public Service to be a go-between for artists and architects, the committee if it is cognizant and capable should be able to create an empathy to bring a true picture of Canadian contemporary imagery to public buildings.

New Roles for the Committee

There are other new roles for the committee. As an intermediary, it can perform the useful and necessary role as interpreter for the free-wheeling society of artists on practical matters involved in contractual commitments. The addition of some hard-headed practical "know-how" can often guide the course where empathy between the artist and his commissioners will give the happiest results. Often the artist's interests are not too well understood. His eagerness to perform conceals situations where he has allowed his ideas, presentation models and time spent on a project to be grossly undervalued — his desire to give of his best should not make him an easy victim for exploitation. At present there are many anomalies in government contracts for artists which makes them, in comparison with other

contractors, seem to be at a disadvantage.

The demands of architectural decor have caused a restatement of values as to who is an artist and who is a craftsman. Therefore the roster of talent available should aim for competence on an architectural scale in addition to creative ability and contemporary imagery. Outside these prerequisites, it will be a test for the committee to choose those who can respond to a specific problem and at the same time preserve their own true image. Diligence and perception in finding talent throughout Canada will make the new committee a very "busy body" indeed.

Art Societies and the Committee

The committee must be fed with factual servicing from every aspect of the art practicing world in Canada. The type of servicing will need to aim at quality and creativeness. Any group who pretends to exist on behalf of the artists of Canada will need to be truly competent in representing the hard core of the best available talent. So called art societies will have to overhaul and reorient their organizations in the light of new demands. It is to be remembered that art societies exist for the artist and not the artist for the societies.

In the final result it is the artist's response to a new situation and his confidence in his patron and mediators which will test the "high hopes" of all concerned. The "how" requires dynamic direction and a sensitive understanding through the period of trial and error to come.

Next Issue — Servicing the Visual Arts for Architectural Commissions

Anita Aarons

Hygienic ceilings are over Miss Kelly's head



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Page 43

L'Architecture électro-graphique Tom Wolfe

Spectacle en photos de l'architecture électro-graphique (terme inventé par Wolfe) des environs de Los Angeles et San Diégo faisant preuve que les artistes commerciaux ont au moins dix ans d'avance sur les artistes dits 'sérieux' – une enseigne électrique (1, 2, 3) à San Diégo par Melvin Zeitvogel exécutée il y a dix ans – merveilleuse explosion de lumière, de couleurs et de mouvements, 11 étages de hauteur! Elle rend stériles et blafardes les oeuvres et théories des artistes soi-disant 'sérieux' en matières lumineuses, primitives comparées à la BUICK de Zeitvogel, qui ne s'est jamais demandé s'il était un artiste – pourquoi faire? – lui et ses semblables sont des esprits libres et au diable l'histoire de l'art, l'Art Forum, la Bauhaus, Mies, Corbu et tout le reste. Les créateurs de la nouvelle architecture électro-graphique construisent pour attirer l'attention des gens qui passent en voiture – pas pour attirer l'attention du monde de l'art – c'est bien simple – le dessin pour les yeux des gens qui voyagent – l'idée a libéré l'artiste commercial et l'ingénieur de la Californie de tout le bataclan historique des architectes sérieux qui pensent toujours en termes de formes solides statiques. Les artistes commerciaux de Los Angeles ont unifié le concept de Zeitvogel — de l'éclairage, des graphiques et du bâtiment ils créent une seule forme architecturale (4, 5); le bâtiment devient une énorme réclame électrique, la structure devient la publicité. La poste d'essence Union 76 (6 et 7) est la preuve que l'architecture électro-graphique fait monter le chiffre d'affaires – un mois après la construction de cette oeuvre de Wong, le chiffre avait augmenté de 50%. Le premier bâtiment d'envergure exprimant non pas la forme structurale mais la forme graphique est l'agence Ford Crenshaw où la façade d'angle était conçue strictement pour accommoder le F de FORD . . . depuis, les graphiques de l'architecture électro-graphique ont progressé du simple lettrage aux structures conçues comme tableaux ou sculpture représentationnelle – tout un mur de restaurant étant une immense photo d'un

steak, salade, etc. Sal Merendino, dessinateur industriel, dit que ce genre de graphiques est une nouvelle vague du dessin urbain. Pourquoi un bâtiment devrait-il exprimer que sa propre structure, dit-il, sans exprimer ce qu'on trouve à l'intérieur? Ces panneaux lumineux expriment la joie de vivre et une ville devrait être joyeuse – dans ce sens, on devrait oublier l'idée de l'architecture urbaine et se rappeler ce que veulent les citoyens – une ambiance chaleureuse, accueillante, de bon goût. Toute l'idée de cette architecture est tellement loin des concepts conventionnels de la Bauhaus que c'est émoustillant – on a du mal à comprendre comment les idées fonctionnalistes de la Bauhaus ont tenu le coup si longtemps . . . les architectes sont devenus obsédés de l'idée que la structure devra être exprimée 'honnêtement'; ils hésitent à exploiter les possibilités du béton armé avant Saarinen; ils tendent à penser toujours que toute décoration extérieure est malhonnête – je doute qu'un architecte sérieux pense sérieusement des possibilités de façades éclairées d'en arrière, de l'usage de la peinture acrylique – ils ont, au fond, une terrible 'nostalgie du château' dont ils ne peuvent pas se défaire – à part quelques architectes tels que Robert Venturi. Il s'est incombé aux artistes commerciaux de Los Angeles, Las Vegas, San Diégo de créer quelque chose d'assez fantastique et baroque pour exprimer la nouvelle ère de mouvement et de richesses. Prenons Los Angeles où, disent les New Yorkais, on a du mal à s'orienter parce qu'il n'y a pas de monuments – au contraire, les autoroutes ont tout de ce qui est le plus monumental avec leurs formes en courbes et toutes les formes de l'architecture fantaisiste de l'auto, l'éclairage, les lampes, enseignes, tours, etc., qui dépassent de loin la sculpture lumineuse des artistes 'sérieux' en qualité et en intérêt. Au diable le fonctionnalisme – ici on trouve la vraie excitation visuelle – les espèces de hangars des Car Wash, des Drive-ins, reçoivent un traitement monumental et souvent fantaisiste – la fonction psychologique de l'architecture électro-graphique est de civiliser la sévérité impersonnelle massive de la ville moderne – elle semble dire "il faut domestiquer la bête". Pour dire la

vérité, combien ternes seront des villes telles que Los Angeles et des centaines d'autres villes, carrefours et villages américains sans l'architecture électro-graphique de la fantaisie mobile qui leurs a été donnée par l'artiste commercial avant-garde.

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Au sujet de Canards et de Décorations Denise Scott Brown et Robert Venturi

La décoration a été qualifiée de péché, de moyen de cacher les défauts, l'expression de la joie d'esprit des artisans. Les stylistes internationaux estiment que la décoration appliquée n'a plus de raison d'être car le bâtiment fabriqué à la machine est en soi la décoration. Le Corbusier et peu d'autres ont été liés aux arts décoratifs d'assez près que l'on puisse le ressentir dans leurs oeuvres d'architecture.

En sorte, il y a deux types d'enseignes qui font partie de l'architecture "Pop": premièrement, l'enseigne qui est le bâtiment tel que le canard auprès de la route dans lequel on pénètre pour y trouver un restaurant; deuxièmement, l'enseigne qui constitue toute une façade mais que néanmoins ne gêne pas au fonctionnement du bâtiment. La plupart des bâtiments de notre époque sont des 'canards' conçus pour attirer l'attention en dépit du bon fonctionnement. Ils ont tout un répertoire d'empruntés des maîtres tout en se disant anti-formaliste.

Nous croyons que l'architecture de communication nous mènera à repenser notre architecture et à faire face à la question de décoration. Nous pensons qu'il sera plus facile, moins cher, plus directe et plus honnête d'appliquer à un bâtiment fonctionnellement rationalisé la décoration qui sera nécessaire à un symbolisme particulier. Plutôt décorer une construction que de construire une décoration.

The 1950's will be remembered as a period of architectural questioning. The Modern Movement, only some thirty years old, led astray by a technological epoch had dead-ended in the glass box. Louis Kahn, in the spirit "that a good question is better than the most brilliant answer" argued for the reunification of contemporary architecture with the past (architectural history having been banished by the Bauhaus). He championed the search for "beginning" – "the beginning of any established human activity is its most wonderful moment." While Aldo Van Eyk was singling out folk architecture, Bernard Rudofsky culminated the movement for a more human architecture with an impressive show in the early sixties at the Museum of Modern Art which featured "Architecture without Architects". The trend was thus set: learning from Mykonos was in.

Concurrent with this trend in architecture but diametrically opposite in spirit was the art movement in New York begun by Warhol, Johns and Rauschenberg, et al, which was soon dubbed, in our ever present desire to categorize, Pop Art. This has diversified into Op, Kinetic, Psychedelic, Inflatable, etc., but its message is clear: TODAY.

Just six years ago, "Grand's" restaurant in Philadelphia by Robert Venturi signified the beginning of the Pop movement in architecture. (And in the true Pop spirit Grand's has since been demolished.) The message was likewise TODAY, recognizing, in the use of Pop idiom and materials (porcelain enamel, epoxy-resin, and paint as architectural ornamentation – "supergraphics") – the way it is. The general acceptance of this movement is indicated in the October issue of *Progressive Architecture* which is dedicated to what they have called supermannerism, defined as "partly a mannerist approach to expand our vision to a new superscale, and partly an approach to materials and functional uses that is Pop." P/A deals primarily with the visual arts,

ie painting to reinforce the perception of space. Not since cubism have the visual arts been so close to being integrated with architecture.

However, the relevance of the Pop movement lies not in its visual aspects but in the question it poses: isn't TODAY a valid learning source? Stemming from this is the issue of "involvement", and this is the subject Architecture Canada's "Pop" issue deals with. Doug Michels, like many of his age, is concerned with this trend. The incident at Catholic University, as described on page 39 of this issue, though comic in its presentation typifies the isolation of architectural schools. As Michels puts it, "At a time when people are shooting each other in the streets and burning down their own houses and the Government is building new slums, the idea of spending your time on a gatehouse for a girls school is ridiculous". For those who are now doing megastructures, a letter to the August Issue of *Progressive Architecture* from Robert Venturi – "Forty years ago, Beaux Arts students designed irrelevant summer palaces for deposed kings. Today their equivalents design visionary megastructures that are fashionable hill towns with technological trappings, because they capture the easy image of traditional spatial architecture that way. Go west, young man, to Los Angeles. To be truly visionary, you must deal with now."

On the other hand, Tom Wolfe, the articulate spokesman of Pop Culture, feels that architects by using the vocabulary of Pop Culture will destroy its vitality. But if Las Vegas and Los Angeles are both spontaneous expressions of the American mass culture, and if architecture reflects the values of the culture that produces it, then it is clear that architects must develop an understanding of this culture which goes beyond its superficial visual images.
B.M. and A.S.

tract

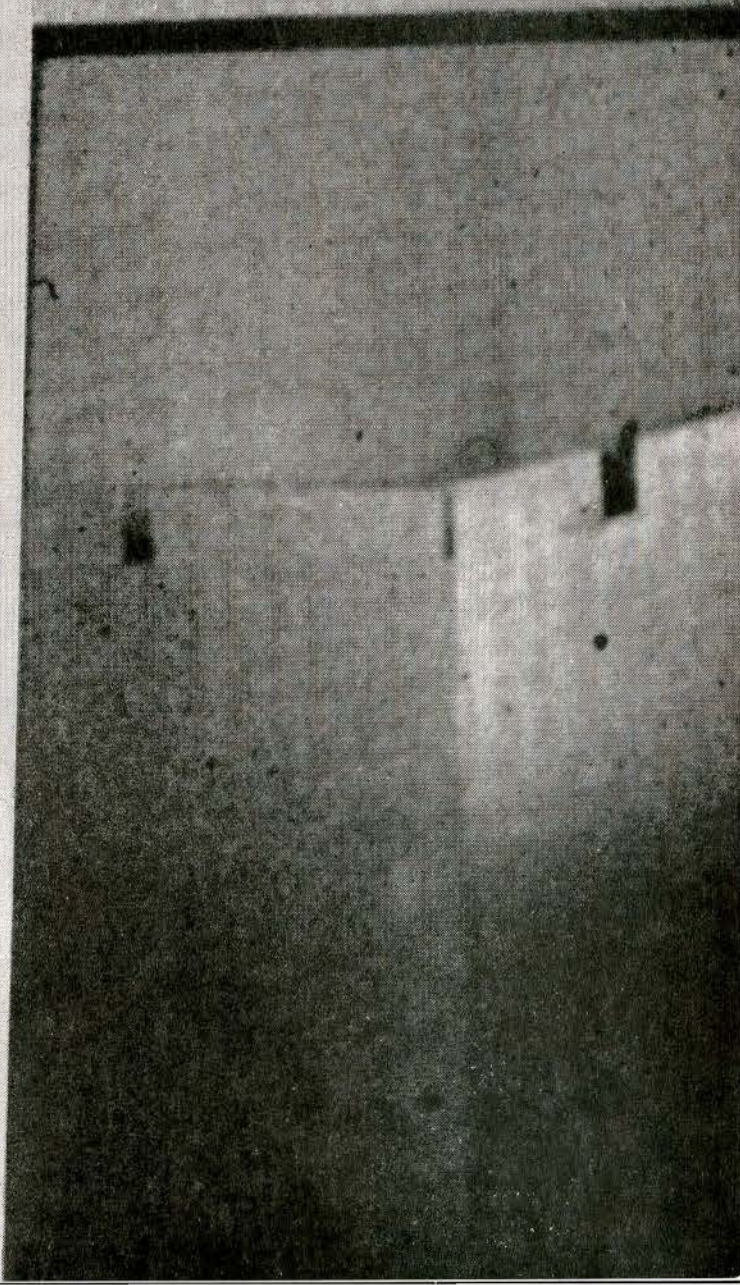
COMPONENT HOUSING SYSTEM
DESIGNED BY DOUG MICHELS

TRACT : the house designed to be designed by you

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				SALES TAX	
				TOTAL	260238

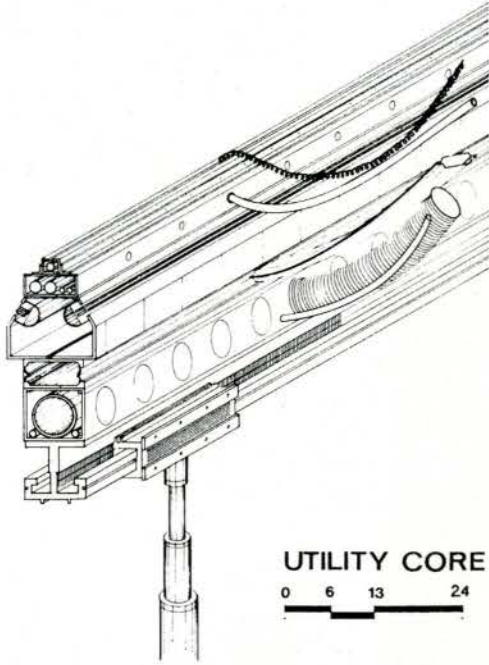
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SOME WORDS ON THE "TRACT/KIT"
 WHEN I WAS IN HOUSTON, TEXAS LAST YEAR I ATE
 IN A PLACE CALLED "SOUTHCOAST" IT WAS OWNED
 R.T. COFFMAN AND THE FOOD WAS VERY GOOD.
 THE SERVICE WAS SPEEDY AND SPEEDY.
 BECAUSE YOU ASSEMBLED A KIT OF PARTS
 FOR YOUR MEAL, WELL TRACT IS ALSO
 SPEEDY, LIVING IS A SNAP
 WITH HANDY TRACT

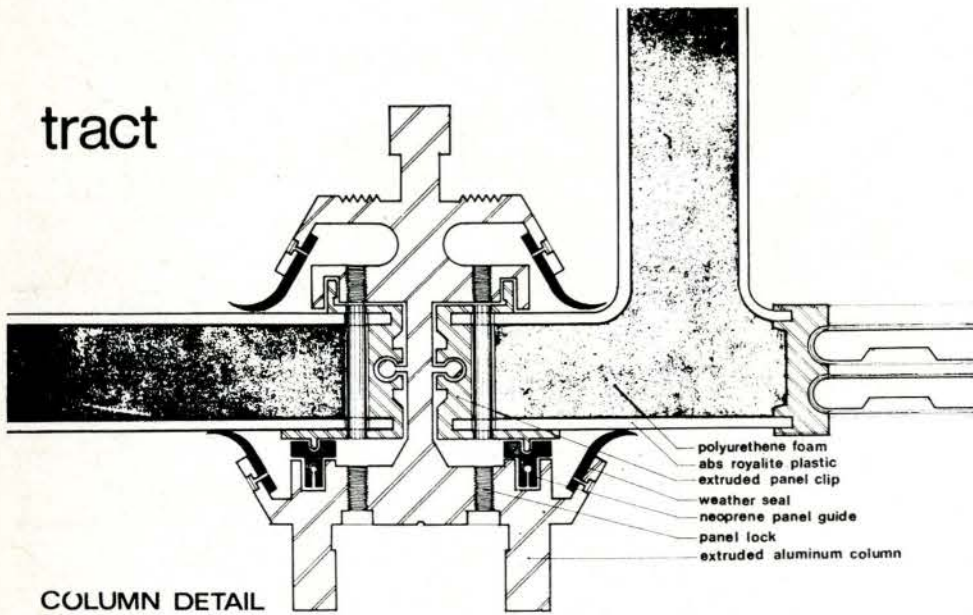


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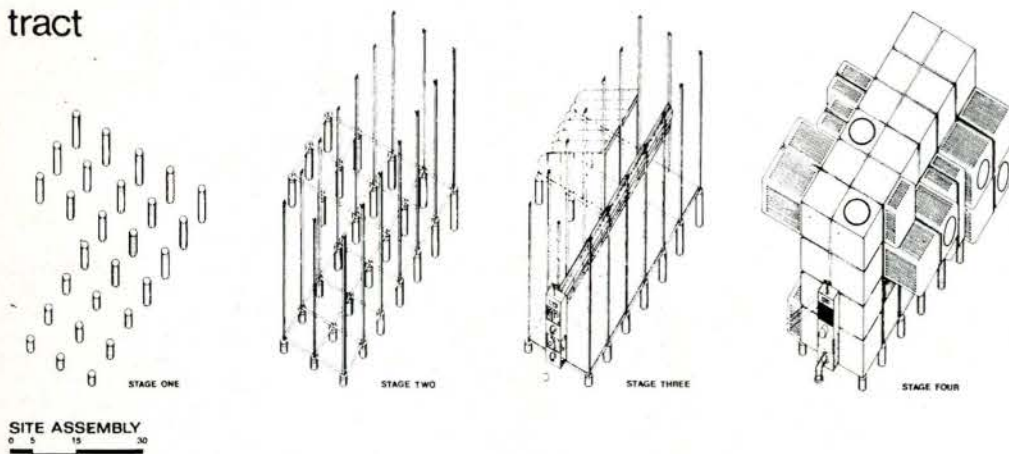
- intercom - telephone
- electrical supply
- h.v.h.s. return intake
- h.v.h.s. return duct
- h.v.h.s. supply duct
- pressure flow waste system
- hot cold water supply
- entertainment unit track
- ent. unit mobile assembly



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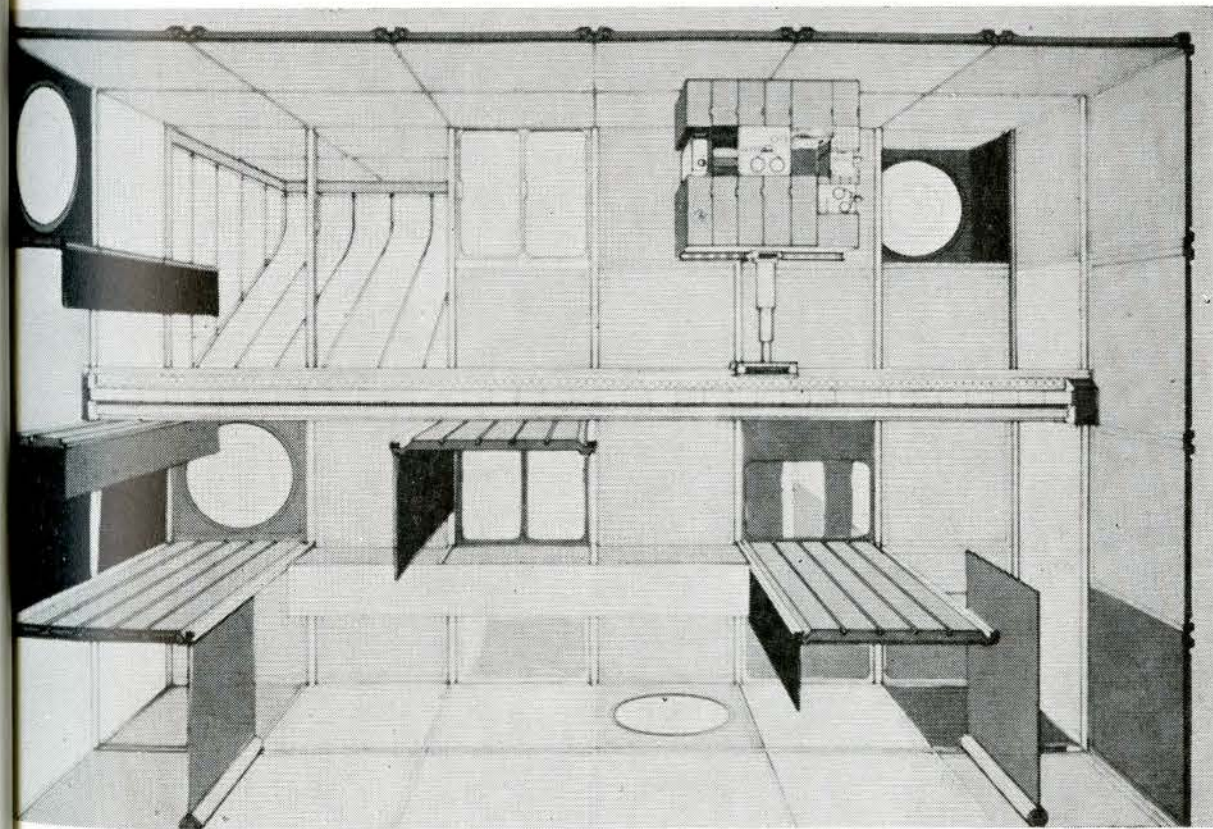
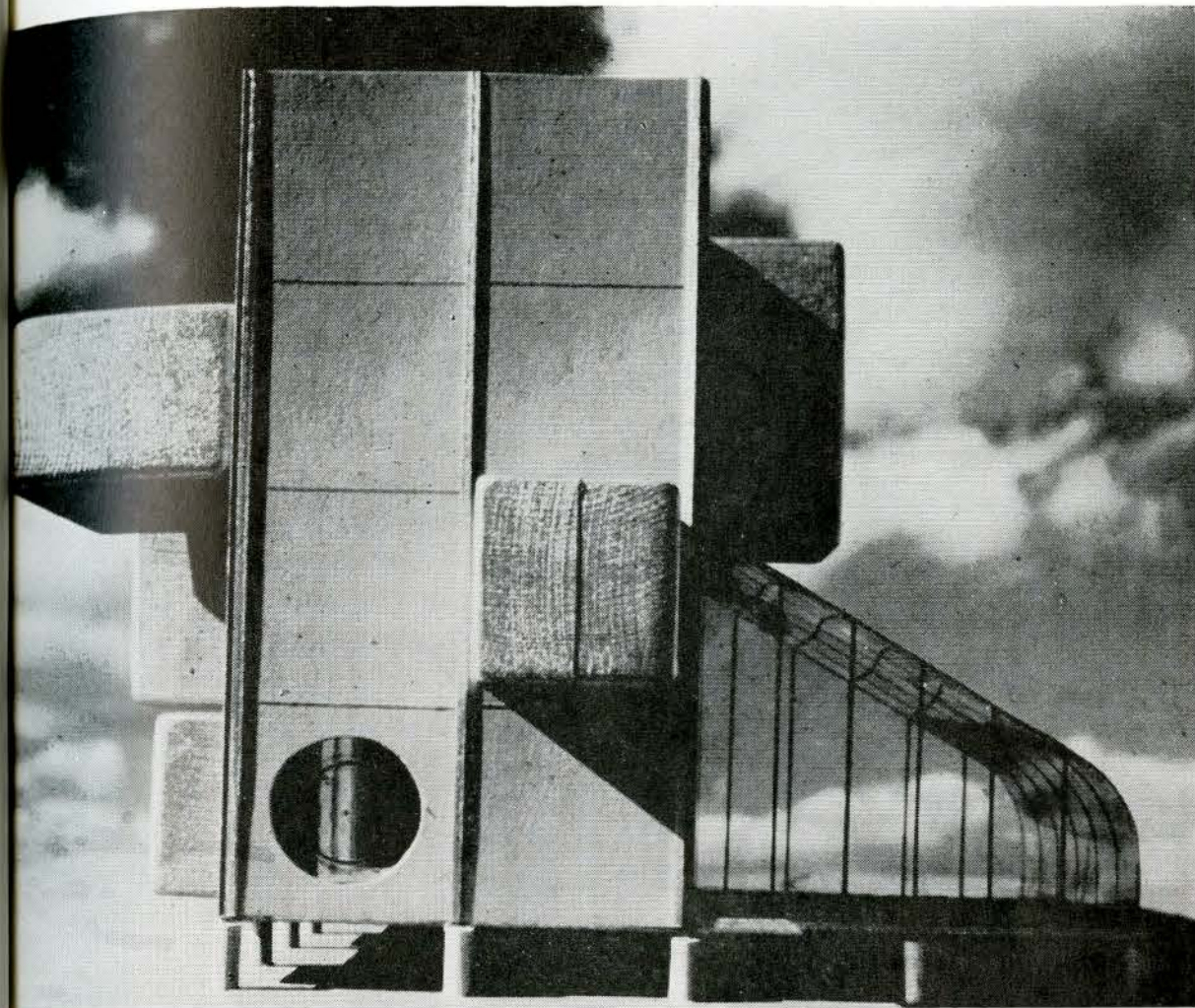
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The Catholic University of America
Washington 17, D. C.

DEPARTMENT OF ARCHITECTURE

September 26, 1967

Mr. Doug Michels
Department of Architecture
Catholic University of America

Dear Mr. Michels:

As you have no doubt noticed, the Architecture Workshop Faculty operates as a group, to allow flexible team teaching methods to give each critic an opportunity to emphasize his strengths and interests, within the context of the problem assigned.

Your introduction of a lab problem, involving 15 foot weather balloons on the Mall, without consulting any of the other critics, is extremely disruptive to the current design problems. After discussing this situation, we believe that this problem should not be scheduled until the completion of the current assignments, nor until it has been outlined, discussed with all the critics involved, and adequately prepared for.

In our opinion, for the workshop to operate effectively, all problems and assignments must be made with the general agreement of all the faculty involved as to their nature, scope, and scheduling.

We were looking forward to collaborating with you in this work, and would very much like to have some cooperation between yourself and the other four critics.

Please reply at your earliest convenience.

Wall
Hartman
Ch
RAMBERG

CC: Dr. Goettelmann

STATEMENT ON ARCHITECTURAL EDUCATION

DOUG MICHELS

Rebel

It was surprising to learn that the architecture students as a body seized their classroom building during the upheaval at Columbia University last April. The incident, whose motives apparently were more or less architectural, was outclassed by the other disturbances of those days and so has aroused no great curiosity; some light may be shed upon it by the case of a young man named Douglas Michels, whom Catholic University hired to teach architecture last fall.

Mr. Michels is a bright-looking, well-dressed fellow with good manners and a master's degree in architecture from Yale; he is honest, even to the point of admitting that when he came to teach at Catholic University he was wearing his hair long and used naughty words in conversation. His job was to teach first and second year architectural design,

which is done by the simple technique of assigning the students something to design. Mr. Michels started off with two projects for his students: One was to have them spend some time in the area of 18th Street and Columbia Road talking with people and just looking around, so that they could define the design problems of that area for themselves. The other involved inflating huge weather balloons on the Mall.

Students traditionally play around with ping-pong balls and such, moving them around on a board, pretending that they are working with great big buildings. The balloons on the Mall would have let them work with honest-to-goodness great bulking masses. The architecture faculty, however, disapproved of both these projects and instead assigned the students the task of designing a gatehouse for a school, an exercise to which Mr. Michels vehemently objected. "At a time when people are shooting each other in the streets and burning down their own houses and the Government is building new slums," he says, "the idea of spending your time on a gatehouse for a girls school is ridiculous."

As a result of the argument neither Michels' projects nor the gatehouse fared very well, so the faculty came up with another project. This time the students were told to redesign their classroom; it is a standard project and usually means that each student sits down by himself and privately envisions an ideal classroom. In Mr. Michels' opinion this is a "fascist" way of doing things: "It's the old idea of the architect having complete control over his design without consulting the people his building is for." Therefore he had his students fill in a questionnaire, staring whom they would prefer to sit by, what kind of desk they

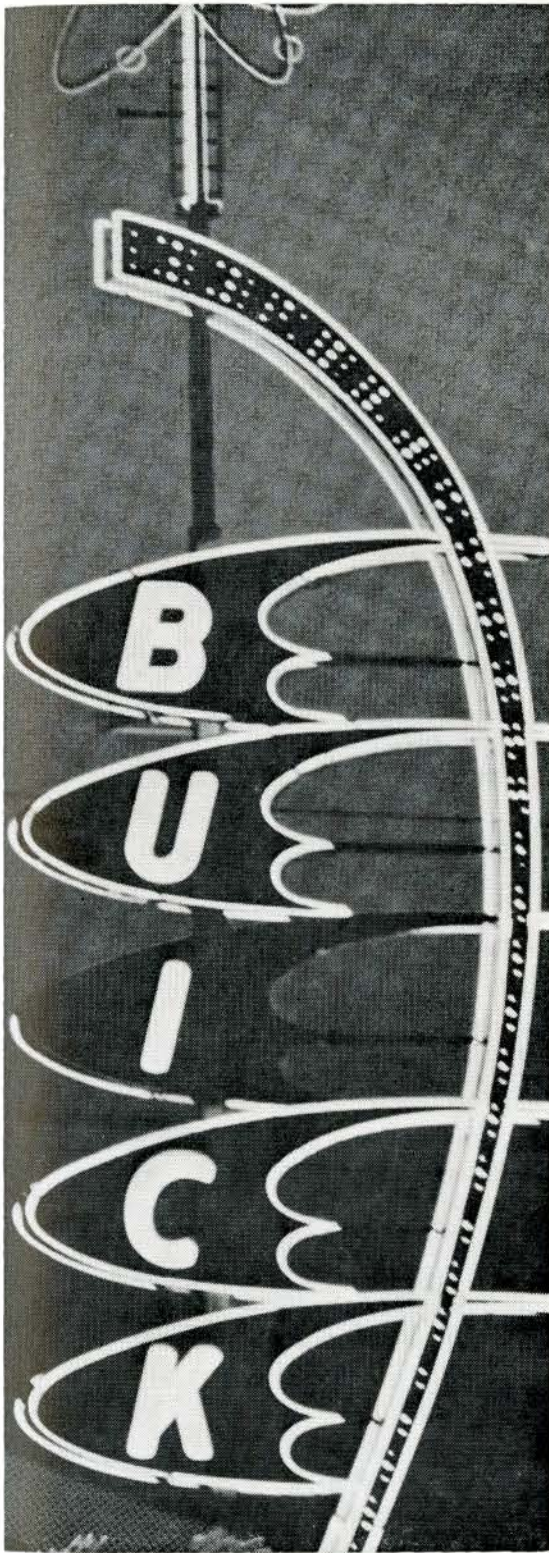
liked, whether or not they wanted to work next to a window, and so on; the idea was then to feed the results of the questionnaire through the university's computer and come up with a compromise design for the classroom in which everyone would have a share. The result, which might have been fantastically original if nothing else, was not achieved. Instead, Mr. Michels found himself teaching architectural history rather than design, and shortly afterwards graphics were canceled. The university claimed that he was disrupting class schedules, endangering the lives of the students (by taking them down to 18th and Columbia), and generally falling down as a teacher. Mr. Michels claimed the university was interfering with his academic freedom and went to the American Association of University Professors, which mediates such disputes, and which ruled that the university lacked grounds to fire him. The AAUP worked it out so that Mr. Michels would continue to get his salary as long as he promised to stay away from the campus.

This ridiculous financial arrangement has enabled Mr. Michels to pursue his education ideas at some liberty. He has been touring the country giving lectures and, with another young man named Bob Feild, has started his own firm. The firm is running an experimental program called *Crash City*, "to show what a school might be like." Students in architecture, graphics, film, design, and other fields live and work together for as long as they like—three days or three months—on projects of their own invention. None have shown an inclination either to redesign 18th and Columbia Road or to build a gate for a girls school.

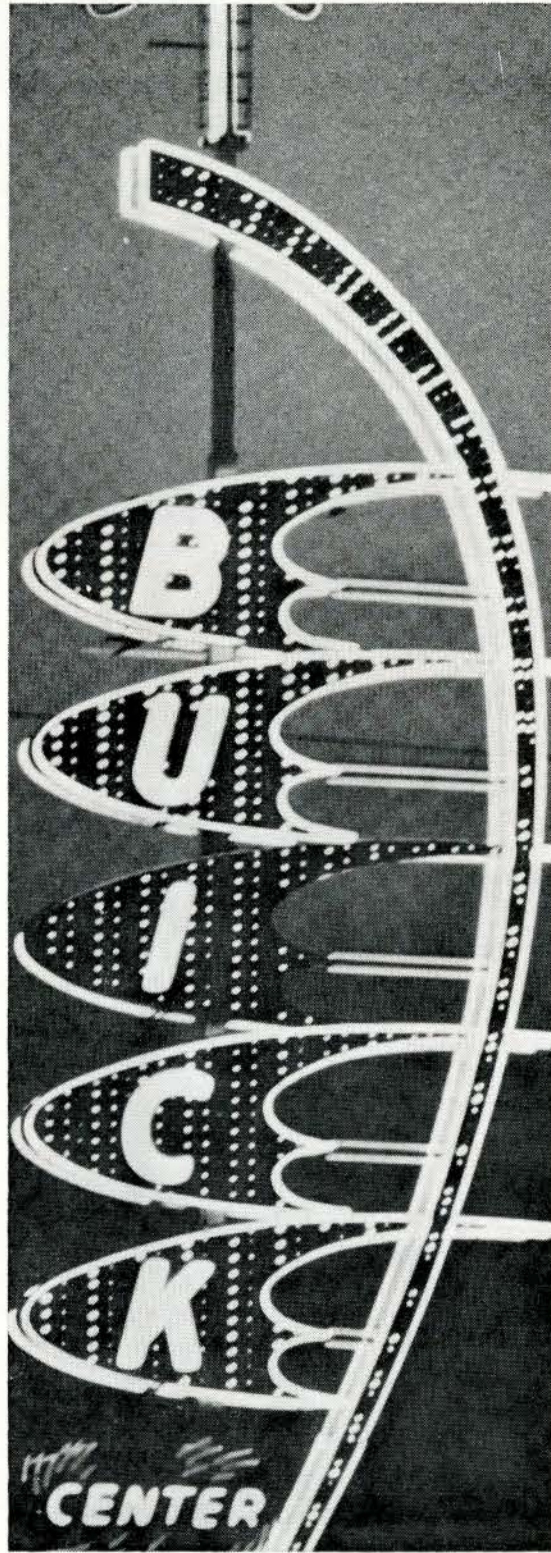
—LARRY MASSETT

Electro-Graphic Architecture

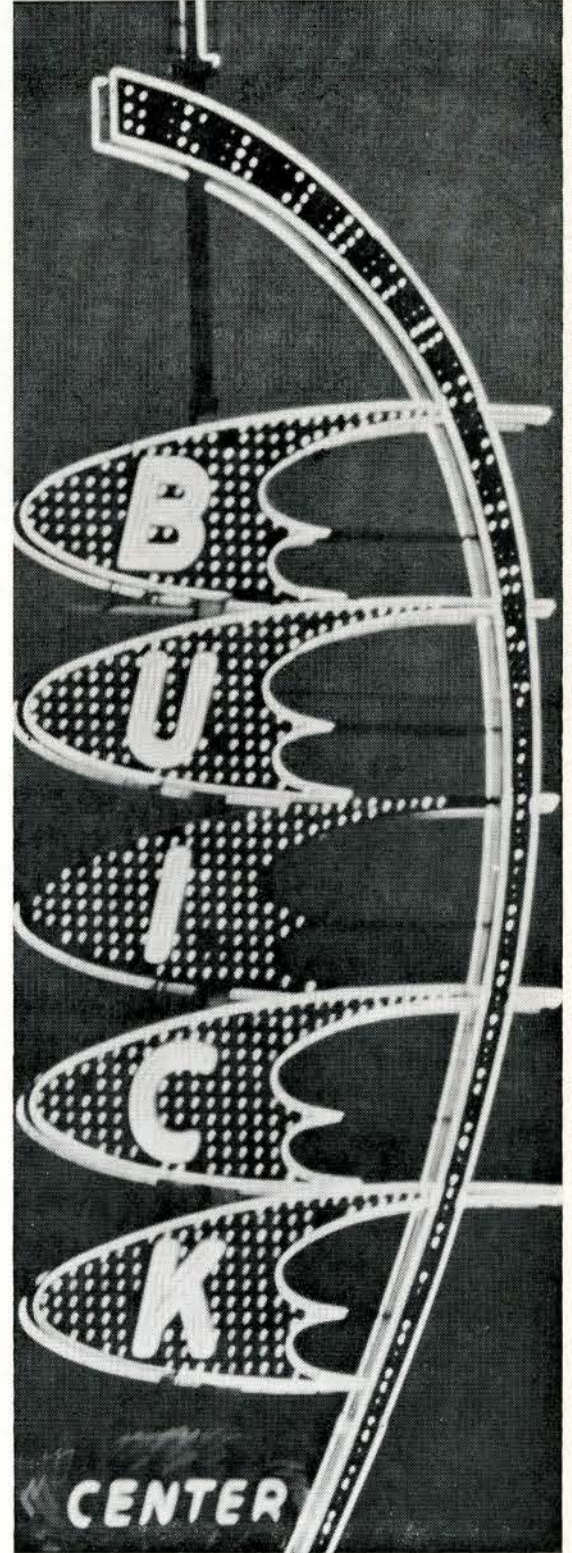
Tom Wolfe



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All photographs in Tom Wolfe's article on "Electro-Graphic Architecture" are by Mike Salisbury, Los Angeles

¹ *Serious light sculptors have a strangely old-fashioned, rear-view taste in technology. They have a nostalgia for neon. Neon was introduced into the electric sign business in the late 1920's and enjoyed quite a vogue. But it was a fragile material and unsuited for large-scale or really spectacular work. In the 1930's glass signs were developed, using interior incandescent lighting and ceramic-fired colors for the lettering and art. In the late 1940's back-lit plastic signs were developed. The trouble with plastic had been that there was no way to apply color*

to it for the art work. Acrylic colors solved that. Signs today use all devices, from the oldest to the newest. The most spectacular effects, as in the new 188-foot-high Stardust (hotel and casino) sign in Las Vegas, still use fields of light bulbs for the most brilliant effects, plus plastic facings, acrylic colors, and neon for outlining letters and other highlight effects. The Stardust sign, by Ad Art Co. of Stockton, California, has 25,000 bulbs, 611,000 watts of power, and a solid-state programming with 27 lighting sequences.

This is a show, this set of pictures . . . of electro-graphic architecture from around Los Angeles and San Diego. Electro-graphic . . . I coined the term myself . . . Why be bashful! The existing vocabulary of art history is helpless before what commercial artists are now doing in the western USA. Commercial artists in America are now at least 10 years ahead of serious artists in almost every field, including architecture . . . It's a revelation, you might say . . . which first came to me one evening on Park Avenue, in New York. I stopped by the lobby of the Pepsi-Cola building to see a show of neon sculpture by Billy Apple. Apple is a serious artist. Avant-garde is the word. He "combines art and technology" . . . "He is a lyrical user of neon with a very personal sense of color," in the words of Jack Burnham . . . The praise is running deep . . . I walk in and here is neon tubing hung from wires and bent into simple geometric shapes . . . The colors are curiously pallid, for neon . . . Everything is a sick apricot in here . . . They're limp . . . They splutter . . . They're like the neon outlines you can still see sometimes in the windows of the old bars with glass brick facing and other remains of 1930's Glamor . . . Frankly, I'm embarrassed for the guy! . . . All I can think of is that I could walk over a few blocks to almost any intersection along the avenues on the West Side or drive out Route 22 in New Jersey and see some common commercial electric signs that do it better . . . There's not a drive-in or all-night cafeteria or bar & grill in the lot that doesn't give the glories of electric tubing a better ride.

... A lyrical user of neon with a . . .

All of this came back to me last week as I drove around Los Angeles and San Diego. Here is an electric sign (1, 2 and 3) I saw on El Cajon Boulevard in San Diego, near the Route 395 freeway . . . By Melvin Zeitvogel of the California Neon Co. – why be bashful! . . . I wish I could show it in action, or at least in color . . . Each letter of *Buick* is on a baroque rocket . . . The lights work in a series . . . In phase 2 the rockets light up orange and yellow . . . They shoot off red jet flames . . . They take off to the left . . . A terrific rush of light shoots up the main stem there, the big parabola . . . It explodes in the crazed atomic nucleus at

the top . . . The sign is 105 feet high, 11 stories up in the air, in other words . . . It's insane! . . . It's marvelous!

Melvin Zeitvogel did this sign 10 years ago. Serious artists and architects are only just now approaching the ideas commercial artists like him have been working with for years . . . I notice in the October issue of *Progressive Architecture* that Kenneth Carbajal is saying: "What is happening in architecture today is a revolution. It is a complete readjustment of aesthetics that puts it more in step with the Space Age and its materials and forms." . . . More statements about the revolution . . . They love this word revolution . . . They set about illustrating it. They present a special section on electric light experiments . . . The Pulsa group at Yale, in Project Argus . . . A California group designs "neon banners" for Charles Moore's Faculty Club building at the University of California's Santa Barbara campus . . . Here are designers working with Super-graphics, as they call it, for interiors . . . Everybody comes skipping and screaming into the million-volt future, of course . . . Another magazine, *Domus* . . . they're excited about some simple rectangles of light used on the exterior and interior of a club in Rimini, Italy, called The Other World, and about some light show effects in the Piper-Pluriclub . . . I pick up a new book entitled *Beyond Modern Sculpture*.

It calls light sculpture the new wave in this age of new technologies . . . They're all in there, serious artists like Apple, Dan Flavin, Martial Raysse, Robert Rauschenberg, Robert Whitman . . . They have terrific theories, especially Rauschenberg and Whitman, about cybernetic art, computer art, holographic art, laser art. But I look at what they have actually done and then at Melvin Zeitvogel's *Buick* – it's crazy! the art world is upside down. All of a sudden the avant-garde, the serious artists, are the primitives, the Grandma Moseses . . . The commercial artists, the Melvin Zeitvogels, are the classicists¹ . . .

Melvin Zeitvogel! I have to call the guy up . . . He's 54, it turns out. He tells me he started out as a glass blower. He was hired by California Neon 25 years ago, when he was 29, because he could work with the glass that goes into neon and fluorescent tubing. He gradually moved into designing

. . . He was 44 when he did *Buick* . . . I asked him if most electric sign designers get into it indirectly like he did . . . No, he says, quite a few today have some art training . . . "You kind of need a fellow who has – you know . . . kind of an arty side to him" –

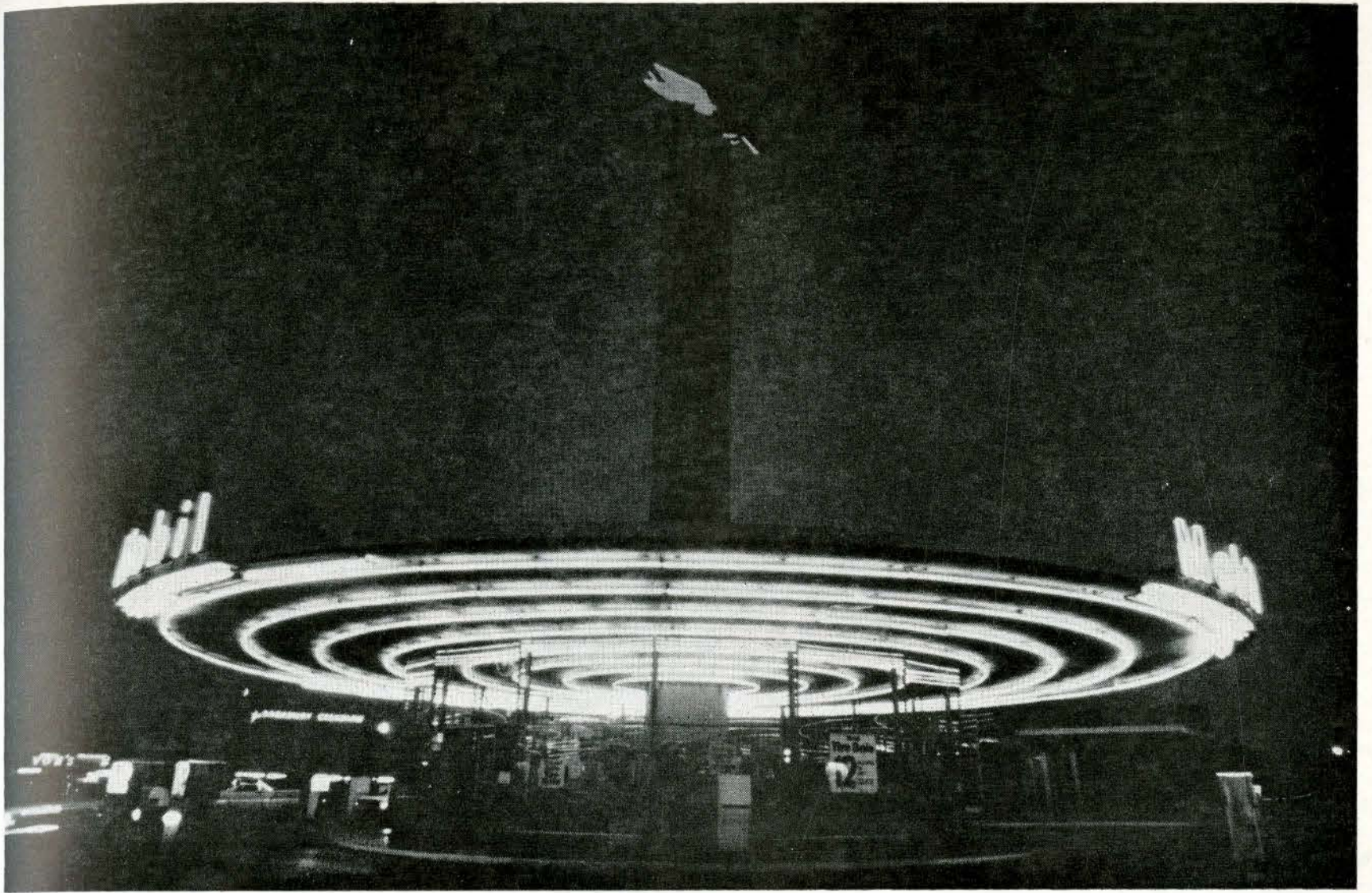
Kind of an arty side to him! Perfect. The notion that he himself is an artist – none of the great sign artists seem to lose any sleep over that . . . Which is their secret, of course. They're free souls! The hell with art history! and the New York art status sphere! The hell with *Art Forum* and the new academy! The hell with the Bauhaus, Mies, Corbu, and Billy Apple! and all lyrical users of neon with a very personal sense of color! –

Yahhhh! – if anybody ever heard of them. Practically all the men in the new electro-graphic architecture have been engaged first of all in a highly competitive business . . . They have been building not to catch the eye of the art world but of people driving by in cars . . . It's as simple as that . . . A very liberating thing, the car . . . Millions of Americans roaring down the boulevards and strips and freeways in 327-horsepower family car dreamboat fantasy creations . . .

... Daddy Dreamboat Family Car . . .

Designing for the eyes of people moving – it shook California's commercial artists and engineers free of the whole historic baggage of serious architects . . . who still think chiefly in terms of static solids . . . Zeitvogel's *Buick* is 1960-style Las Vegas electro-graphic architecture . . . He added an 11-story electric sign to a conventional one-story commercial building, the Dick Grihalva Buick agency . . . Since then Los Angeles commercial artists have unified the concept. They don't just add the lighting. They combine lighting, graphics and building structure in a single architectural form (4, 5, *Mobil station in the Crenshaw shopping center*) . . . They convert the building itself into one vast electrical advertisement . . . The structure itself takes on the hyperbole of advertising . . .

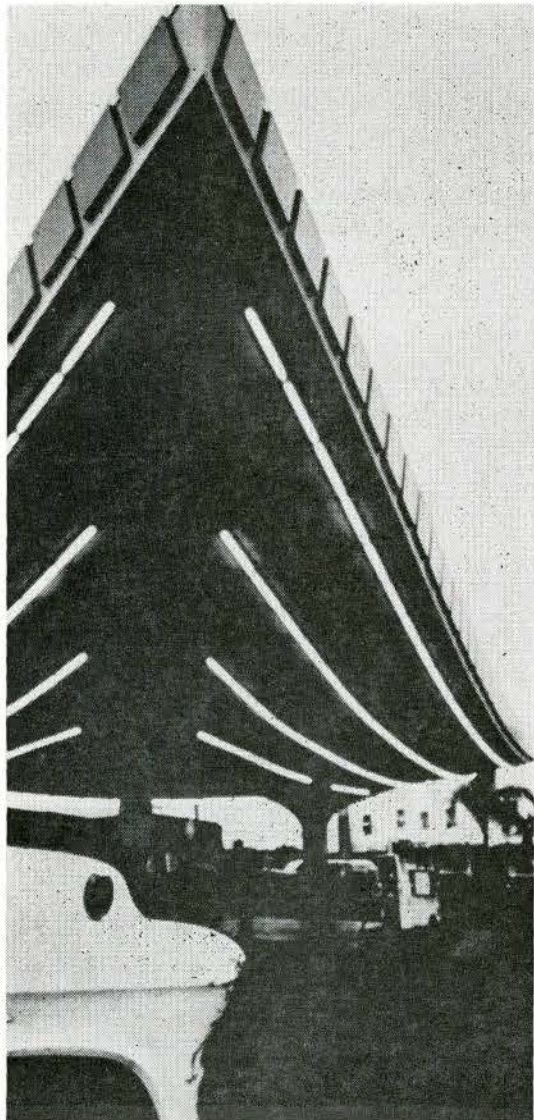
Here is a Union 76 station (6 and 7) in Beverly Hills, at Santa Monica Boulevard and Crescent Drive, built in 1964. Jim Wong



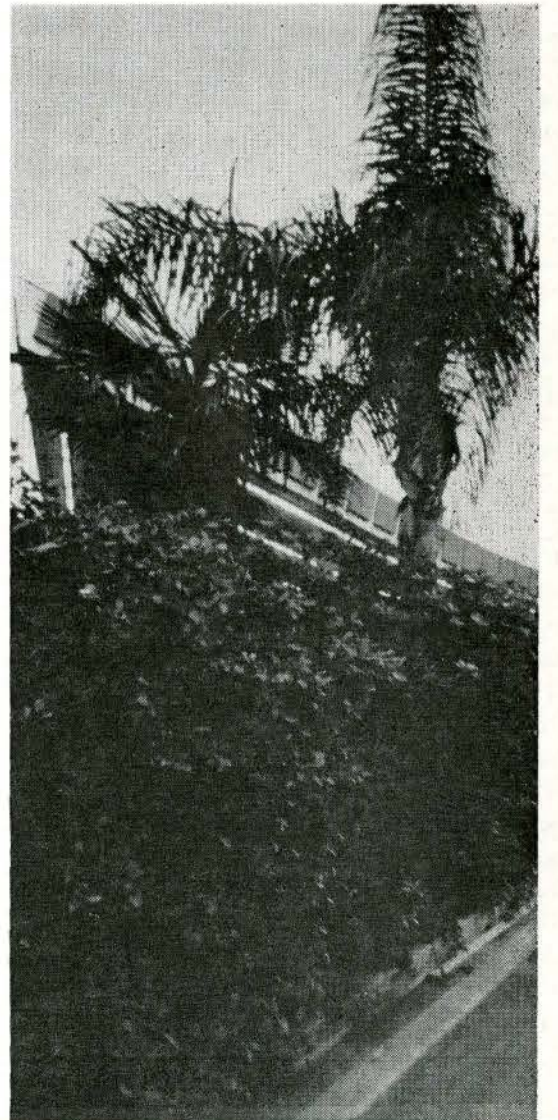
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² Other architects had dreamed up fantastic dome and shell designs, of course, notably, Gunter Günschel, Enrico Castiglioni, Eduardo Catalano, Luciano Baldessari; but few had been built.

³ Robert Venturi is one of the few serious American architects to comprehend the possibilities of electric sign technology and to conceive of full-scale electro-graphic architecture. In fact, this month (October) he has taken his third-year studio class at Yale to Nevada to study the electro-graphic

landscape of Las Vegas with the same objective and scholarly thoroughness that might be applied to Athens or Pompeii. A few architects in Germany and Tokyo have used electric sign technology as an integral part of design, sometimes in the form of fluorescent tubing outlining the entire face of a building, something I have never seen done in this country; also in the form of electric designs covering a main facade, as in the case of the ascending burst of stars on the face of the Stern (Star) magazine building in Frankfurt.

of Pereira Associates designed it. He actually designed it in 1960, for the Los Angeles airport. He told me he wanted to express the sense of motion around the airport . . . the flow of cars as well as planes . . . It looks like a pagoda style from most angles, but it is really a huge spherical triangle resting on three piers with curving soffits . . . Standard Oil bid lower for the airport station and got the site. As a matter of fact, they put up a remarkable piece of electro-graphic architecture of their own (8 and 9) . . . Anyway, Union 76 eventually decided to build Wong's fantasy in Beverly Hills . . . If any building ever proved that electro-graphic architecture works commercially, it was this one . . . There was a Union 76 station on the site already. It was pumping 100,000 gallons of gasoline a month, which was high, even by Los Angeles standards . . . A month after Wong's building went up, business increased 50 percent, to 150,000 gallons a month . . .

Here is one of the first large buildings in Los Angeles that was designed to express not a structural form but a graphic form . . . the Crenshaw Ford agency on Crenshaw Boulevard at 52nd Street in Los Angeles (10) . . . The whole building is designed around the big curved corner facade. The corner was designed solely to accommodate the shape of the F in Ford . . . Since then the graphics in electro-graphic architecture have moved from mere lettering to whole structures designed primarily as pictures or representational sculpture, everything from drive-in theaters (11 and 12) to a restaurant in Long Beach (no longer standing) in which the walls were huge and very sharply defined color photographs of steaks, chops, salads, sundaes, drinks . . . Entire walls were back-lit, like the huge photo-mural in Grand Central Station advertising Kodak . . . A whole building expressing a gigantic sirloin, medium-rare, with french fries . . . and why not! . . . That's what we have here, motoring friends . . .

I talked to Sal Merendino, a Los Angeles industrial designer and teacher. He told me he sees this kind of super-electro-graphics as a great new wave of urban design: "I can see these sort of panels being done by really first-rate graphic designers, like Saul Bass or Gregory Kepes. Why should

buildings always express merely their own structure? Why shouldn't they express what's inside? I think panels like this could be used with great warmth, joy and good taste. A city ought to be joyous. There's enough severity in a city anyway, without striving for it in architecture. In one sense we ought to forget the idea of Architecture in cities. I think if you call it Architecture, you get screwed up. You end up setting these old standards for yourself. Architects want something that makes them look good when it's photographed and printed on coated stock in some grand book on the history of architecture. It's time we started thinking about what people who live in cities really want and need. All my beliefs end up with that. I think people want warmth and love and joy and good taste in their environment, and I think really good graphic panels would be a big step in that direction."

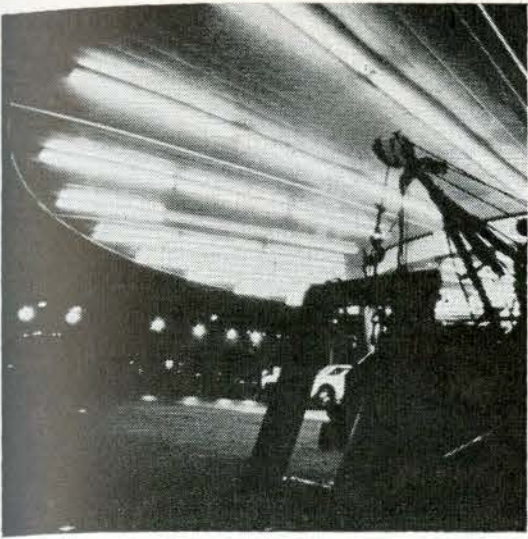
The whole idea is so far away from the conventional Bauhaus notion of what a structure ought to express that it's — exhilarating. It's beyond baroque! beyond mannerist! . . . In fact, it is really hard to figure out how the old Bauhaus ideals of "structural honesty" and "a pure art of use of usefulness" . . . of functionalism, in short . . . have hung on so long. After all, the whole idea came out of the political atmosphere of post-World War I Europe. A desperate time, brothers . . . "Brothers of the world bend your knees . . . The proletarian armies of the world have grasped at the stars, destroying and building at the same time in a heavenly craving for justice and love . . . brothers, lift up your hearts and eyes high to the firmament, and the ridiculous national boundary stone will be no obstacle to a single fatherland for us all — the World — the Earth!" This was a manifesto of the November Group in 1919, a group of radical German artists concerned chiefly with architecture . . . Out of the November Group grew the Workers Circle, including Walter Gropius, guru of the Bauhaus . . . which, in turn, was the mother of it all, the rectangular straight-line functional serious "modern" architecture of Europe and America . . . Serious architects became obsessed with the idea that structure should be "expressed honestly" . . . Honesty usually meant straight lines and right angles! Serious architects were very slow to shape newer

materials like reinforced concrete into the sort of fantastic curved shells and soffits that Saarinen became famous for in the early 1960's². . . Serious architects still tend to regard exterior decoration as dishonest. Electric tubing is still *gauche* . . . or, at best, camp³. . . Back-lit plastic facings and acrylic paints — I doubt if many serious architects have ever thought about them in terms of architecture. Underneath it all, they have a terrific *nostalgie du chateau*. They can't get it out of their systems . . .

It was left to commercial artists in towns like Los Angeles, Las Vegas, and San Diego to create something wild enough and baroque enough to express the new age of motion and mass wealth. There is a terrific Eastern intellectual snobbery about Los Angeles as a city of sprawl, chaos, madness, strangled by the automobile

. . . *Nostalgie du chateau!* . . . I still hear people in New York say that the trouble with Los Angeles is that it has no landmarks, you can never orient yourself. I doubt that anybody who lives in Los Angeles feels that way. In fact, Los Angeles has the most monumental landmarks ever built, namely, the freeways (13). Periodically, the upper social orders of Los Angeles try to bring the city's architecture in line with the dictates of the New York art status sphere and its ancient ideas of monumentality — *nostalgie du Lincoln Center!* — by sponsoring museums, culture centers, grand plazas . . . Invariably they end up as great . . . lumps, compared to the curvilinear forms of the freeways (14, an unfinished ramp to the San Diego Freeway at Jefferson Boulevard) and all the forms of car fantasy architecture that go with them . . .

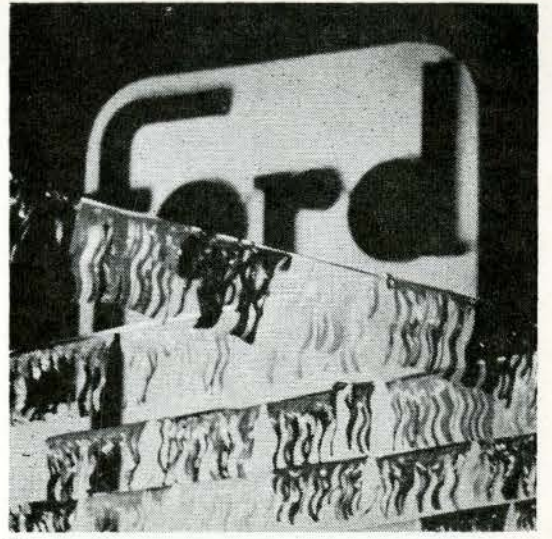
And so much goes with them; yes. The freeways are elevated at many points, and for many miles, in the form of what in New York would be called skyways. They are anywhere from 20 to 100 feet above the ground in curving shapes, with these great heron-neck light stanchions curving over them like some endless Yves Tanguy decoration . . . The great spaces between the skyways are unified by a constellation of other objects of light and color thrust high up into the air: signs, electric displays, banners, bunting (10), towers, spires . . .



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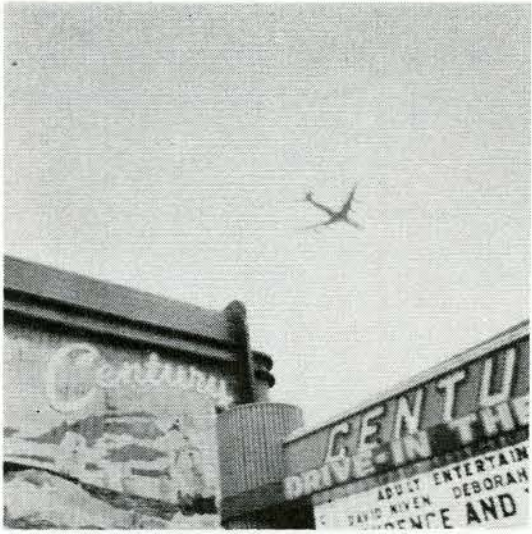
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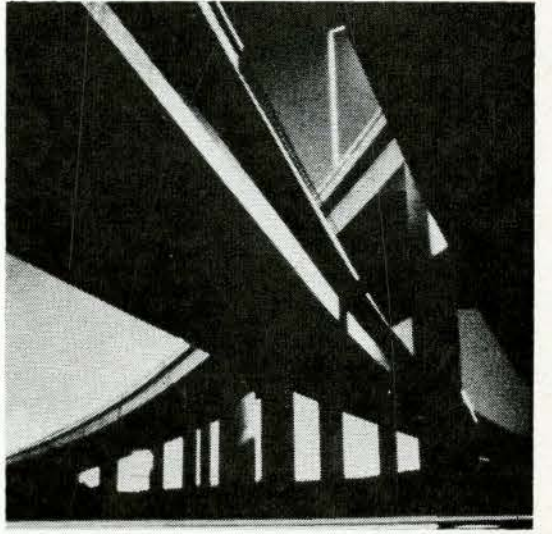
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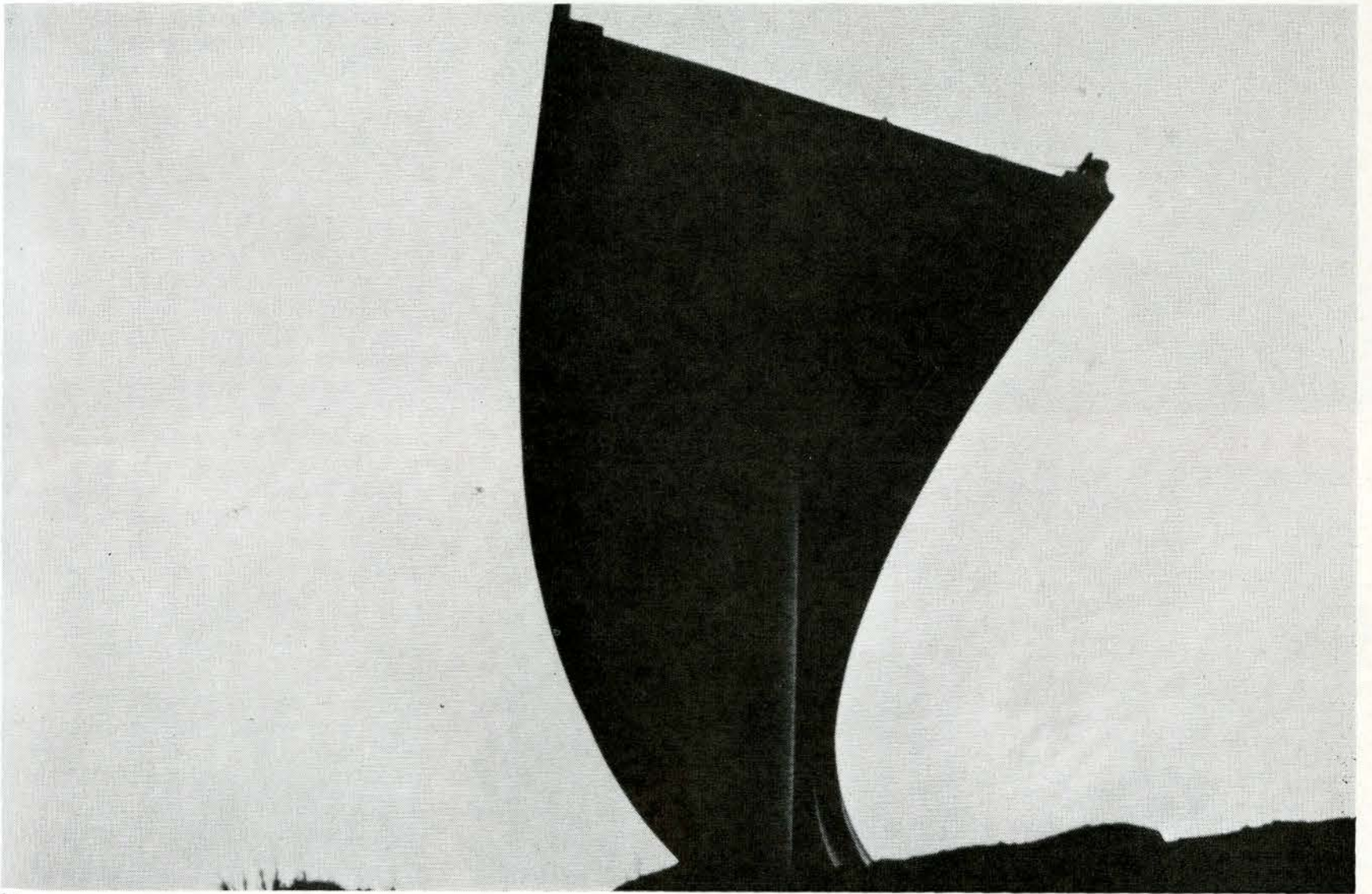
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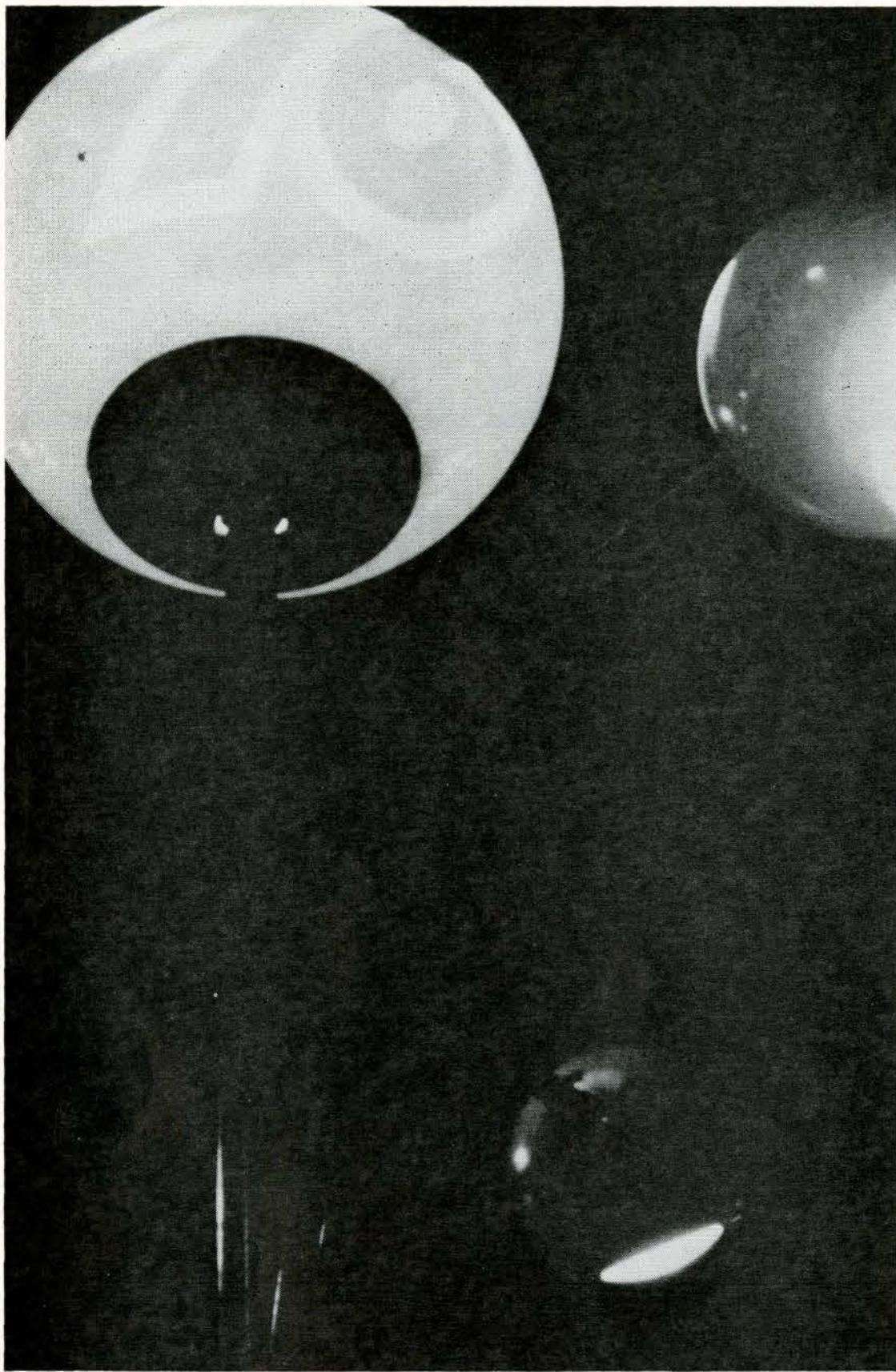
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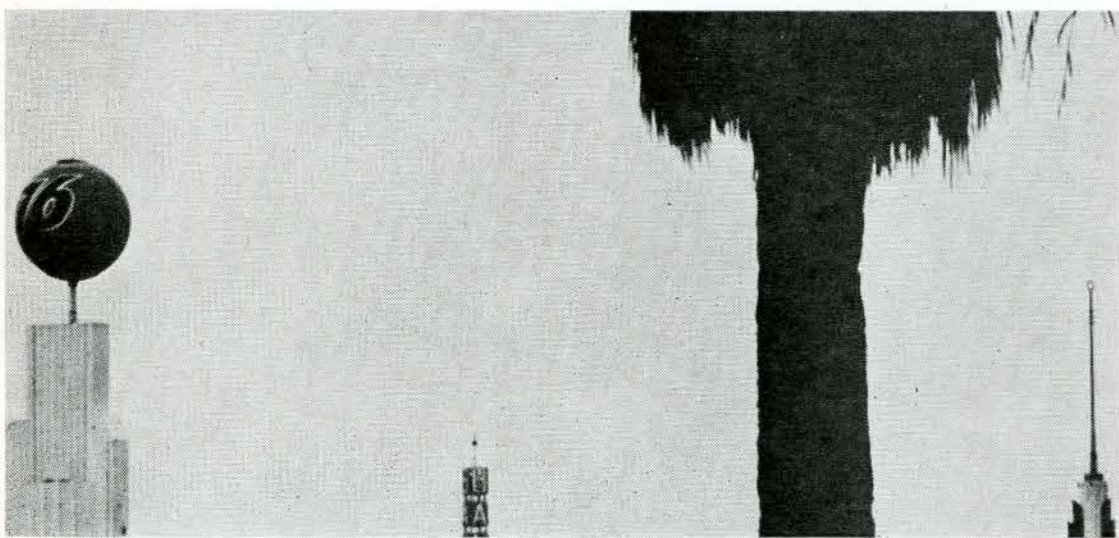
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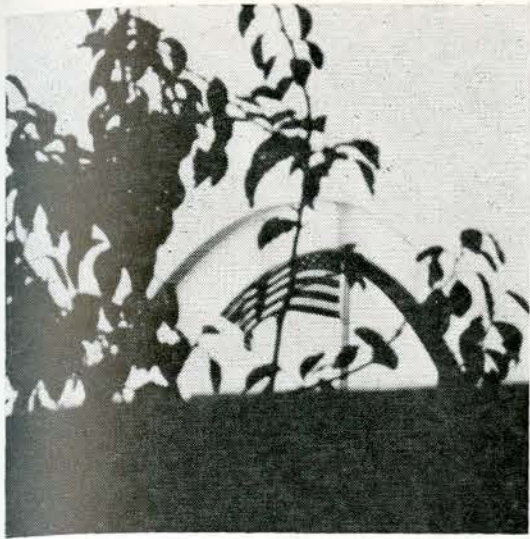
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like the scores of lit-up orange globes of the Union 76 stations (15 designed by Raymond Loewy; 16 spires in the Westwood section of Los Angeles) . . . full-fledged electro-graphic architecture, like the McDonald's Hamburger golden arches (17) . . . and, everywhere you go, clusters of light stanchions over car lots with flat wing-shaped banks of electric tubing at the top (18, 19) . . . these light displays in themselves are more interesting than most of what serious light sculptors have accomplished, for my money . . .

Many of the spires and luminous objects, shooting up or floating in the atmosphere, have no function whatsoever other than display . . . They are there for visual excitement. Functionalism – the hell with it! – The Los Angeles car washes especially . . . They violate all the canons of 50-year-old Modernism with a verve that would drive Mies off the platter . . . The car washes are very simple structures, basically, just open sheds, but they send their supporting columns 10, 20, 30 feet up into the air with a kind of pure Low-Rent L.A. exuberance (20, 21, Cinema City Car Wash) . . . Other shed structures, like the roofs of drive-ins, are given a massive and often whimsical treatment (22) . . .

Other structures of the most massive or towering sort will have little ornaments stuck on top after a kind of Christmas Tree Star principle, like Zietvogel's Buick (1, 2, 3) . . . I noticed the same thing throughout Las Vegas. At first it just seemed like Google decoration. But gradually I saw that it has an important psychological function in the modern city . . . It tames the impersonal massiveness and severity . . . Hey! it says, This is a laugh and a half! . . . It's like the old Low-Rent car jockeys with a pair of Styrofoam dice hanging from the rearview mirror of their Cadillac and a da-da-da-dum-dum-dum musical horn under the hood . . . Domesticate the beast . . .

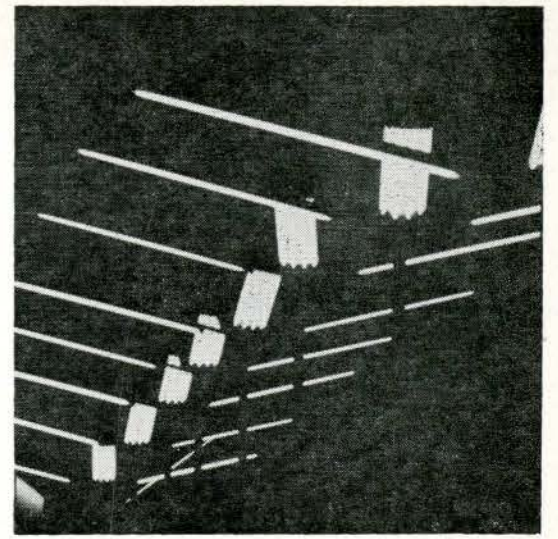
Frankly, it is very ironic that the national Beautification program is now beginning to catch on around Los Angeles in the form of local zoning ordinances requiring that commercial buildings and displays conform to conventional local building designs . . . in other words, to the traditional static forms, the bungalows, the two-story stores, that have been there longer . . . The new genre of gasoline stations has pitched rooves and rubble facing – *nostalgie du Quaint & Rural* . . . The truth is . . . how drab Los Angeles, San Diego and hundreds of other American cities and towns and crossroads would be without the electro-graphic car fantasy mobile architecture that America's avant-garde commercial artists have given them . . . Someone must write the new book, now, fast, on the most lavish coated stock \$18.50 a copy, called *Beyond Modern Architecture*, featuring . . . well, for a start – Melvin Zeitvogel . . .



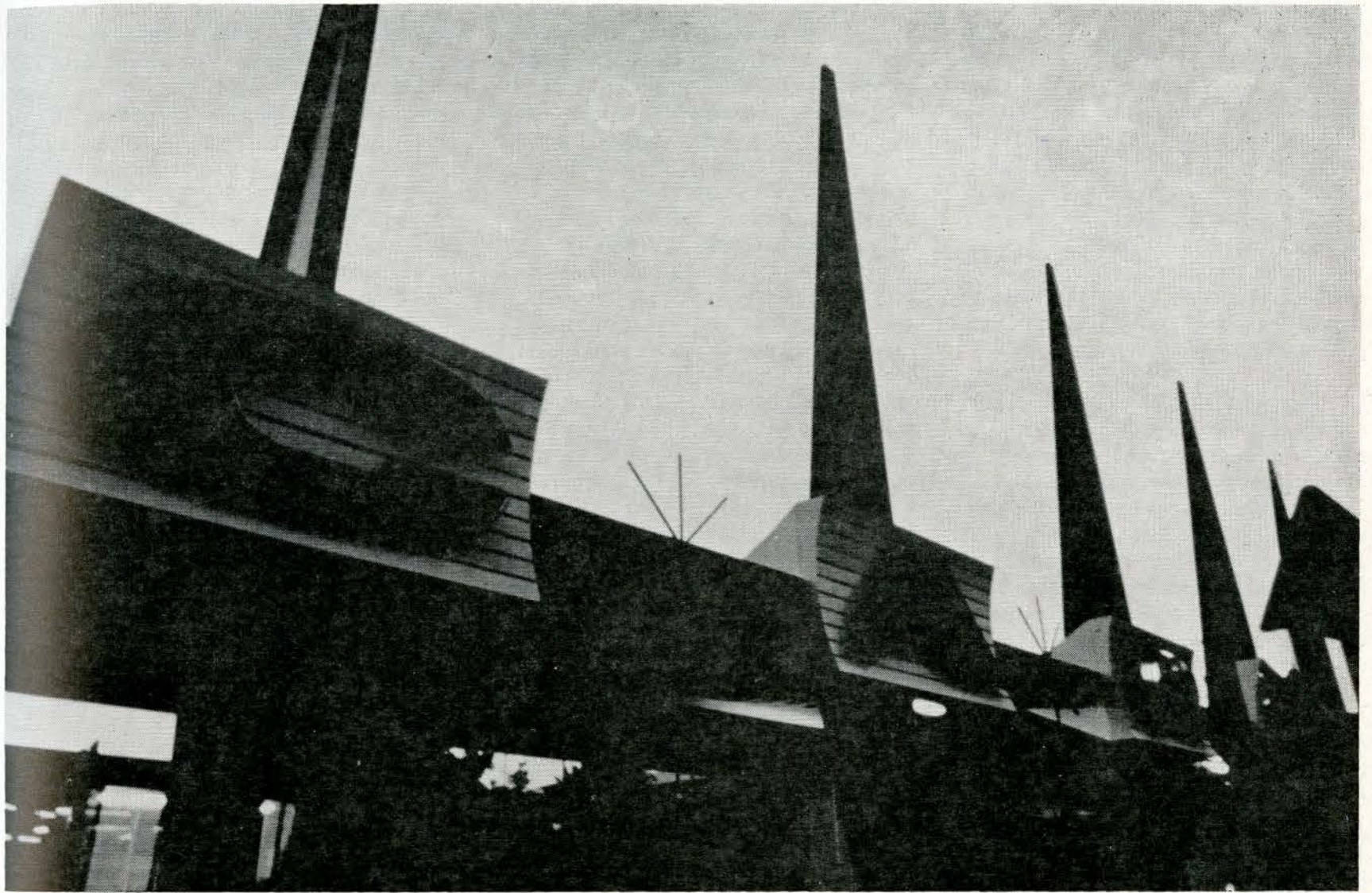
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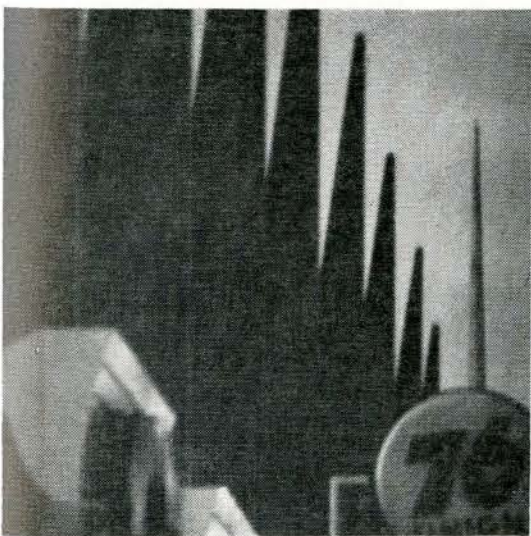
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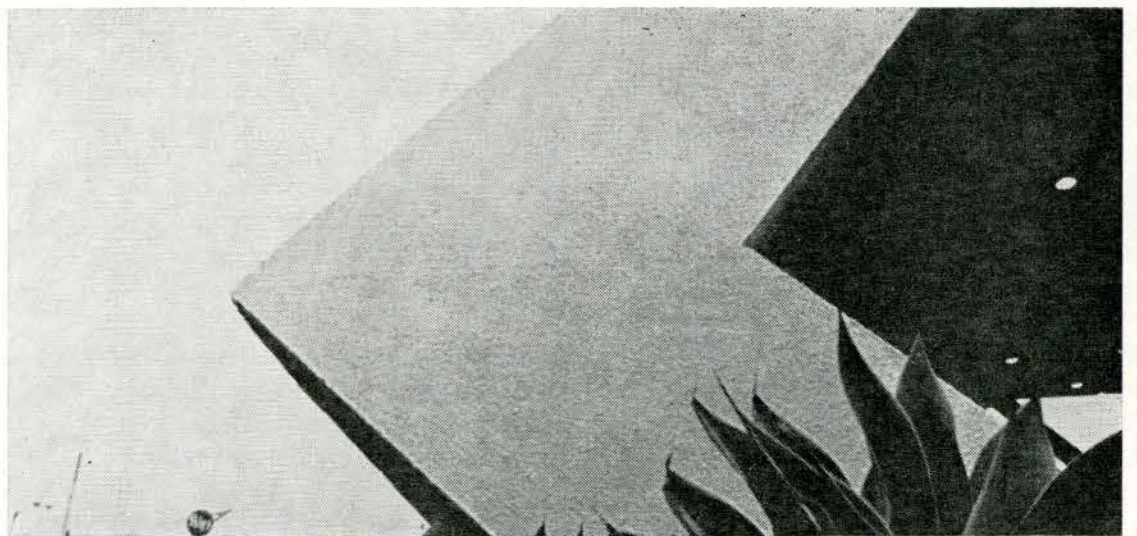
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22

On Ducks and Decoration

Denise Scott Brown and Robert Venturi

Loos equated decoration with sin; Perry believed it always hid a fault in construction. International stylists believed it was valid as the *joie d'esprit* of the individual craftsman as he worked by hand on the great cathedrals sculpting to the glory of God, but that in a machine age the I-thou relation with materials and construction is lost and so is the point of decoration; the same *joie d'esprit* should now, it was felt, be expressed through the beautiful and precise use of machine-made building elements and the eloquent spaces of the building itself. The whole building is the decoration.

This may have been literally and ironically more true than was intended. Contemporary painting and sculpture is now generally accepted as a formal source of early modern architecture – whole buildings from this period, in fact, resembled constructivist sculptures or cubist paintings. But this happened on an unconscious level. Architects such as LeCorbusier lived their connection to the arts intensely and it came through in their work.

A vocabulary of forms whether consciously possessed or not is probably as important in the synthesizing process which gets from functional requirements to a building, as is a load of bricks. Whether you call it "composition" or "plastic organization" you have to have a philosophy about it. Your philosophy may be more or less useful depending on how well it helps you relate forms to requirements.

Later architects have taken too literally the functionalist dictum and allowed the formal vocabulary (still unadmitted) to stultify. We don't admit the importance of having a philosophy about forms, because a good building should arise like Venus purely from the functional requirements. But since this is impossible, a repertoire of old hand-me-downs, from LeCorbusier, van der Rohe, or Lou Kahn slips in unnoticed while the pieties of each on anti-formalism are mouthed.

Because applied decoration is still taboo the whole building is still the decoration. Only now, artists like le Corbusier, sensitive to what they are denying, are not involved, so the formal vocabularies are dull, unsuited and unrevised for today's needs. The more interesting the attempts of our best, most avant-garde architects at mannered complexity supposedly derived from structure and program, the more uninteresting their buildings become: they may heave themselves up on needless pilotti, corset themselves in rusted iron stays, zap out and up in plan and section ten stories, making twenty apartments with "bad space", or welcome in a heedless multitude to an unused piazza. They do these deeply distorting things for the sake of appearance, but they have no "decoration."

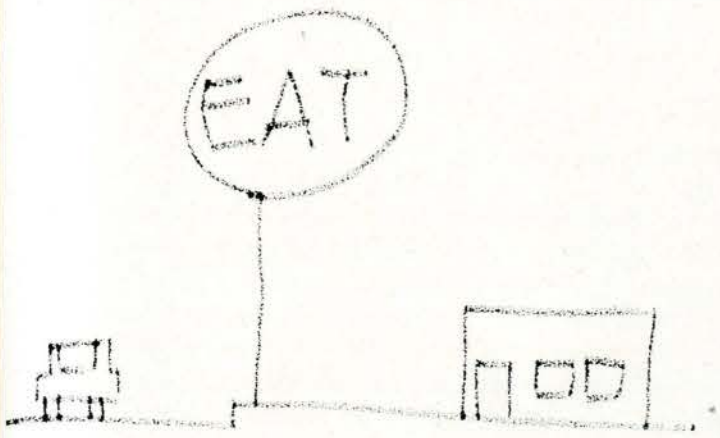
We believe a new interest in the architecture of communication involving symbolism and mixed media will lead us to reevaluate the eclectic and picturesque styles of the last century, to reappraise our own commercial architecture – Pop architecture, if you wish – and finally to face the question of decoration. We have distinguished in a previous article¹ between two types of heraldry in the commercial environment: the sign which *is* the building (for example, the road side duck, first brought to fame in Peter Blake's book) and the sign which *fronts* the building. The first distorts the less important inside function, eating, for the more important outside function of drawing you in. The second, applied to the building or separated from it with the parking lot between, allows the modest eating function to take place without distortion in a modest building, right for it, and permits the symbolic function its own leeway as well – they need not coincide and it is probably cheaper and easier if they don't.

Our thesis is that most architects' buildings today are ducks: buildings where an expressive aim has distorted the whole beyond the limits of economy and con-

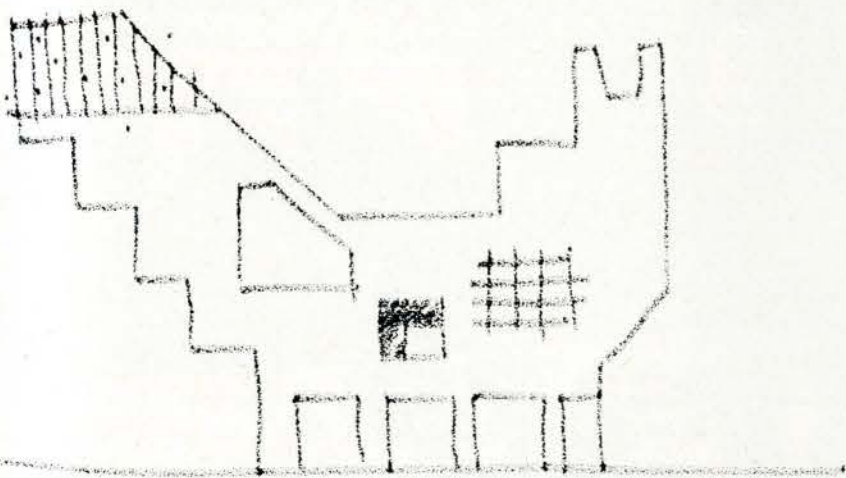
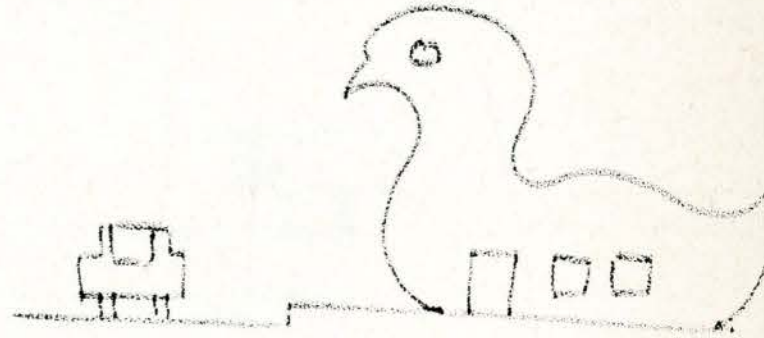
venience; and that this, although an unadmitted one, is a kind of decoration, and a wrong and costly one at that. We'd rather see the need admitted and the decoration applied where needed, not in the way the Victorians did it but to suit our time, as easily as the billboard is pasted on its superstructure; with the building it is applied to allowed to go its own conventional way, no more distorted than are the functional windbracing and catwalks of the superstructure. This is an easier, cheaper, more direct and basically more honest approach to the question of decoration; it permits us to get on with the task of making conventional buildings conventionally and to deal with their symbolic needs with a lighter, defter touch. It may lead us to reevaluate Ruskin's horrifying statement, "architecture is the decoration of structure." But add to it Pugin's warning: it is all right to decorate construction, but never construct decoration.²

¹"Learning from Las Vegas or a Significance for A and P Parking Lots", *The Architectural Forum*, March 1968

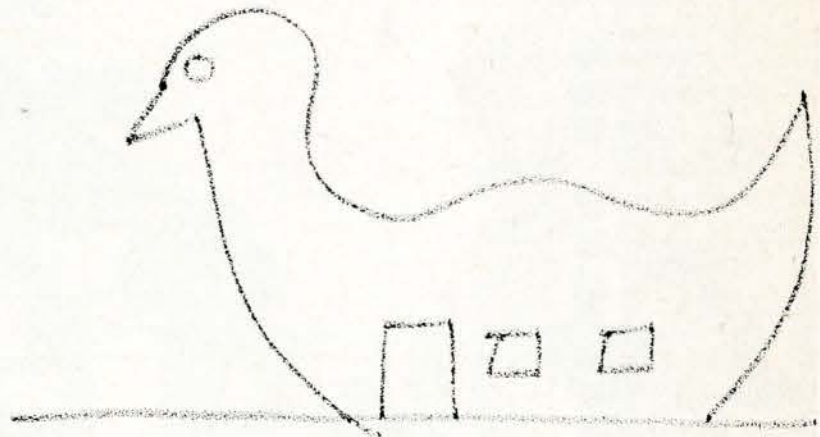
²We are grateful to Mr. Alan Lapidus, A.I.A. for this indirect quotation



or



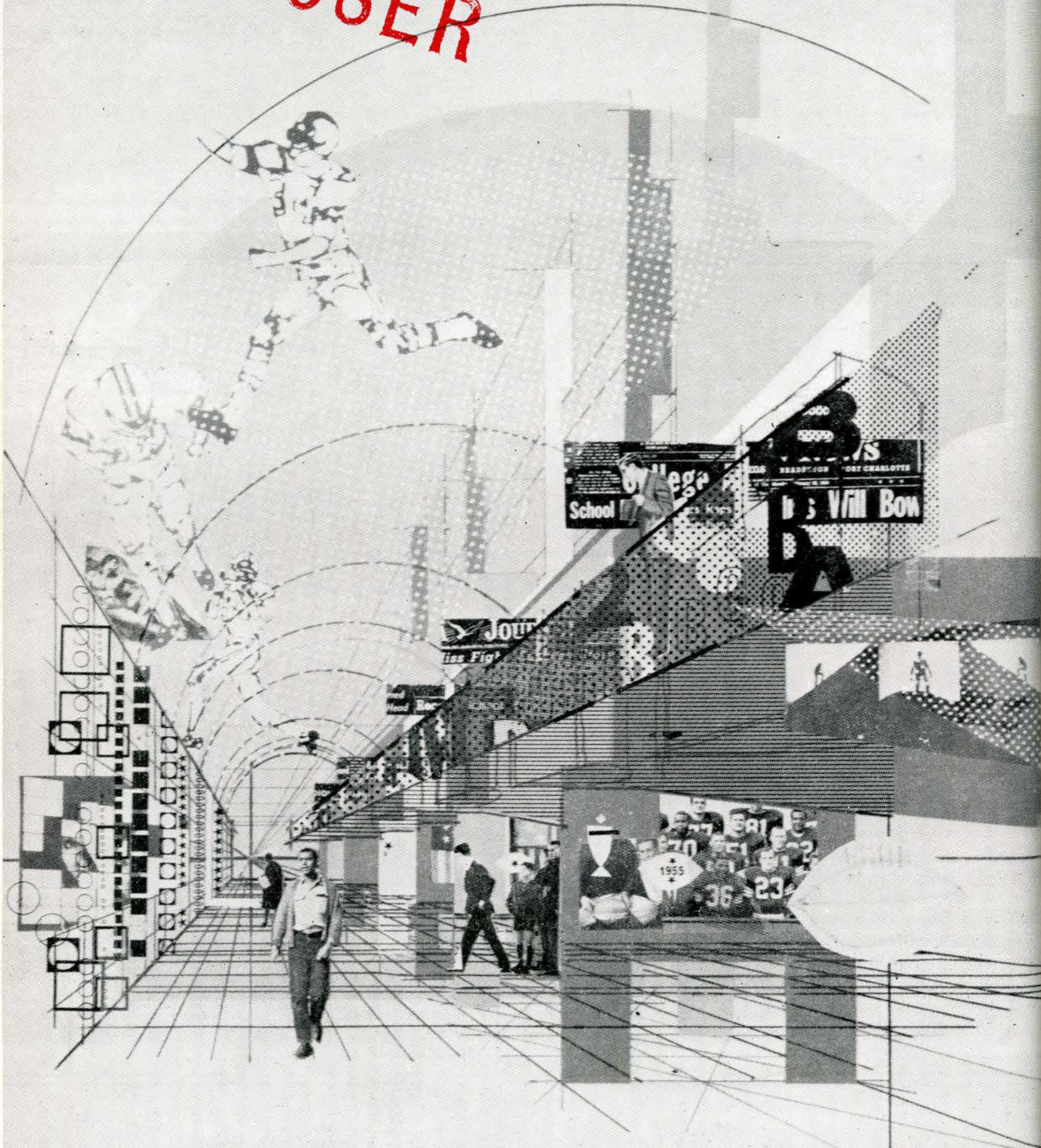
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NATIONAL FOOTBALL HALL OF FAME

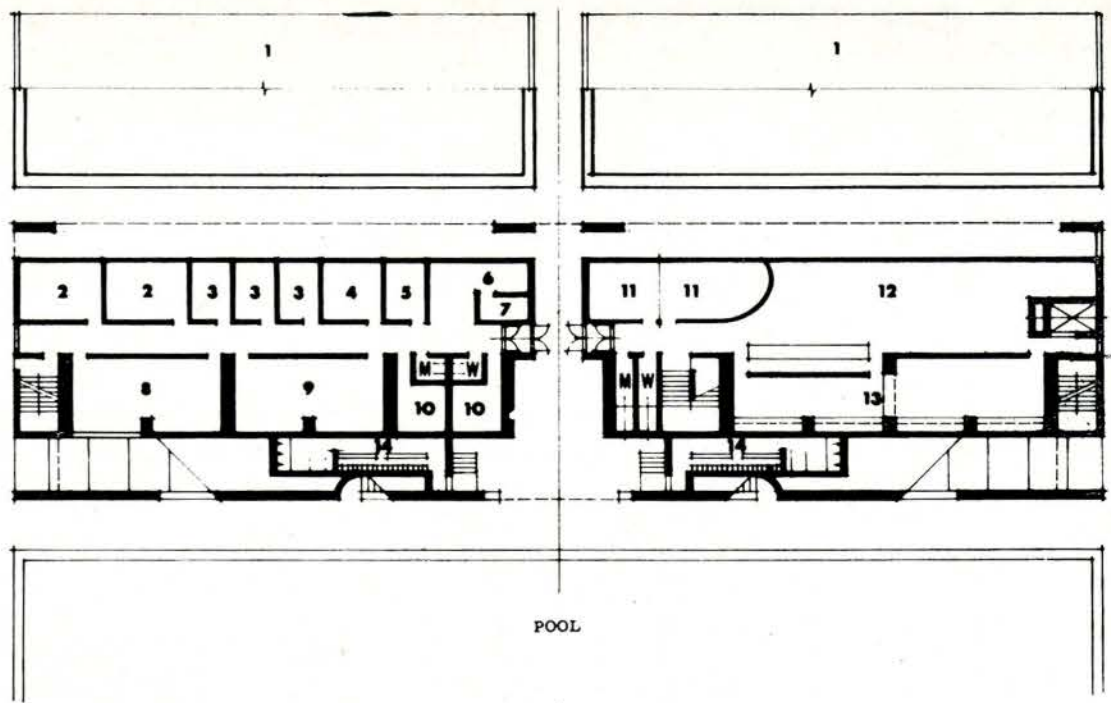
Competition

LOSER



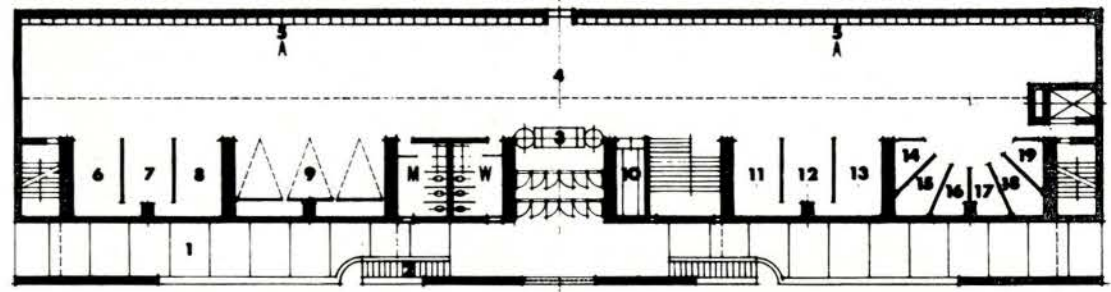
Ground Floor

- 1 observation berm
- 2 National Football Foundation
- 3 behavioral scientists
- 4 electronic control center for programmed visual displays
- 5 guides
- 6 curator
- 7 archives vault
- 8 library
- 9 private film projection and board room
- 10 private film projection
- 11 private dining rooms
- 12 cafeteria
- 13 kitchen
- 14 lockers and showers



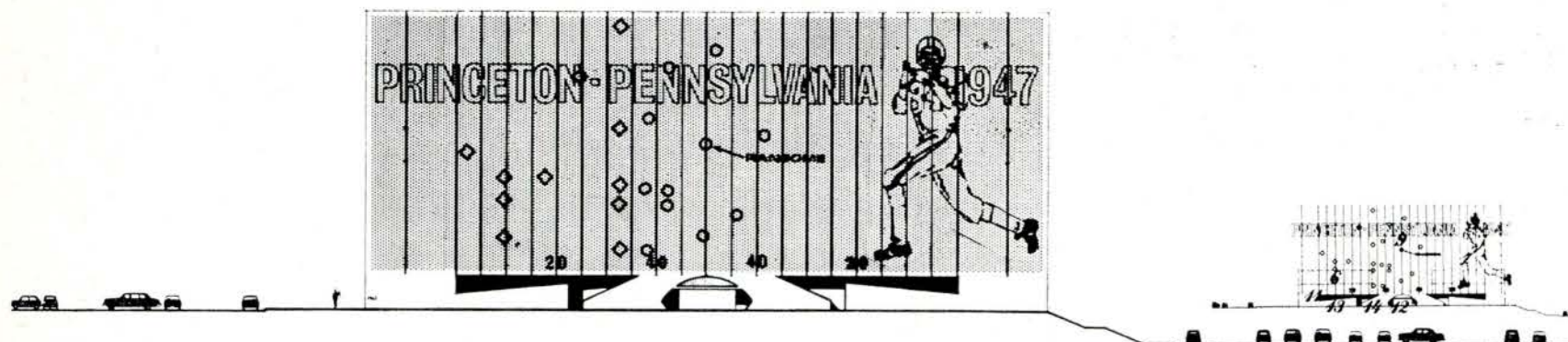
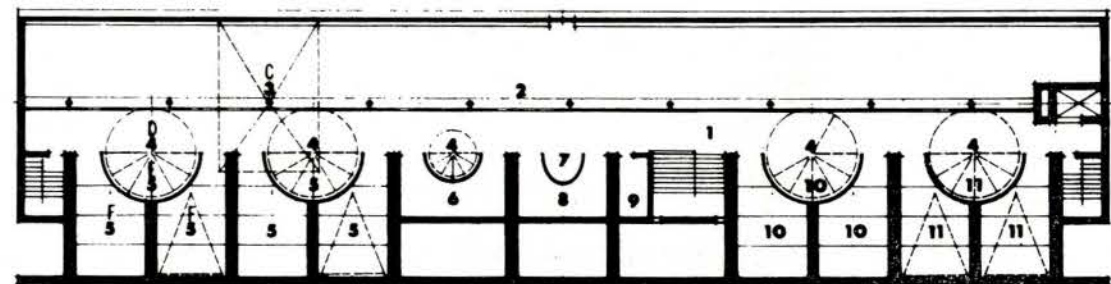
Hall of Fame

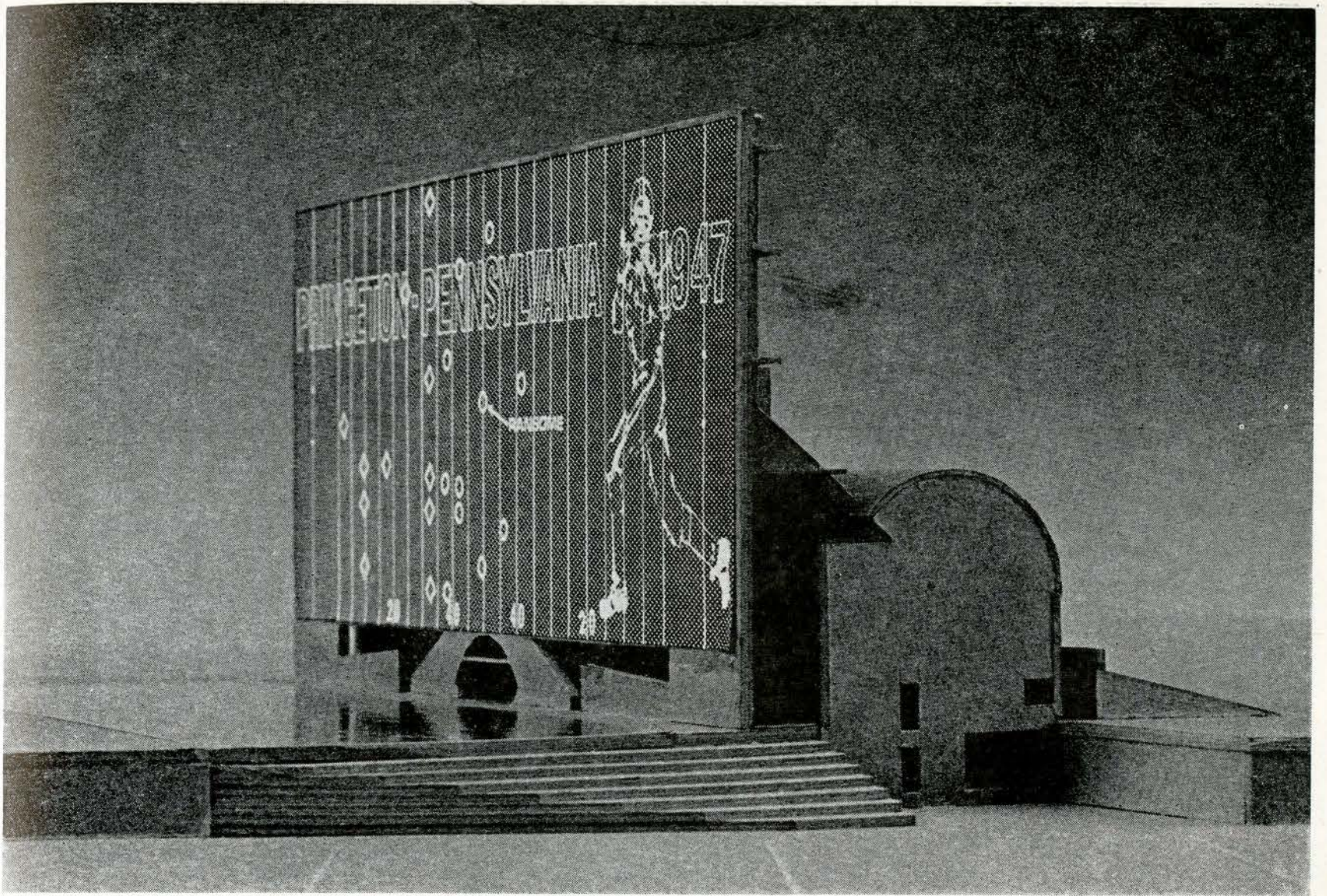
- 1 ramp up
- 2 stair up
- 3 control
- 4 Hall of Fame
- 5 The Gold Medal Winners, players elected to the National Football Hall of Fame
- 6 coaches elected to the Hall of Fame
- 7 The Man Who Made the Game
- 8 The Scholar Athletes
- 9 The MacArthur Bowl
- 10 coat room
- 11 "Sports Illustrated"
- 12 the All-America of the coaches
- 13 High School Scholar Athletes
- 14 bowls
- 15 officials
- 16 coaches
- 17 NCAA
- 18 COSIDA
- 19 Warner's Little League



The Game

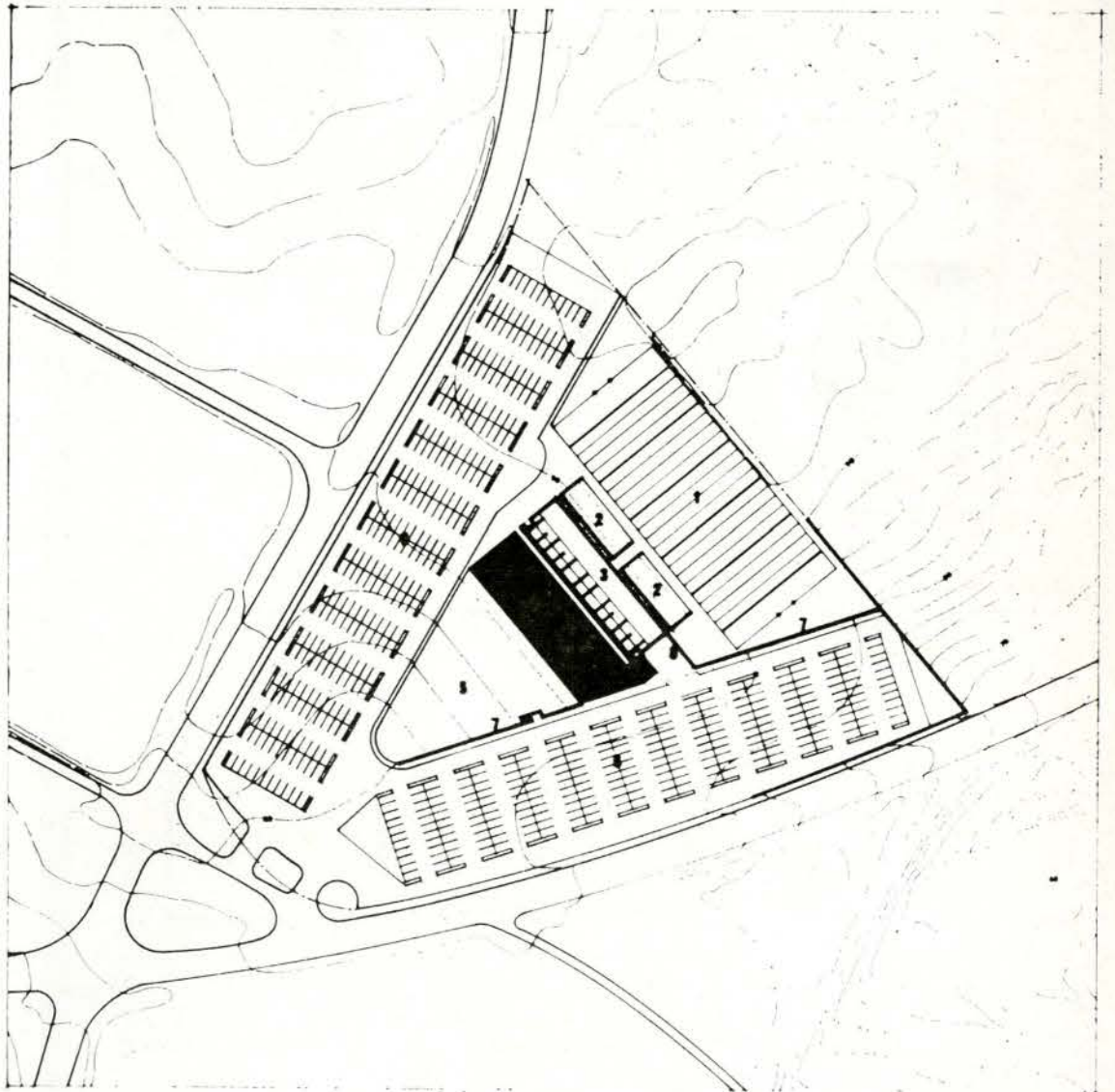
- 1 Mezzanine – The Game
- 2 quotation "Football teaches a boy ... the best is in everyone" (on face of mezzanine railing)
- 3 projectors for huge scale ceiling presentations
- 4 title sequence on flip panels (above)
- 5 theory of the Game
- 6 slide and file storage
- 7 trophies
- 8 historic section
- 9 development of the Game
- 10 practice of the Game
- 11 topical sections





Site Plan

- 1 *football field*
- 2 *berms*
- 3 *building*
- 5 *picnic - observation green*
- 6 *parking*
- 7 *retaining wall*





Photographs by John Reeves



Total Environment – an Involvement in an art form

The Mind Excursion Centre is, according to its designers, "a progression from two-dimensional art such as films and paintings, and three-dimensional art such as sculpture, to something new and different". Housed in an old Montreal warehouse, the Centre consists of 11 rooms, each one programmed to stimulate a different emotion. By the end of a "trip" each visitor should have undergone a series of emotional changes, in this instance brought about by spatial development and the use of sound, light, tactile surfaces, smell, and visual surprises.

The two rooms illustrated here are the Kaleidoscope Room (opposite) and the Confetti Room (this page).

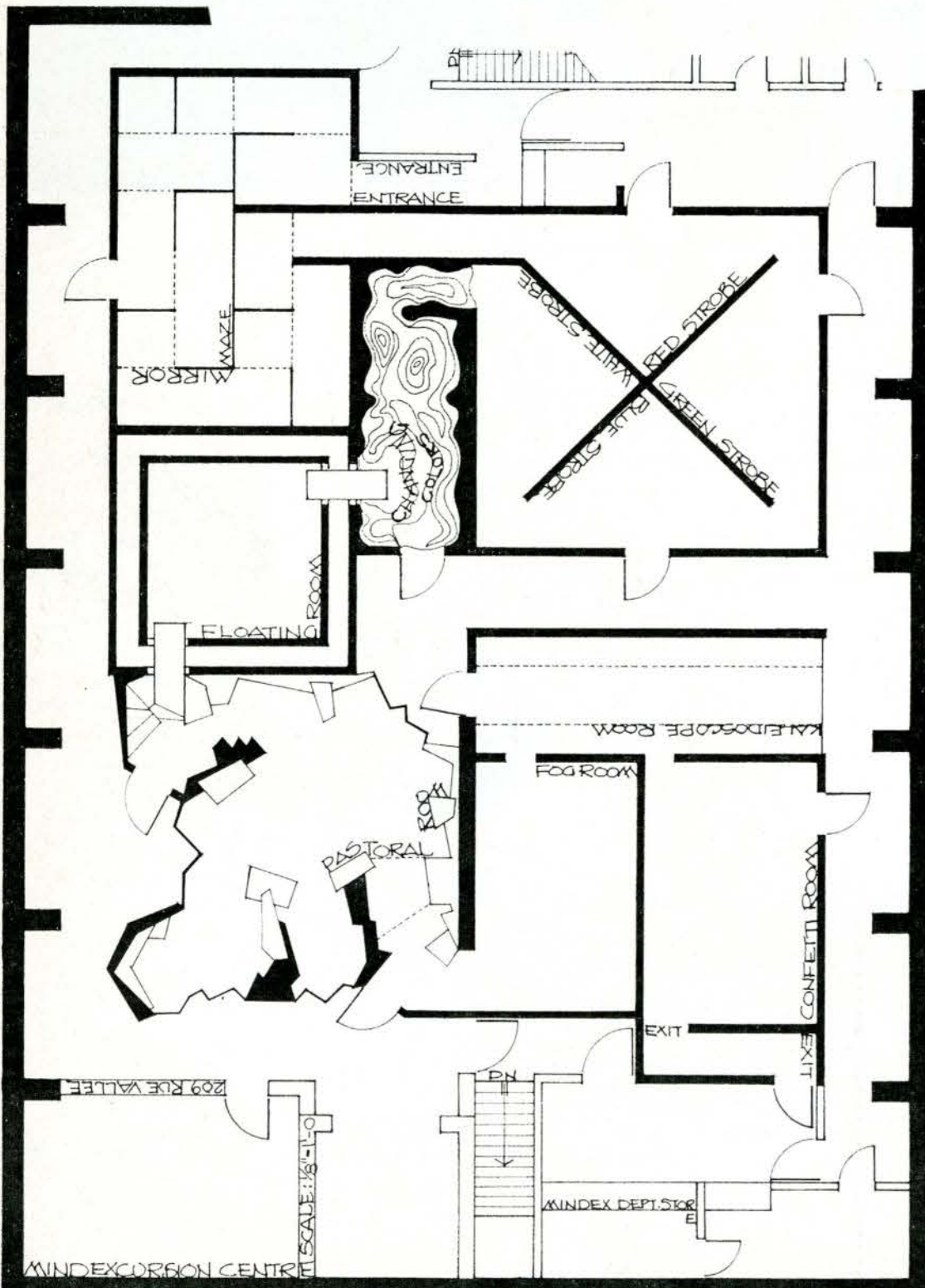
The Kaleidoscope Room, the tenth of the eleven, is a mirrorized passage hexagonal in section. Changing images projected onto a rear projection screen reflect on the walls, ceiling and floor of the passage. Electronic music is provided through eight speakers in the walls.

The Confetti Room, the eleventh, is a large mirrorized chamber with a stereo sound system. Ultra violet strobes illuminate fluorescent confetti as it drifts down through apertures in the ceiling.

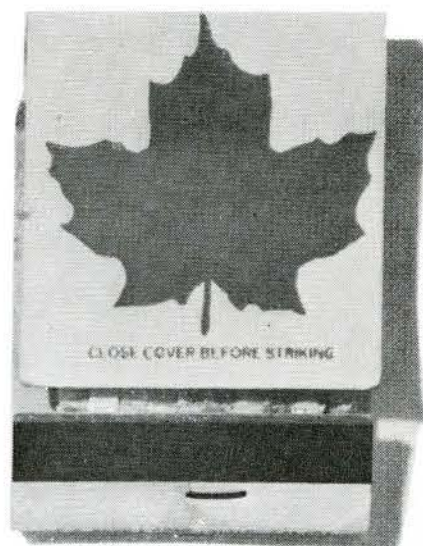
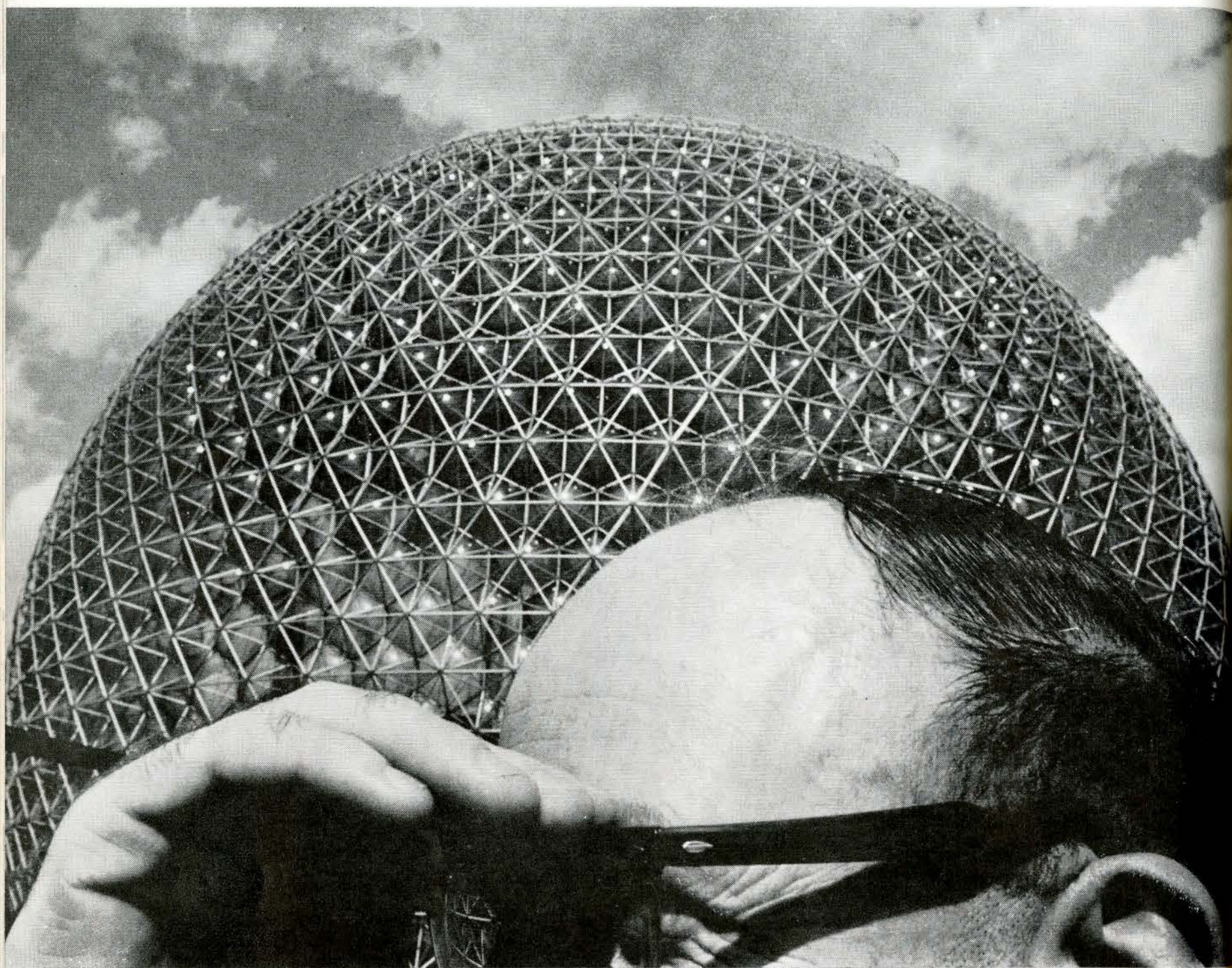
Room One is a mirror maze. Two, Three, Four and Five are stroboscopic. In these rooms the viewer's eye is saturated with flashing primary color until he begins to imagine complementary color between flashes. Room Six changes colors. Curvilinear surfaces of molded asbestos painted in intricate patterns of fluorescent colors appear to fade in and out thus visually changing the space. Room Seven, a floating room, floats inside another. Room Eight is pastoral, urethane foam and imitation grass are on the floor and the ceiling ripples with translucent glass cloth. Room Nine, entirely covered in carpet is filled with fog.

The Mind Excursion Centre, which is temporarily closed, is located at 209 rue Vallée, Montreal

Designed by Intersystems, Toronto





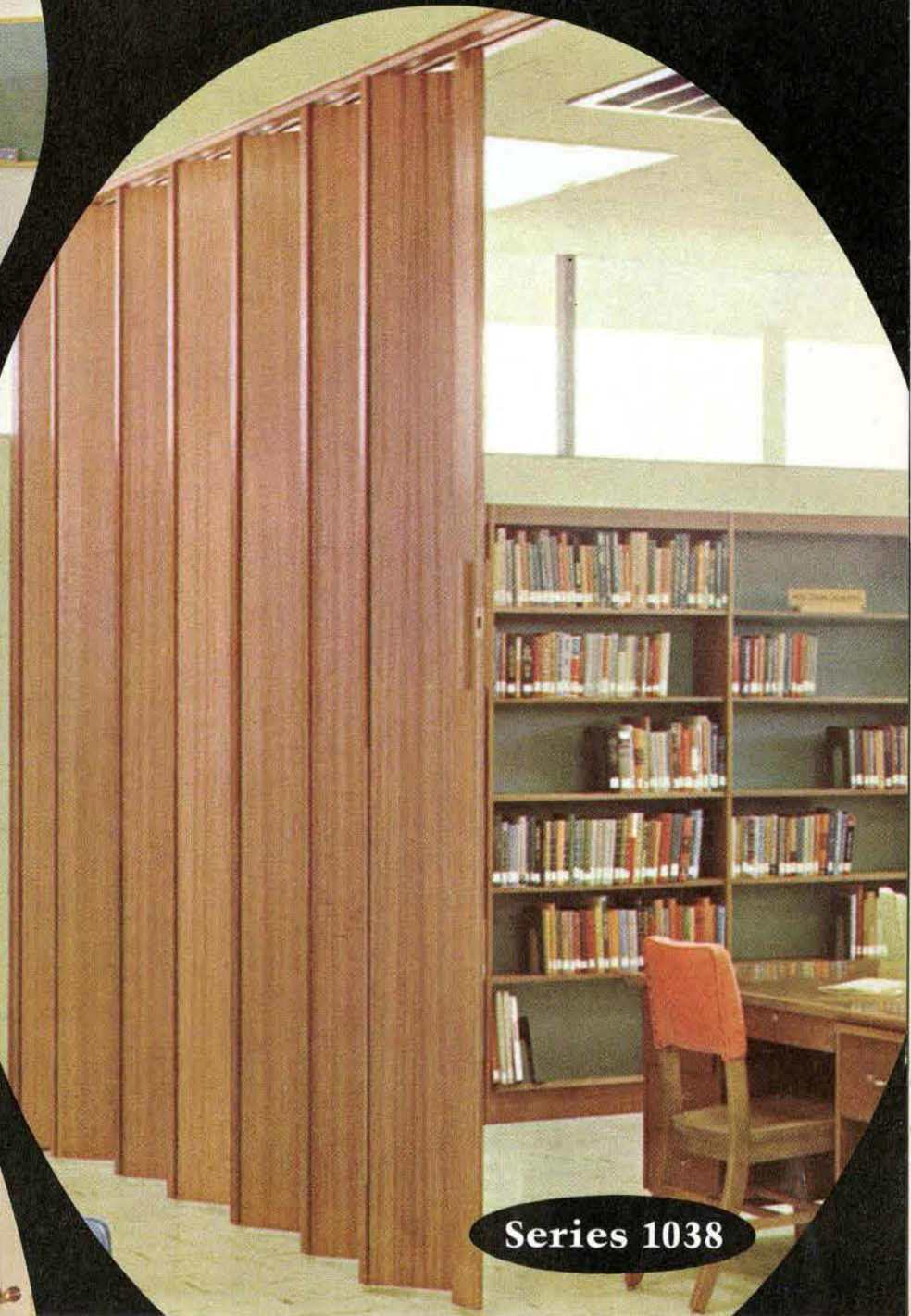


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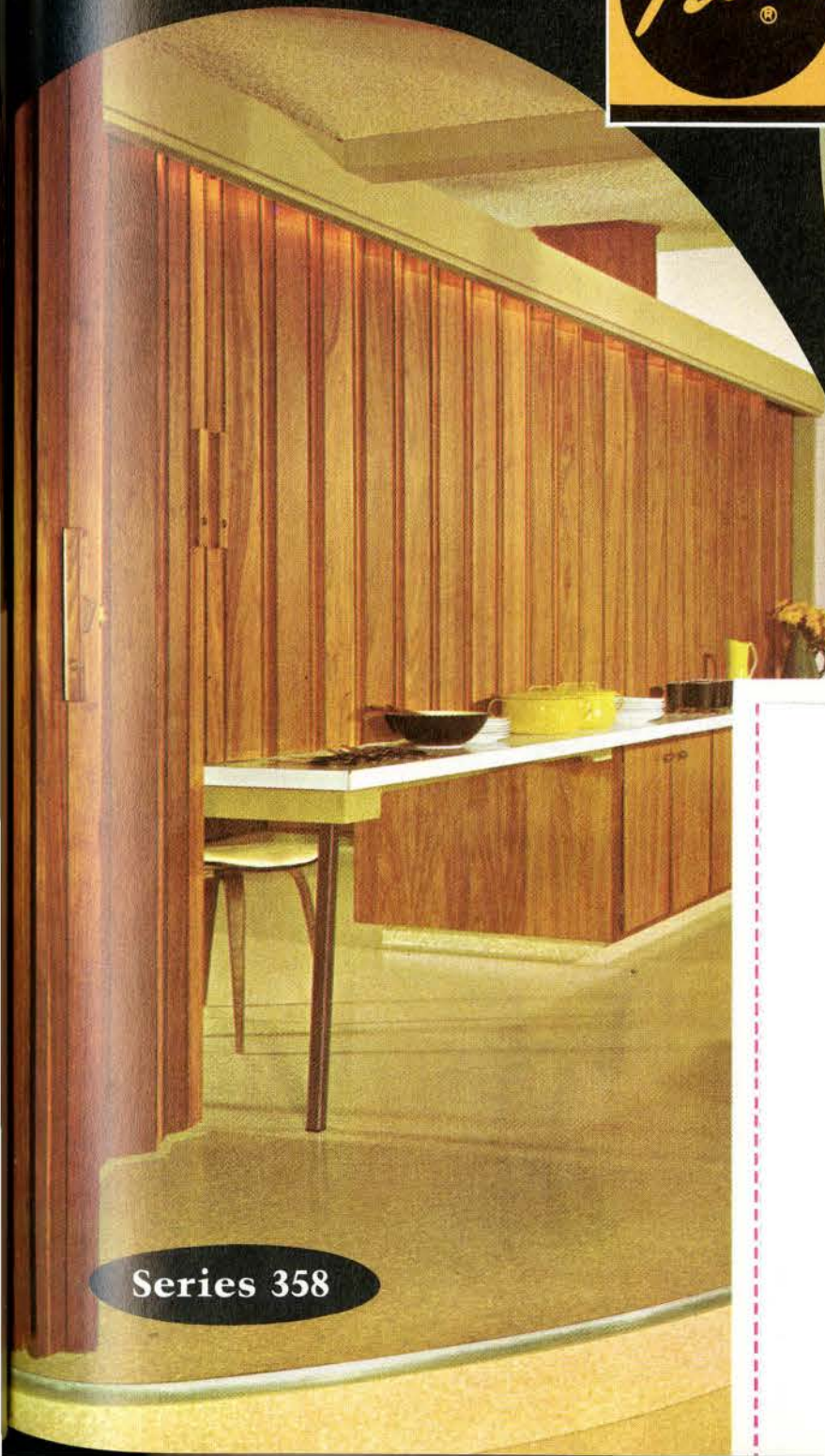
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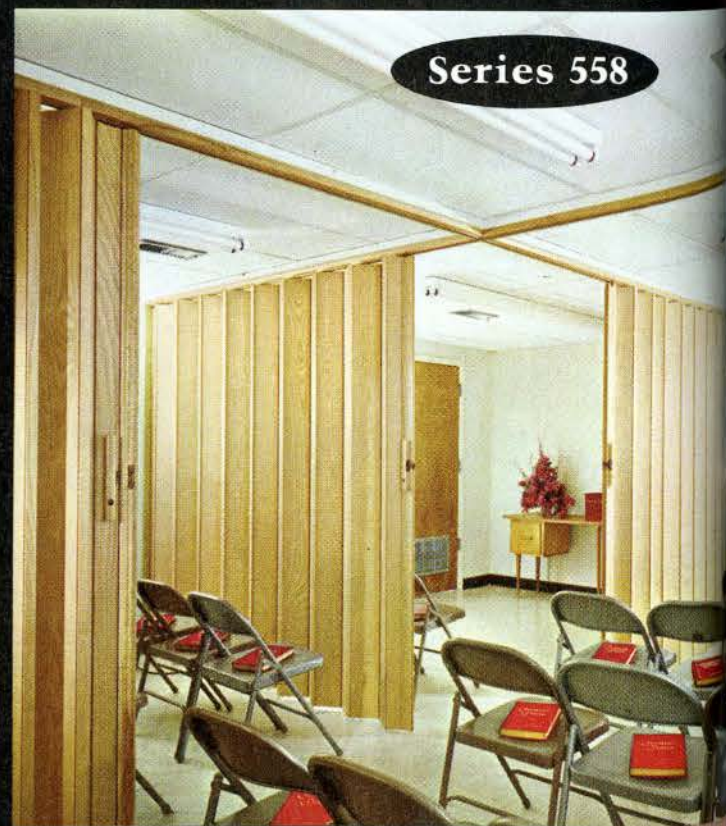
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Before Expo '67, ten years of testing Texama in high traffic areas such as schools, universities, stores, offices and hospitals, proved the carpet outstandingly tough. In fact, Texama has been so successful that in many instances the same carpeting used at Expo will be used at Man and his World. The toughest test of all has brought final conviction that Texama carpet, made in Canada, is the best for heavy traffic areas.

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Man in Control
Man and Life
Planet Theatre
Steel Pavilion
Pepsi Cola Booth
Habitat 67
Czechoslovakia
(La Terne Majica Theatre)
Ontario Pavilion
Brewers Association of Canada
Dupont of Canada
Place des Nations
Man and Health
Resources for Man
Man in Progress
Man in the Polar Regions
Man and Music
Air Canada
Argentina Restaurant
Man and His Home (Offices)



Texama adds warmth and comfort when used to upholster seating as well as floor covering in the Brewer's Pavilion.



A touch of elegance, with the bar and settee in Texama, in the Argentina Restaurant.



Texama in the Ontario Pavilion gives the theatre a mood of composed calm.



A pleasing use of muted colours in Man And His Resources.

BREWING INDUSTRY OFFICIAL SAYS: "absolutely no sign of wear"

DEAR SIR:

... not only has this carpet been installed wall to wall throughout our pavilion theatre, but it has also been used to upholster the benches. Over 5,000 people per day pass through its doors, and since the opening of our pavilion April 28th of this year, over 35,000 persons have walked across this carpet and there is absolutely no sign of wear, especially at the entrance and exit. The benches being covered with Texama... look as new as the day it was installed. On wet days, Texama at the entrance becomes saturated with water and within a few hours

after the rain has stopped, the carpet is completely dry and back to its original warm colour...

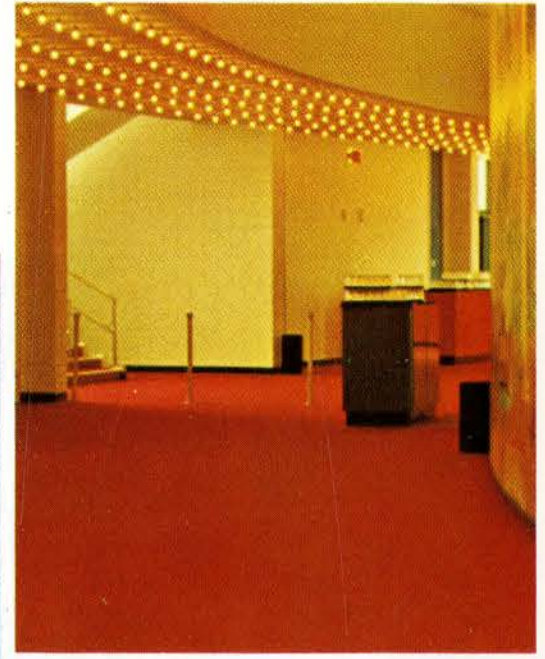
... Texama has not required shampooing, and judging from its appearance as I write this letter, I doubt very much if it will be necessary.

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YOURS VERY TRULY, Ange-Albert Vallée

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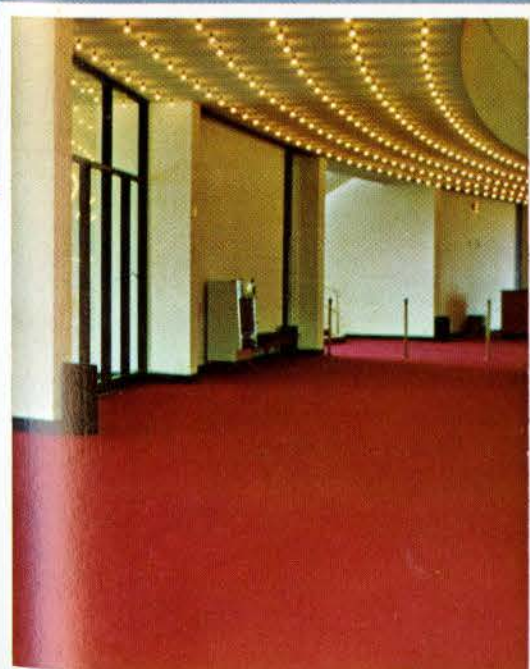


Here's Texama installed in the Expo Theatre before the doors were opened.

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THEATRE
BEFORE

... and here's the proof

These two swatches of carpet offer dramatic proof that Texama can stand up to practically anything. The upper swatch is brand new; the lower, is a piece of the same carpeting after thousands of visitors trampled over it in the Ontario Pavilion. No wonder it can still be used at Man and his World!



Here's the same carpeting after being subjected to the torture test of Expo...and it's still ready to meet the crowd at Man and his World!

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THEATRE
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Under the heaviest traffic, the tough nylon pile of Texama stays upright and never flattens out. Texama's 100% Du Pont virgin nylon pile is knitted rather than woven, giving a tighter pile that can't fall flat under heavy pressure. The foam rubber absorbs the punishment of stiletto heels, furniture, caster . . . even roller skates.

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Excellent sound absorption

Even in heavy echo areas, Texama cuts noise level substantially. It has one of the highest acoustic reduction co-efficients of any carpeting. Texama is ideal for schools, universities, libraries, hospitals . . . anywhere a low noise level is important. It has been used as an acoustic wall covering too.

No underlay required

In Texama's exclusive manufacturing process, the high density foam rubber underlay is cured right into the fabric, resulting in breathability and remarkably high tensile strength. Installation time is saved and Texama is easily laid over plywood base floors, chip board, or sealed concrete sub-floors. Texama takes contours beautifully over stairways, platforms and even furniture.

Long life


The tough characteristics of Texama give it exceptionally long life. This coupled with low cost maintenance, makes Texama a superior long term investment.

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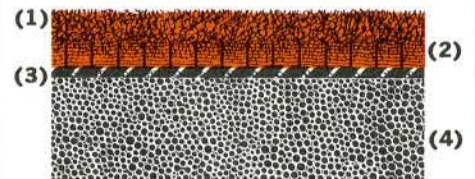
TEXAMA UNLIKE ANY OTHER CARPET.

Texama's patented construction breaks new ground in carpet manufacture, and this is part of the reason for its hardwearing qualities and easy maintenance. Texama is knitted from tough Du Pont nylon, giving a tight pile and preventing dirt penetration which can shorten carpet life. Maintenance is easier too, since vacuuming easily picks dirt off the top. Another benefit is the elimination of pile compression and thus traffic patterns and the need for special pile lifting equipment.

The thick virgin high density foam rubber base is cured directly to the carpet backing letting the whole carpet breathe. After shampooing, Texama dries much more quickly than conventional carpeting so it can be used in places where moisture might be a problem such as basements. Texama, with its foam rubber backing, is completely odourless and non-allergenic.

Texama has a high level of sound absorption. It's easily installed over plywood based floors, chipboard or sealed concrete, and gives a perfect fit around tricky curves, corners and stairways . . . you can even use it on seats and benches.

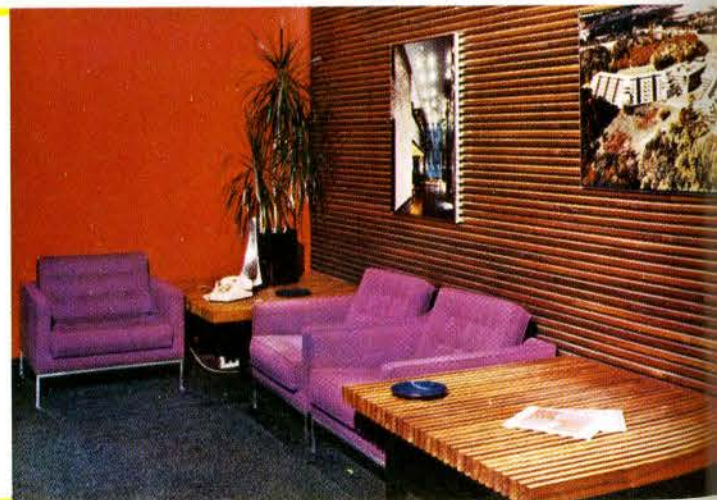
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(1) Dense 100% Dupont nylon pile resists dirt and stain penetration. (2) Tight-knitted, stitch locked, 100% Dupont nylon body for strength. (3) Tough inter-knitted natural fibre and nylon backing for stability. (4) Heavy foam rubber base is welded to both natural fibre backing and nylon body. Complete structure permits evaporation—no vapour-resistant adhesives are used.

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**The RIBA Introduces its 1968
Construction Indexing Manual**

A. W. Cluff, MRAIC, ARIBA

Editor's Note:

We thought we had disposed of the subject of information retrieval for a while with our report on the progress of the Department of Industry's project (Architecture Canada, September, 1968, Page 69) and then we received a copy of the 1968 Construction Indexing Manual of the Royal Institute of British Architects. While it does not now seem likely that the SfB Indexing system will be adopted officially in Canada, we felt the manual should be reviewed, firstly because it is the result of seven years experience and, secondly, the system has been adopted practically everywhere in the world except the United States and Canada. Also, it appears to offer a complete office indexing and filing system usable in any language and already adapted to computer use. In the accompanying article our new contributing editor, Mr A. W. Cluff, states the requirements for an acceptable system, outlines those in use and describes the new RIBA Manual.

The primary requirement for the organization of information is a classification system which is acceptable and applicable to the entire construction industry.

Increased efficiency in the classification, filing and retrieval of information is as essential for the industry as a whole as it is for the individual architect's office. It must cover all aspects of information, including product literature, technical articles, design, theory and practice and be equally applicable to loose sheets, articles, pamphlets and books. In scope it must accommodate all the various requirements, including:

- National and international needs
- Existing and new requirements
- General as well as specific requirements
- Simplified use for small offices
- Expansion for larger reference libraries
- Computerized retrieval.

It is an accepted principle that, wherever possible, the process of analysis and classification must be carried out by the

producers of information rather than the receivers. Any system which is to be widely used must therefore have a degree of change or expansion acceptable to producers as well as users so that both get the maximum return for their investment of time and effort in development and use.

Present Indexing Systems

The major indexing or classification systems in use today are the Canadian BCI (Building Construction Index); the American Uniform System for Construction Specifications, Data Filing and Cost Accounting; the international UDC (Universal Data Classification); and the European SfB, which is the basis of the RIBA Construction Indexing Manual. The American Institute of Architects also has a system for Filing Architectural Plates and Documents.

BCI: Building Construction Index

This system is the Canadian version of the system developed in the United States by the Construction Specifications Institute and introduced here by the Specification Writers Association of Canada. Three years ago it was officially adopted by the RAIC, the Association of Consulting Engineers, the Canadian Construction Association and, of course, SWAC. It is a seven division index which includes a 16-division specification format and filing index for product literature, which is its principal office use. It is utilized in the supplier section of the RAIC Architectural Directory Annual, the most comprehensive source of information on building products and suppliers.

Uniform System for Construction Specifications, Data Filing and Cost Accounting

The data filing section of this system replaces the old 44-division Product Literature and Data Standard Filing System of the AIA, which was also used by the RAIC. It was developed by the CSI and later adopted for joint use by the AIA, the Association of General Contractors of America, the CSI and the Council of Mechanical Specialty Contracting Industries.

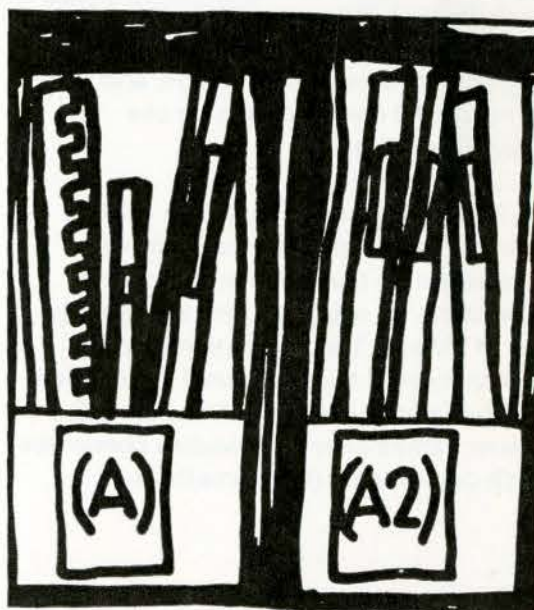
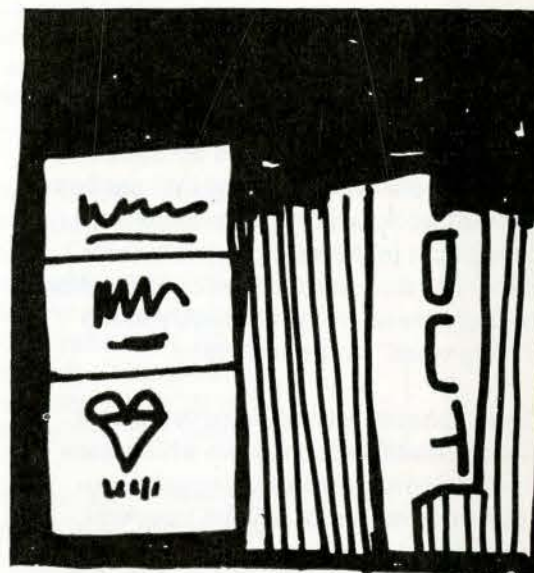


Figure 1

The classification box, SFB system, reprinted from the RIBA Construction Indexing Manual

It is available as AIA Document K-103, 1966.

The BCI and the Uniform System have grown logically from the 16 broad generic headings or "divisions" used for specifications. Each division is divided into sections, or units of work, which are variable but always occur in the same division. Both systems are also used for the classification of product literature by division, section and "key word", or generic term.

Caution is necessary when developing a national classification system which uses key word coordinates as bilingual documentation is required, with its inherent problems of duplication and confusion.

UDC: Universal Decimal Classification

This is the system of classification used by many large libraries and has little direct application to the construction industry. In many countries UDC is being used to classify "theoretical subjects" and the SfB system for other information, but it would appear to be a backward step to adopt any system which is not applicable to the classification of all information for the construction industry. The expanded use of UDC is therefore questionable.

RIBA Construction Indexing Manual, 1968

This 1968 Manual is the result of seven years experience with the SfB system, which the RIBA introduced into Great Britain in 1961. Its purpose is to provide a more comprehensive classification for filing and retrieval of information, and it merits careful consideration for use in North America.

The SfB system came into use in 1947 as the result of a conference on building documentation convened by authorities responsible for rebuilding the war damaged area of Europe. The international need for documented and organized information was apparent and the result was the SfB system, named after the Swedish committee which developed it (the Samarbets-

kommittén för Byggnadsfrågor). In 1952 an International Building Classification Committee set up by CIB, studied 55 systems and decided joint use of SfB and UDC could be the most useful for the construction industry. The original SfB did not provide for theoretical or background subjects so the RIBA in its SfB/UDC Building Filing Manual published in December 1961, introduced revisions to make the system comprehensive enough to use also as a library classification system. It also included UDC numbers as an alternative classification.

Since 1961 SfB has been adopted by most countries in Europe as well as Japan, Australia, New Zealand, India and South America.

In the RIBA 1968 Manual, the SfB system has been further revised to take advantage of experience gained since 1961 and to bring it into line with other developments in project documentation.

Computer Use

A proprietary computer version of SfB, known as CBC, has been developed in Sweden, and is being used on pilot projects in the United Kingdom.

How SfB Works

The system defines "departments" for information and divides it into four categories, as follows:

First Division (Table 0)

"The building environment", (Main divisions 0-9) includes land, planning, landscaping, civil engineering, transport, administrative, health, recreation, religious, educational, residential, etc. Each division is sub-divided into nine categories.

Second Division (Table 1)

"The building elements" (Main divisions 1-9) include substructure, primary elements,

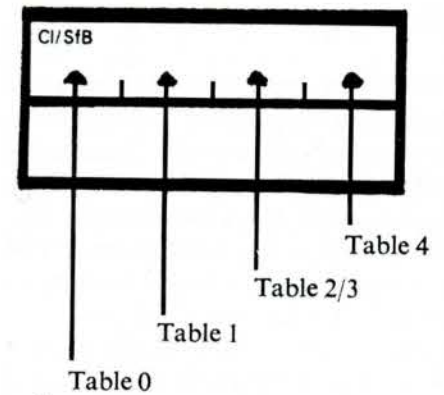


Figure 1

CANADIAN BUILDING DIGEST

DIVISION OF BUILDING RESEARCH • NATIONAL RESEARCH COUNCIL



CANADA

THE BASIC AIR-CONDITIONING PROBLEM

by N. B. Hutcheon

UDC 697.9

A building may be regarded as an assemblage of spaces, each providing a particular environment appropriate to its intended use. Correspondingly, much of the design of a modern building must be concerned directly with the means for ensuring that the desired conditions will be obtained. Air conditioning is now a common requirement and poses special problems for the building designer. He must, of necessity, delegate some responsibility for the design of the system to be employed, but he cannot do so completely. Some decisions may influence the design of other parts of the building, and decisions concerning the design of the building can have a marked influence on the cost and performance of the system.

An understanding of the interaction between the building and the air-conditioning system is essential if good design is to be achieved. The effects of some features of the building on heating and cooling requirements were discussed in CBD 105. These were considered primarily in relation to the cost of air conditioning. The quality of the environment produced by air conditioning is also important and depends in large measure on what happens in individual spaces. The creation of acceptable conditions by the manipulation of heated and cooled air within a space is called here the basic air-conditioning problem and is the principal subject of this Digest. Discussion will be carried on primarily in the context of air conditioning for human comfort.

Design for a comfortable thermal environment must begin with a recognition of the reactions of people to the pertinent physical conditions of a space. These matters were discussed in CBD 102 and reference was made to the ranges of conditions within which people will probably be comfortable. It was noted that thermal radiation levels are a factor in

body heat balance and that they are not directly under the control of air conditioning. As these levels are determined mainly by the pattern of temperatures of surrounding objects, including wall, floor, ceiling and window surfaces, they are variable with location in the space. They cannot readily be offset, except in a general way, by an adjustment in the over-all level of air temperature.

Thermal radiation levels result from conditions and decisions not normally within the control of the air-conditioning engineer, yet they may affect markedly the extent to which a uniform thermal environment can be provided. When close control over conditions becomes of prime importance, limitations may have to be imposed on the design of the enclosure and perhaps also on the nature of the occupancy. This is a common occurrence in the design of research laboratories, for example, where windows have to be omitted to make possible close temperature and humidity control.

The essential operation in controlling temperature and humidity involves supplying or extracting heat and moisture within a space so as to offset the effects of the losses and gains of the space as a whole. The nature of these losses and gains is discussed in CBD 105, in which it becomes evident that the thermal characteristics of the space and its occupancy can lead to storage effects that modify the amount of heating or cooling required at any given time. The basic air-conditioning problem consists of making adjustments to balance the heating and cooling loads for the space as a whole so that conditions will be maintained everywhere within the occupied space within acceptable limits.

A common way of arranging for the supply or removal of heat and moisture is to draw a

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definite amount of air from the space and replace it with an equal amount of conditioned air. The conditioning of the air, which may include filtering to remove dust and blending with a certain proportion of fresh air for ventilation, is often carried out outside the conditioned space. (The means by which this can be accomplished are not important at this stage in the discussion.)

Some thought about the situation depicted in Figure I will lead to the conclusion that the air exhausted from the room is substantially at room condition. The entering air stream must therefore be at a higher or a lower temperature and moisture content, to the degree required to balance the heat and moisture loads. Several most significant features of this basic relation become apparent only when they can be examined quantitatively.

Consider that the room in question has a cooling load, H , and a moisture load, M , in unit time. If the mass flow of air in and out is W lb/hr and h and m are the heat and moisture contents of the air, respectively, for 1 lb of air, the simple mass and energy balance equations for the room are as follows:

$$H = W (h_2 - h_1) \quad (1)$$

$$M = W (m_2 - m_1) \quad (2)$$

These equations indicate that the cooling load, H , of the space must be balanced by the difference in the heat content of W lb of leaving and entering air. When the cooling and moisture loads result from heat and moisture gains to the room, the entering air must be cooler and contain less water vapour than the exhaust air. If under winter conditions there are heat and moisture losses to be made up, the entering air must be warmer and contain more moisture than that in the room.

The amount by which the condition of the entering air differs from that of the room air is shown to be dependent on the magnitude of the heat and moisture loads (H and M) and on the rate of air circulation (W). Under winter conditions, which involve mainly heating, it is not uncommon to employ air stream temperatures up to 150°F. Rooms with average heat requirements will have a rate of air circulation, W , corresponding to a volume change of three air changes per hour. The heating of the air to this level presents no problem and warm air will not usually create uncomfortable drafts. Air supplied for cooling can more easily create sensations of draft and must usually be kept above 40°F to avoid frosting of the cooling coil. In practice, air for cooling is generally supplied at from 15 to 30F deg below room temperature. Thus it is more common to

employ ten air changes or even more per hour with the loads that usually occur.

It will be recognized at once that if an air stream is to be projected into a room at 15F deg below room temperature, those parts of the space it affects directly will deviate by as much as 15F deg from room temperature. A similar situation could occur with moisture content. It might be proposed, therefore, that the primary air stream should not deviate from the desired room condition by more than the accepted tolerance. For example, if room air temperature is to be 75°F ± 2°F one might require that the primary air stream for cooling be no lower than 73°F and for heating no more than 77°F. The required air changes with a limit of 2F deg would be 110 to 150 air changes per hour (ach) for heating and 75 ach for cooling.

An air change rate approaching 100 ach must be considered very high indeed for any ordinary occupancy, requiring very large fans, ducts and grilles, and leading to the possibility of high local room air velocities. When such rates are required a complete pierced ceiling and floor or two opposite walls may be used as supply and return grilles. Under such conditions a uniform sweep of air in one direction, with little turbulence and low velocity (laminar flow), can be obtained. Such arrangements are justified only in special cases, usually in clean rooms or where there is a requirement for very high air rates to reduce temperature differences throughout the whole room.

In normal air conditioning practice great advantage is taken of the fact that of a whole space only the part that is to be occupied need be held within acceptable limits for occupancy. That part of the room volume above the 6-ft level may be used to advantage as a distribution and mixing zone (see Figure 1). This requires that the primary air be projected with sufficient velocity to entrain room air by induced secondary circulation in amounts up to three to five times its own volume before it enters the occupied zone; and at the same time provide the best possible distribution and movement of air throughout the occupied zone. This is not easy to accomplish and it constitutes one of the great challenges to the designer of the air-conditioning system. Clearly the extent to which uniform air temperature, air movement, and relative humidity can be achieved throughout the occupied zone is greatly dependent on it.

Distribution of the air is accomplished by three factors: velocity energy of the primary

stream, gravity effects due to differences in temperature, and displacement resulting from the general movement caused by the continuous over-all introduction and withdrawal of air. It becomes necessary to take account of all three in designing for adequate room air distribution. The supply registers must also be designed to assist in the scheme of air distribution selected. Their size, location, spacing, amount of air handled, and the direction given to the air are all important factors.

If the "throw" of a register is too great, the primary air stream may be projected directly into the occupied zone or may "splash" on a wall and be deflected downward. Heated air streams rise when projected horizontally; cooled streams fall and must be given an appropriate initial deflection.

It is hardly necessary to point out that a cooled primary stream striking anyone will give rise to a very objectionable draft. The secondary circulation (Figure 1) induced by the primary stream, however, can also produce drafts if room conditions are generally on the cool side. Note that the induced flow making up the secondary air circulation is in the same direction as the primary stream when it is near it, but in the opposite direction when it is further away. Examples of such "reverse flow" accompanied by marked drafts can be produced by the hot primary streams of car heaters or warm air heating registers in low sidewall locations where the air temperature is generally

below the comfort level, even though the primary stream itself is quite warm.

Various locations are used for supply registers and exhaust grilles. The arrangement shown in Figure 1 is reasonably well-suited for both summer and winter conditions provided the heating load is not large. When the width of the room permits, the cooled primary air can be projected well over toward the opposite wall to mix with the rising warm air at wall and window surfaces. The low sidewall location for the return grille provides some advantage for summer cooling, but during the heating season a location beneath the window would tend to remove some of the cold air flowing down from the cold surface. Warmed air projected overhead tends to remain there, so that no great compensation is provided for the cooling effects of the exterior wall and window.

Ceiling diffusers are also common. The primary air supply is projected generally downward from a central location in a flat cone. Such an arrangement can be quite acceptable for cooling, but when used for heating it is difficult to project the heated air downward through the occupied zone with sufficient velocity for it to mix with or displace the cooled air at the floor. Like the system shown in Figure 1 this arrangement is more satisfactory in a split system of heating and ventilating in which convectors located at the window carry the winter heating load, and the air system is

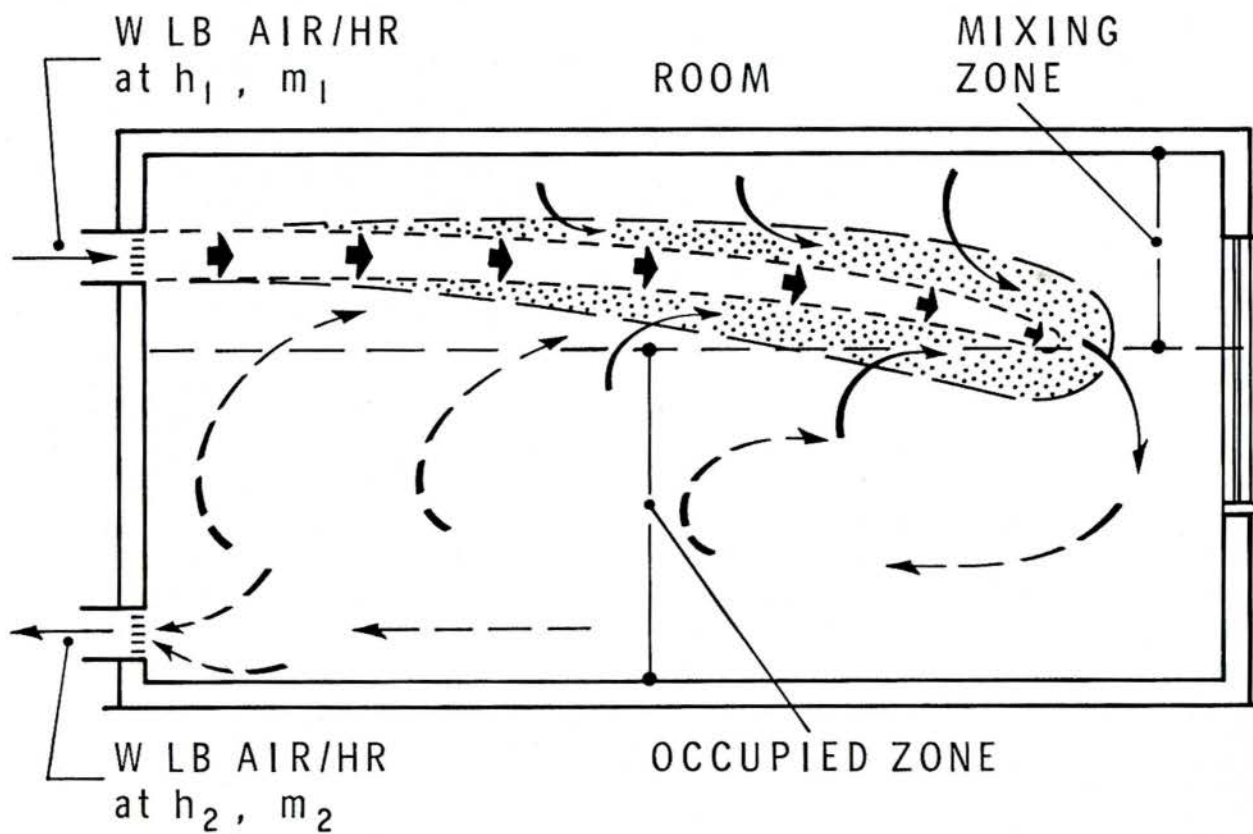


Figure 1 The basic air distribution problem.

operated to provide tempered air at room temperature only. The rising warm air stream from the convectors is in the proper location to counter the tendency for cold air to fall and collect at the floor. When the same air system is to be used for both heating and cooling, it is difficult to ensure good performance in both seasons.

When, as is often the case, windows are a major source of both heat and cold, it is common to discharge air vertically upwards from either continuous or cabinet-type units located below the windows. When this is done the vertical zone close to the windows becomes, in part, a mixing zone. This location is often satisfactory for heating with only natural upward convection, but for cooling forced convection must be used. In one arrangement the energy of the primary air, supplied to the unit under pressure, is used to induct large volumes of room air from the floor for mixing before it is discharged vertically upward. Thus displacement is used along with discharge velocity to provide vertical circulation in the room, counteracting the natural tendency for a cold zone at the floor in winter and a hot zone at the ceiling in summer due to gravity effects.

Thus far the problem has been discussed mainly in the context of temperature variations as affected by the distribution of the conditioned air and the heating and cooling effects of exterior walls and windows. The lighting system, when in use, also enters in an important way into the problem, since it contributes markedly to the heating of the space. The thermal interaction with the space varies with the arrangement. Suspended fixtures give off their energy by radiation and by convection through heating of the air adjacent to them. Recessed ceiling systems give off part of their energy to the space above the ceiling, and this warms floors and ceilings and ultimately returns to the conditioned spaces.

Various elements associated with the occupancy of a space such as lamps and stoves, as well as people, can contribute energy to the space by radiation exchange with surrounding surfaces and by convection involving the air in contact with them. Air that is warmed in contact with a hot object will rise as a plume to the extent permitted by the overriding influence of local air movement. Cool objects will produce falling streams. The resulting air

streams may depart markedly in temperature from the surrounding air, but this may not be objectionable if they do not come in contact with occupants before becoming well mixed with the air in the space.

Temperature is not the only factor of interest. The plumes of air rising from human bodies will contain added water vapour and will produce deviations from the general level of moisture content in the space. Additional heat and moisture is projected into the space in respiratory air, which is also deficient in oxygen and carries a high level of carbon dioxide. Odours are also given off, and smoke may be an additional contaminant. Any or all of these factors, and others arising from a particular occupancy, lead to variations in conditions. Their extent can be controlled by the simple process of dilution, or mixing. This can usually be produced satisfactorily by promoting turbulence and general circulation of the air in the space.

Contamination by dust, smoke, carbon dioxide and odours, and depleting effects such as reduction of oxygen through respiration, are normally not required to be held within close limits but only to be kept below some limiting value. They are normally controlled by filtering and by dilution with fresh air. The amount of fresh air required is often only 10 to 20 per cent of the air capacity required for conditioning the space.

This discussion of air conditioning from the viewpoint of the conditions in the space has been presented in the hope that it will lead to a better appreciation of what is involved. It is highly desirable, when deciding upon the environmental conditions for a space, that the ease or difficulty, and thus the cost, of providing what is proposed should at least be recognized in a general way. There is a similar need to recognize the influence of various other decisions that may be made in the course of developing a design. It has only been possible to indicate briefly and somewhat indirectly how an enclosure and the nature and requirements of the occupancy affect the conditioning of the space. It has been assumed that means exist for sensing the needs of the space and for producing the conditioning air streams as required. The many considerations involved in the choice of systems and equipment will be the subject of a later Digest.

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Table 2/3 symbols

Table 4 symbols

Figure 2

Using C1/SfB system, information is analysed by asking four questions, each corresponding to a C1/SfB Table. The process is shown in this flow chart. Reprinted from August 1968, RIBA Journal.

secondary elements, finishes, services, etc. Each division is subdivided into 19 categories.

Third Division (Table 2/3)

“The construction form and material” (main divisions E-Y) including cast in situ, bricks, blocks, structural units, sections, tubes, wires, sheets, coatings, components, etc. The material is lettered as a suffix to the construction form.

Fourth Division (Table 4)

“Activities and requirements” (main divisions A-Z) including administration, plant, construction operation, layout, appearance, heat, strength, mechanical, sound, light, fire, durability, maintenance, economics, etc. Each division is subdivided into 9 categories.

Classification

In the top right hand corner of each document the number is placed in a rectangular box. (See Fig 1) Each of the four parts of the box corresponds to one of the four tables and when the information is to be directed to one division of the library the corresponding part of the box is completed only. The lower section has been left for UDC or individual library requirements. It is important to note that the information always appears in the same box, and facilitates identification.

The correct symbols are selected by following a series of questions in strict order and this has been shown diagrammatically in the manual (See Fig 2).

The Construction Indexing Manual is a result of years of work and testing and is recommended that this document be studied by those interested in improving the present situation.

Existing systems must be reviewed for obsolescence, complexity or inflexibility and a new system capable of and adaption

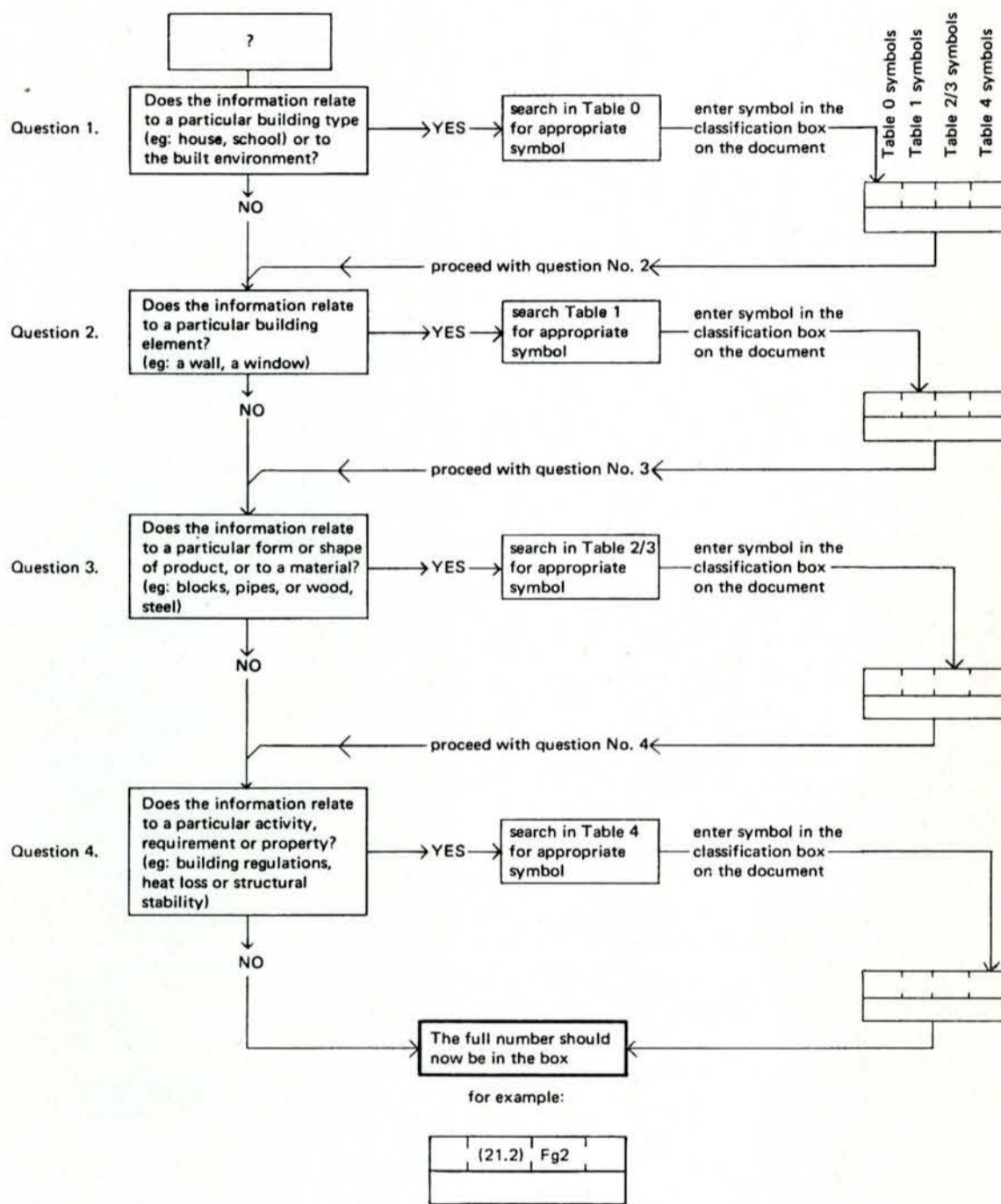


Figure 2

to the expanded body of knowledge is urgently required.

Architects have much to gain by providing the impetus for the acceptance of a workable system for the proper organization of information and should take the lead in research, and in development of a national standard.

References:

1 "The Building Construction Index". Specification Writers Association of Canada —RAIC — SWAC-CCA, 57 Bloor St. West, Toronto. \$2.00

2 "Uniform System for Construction Specifications, Data Filing and Cost Accounting". The Construction Specifications Institute Inc., 1717 Massachusetts Ave., North West, Washington D.C. 20036. \$6.50

3 "Abridged Building Classification". A selection from the Universal Decimal Classification, 2nd Edition, CIB Rotterdam, 1955

4 "Construction Index Manual", 1968, RIBA, 66 Port'and Place, London, W.I. £3.15 plus postage of £1.10. (160 pages including illustrations).

Other selected references:

"SIB Revised; the C1/ SIB Manual", *RIBA Journal*, August 1968.

"The Challenge of Co-ordinated Building Communication", Bjorn Bindsler, *RIBA Journal*, February 1965.

"The RIBA Computers & C B C", John Carter, *RIBA Journal*, October 1966.



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- 5 The spring is adjustable
- 6 All adjustments are easily made without removing any part



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Douglas Lintula B.Arch.
Architectural Writing

Assistance with magazine articles and press releases brochures and reports

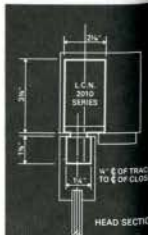
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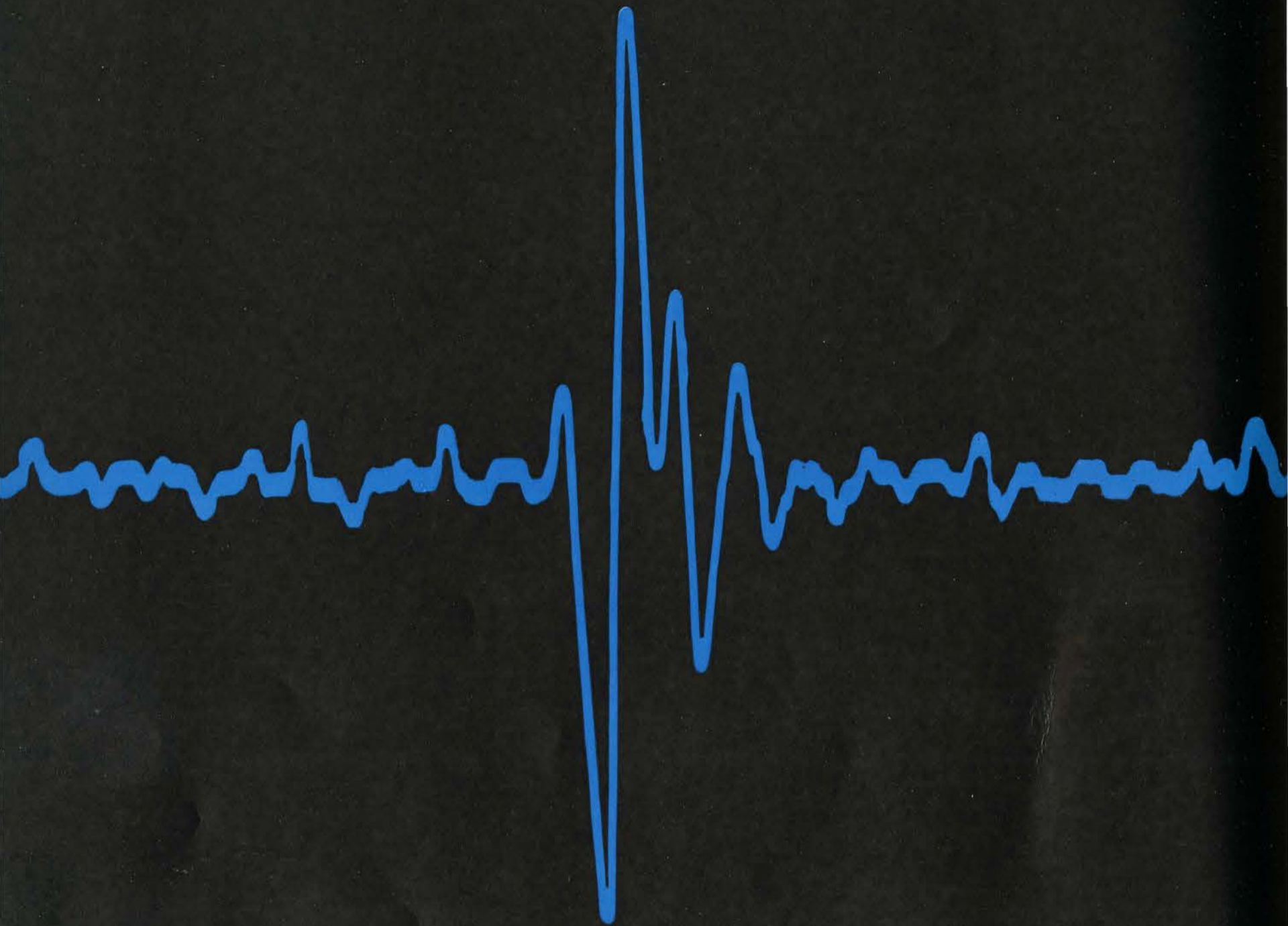


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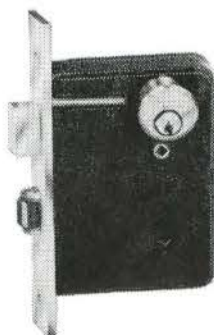
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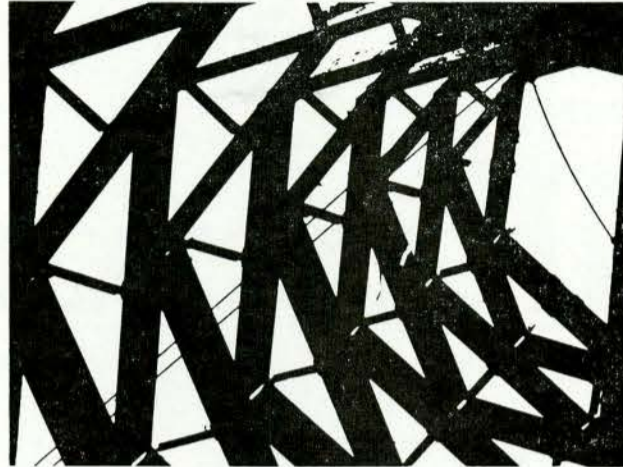
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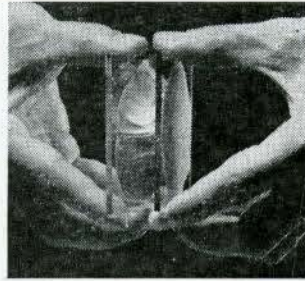
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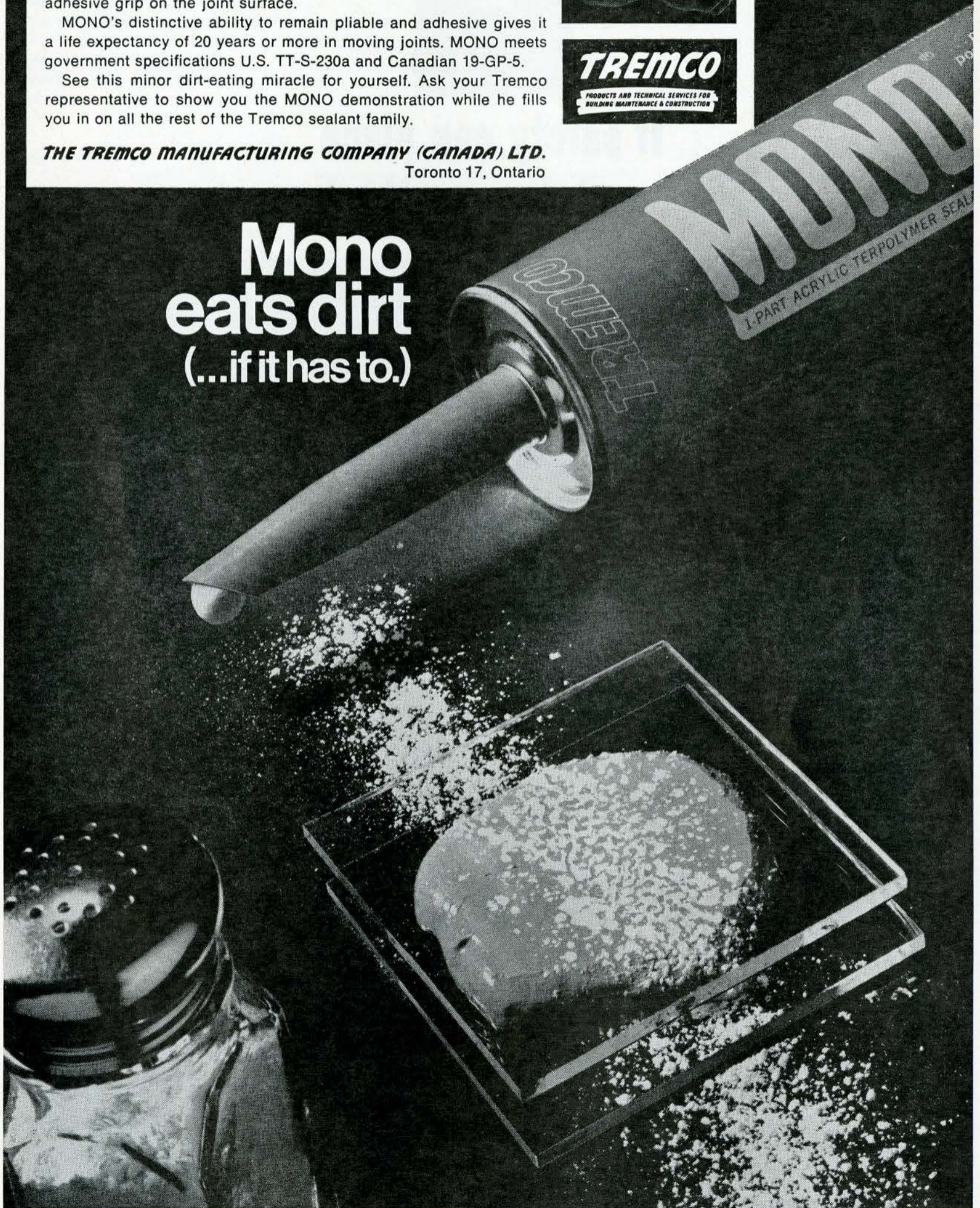
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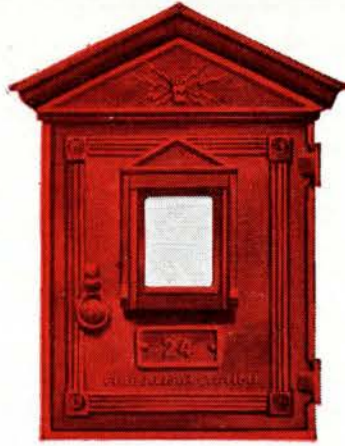
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Nova Scotia Association: Robert Moore Skanes

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Practice Notes

Sirlin & Kelman Architects have relocated their offices at 74 Sheppard Avenue West, Willowdale, Ontario. The new telephone number is 225-1101

Allan W. Mackay, MRAIC, and Robert A. Heughan, MRAIC, announce their partnership under the name of Mackay and Heughan Architects at 3300 Cavendish Boulevard, Suite 640, Montreal 28, Quebec, Telephone 482-5300

Positions Wanted

31 year old graduate architect, from University of Zagreb, Yugoslavia, has own practice in Zagreb, four years experience with German company in Europe, interested in architectural rendering, seeks employment. Write to *Architecture Canada*, Box No 152

Bachelor of Architecture (Hons.) University of New South Wales, 23 years of age, three years office experience, requires permanent position in Toronto; date of arrival 29 October 1968. Write to Box 153, *Architecture Canada*

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3rd year student at Cheltenham School of Architecture, England, seeks position in Canada for a period of one year from November 1968. Reply Johnny Coppin, 137 Elgin Crescent, London W. 11, England

27 year old graduate architectural-engineer from University of Belgrade, eligible for registration with Ontario Association of Architects, three years experience in Yugoslavia and W. Germany in designing residential apartments and public buildings including engineering drawings of reinforced concrete construction, seeks junior position in architect's office. Contact Milan Velickovic, 36 Frankish Ave, Toronto 3, Ontario

Architectural Assistant (Irish), age 35, with 17 years varied experience in private, commercial and local government offices, including school, hotel, shop and domestic design, shortly sitting for RIBA, Final Part 2 examination, seeks employment in Canada. Apply R. Leslie Jackson MSAAT, 118 Beechgrove Ave., Belfast 6, Northern Ireland

Architect, ARIBA (qualified London 1959), 38, married, two children, seeks situation anywhere in Canada in early 1969, 16 years experience in private practice and in local government offices in England. Vernon S. Benstead, 31 Pine Avenue, Hamilton, New Zealand

Assistant Architect, educated in India and London, member, Indian Institute—ten years experience designing — cinemas, hospitals, schools, seeks position. Write Malcolm Drake, 98 Central Avenue, Hounslow, U.K.

Architect, diploma-degree 1956, 12 years experience in Germany and Scandinavia, fields: town-planning, housing, industrial-buildings, laboratories, cinema and public building, specialized in hospital-building, seeks employment or corporation with architect in Toronto or other parts. Approximate date of arrival December, 1968. Write Parviz Zargarpoor, Lasarettsgatan 8, 582 25 Linköping, Sweden

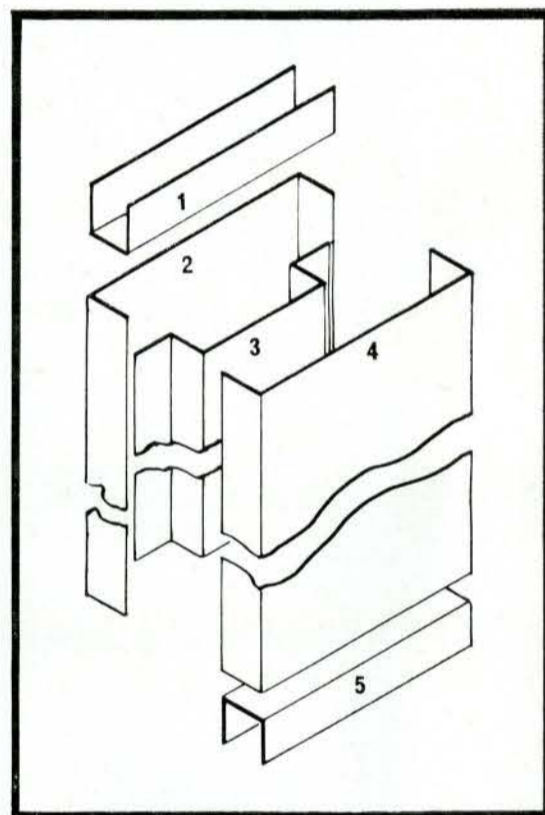
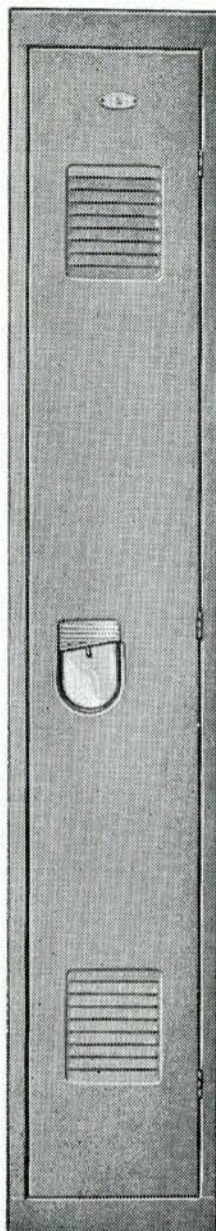
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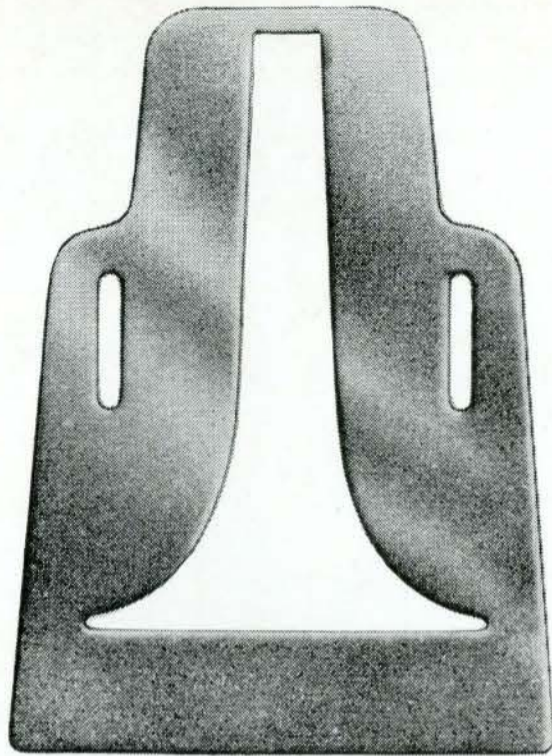
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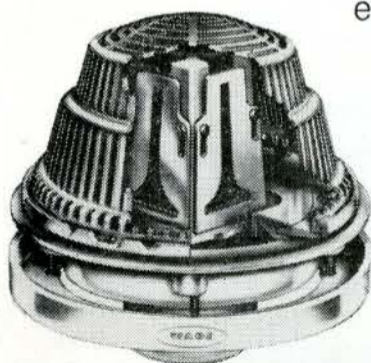
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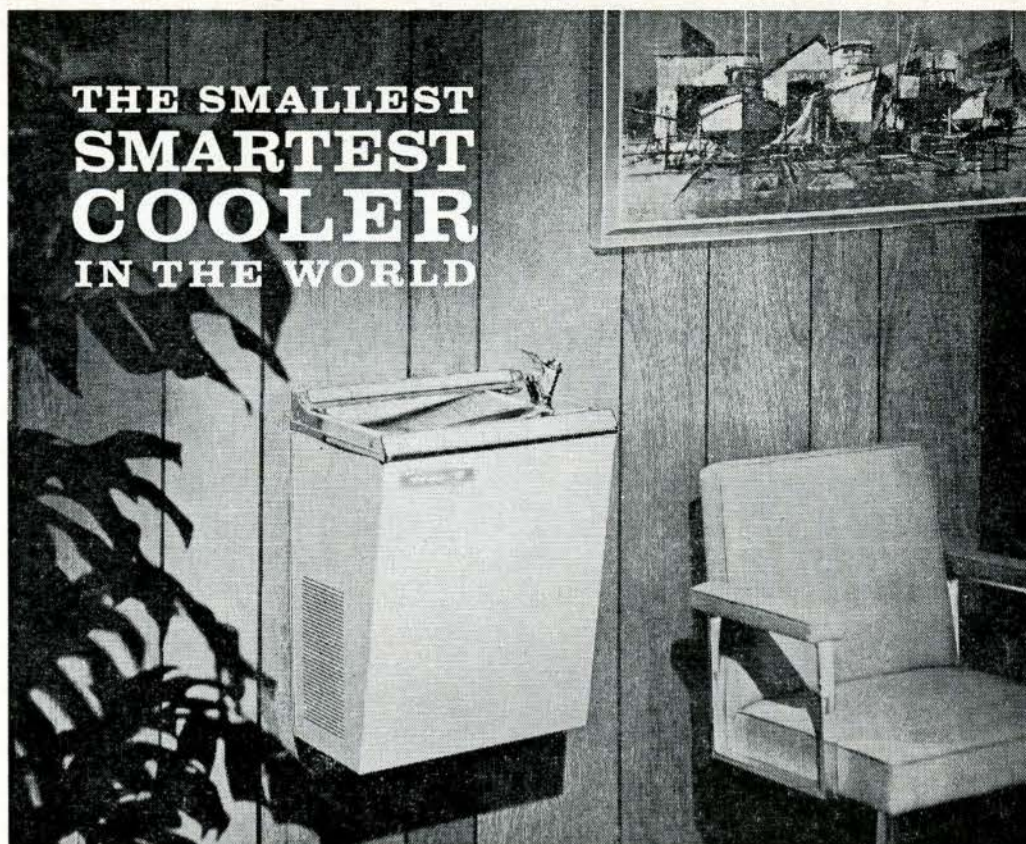
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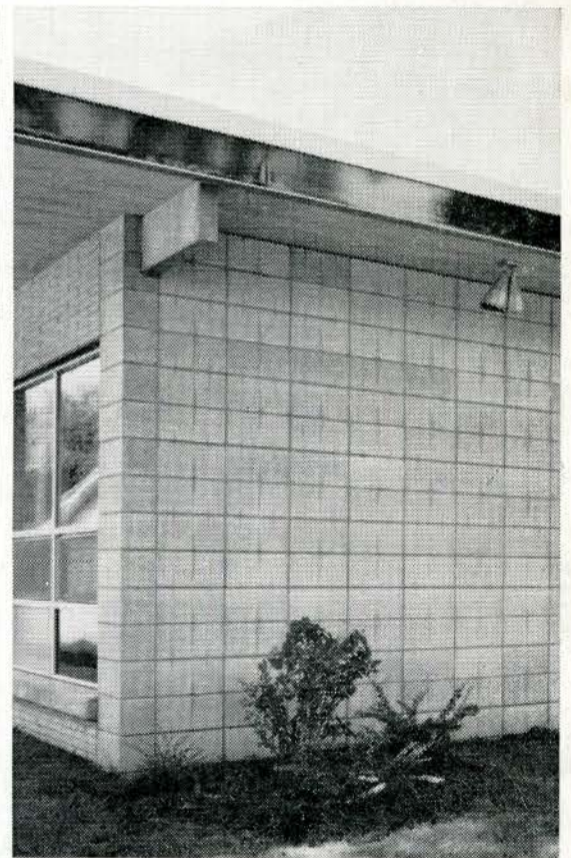
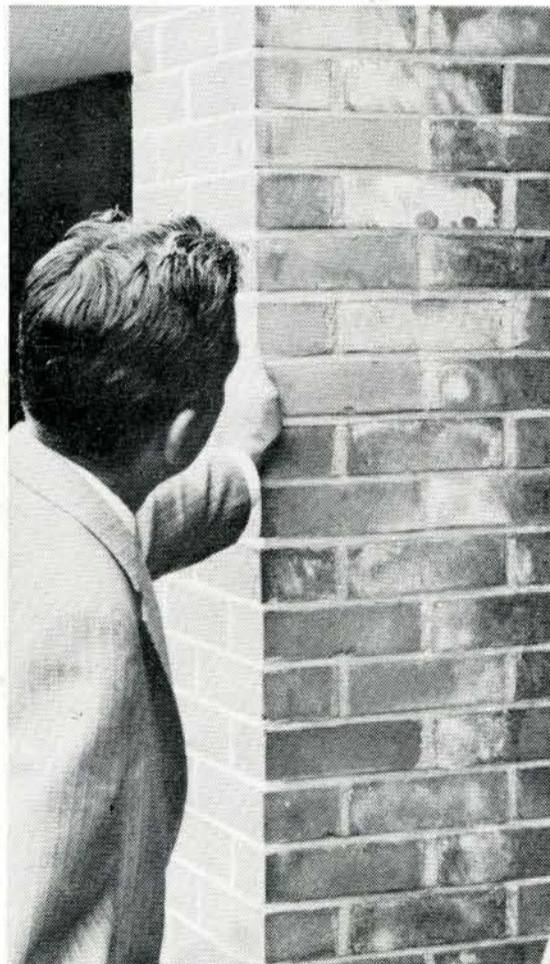
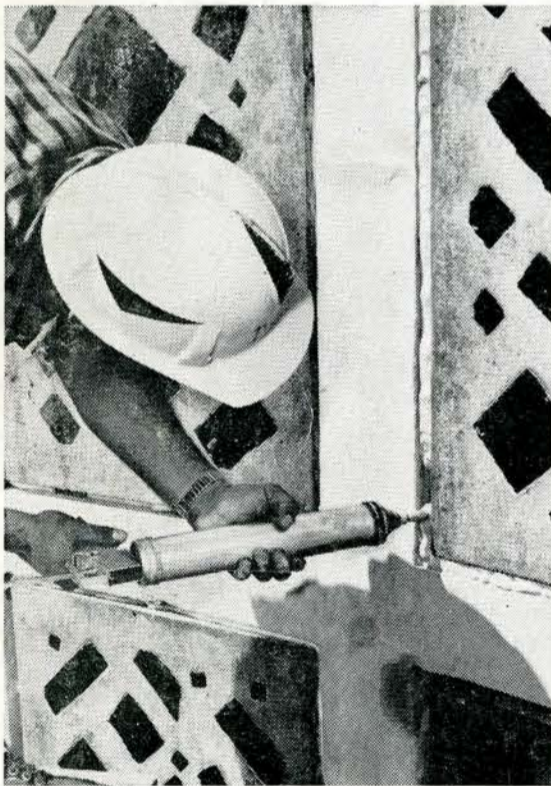
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