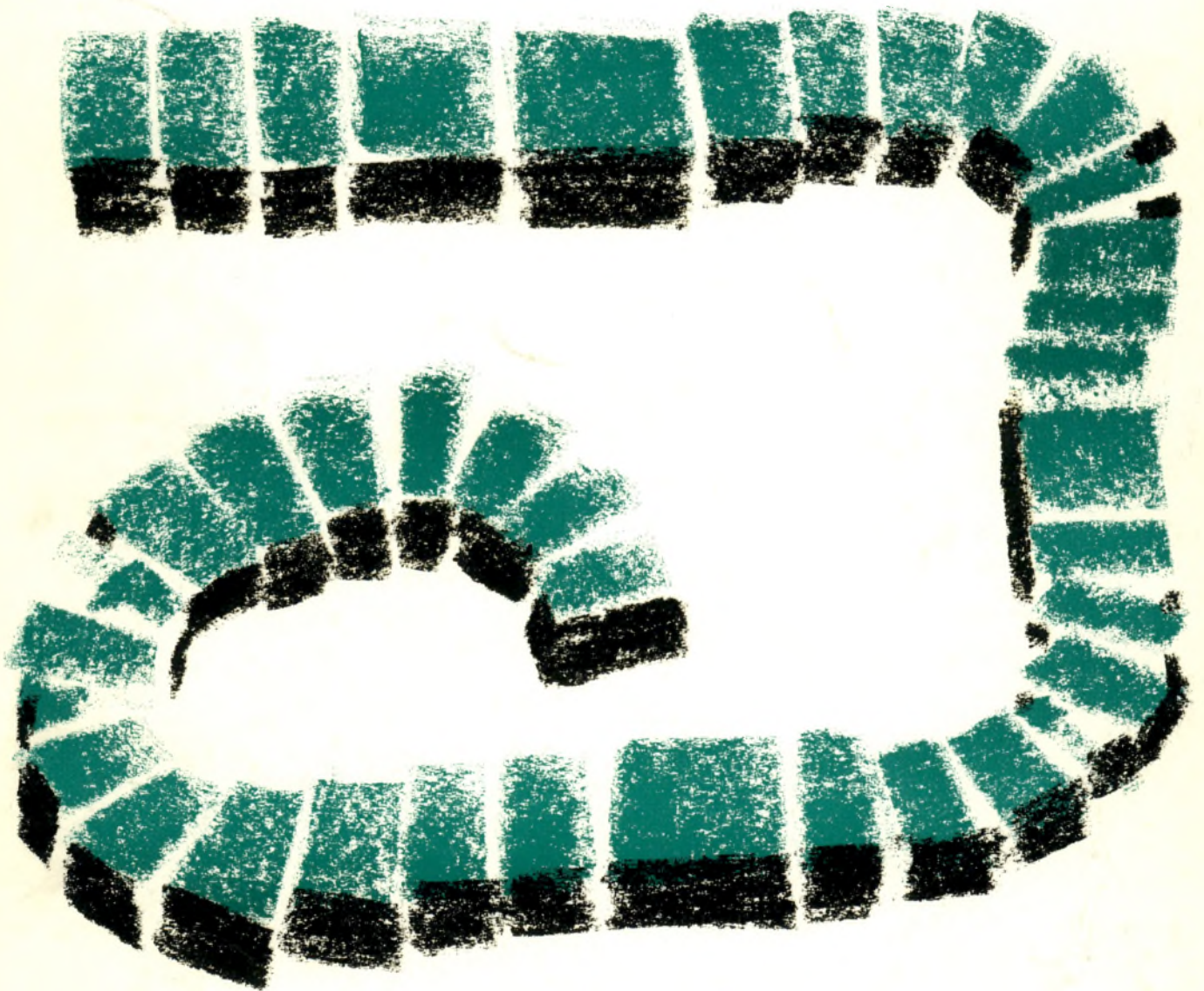
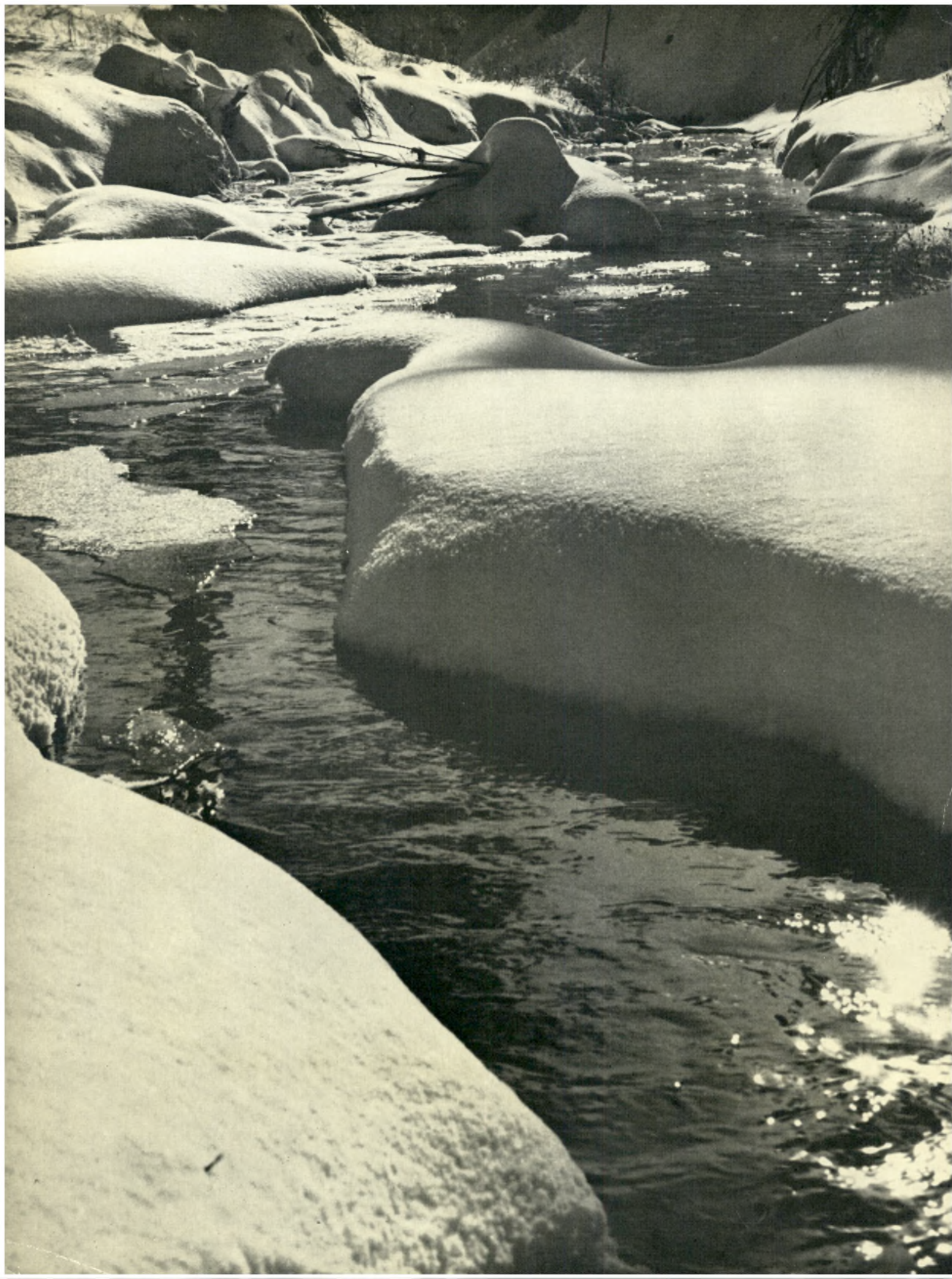


habitat



Jan. Feb. 1968



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habitat

After Centennial — What?

Last year was a magnificent party for Canadians. We showed our happiness and enthusiasm in a variety of ways, from the burning of outhouses in a small Manitoba community, to displays of fireworks on Parliament Hill in Ottawa; from a canoe race routed along some of our most historic rivers, to Hovercraft rides on the St. Lawrence; from receiving kings, queens, emperors and other distinguished overseas visitors, to the distinction of constructing for ourselves and the world a dazzling exhibition — Expo 67. The year was one celebration after another until, finally, we reached the end of it and, as one observer noted, "It seemed we almost celebrated ourselves out."

But now, with the noise of success still ringing in our ears, what do we do next? Perhaps we should remember the advice given to young cricketers when they make their first hundred runs: 'Raise your cap to acknowledge the applause, and then go on to make another hundred.'

Having accomplished one hundred Canadian years, we too, should acknowledge the generous applause that came to us last year. Then, with confidence born of a substantial achievement, we should turn to the many events — great and small — that will demand our efforts as we go on to make our second hundred. The maintenance of world peace; the building of great cities; the provision of good homes for everyone; the slow, difficult process of working out a way of life worthy of every Canadian.

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Inside Cover: "Promise of Spring"
by R. O. Lundgren

Que nous réserve le deuxième siècle?

L'année qui vient de s'écouler a été une année de réjouissances extraordinaires pour tous les Canadiens. Pour manifester leur joie et leur enthousiasme, les Canadiens de partout ont eu recours à des moyens différents: dans certaines petites localités du Manitoba, on a brûlé de vieux bâtiments extérieurs en guise de feu de joie alors que sur la colline du Parlement on présentait de grands spectacles à l'aide de pièces pyrotechniques. Ailleurs, on a organisé des courses en canoë le long de nos rivières les plus célèbres; d'autres se sont contentés de traverser le Saint-Laurent à bord d'un Hovercraft. Des rois, des reines, des empereurs et d'autres distingués personnages sont venus d'outre-mer nous visiter et visiter l'Exposition Universelle à Montréal. Les célébrations se sont succédées jusqu'à la fin de l'année et, comme le faisait observer quelqu'un, "il semble que nous nous soyons épuisés à célébrer".

Alors que résonnent encore dans nos oreilles les applaudissements et les accents joyeux, nous pouvons nous demander: "Qu'allons-nous faire maintenant?" Allons-nous nous contenter d'attendre le deuxième centenaire de la Confédération pour nous réjouir à nouveau? Ou bien, allons-nous faire comme l'athlète qui, ayant accompli un exploit et mérité des applaudissements, en remercie la foule et s'élance à nouveau pour faire encore mieux?

Bien sûr! Après avoir vécu ce premier centenaire, nous devons nous réjouir des succès obtenus et des applaudissements qu'on nous a généreusement adressés l'an dernier, mais, remplis de confiance à cause de nos réalisations du passé, nous devons nous tourner vers l'avenir et envisager avec fermeté et détermination les efforts que nous devons fournir pour vivre un deuxième siècle. Le maintien de la paix, l'édification de grandes villes, la construction de logements confortables et salubres pour toute la population, l'établissement d'un mode et l'un milieu de vie digne de tout Canadien, voilà le programme qui nous attend!

Fundamentally, a designer is faced with a series of choices, options and obligations. There is no escape from the decisions that have to be made in this process.

by Ronald C. Whiteley

Design: options and obligations

There is a fascination about the problem of a Theory of Design, not only in the sense of asking what is design all about, but rather, is there a rational basis upon which we set about this business of design?

In any theoretical study, a search for some generalized statement, the fundamental principle is the primary core of the problem. Does such a fundamental exist and, if it does, how can we hope to discover it? Are phrases like "commodity, firmness, and delight" or "form follows function," meaningful or merely superficial observations? Perhaps a definitive answer such as is suggested by these phrases is not possible. However, a fundamental understanding of the problem would, in itself, be a forward step in the attempt to establish a Theory of Design.

To trace some of the paths followed by persons with a keen interest in the subject will help to illuminate this area of human occupation.

At the first level, design has been con-

sidered chiefly in the visual sense, and theory seems to confine its efforts to analysis, synthesis, classification and appraisal. Defining terms becomes a very important part of theory; balance, symmetry, proportion, scale — terms that, once they are made clear, become the foundation of an aesthetic language. The concern is chiefly with the classification of objects outside man himself. It is the search for absolute yardsticks, for use in a variety of ways, to describe ideas, to judge and appraise finished products. It is an attempt to create standards and principles in an objective sense and also in an absolute sense. At the same time it seeks to elevate those who "know" design to an élite.

The fact that there never was any fundamental agreement as to terms and meanings or even as to who were and who were not of the élite, are really minor shortcomings. The major drawback is the lack of relationship between man and his world, hence we must peel down to a more basic level.

In an attempt to bring into sharper focus the man and his world aspect of the problem, we search for theory and the guiding principle in the realm of sociology, or geography or psychology. We believe that the key to design probably lies in the physical world with its interaction with the mental world and even with the world of the spirit. Isn't the problem of housing a sociological one, or an economic one, or an environmental one?

Obviously design is in all of these areas and also part of the whole body of human activity. But how is one to grasp this very complex picture, which seems to include everything, where boundaries are blurred and overlap is a constant

condition? The magnitude of the study and the wide range of possibilities seems to make the grasping of a viable design theory an impossible pursuit. Certainly, an understanding of the totality of design, and the interdisciplinary nature of it, is an important rediscovery. That function has a psychological side as well as a pragmatic one, is a noteworthy insight. However, in a way, this level of study also seems unsatisfactory. To some this is the moment of despair, and they become eloquent in proposing that our search is meaningless, that though there may be a design theory, it is not possible to discover it and hence we must discipline ourselves to get along without it. But this over-

looks that strange quality of human beings which makes them continue to struggle with, and be concerned about, seemingly impossible problems.

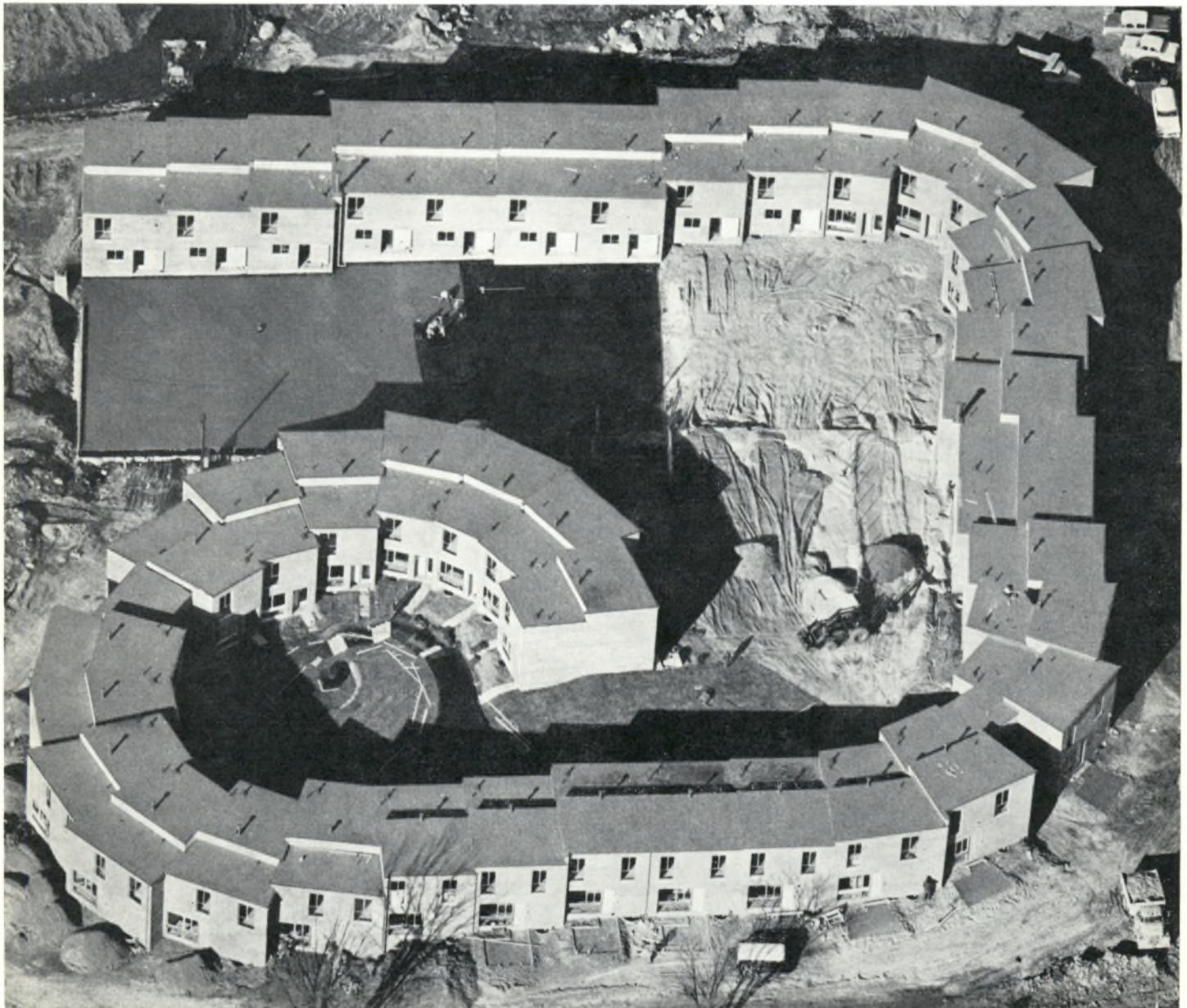
So we are led to inquire; what is the next level that we may conceive as being the plane upon which a theory of design may be built?

This is the level, I believe, that we begin to inquire into the nature of design itself. How does it work? How do we design? Some of the answers are found in the thoughts and ideas very current today in relation to method or process in design. The most widely held belief is that this process is something in the

nature of an analysis of the problem and a synthesis of our findings. It might be compared to a chemical problem; for instance, if we wanted to make table salt we would analyse it, find out the parts and the proportions, put them together and synthesize. This is an oversimplified analogy but as such describes the process as we might see it, in a design method. And what is important, it is very close to the mark.

Study of the process of design is a good beginning into the basic theory. We must learn more of how we set about problem solving in design. Diagrams and charts describing the method, studies of systems analysis are all significant

Geometry of the unfolding spiral was the site plan decision for the Oakdale Manor housing development in Toronto.



ant. In the long run, however, this too is not at the heart of the matter. If, at this level, we broaden out to include such ideas as systems of logic, or theories of communications, computer technology and so forth, we may be very close but, I believe, not quite at the most fundamental level.

Fundamentally, what is happening when we design? We have certain choices and we make some decisions, or we have some options and we are obliged to select from among them.

Design, in essence, is something that happens first in the mind as an idea. With this idea in mind, one may profitably return through the various levels and see how having or finding options and realizing one's obligations to choose, constitutes the real nature of our designing at any level.

When the process of design is described in terms of analysis and synthesis, what does this really imply? Undoubtedly in our analysis we find out what factors affect the problem, we try to discover what options we have and we select those which seem to us to "make sense" or are most rational, and we assign to them either in a vague manner or in a very consciously objective way, values relating to the importance of each factor. In the synthesis of our solution to the problem, we select from among many ways of doing it, those that seem to us to be the most appropriate.

Pursue this to another level. Let us agree that a major part of the problem of housing is a sociological one. This means we must see clearly that our options are in the sociological nature of the problem and we must select the sociological proposal that seems most logical or rational or economical, and then carry this same procedure of option and obligation forward into our building or planning problem. But then, how does a person involved in architectural design make decisions in a field like sociology? Usually the answer is that we don't, or that we make them without knowing anything about it. We should realize that some sociological decisions will be made, when we pro-



Above:

Rare Book Library at Yale represents decisions made very consciously viz. the square pattern and the 15 x 5 rectangles of marble.

Opposite:

Lanterns at the entrance of the Japanese Cultural Centre in Toronto, the materials used, the wall patterns — all were the result of very deliberate decisions.

Below:

Choice of a clock tower for the pivotal point of the Stevenage, England, town centre was the result of a competition. The entries represented the "choice-finding," and the eventual prize winner the "decision made."



STEVENAGE DEVELOPMENT CORPORATION



pose the architectural solution, whether we are aware of making it or not. One need only know what is considered an appropriate solution to the sociological problem by some professional in the field whose ideas and knowledge we respect or even by the insights of our own common sense.

For it is only after this decision has been made that we move again, in a design sense, from a problem to a solution, from a concept to a form.

Even thinking about design in visual terms we are involved in a multitude of options and the obligation to choose the most appropriate. Which structure should we use? What colour shall we paint it? What kind of balance would be most satisfying? Which two relationships of these three areas will accommodate the greatest number of students? We may never formulate the question in any kind of list or formal way but we find out what choices we have and we pick the one we consider most desirable or appropriate. It may be that we do this consciously or unconsciously, rationally or impulsively, in a clear and logical way or from some intuition or feeling. But we do it, and fundamentally this finding of choices

and making decisions is designing.

The implications of basing a theory of design on this broad general base are not so obvious as the generalization itself. Most people will find it easy to accept the thought that a meaningful basis of design is found in the idea that we find out the choices and decide which options to select. This is the ground in which ideas develop; indeed, it is how we get the ideas in the first place. However, we don't accept as readily what this implies in the process of design.

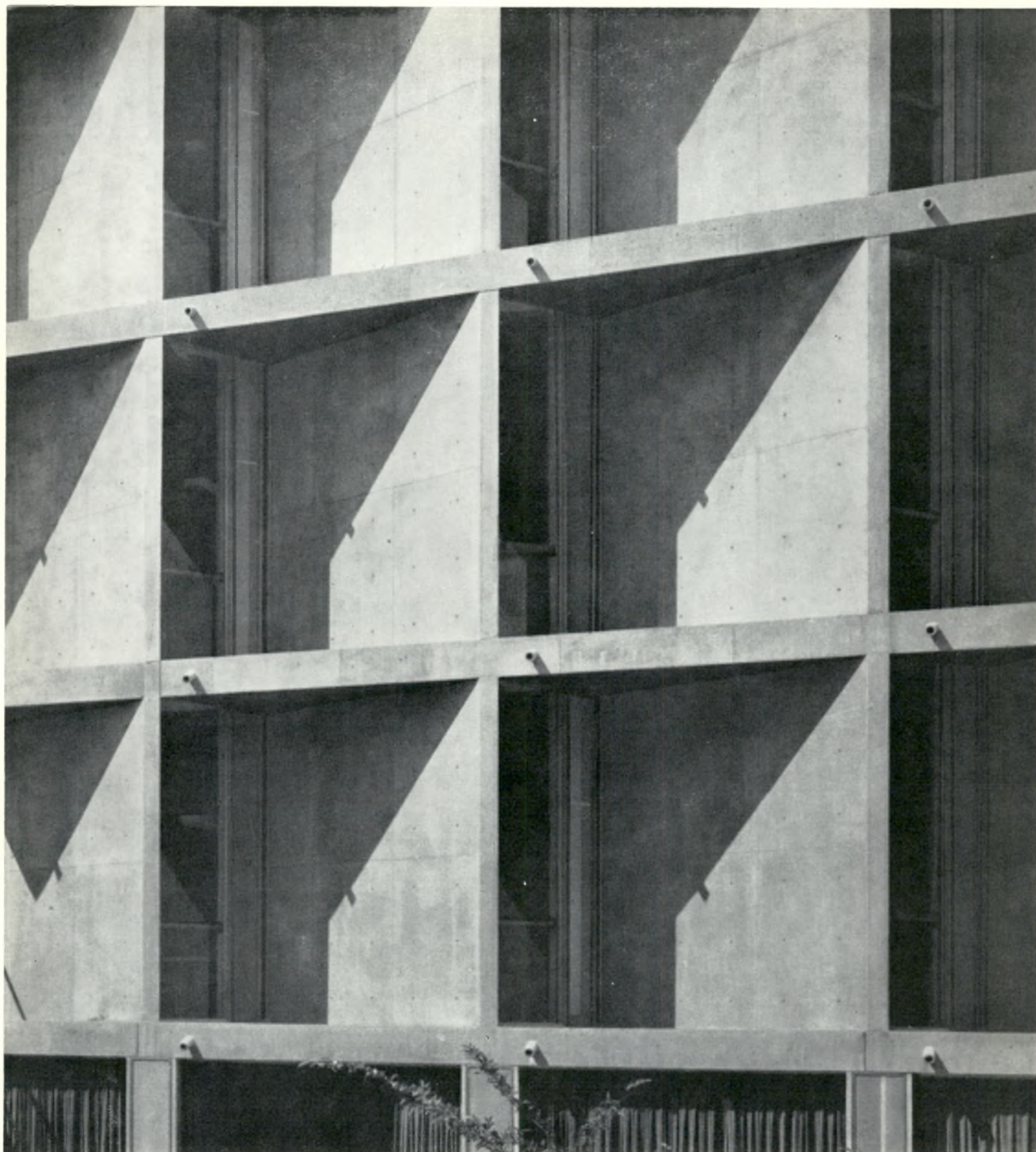
Without a doubt, one difficulty is to be found in the bias we will always have in discovering our choices and making our decisions. How often do we maintain that our choice of material be limited to brick, or to concrete, or precast and the limit is not set by the problem but by our bias? If, without attempting to evaluate this situation as either good or bad, desirable or very undesirable, we were conscious of what we were doing when we made our "choice — decision" operations, then at least we would not be guilty of trying to rationalize the situation and feeling more and more uncomfortable as the design became less straightforward. We would say we are

using brick because we want to do so. Also, if we remember Godel's theorem on formally undecidable propositions, we will realize that one way our bias will show itself, is in the way we find our choices. Are we really finding genuine choices when we propose that this is right for no other reason than that if we used this other way (a particularly bad one) we would bring about an undoubted disaster? Again, when we establish our problem or parts of the problem in such a way that no real choices exist, we have in fact an undecidable proposition.

Another element in the paradox of believing in principle but not in practice, is that of wanting to make what we call right decisions or to be certain with a high probability. This leads in many cases to the business of choice finding ad nauseam, because we don't want to proceed until we are absolutely sure, almost to the extent of believing that only a sworn affidavit by a recognized expert will be sufficient grounds to warrant a decision.

This impossible situation will never resolve itself automatically nor will the rightness of the decision ever be proved except in retrospect, and then it is too late. In some respects it is undoubtedly this desire to make only the best decisions that seems to be the reason why we need computers in design. This, too, is an illusion, for it is self-evident that if we limit the input to those things that we feel will have any effect on the answer, all we do is to transfer our original bias to the computer. So the answer will be no more right and true made this way than made as a rational decision by an individual. We must be satisfied with the most appropriate decision in the terms of what we know about our problem. No doubt it will always be the case that someone else, given more data and with greater knowledge and vision, will be able to make a better decision — he will also be able to find better choices.

This then is design; find your options and your choices, but remember what follows inevitably, be prepared to assume the obligation of choosing — for the two things are inextricably linked.



Le CORBUSIER

une oeuvre / un combat / un homme

par André Jardon

Tel était le thème de l'exposition que présentait, il y a quelque temps, le Musée de Québec en collaboration avec l'Ecole d'Architecture de Laval.

L'oeuvre complète de Le Corbusier a été publiée, disséquée; on en connaît généralement quelques titres de livres chocs:

"Une maison — un Palais"

"Quand les cathédrales étaient blanches"

"La maison des hommes"

quelques réalisations majeures:

—Le pavillon Suisse à la Cité Universitaire,

—Le couvent de la Tourette,

—Notre-Dame-du-Haut à Ronchamp,

—Chandigarh, capitale du Penjab;

quelques projets fabuleux, restés dans les cartons de par la mesquinerie, la bêtise ou pis encore la peur des gens bien en place:

—Le plan Voisin de Paris,

—Le projet de Palais pour la Société des Nations à Genève,

—Le projet d'urbanisation d'Alger.

Ce que l'on ignore plus souvent c'est l'Homme, bourru pour ne pas s'avouer sensible et généreux, préoccupé jusqu'à l'anxiété par le Bonheur de ses frères les Hommes. Toute sa vie est marquée par ses recherches sur l'habitat; toute son oeuvre est jalonnée de constructions résidentielles allant de l'humble maison pour artisan à la villa cossue (telle l'adorable "Maison Savoye" construite en 1929 à Poissy et qui sera trente ans plus tard, classée monument historique) et aux grands ensembles de Marseille, Nantes-Rezé, Berlin. C'était enfin, après la guerre, la réalisation d'un vieux rêve: construire sa "Ville Radieuse" sous forme d'un édifice de dix-sept étages sur pilotis, groupant quelques trois cent trente unités de types très différents, depuis la garçonnière jusqu'aux grands logements pour familles nombreuses; les appartements y sont construits sur deux étages comme une maison particulière; le bâtiment est desservi par cinq "rues intérieures" superposées dont, à mi-hauteur, la "rue commerciale"; sur le toit-terrasse, se trouvent l'école maternelle, la piscine, le gymnase, le bar-buffet.

Après la construction de "l'unité d'habitation" de Marseille, Le Corbusier fut poursuivi en correctionnelle par l'"Association pour l'esthétique générale de la France" qui lança un réquisitoire féroce contre cette "verruve profonde qui déshonore notre pays". La presse de l'époque, heureusement plus sage, conclut: "Tout cela s'apparente à la pitrerie à moins qu'il ne s'agisse d'une conjuration . . . Pourquoi n'a-t-on pas demandé l'avis de ceux qui déjà y habitent et qui, semble-t-il, s'accommodent fort bien des audaces d'un Architecte que Marseille a renoncé à appeler "Le Fada"¹.

Le rayonnement des écrits de Le Corbusier, de ses idées, de son oeuvre fut et reste immense; des milliers d'étudiants en architecture, de par le monde entier, ont rêvé du "Père Corbu" comme ils l'appelaient familièrement et, comme lui, grâce à lui, "sont entrés dans l'Architecture comme on entre dans les Ordres". La majorité des grands noms de l'Architecture actuelle le reconnaît comme le Maître et pourtant "c'est l'homme du passé et d'un passé depuis longtemps dépassé, disent de lui quelques jeunes gens qui savent tout sans avoir cherché à comprendre et proclament leur savoir avant de le montrer" (Claudius Petit).

A ces jeunes, à mon fils, Corbu adresse cet ultime et poignant message enregistré deux mois avant sa mort:

"Vas-y petit! Tu recevras bien assez de coups de pied dans le derrière pour savoir que tu fais quelque chose de bien. Vas-y! Vas-y! Réussir c'est faire quelque chose."

Pour Le Corbusier, l'"Architecture est un acte d'Amour"; de l'immense main ouverte qu'il éleva au centre de l'Agora de Chandigarh, il dit:

"Elle est ouverte puisque tout est présent, disponible, saisissable, ouverte pour recevoir, ouverte pour que chacun y vienne prendre."

¹Fada: Mot provençal signifiant: un peu fou, niais.



Twenty Years of Housing

CMHC 1946 -1966

Part III, by R. G. Lillie

Left:

Split-level house at Don Mills, Ontario was one of the first selected by the Canadian Housing Design Council to receive its Award of Excellence. The Council is a non-profit body whose charter was issued in 1957.

Opposite, right:

Standing on cleared land the Moss Park, Toronto high-rise apartments are the result of an early redevelopment project. This Federal-Provincial undertaking was one of seven started in Canada between the years 1955-1959. "Slum clearance" was the old-fashioned term used for such action, to-day the word is redevelopment. In many cases some very poor housing was destroyed, often to be replaced by such good accommodation as this.



CHDC

Housing Costs

During the five year period 1954-1959 the cost of Canadian housing increased very noticeably, with land rising higher in cost than construction. For the average house financed under the NHA, the construction cost per square foot rose by 10%, from \$9.81 per square foot to \$10.78, while the cost of the average lot rose nearly 40% from about \$1,800 to more than \$2,500. The cost-comparison for the lot is not exact; there was a tendency towards wider lots, and a higher level of services included in the land costs; but still, the real price rise was a very significant one. In 1955, land represented about 14% of the total cost of the house; in 1959, it was 17% of the total.

The total cost of the average NHA house was \$12,600 in 1955 and \$14,460 in 1959. Even so, this increase of almost 15% did not decrease the marketability of the houses for during this period the average income of NHA borrowers rose

by 10% while the average downpayment, about \$3,000 in 1955, had risen less than \$100 by 1959. The average mortgage loan was, of course, larger and correspondingly more expensive for the borrower, but because of the rise in incomes the gross debt service (monthly payments of principal, interest and taxes) which was nearly 19% in 1955, had risen to only 20% by 1959.

In 1955 the ratio of the NHA mortgage loan to the appraised value of the house was 90% of the first \$8,000 and 70% of the remainder. Therefore the loan granted on the average NHA house in that year would have been about 83% of its value.

In 1957 the ratio of loan to value was increased to 90% of the first \$12,000 of value and 70% of the remainder. So the average NHA house of 1959 would have had a loan of about 94% of value. During this period the interest rate rose from 5¼% in 1955 to 6¾% in 1959.



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Top:

Semi-detached houses at Kenora, Ontario were built on land serviced under the land assembly provisions of the National Housing Act. Although municipalities are responsible for the initiation of such projects, costs are financed jointly by the Federal and provincial governments with municipal participation.

Bottom:

Brick, timber and log cabin all benefited from repairs carried out with the aid of Home Improvement Loans. In 1955 there was an immediate public response when the legislative provision of this section of the National Housing Act was proclaimed, and during that year Canadian banks made 25,000 loans totalling nearly \$28 million.



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Canadian Housing Design Council

As the quantity of housing in the country increased rapidly, questions arose as to its quality. The soundness of construction was not called into question; the discipline of rigid adherence to the Minimum Building Standards for houses financed by NHA loans had been quite successful and had improved the standard of construction of all types of housing. But as new subdivisions and suburbs appeared, serious questions were asked about design; design, not only from the interior viewpoint of liveability, but from the exterior viewpoint of aesthetics.

One of the results of this concern was a meeting of a number of interested citizens at Ottawa in May 1956. They came from all parts of the country, from various industries and professions and they discussed the subject of design in relation to the growing urban problem. Although the subject was one of infinite complexity it was clear that something

could, and should, be done to improve the design of housing. The continuing role of public bodies, such as municipal planning councils and CMHC was discussed and it was felt strongly that an "outside" organization could play an important additional part. It was therefore decided to create the Canadian Housing Design Council as an independent non-profit body, and a charter was issued in 1957.

The Council is composed of members drawn from a wide geographical and occupational spectrum. Every other year the Council makes awards for design excellence in single-family and multiple housing and invites entries for this purpose. These awards are eagerly sought after by builders and architects and there is no question but that this, and the general interest aroused by the publicity surrounding the awards, has contributed to the betterment of housing design. The Council also issues publications on design, and sponsors public

lectures by distinguished persons in the design field. The permanent Secretary-Treasurer of the Council is an official loaned by CMHC, who also supply office space and administrative assistance.

Home extension and home improvement loans

The 1954 Act contained much the same provisions for guarantees of Home Extension Loans and Home Improvement Loans as the 1944 Act.

Home Extension Loans were made by banks to individuals wishing to alter existing properties in order to create additional self-contained housing units. The guaranteed loan was limited to \$3,750 for the first such unit and \$1,250 for each additional unit created. This provision has never been very popular, probably because such major alterations can usually be more adequately financed by conventional mortgage techniques. Less than 100 units have been created under this section of the Act.



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Home Improvement Loans are made to finance almost any type of improvement or repair. During the period of post war shortages the legislative provision for Home Improvement Loans had not been proclaimed, except temporarily in certain remote areas such as Yellowknife in the Northwest Territories. However in 1955, the relevant section of the Act was made general and there was an immediate public response. That year nearly 25,000 loans were made by the banks for a total of just under 28 million dollars, and over the five years ending 1959, guarantees for loans totalling over 160 million dollars were made.

Urban redevelopment

In this period, seven urban redevelopment projects were undertaken providing for the clearance of about 140 acres in the central areas of various cities. This was no small accomplishment, as public urban redevelopment was a new idea in Canada and proved to be extremely complex in practice. Even under the cost-sharing arrangements it was expensive for the cities concerned, but

the urgency was there. These early projects were mostly true slum-clearance, to use what is now an old-fashioned term, and some really terrible old housing was destroyed.

Even more significant than the actual number of projects undertaken in this period was the twenty-seven grants that were made for urban redevelopment studies; it was clear that the continuing problem of urban renewal was recognized and the number of towns and cities undertaking studies of the problem was very encouraging.

Direct construction activities

The Corporation continued to be heavily engaged as agent for various Federal Government agencies. In this period it was responsible for constructing some 7600 houses and 53 schools for the Department of National Defence and Atomic Energy of Canada Limited.

Public housing and land assembly

Progress in the construction of public housing continued, but not in a spec-

tacular way. About 3500 new units were started compared with 3000 in the previous 5 year period, and 5300 lots were serviced under the land assembly programme, compared with 4000 in the earlier five year period.

By the end of 1959 public housing projects had been started in seven of the ten provinces — the exceptions being Prince Edward Island, Manitoba and Alberta.

There were several factors which probably militated against a larger public housing programme. The public housing legislation was purposely designed so that the initiative for projects had to come from the municipality. The federal government undertook 75% of the cost; in most of the provinces the provincial arrangement was that the province shared with the municipality the other 25%. The municipalities in general were facing increasingly heavy costs for education and other essential municipal services, and taxes were rising quickly. Few municipalities felt that public

Opposite, left:

Due for demolition are houses like these in Halifax's Jacob Street area. Approval to proceed on this project was given in December 1957. Compare this scene with Toronto's Moss Park project, on page nine.

Top, right:

Public housing does not always mean high-rise apartments, as these mixed units at the Orchard Park Federal-Provincial project in Vancouver show. The undertaking was authorized in 1957.

Bottom, right:

School at Griesback Barracks, Edmonton was among the 53 built in various parts of Canada for the Department of National Defense and Atomic Energy of Canada Limited whose construction was the responsibility of CMHC. The Corporation also supervised the building of some 7600 houses for both these government bodies.



CMHC



CMHC

housing should take a high priority in their growing list of problems. It is more surprising that there was not a greater demand for land assembly projects. Using hindsight it is now obvious that many towns and cities would have benefited very greatly from a more aggressive approach to the problem of provision of serviced land. By the same token it could be argued that the senior governments should have given more leadership in this most important matter.

Housing starts and mortgage lending

The year 1955, the first full period of operations under the new National Housing Act, 1954, was a record one for housing in Canada. There was an increase in housing starts of more than 20% over the 1954 figure, the previous high. Completions were also a record, and at the end of the year there were more houses under construction than in any previous year.

More NHA loans were made than ever before and the units financed by

these loans were a greater proportion of total starts.

This banner year was also the tenth year of operation by the Corporation, and it is interesting to recapitulate briefly the housing accomplishments of those first ten post war years.

During the pre-war years 1935-39, the average number of housing starts each year was about 42,500; against this, the average for the first five post war years 1946-1950 was more than 82,000, and the corresponding figure for the period 1951-1955 was over 100,000.

In the ten year period, not more than a third of the housing units started received some form of financing under the various provisions of the National Housing Act, but it was the Act which provided the solid base on which the house building industry was able to grow to the necessary stature for such large scale annual housing production. The long term mortgage, the low interest rate, and the small downpayment all

helped to provide a firm market for a large number of moderately priced homes. The Government's acceptance of the ultimate mortgage risks encouraged the lending institutions to make more money available for financing housing, and the availability of direct government mortgage loans acted to some extent as a stabilizing influence against variations in the flow of institutional mortgage funds.

In the next five year period, 1956-1960, the average annual number of new starts increased greatly, from just over 100,000 to nearly 133,000. However, the change in this period was not a steady annual rise. In fact, the five years saw very wide fluctuations in the number of housing starts. The pace of the record year, 1955, was not sustained in 1956, when the volume of starts fell by 11,000 to just over 127,000. A further drop took place in 1957, down to 122,000. However, 1958 was a remarkable year, with nearly 165,000 housing units started. The volume declined in 1959 to about 141,000 and fell off, drastically, to about 109,000 in 1960.

Such fluctuations in housing starts are a frustrating feature of housing in Canada. There are a number of factors which can affect the volume of starts in any year — availability of mortgage funds, availability of serviced land, effective demand by purchasers and tenants, demand for construction labour and materials by other fields of construction, etc. When some, or all, of these factors are "plus" for housing, a good volume of starts results. If some are "minus" there is a drop in starts. To some extent the fluctuations tend to exaggerate themselves; thus, two low years in 1956 and 1957 contributed to a pent up demand which was one of the factors leading to a very high level of starts in 1958; this high volume, followed by another good year in 1959, must have saturated demand to an extent which was one factor in the very low number of starts in 1960.

One of the most powerful factors is the availability of mortgage funds. We have already seen how this flow varied in the early '50s; the main purpose of the 1954 Act was to introduce the banks to the mortgage lending field in the expectation that this would tend to stabilize variations in the mortgage fund flow. As it turned out, the banks invested quite heavily in mortgage loans and certainly added greatly to the total amount available; but their entry into the field did not smooth out the flow of funds. Subject as they were to the same

general money market conditions which influenced the other lenders, the bank funds may in fact have exaggerated the fluctuations of the mortgage money supply.

In 1957 the Government decided on more direct action to help with this problem, and the Corporation was allowed to engage in direct mortgage lending to a much greater extent than had been the case before 1957. By policy, direct Corporation loans had only been available to homeowners in remote locations, or those purchasing under certain special programmes such as Defence Workers housing. There had also been direct rental loans under the Rental Guarantee plan. In general, direct loans were only made where a special need existed which, for one reason or another, could not be satisfied by the institutional lenders. The volume had never been large enough to be considered a major factor in the mortgage market. In 1956, for example, CMHC direct mortgage commitments were only 2% of all mortgage loans for new housing. In 1957 they were nearly 25%, and they have continued ever since to be a major source of mortgage funds.

Corporation organization

By 1956 the Corporation had been in operation for ten years and was performing a wide variety of operations all across the country. The main activities

were loan insurance, real estate management, mortgage administration, construction, public housing and land assembly, and housing research and community planning. All these were significant functions, but the relative importance of each might vary from time with national circumstances. Some, like housing research, were functions which could best be exercised by centralized action at Head Office; others, like loan insurance, necessarily had to be decentralized. Although the strong Head, regional and branch office structure which had been built up proved adequate to cope with the Corporation's problems, it was felt a review of the organization was necessary.

A long established management consultant firm was engaged to conduct the review and its findings were largely completed by mid-1957. As a result, changes were made calculated to increase the efficiency and flexibility of the organization and reduce staff and costs. In general terms, the reorganization gave greater operating responsibilities and authority to the branch and loans offices, and gave the regional offices supervisory and administrative functions rather than operating ones. The change to the new organization, which involved, among other things, the closing of some field offices and the opening of others, was carried out on a smooth, phased basis and was completed by the spring of 1958.

Vingt années d'habitation

la SCHL de 1946 à 1966 TROISIÈME CHAPITRE par P. G. Lillie



CCH

Le coût de l'habitation

De 1954 à 1959, le coût de l'habitation au Canada augmenta d'une façon très sensible. Il faut dire, toutefois, que le coût du terrain augmenta plus que le coût de construction lui-même. Dans le cas d'une maison ordinaire, financée aux termes de la LNH, le coût de la construction par pied carré augmenta de 10 p. 100, soit de \$9.81 à \$10.78. Par ailleurs, le coût d'un terrain ordinaire augmenta en moyenne de près de 40 p. 100, soit d'environ \$1,800 à plus de \$2,500. Toutefois, la comparaison des coûts du terrain n'est pas tout à fait exacte; en effet, au cours des années, on a prévu graduellement des terrains plus larges et on a inclus dans leur coût un plus grand nombre de services. Toutefois, l'augmentation du prix réel fut considérable. En 1955, le terrain représentait environ 14 p. 100 du coût total de la maison, tandis qu'en 1959, il représentait 17 p. 100 de ce total.

Le coût total d'une maison construite

aux termes de la LNH était en moyenne de \$12,600 en 1955 et de \$14,460 en 1959. Cependant, cette augmentation de près de 15 p. 100 n'a pas nui en réalité à la mise en marché des maisons. Durant cette période, le revenu moyen des emprunteurs aux termes de la LNH augmenta de 10 p. 100. La mise de fonds initiale moyenne qui était de \$3,000 en 1955, n'avait pas augmenté de plus de \$100 en 1959. Le prêt hypothécaire moyen qui était évidemment plus élevé, coûtait plus cher aux emprunteurs; toutefois, étant donné l'augmentation des revenus mentionnés plus haut, l'amortissement brut de la dette (par le paiement de mensualités comprenant principal, intérêt et taxes) qui s'élevait à près de 19 p. 100 en 1955 n'atteignit que 20 p. 100 du revenu des emprunteurs en 1959.

En 1955, le pourcentage des prêts hypothécaires consentis en vertu de la LNH par rapport à la valeur prise de la maison était égal à 90 p. 100 des pre-

Ce joli bungalow construit à Sainte-Foy (Québec) a été primé par le Conseil canadien de l'habitation. Cet organisme a été formé sans but lucratif, uniquement en vue d'assurer la construction de maisons confortables et belles. Sa charte date de 1957.

miers \$8,000 et à 70 p. 100 du reste. Ainsi, le montant du prêt accordé pour un maison moyenne construite aux termes de la LNH au cours de cette année-là était égal à environ 83 p. 100 de sa valeur.

En 1957, le pourcentage du prêt consenti par rapport à la valeur fut porté à 90 p. 100 des premiers \$12,000 de la valeur et à 70 p. 100 du reste. Ainsi, la maison moyenne en 1959 pouvait bénéficier d'un prêt d'environ 94 p. 100 de sa valeur, aux termes de la LNH. Durant la période à l'étude, le taux d'intérêt passa de 5¼ p. 100 en 1955 à 6¾ p. 100 à la fin de l'année 1959.

Le Conseil canadien de l'habitation

A mesure que la quantité des maisons construites dans notre pays augmentait rapidement, on s'est demandé si la qualité des logements était suffisante. Il ne s'agissait pas surtout de s'inquiéter de la solidité de la construction; la discipline d'adhésion stricte aux normes



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minimales de construction que l'on avait fait observer pour les maisons financées en vertu de la LNH, avait donné de bons résultats et avait permis d'améliorer la qualité de la construction de tous les genres de maisons. Cependant, à mesure que de nouveaux lotissements et de nouvelles banlieues furent conçus et aménagés en nombres de plus en plus considérables, on s'est posé de graves questions au sujet du plan et de la conception des maisons, non seulement afin d'en rendre l'intérieur plus habitable mais afin aussi d'augmenter le degré d'esthétique de l'extérieur.

Cette préoccupation eut pour résultat de réunir à Ottawa, au mois de mai 1956, un certain nombre de citoyens intéressés à cette question. Des représentants de toutes les parties du pays, des diverses industries et professions discutèrent en effet la question de l'esthétique en rapport avec le problème de plus en plus grave de l'aménagement des villes. On reconnut que cette ques-

tion était d'une infinie complexité, mais qu'il était possible et surtout nécessaire de tenter d'améliorer les modèles de maisons. On discuta du rôle que jouent les organismes à caractère public, comme les commissions municipales d'urbanisme et la SCHL, et l'on en vint à la conclusion qu'il faudrait un organisme désintéressé pour jouer un rôle supplétif.

Il fut donc décidé de former le Conseil canadien de l'habitation comme organisme indépendant sans but lucratif et une charte fut donnée à cet organisme en 1957. Le conseil se compose de personnes appartenant à tout un éventail d'occupations très variées et venant d'une grande variété de milieux géographiques. A peu près chaque année, depuis son établissement, le Conseil a organisé des concours en vue d'attribuer des prix pour les modèles de maisons unifamiliales et les modèles d'habitations multifamiliales qui présentent le plus haut degré d'excellence. les constructeurs et leurs architectes recherchent

ces prix et il ne fait aucun doute que les concours eux-mêmes, ainsi que l'intérêt qu'ils soulèvent au sein du grand public grâce à la publicité qui a été faite, ont contribué à l'amélioration des modèles de maisons. Le Conseil publie aussi certaines brochures et revues sur l'esthétique du logement et patronne des conférences publiques données par des personnes qui se sont fait une réputation dans ce domaine. Le secrétaire-trésorier permanent du Conseil est un fonctionnaire détaché de la SCHL; celle-ci lui fournit, cependant, les bureaux et l'aide administrative dont il a besoin.

LES PRÊTS POUR L'AGRANDISSEMENT ET L'AMÉLIORATION DE MAISONS

La Loi de 1954 renfermait à peu près les mêmes dispositions que la Loi de 1944 en ce qui concerne la garantie des prêts pour l'agrandissement et l'amélioration de maisons.

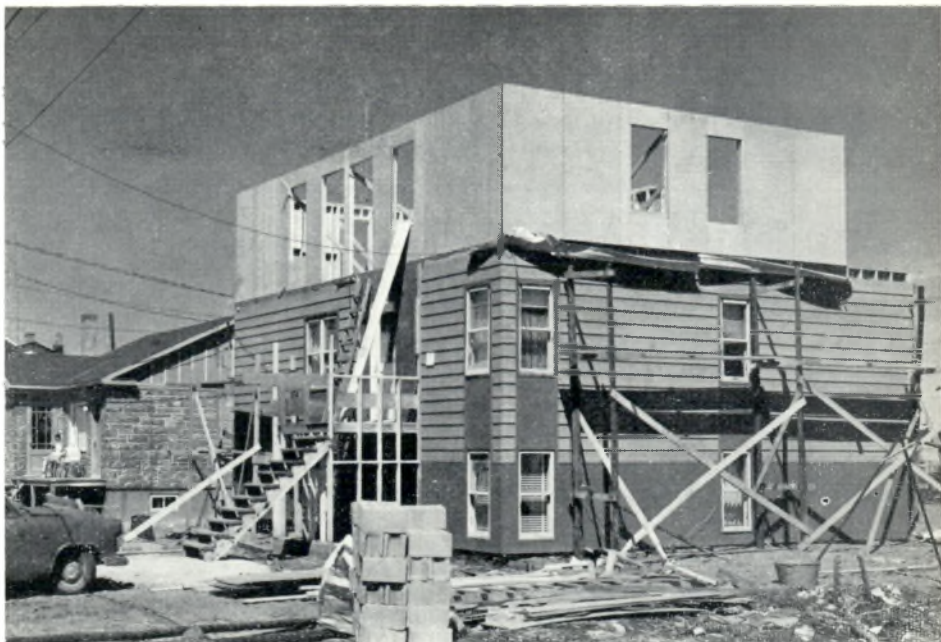
Les prêts pour l'agrandissement de maisons étaient consentis par les

Gauche:

A Montréal, le réaménagement d'un secteur d'un quartier populaire nous a apporté les Habitations Jeanne-Mance. Autrefois, l'action des institutions publiques se limitait à la démolition des taudis; de nos jours, nos gouvernants pensent en termes de réaménagement des quartiers vétustes. Dans bien des cas, il faut déblayer complètement un secteur pour y édifier des habitations où il fera bon vivre.

Droit:

Grâce à un prêt pour l'amélioration des maisons, un propriétaire de Sept-Iles a ajouté un étage à sa maison pour l'agrandir en vue de satisfaire aux besoins nouveaux de sa famille grandissante.



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banques aux personnes qui désiraient remanier leur propriété de façon à y ajouter un ou plusieurs logements complets. Le prêt maximal prévu à cette fin et aux fins de la garantie était de \$3,750 pour le premier logement ainsi ajouté et de \$1,250 pour chaque logement supplémentaire. Cette disposition n'a pas été appliquée fréquemment, sans doute parce que plutôt que d'effectuer des modifications aussi importantes à une maison, il est plus simple et plus facile d'avoir recours à un prêt hypothécaire conventionnel. En réalité, le nombre de logements réalisés en vertu de cet article de la Loi n'a même pas atteint la centaine.

Les prêts pour l'amélioration de maisons ont pour but de financer tous les genres d'améliorations ou de réparations. Durant la période d'après-guerre où les matériaux de construction étaient rares, cette disposition de la Loi n'avait pas été promulguée, sauf temporairement, dans certaines régions éloignées comme à Yellowknife, T. N.-O. Cependant, en 1955, l'application de cet article particulier de la Loi a été rendue générale et la réaction ne s'est pas fait attendre. Dès cette année-là, en effet, près de 25,000 prêts de ce genre furent consentis par les banques, ce qui représentait une valeur d'environ 28 millions de dollars. Durant la période de cinq ans qui s'est terminée en 1959, la valeur globale des prêts que la Société a garantis dépassait 160 millions de dollars.

LE RÉAMÉNAGEMENT URBAIN

Durant cette même période, sept programmes de réaménagement urbain furent entrepris en vue de déblayer au total environ 140 acres dans des secteurs situés au centre de diverses grandes villes de notre pays. Ce ne fut pas une tâche facile vu qu'à ce moment-là, le réaménagement urbain à l'aide de fonds publics était une idée tout à fait nouvelle au Canada et dont l'application s'avérait extrêmement complexe. En dépit des arrangements qui pouvaient être pris pour partager les coûts, ce genre d'activité coûtait énormément cher aux villes, mais il existait indéniablement un état d'urgence. Ces premiers programmes consistaient surtout à démolir des taudis, ce qui n'est plus le cas maintenant, et il est vrai qu'on a détruit à ce moment-là des maisons vraiment vétustes et délabrées.

Toutefois, ce qui importe encore plus que le nombre de programmes entrepris dans cette période, c'est le fait que le gouvernement fédéral a accordé vingt-sept subventions pour permettre qu'on fasse des études de réaménagement urbain. Il était évident qu'un peu partout on avait conscience de la nécessité de faire de la rénovation urbaine; aussi, vu le nombre grandissant de villes qui désiraient faire l'étude de leur situation et surtout de leur problème, l'avenir s'annonçait de plus en plus prometteur.

LA CONSTRUCTION DIRECTE PAR LA SOCIÉTÉ

La Société a continué d'exécuter un fort volume de construction à titre d'agent de divers organismes du gouvernement fédéral; ainsi, durant la période à l'étude, elle a fait construire environ 7,600 maisons et 53 écoles pour le compte du ministère de la Défense nationale et pour l'Energie atomique du Canada Limitée.

LES LOGEMENTS SOCIAUX ET L'AMÉNAGEMENT DE TERRAINS

De 1954 à 1959, on a continué de construire un certain nombre de logements sociaux mais d'une façon bien modeste. Environ 3,000 logements de ce genre furent mis en chantier, comparative-ment à 3,500 au cours des cinq années précédentes; d'autre part, 5,300 terrains furent pourvus des services comparativement à 4,000 durant la période précédente.

A la fin de l'année 1959, on avait amorcé des programmes de logements sociaux dans sept des dix provinces — l'Île-du-Prince-Édouard, le Manitoba et l'Alberta faisant exception.

Un certain nombre de facteurs ont probablement contribué à restreindre le programme de logements sociaux. Les dispositions de la Loi relatives à ce programme avaient été conçues à dessein pour que l'initiative de ces projets soit prise par les municipalités en cause. Le gouvernement fédéral s'engageait à payer 75 p. 100 du coût; dans la plupart des provinces, en vertu d'une certaine entente, celle-ci partageait avec la municipalité en cause le paiement du reste du coût, soit 25 p. 100. Toutefois, les municipalités à ce moment-là se voyaient obligées de payer des frais accrus considérablement pour l'éducation et pour d'autres services municipaux essentiels; aussi, les taxes augmentèrent rapidement. Très peu de municipalités placèrent la question des logements sociaux à la tête de leur liste de problèmes municipaux. Il est plus étonnant qu'on n'ait pas songé à réaliser un plus grand nombre de programmes d'aménagement de terrains. Si on jette un regard en arrière, il paraît maintenant évident qu'un bon nom-

bre de villes auraient grandement profité de l'aménagement d'une bonne étendue de terrains pourvus des services. Evidemment, on pourrait aussi dire que les gouvernements supérieurs auraient dû prendre les devants et insister davantage eux-même sur cette question très importante.

LA MISE EN CHANTIER ET LES PRÊTS HYPOTHÉCAIRES

L'année 1955, qui fut la première année complète d'activité en vertu de la nouvelle Loi de 1954 sur l'habitation, fut une année de production record dans le domaine de l'habitation au Canada. En effet, les logements mis en chantier accusèrent une augmentation de 20 p. 100 par rapport au chiffre de 1954 qui était alors le plus élevé. Le nombre de logements parachevés et le nombre de logements en voie de construction à la fin de l'année atteignirent aussi un niveau sans précédent.

Le volume des prêts consentis aux termes de la LNH fut plus considérable que jamais auparavant et la proportion de ces prêts par rapport au total des logements commencés fut également la plus élevée.

Cette année exceptionnelle était la dixième année d'existence de la Société; aussi, il me semble approprié de récapituler rapidement les réalisations de ces dix années d'après-guerre dans le domaine de l'habitation.

Durant les cinq années qui précédèrent la guerre, soit de 1935 à 1939, 42,500 logements en moyenne étaient mis en chantier chaque année; pour les cinq premières années d'après-guerre, soit de 1946 à 1950, cette moyenne dépassait 82,000 tandis que le chiffre correspondant pour la période de 1951 à 1955 dépassait 100,000.

Au cours de cette période de dix ans, pas plus d'un tiers de tous les logements commencés bénéficièrent d'une forme quelconque d'aide financière prévue par la Loi nationale sur l'habitation; toutefois, ce fut la Loi qui constitua le fondement principal sur lequel s'édifia l'industrie de la construction d'habitations, jusqu'à ce qu'elle atteigne l'importance nécessaire qui lui a permis de produire annuellement un

Droit:

Voici des maisons de l'aéroport de Rockcliffe, près d'Ottawa, qui ont été construites sous la surveillance de la SCHL; celle-ci se charge aussi de diriger la construction d'ensembles de logements dans des villes champignons isolées des grandes centres.

volume aussi considérable d'habitations. Le prêt hypothécaire à longue échéance, le taux d'intérêt et la mise de fonds initiale peu élevés sont autant de facteurs qui ont aidé à établir un marché stable de maisons à prix moyen. Le fait que le gouvernement acceptait d'assumer en dernier lieu le risque hypothécaire encouragea les institutions prêteuses à investir plus d'argent dans le financement de l'habitation; d'autre part, les prêts hypothécaires directs du gouvernement fédéral ont stabilisé jusqu'à un certain point les variations qui se sont produites dans la disponibilité de deniers hypothécaires provenant des institutions de financement.

Au cours des cinq années suivantes, soit de 1956 à 1960, la moyenne du nombre de logements mis en chantier chaque année augmenta considérablement, soit de 100,000 ou un peu plus à près de 133,000. Cependant, cette augmentation n'a pas été constante et régulière. En effet, au cours de cette période, le nombre de logements mis en chantier a subi d'assez fortes fluctuations. Le nombre record atteint en 1955 ne s'est pas maintenu en 1956, alors que le volume des logements commencés diminua de 11,000 unités



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pour dépasser à peine le chiffre de 127,000. En 1957, cette baisse continua et le chiffre total ne fut que de 122,000. Cependant, l'année 1958 fut une année remarquable alors que près de 165,000 logements furent mis en chantier. Le volume baissa de nouveau en 1959 à environ 141,000 et, d'une façon presque alarmante, jusqu'à environ 109,000, l'année suivante.

De telles fluctuations dans le nombre de logements mis en chantier constituent une caractéristique assez décevante de l'habitation au Canada. Un certain nombre de facteurs peuvent faire varier le volume des logements commencés au cours d'une année; il y a, par exemple, la disponibilité de deniers hypothécaires, la disponibilité de terrains pourvus des services, la demande réelle des acheteurs et des locataires, la demande de main-d'oeuvre et de matériaux de construction par d'autres domaines de la construction, etc. Lorsqu'un certain nombre ou la totalité de ces facteurs jouent en faveur de l'habitation, il en résulte un fort volume de logements mis en chantier; dans le cas contraire, on accuse une baisse. Ces fluctuations ont tendance à s'accroître elles-mêmes jusqu'à un certain point; ainsi, les deux mauvaises années de 1956 et de 1957 ont contribué à produire

une demande continue qui est devenue un des principaux facteurs permettant d'atteindre un niveau très élevé de logements commencés en 1958; ce volume élevé, suivi d'une autre bonne année en 1959, a sans doute saturé la demande au point d'être une des raisons qui ont entraîné la réduction de la mise en chantier en 1960.

Parmi les facteurs les plus importants déjà mentionnés, signalons la disponibilité de deniers hypothécaires. Nous avons déjà vu comment cette disponibilité avait varié au début des années 50. Le but principal de la Loi de 1954 était d'engager les banques dans le domaine des prêts hypothécaires ce qui, selon les prévisions, devait avoir pour effet de stabiliser les variations dans la disponibilité de fonds hypothécaires. En réalité, les banques ont investi de grosses sommes dans les prêts hypothécaires et elles ont certainement ajouté énormément à la disponibilité de ces fonds; toutefois, leur participation n'a pas du tout contribué à stabiliser cette disponibilité. Du fait qu'elles étaient aussi assujetties aux conditions générales du marché des valeurs qui influençaient les autres prêteurs, on pourrait sans doute dire que les fonds investis par les banques ont peut-être au contraire accentué les fluctuations

dans la disponibilité des derniers hypothécaires.

En 1957, le gouvernement décida de prendre des moyens plus directs pour aider à régler ce problème. La Société fut donc autorisée à consentir beaucoup plus de prêts directs qu'elle n'avait pu le faire jusqu'à ce moment-là. Selon la politique établie, les prêts directs de la Société n'étaient offerts qu'aux propriétaires de maisons qui habitaient des endroits éloignés ou qu'aux personnes qui achetaient une maison en vertu de certains programmes spéciaux comme le programme établi pour loger les ouvriers de la Défense. Des prêts directs avaient aussi été accordés pour la construction de logements à loyer en vertu du programme des garanties de loyer. D'une façon générale, des prêts directs n'étaient consentis que dans les cas où il existait un besoin particulier que, pour une raison ou pour une autre, les institutions prêteuses ne pouvaient pas satisfaire.

Toutefois, le volume de ces prêts directs n'avait jamais été assez considérable pour constituer un facteur important sur le marché des prêts hypothécaires. En 1956, par exemple, les prêts directs consentis par la SCHL ne représentaient que 2 p. 100 des prêts



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Ces maisons de Gagetown, au Nouveau-Brunswick, comptent aussi parmi les 7,600 maisons qui ont été construites à divers endroits du pays sous la surveillance de la SCHL pour loger les employés du ministère de la Défense nationale et de l'Énergie atomique du Canada, Limitée.

hypothécaires consentis pour la nouvelle construction. En 1957, cette proportion avait atteint presque 35 p. 100 et depuis ce temps, les prêts directs ont continué à être une source importante de deniers hypothécaires.

L'organisation de la Société

En 1956, la Société, qui comptait dix années d'existence, s'était livrée à de nombreuses formes d'activité d'un bout à l'autre du pays. Il faut mentionner entre autres l'assurance des prêts, la gestion des propriétés immobilières, l'administration des prêts hypothécaires, la construction de logements sociaux et l'aménagement de terrains, ainsi que les recherches sur l'habitation et l'aménagement des collectivités. Ces différents domaines avaient chacun leur importance qui pouvait varier,

toutefois, suivant les époques et suivant la situation qui prévalait au pays. Certaines de ces attributions, comme les recherches sur l'habitation, ont fait l'objet d'une action centralisée au Siège social; quant à d'autres, comme l'assurance des prêts, il fallait nécessairement les décentraliser. Même si l'organisme bien structuré qui comprenait le Siège social, les bureaux régionaux et les succursales semblait répondre d'une façon satisfaisante aux besoins de la Société, il fut jugé nécessaire, à un moment donné, d'examiner à nouveau l'organisation de la Société.

On retint donc les services d'une firme d'experts dont la réputation est établie depuis longtemps dans le domaine de l'administration pour faire cet examen qui dura jusque vers le milieu de

l'année 1957. A la suite de cette étude, on apporta des changements qui avaient pour but d'augmenter l'efficacité de la Société et de rendre son organisation plus flexible tout en réduisant le nombre d'employés et les coûts d'administration. D'une façon générale, après cette réorganisation, les attributions et l'autorité des succursales et des bureaux de prêts ont été accrues, tandis que les fonctions des bureaux régionaux ont pris un caractère de surveillance et d'administration plutôt que de participation directe à l'activité. Le changement occasionné par la réorganisation, qui nécessitait par exemple la fermeture de certains bureaux locaux et l'établissement de certains autres, s'effectua sans heurts et tout fut terminé au printemps de 1958.



Ellum Entry.

Londoners I loathe
for instance their lamentably
unnatural apathy
towards nature
not knowing their trees
and being so damn weatherfoolish

But this lad when I asked
Do you know what tree this twig comes from
who replied A big tree
had the right idea
the bright rhyming answer
and couldn't have been righter
 or brighter
if he'd come out with the botanical name
 the elm **was** a big tree

is a big tree
always will be a big
bigamous (? — certainly not bigoted)
bigarreau (not)
bignonia (not)
bifurcated
bighorn-bucked-by
tree

Some
Londoners I love

Terence Heywood.



The vegetation of Prow Mountain is almost unchanged since the 1880's. Situated in the Red Deer River valley, Banff National Park, it is one of the comparatively few areas where fires, lumbering, mining and other processes did not affect considerable change during the nineteenth and twentieth centuries. The Red Deer valley is therefore close to the "original or untouched landscape" ideal of the National Park movement. For this and other reasons careful thought should be given to a transit route at present being considered for construction there.

As population, technology, income, leisure, and other influences grow, and the desire for outdoor recreation and travel rises, the pressure on the wildlands increases. In few places is this pressure more apparent than in Western Canada, particularly the British Columbia-Alberta border. Within these lands themselves, the pressure centres on the National Parks, whose use has long included many kinds of recreation, and on a scale that did not seriously detract from their uncivilized or "wilderness" image.

by J. G. Nelson

Spoiling the landscape

Despite claims to the contrary, the National Parks, by and large, are not "untouched" or "original" landscapes little changed since Indian days, but rather areas removed slowly and arduously from various kinds of extractive use. Like many other lands, their animal life and vegetation were changed by trapping, hunting, lumbering, mining, burning and other activities and effects of the white man in early pioneer days. Unlike other lands, however, the National Park areas have been managed under a gradually developing policy of protectionism which has resulted in regrowth of vegetation, the return of animal life and other changes associated with the wild character of the National Parks of today. The National Parks are, therefore, unique not so much because of their "original" character, but because protectionism has allowed the development of a wild landscape unlike that of other areas managed for commercial or subsistence purposes. Such protected lands are increasingly rare today, and will be more so in future as population, rising living levels and other influences cause us to make greater and greater changes in our environment.

The recreational industry has been a major exception to the policy of excluding commercial industry from National Parks, such as Banff. Until the last decade or so, the government policy of promoting both protectionism and recreation has not created major problems.

However, since World War II, in particular, changes in population and in the other influences mentioned earlier, have caused a great surge in recreation, particularly in tourism. Plans are now being made for the expansion of facilities at places such as Lake Louise. More roads, motels, and other urban amenities have been constructed or are being planned, and the demand for more is increasing. Clearly, facilities associated with certain types of recreation are now threatening the wild character of the park landscape. Recreation, long the handmaiden of protectionism, is now increasingly incompatible with that policy. One result is that citizens who wish to protect the National Parks are beginning to look on the development of motels, roads and other facilities as the same kind of threat to the wild landscape as lumbering, mining, and other similar enterprises. On the other hand, some see National Parks, such as Banff, as being large enough to accommodate an increase in recreation of all kinds.

The idea that National Parks are large and able to accept much more in the way of ski runs, roads and other facilities is a dangerous one. The "large area" concept has been one of the basic ideologies in our settlement of Canada so far. But increasing evidence shows this concept is less tenable in the face of increasing pressures for recreational land. Unfortunately, we have relatively little data on the scale of the demand

for future recreational land in Canada. However, statistics from the Report of the Outdoor Recreation Resources Review Commission of the U.S. are helpful here. In a section called, *How Great Will The Demand Be?* we find the following pertinent remarks:

"The most basic factor, of course, will be the number of people. Barring a war or other catastrophe, it seems very likely that the population will virtually double — from about 120 million today (1960) to approximately 230 million by 1976, and to 350 million by the year 2000 . . . It will be a more concentrated population; compared to 63% in 1960, about 73% of the people will be living in metropolitan areas by the year 2000. There will be more young people, the proportion of those in the 15-24 age bracket — the most active of all — will grow from the current 13% of the total to about 17% by 1976.

At the very least these figures suggest a doubling of demand by 2000 even if participation did not increase. But it will. Studies of other plans indicate that in the years ahead the individual will be participating a great deal more in recreation than he does now.

Incomes, for one thing, will be higher. For the projected annual growth rate of gross national product of 3.5% disposable consumer income is expected to rise from 354 billion in 1960 to 706 bil-

lion in 1976 and 1,437 billion by 2000 . . . People will have more time. By 1976, it is estimated that the standard schedule of work week will average 36 hours for the entire industrial work force versus 39 hours in 1966. By 2000 it may be down to 32 hours. Much of the extra time will go to recreation;

The forecast of travel suggests an enormous expansion . . . The number of passenger cars is projected at 100 million by 1976 — an increase of nearly 80% above the number registered in 1959, — by 2000 the number is expected to grow by as much again. The new degree of mobility should be very impressive indeed, and among other effects, this will inevitably increase the pressure on recreational sites that now seem remote."

Not only is the overall demand for recreation important, but also the demand for different kinds of recreation. Recreation can be divided indefinitely by kind so that downhill skiing, cross country skiing, swimming, golf, motor boating, fishing, hiking, bird watching, photography and so forth are considered as separate activities. However, it is useful, in thinking of the National Parks problem, to define two basic kinds of recreation; that based on the use of facilities and that requiring few or no facilities. Thus, the downhill skier or the motor boater needs roads, parking lots, tows and marinas, while the photographer or hiker needs little beyond a rude trail. To complete the basic distinction in kind, recreation, based on facilities, also is generally associated with the noise and commotion of an urban atmosphere, whereas hiking or photo-hunting is generally associated with quiet and isolation.

Many people feel that zoning will permit the accommodation of these two basically different types of recreation within the National Parks. Certainly, zoning will have to be used, if only to control those types of land use already in the parks, for example, areas for intensive camping like Tunnel Mountain near Banff townsite because destruction of vegetation is often characteristic of such campsites. Also, certain areas of sensitive vegetation in high



GEOLOGICAL SURVEY OF CANADA: S. J. THOMPSON COLLECTION

At Kicking Horse Pass in the 1890's bare-pole forests covered much of the valley, which was also marked by the growing town of Field. This was in contrast to the early 1880's when the vegetation of the area was unaffected by fires. The coming of the railroad changed this, with fires being started by sparks thrown from the early wood-burning engines. As of 1967 the National Parks Branch has favoured the regrowth of forests, chiefly fire-following lodgepole pine, on the formerly burned over slopes, but has not prevented other changes such as the construction of the Trans-Canada Highway.

alpine regions could be very severely damaged if heavy camping were permitted there. Wisdom would seemingly dictate zoning such areas for other uses.

Zoning is also necessary to control land use where recreation is already oriented towards the use of facilities. For example, areas where downhill ski runs and associated roads, parking lots and motels, have been developed may have to be located within what might be termed semi-wilderness zones. Banff, Lake Louise, Field and other service centres are not likely to be removed from the National Park. The growth of such service centres must be controlled by some zoning systems.

On the other hand, the existence of ski runs, townsites, roads and other facilities, inheritances of the past, should not be considered a strong reason for their further development, nor for the development of similar facilities elsewhere in the National Parks. Certainly, a case for such development can be made, but only at the risk that the wild character of the National Parks will be affected and also that continuing recreational pressure will result in expansion and further consumption of the uncivilized parts of the National Parks. The zoning approach is similar in principle to proposals that certain developed or desirable areas be removed from the National Parks and replaced by other

nearby lands. The basic problem in such procedures is that once the idea of trading is established, in future it may be more difficult to protect needed National Park land from a variety of development proposals, recreational or otherwise.

For various reasons then, zoning of the parks is inevitable and, once established the zones, unlike those in our cities and towns, should be inviolate. The relentless expansion of man and his culture in the past should prompt us to use zoning primarily as the means of controlling those facilities already in the National Parks. By far the greater part of the park area should remain free of facilities and disturbance. Such an area will be invaluable to the increasing number of cross-country skiers, snowshoers, hikers, and others who want to escape roads and urban life. This area will also continue to be useful for other purposes, for example as a valuable water storage area, or as an outdoor laboratory where scientists can undertake relatively uninterrupted studies of plant and animal life, stream flow characteristics, glaciers and climatic change.

The growing demand for recreation of all kinds, therefore, seems to require answer must be the opening up of new other than the National Parks. One recreational regions, many of which would have provisions for a wide range

of activities based on facilities, thereby reducing that kind of pressure on the National Parks. In the west at least, it would seem that thousands of square miles of suitable public and private land are available. For example, the provincial forests in Alberta encompass very large areas whose terrain and beauty are comparable to that of the western National Parks. At present, these lands are little developed, with large areas being inaccessible because of lack of roads. Knowledge of the recreational capacity of these lands is also limited because of lack of relevant research.

Indeed, lack of research is one of the main handicaps to progress, not only with respect to the National Parks but recreation as a whole in Canada. Although we know that the recreational potential of lands like those in Alberta provincial forests is large, we do not know how large. What are the opportunities for developing certain lakes and rivers in the foothills and mountains for water sports and associated recreation? What is the actual demand in western Canada for different types of recreation including hiking, wilderness camping, skiing and so forth? How is this demand changing with time? What role could joint Federal-Provincial fiscal support play in development? Are the recreational opportunities in the National Parks and surrounding areas available to all socio-economic groups in cities such as Calgary?

Another worthwhile line of research would be the historical geography or cultural history of all the National Parks. What was the vegetation and animal life like in earlier days? What effect did the Indian have on the landscape? How has the vegetation been changed by lumbering and other European activities? Where was lumbering and mining carried on?

Some of this historical geographic research on Banff National Park, has been carried out by the Geography Department at the University of Calgary. The research is useful for a number of reasons not the least of which is that it can add to the knowledge available to the visitor. A reasonable amount of information on natural features such as

plants and glaciers is available, but visitors learn little about the way man has used the park and how it has been protected and changed by the National Park concept. As important as the natural science aspects of the park are, many might gain more from information on the settlement of the park, the effect of man on it, and the history of old mining towns such as Anthracite or Silver City. Historical geographic research is also important to understanding National Parks' accomplishments. Few know that much of the Banff Park has been affected by the white man through lumbering, mining and fires. Few appreciate how devastated many areas of Banff Park were prior to the establishment of the park and so do not know that the protectionist policy of the National Parks Branch has been the basic reason why they can enjoy the forest and animal life of Banff and other National Parks. Nor do they fully appreciate how important the continuation of this policy is to their being able to continue to enjoy these things in future.

Finally, historical geographic studies can contribute to planning for the National Parks. For example, our studies in Banff have revealed that the Red Deer Valley—Clearwater Valley area, is unique in that lumbering and mining do not seem to have occurred and fires during European times have been few. The Red Deer Valley region is, therefore, relatively close to the "untouched" landscape idea so long associated with National Parks. In terms of this historical geographic evidence the Red Deer—Clearwater area should be left as wilderness. However, this evidence seemingly is being ignored as plans are afoot to drive a road through the valley.

How is more research to be carried out on National Parks and related recreational problems? One means is through the planning and research facilities of the Historic and National Parks Branch. However, the question arises as to how far this Branch should become involved in general recreational research, as distinct from that relating more directly to National Parks themselves. Another means of encouraging research might be through an Advisory Conference on National Parks which might meet twice

a year to discuss policy, practice and research needs relative to National Parks. An Advisory Conference on National Parks could help identify worthwhile research problems and also help arrange for the necessary research. I deliberately use the word Conference, rather than Council, for this advisory organization, because I believe that the people involved should discuss problems and make recommendations while minimizing formal connections with the relevant government and management groups.

The Advisory Conference should be in a position to raise questions about fundamental matters connected with policy on National Parks and related fields, or to do research and give advice on these as they are raised by government and administrative bodies. The Conference might examine such things as the relations between various government or administrative bodies interested in recreation as well as the need for new co-ordinating groups. The Conference could also think about studies such as those conducted on recreation by the U.S. Outdoor Recreation Resources Review Commission and it might also encourage the further development and use of research resources present in Canada, notably in the universities.

In summarizing, I would like to lay stress on the idea that recreation based on facilities now constitutes at least as great a problem for the National Parks as lumbering, mining and other extractive activities. I would also stress the likelihood that future demand for recreation of all kinds in western Canada will exceed our present expectations and note that changes in landscape, unwanted by many Canadians, could result from attempts to accommodate much of this demand in the National Parks. In view of the growth in demand for all kinds of recreation, the National Parks seemingly should be thought of as sites for recreation requiring little or no facilities. I would also stress that while zoning will be a necessary land use control in National Parks, it cannot, in my opinion, be a substitute for more recreational land and opportunity for Canadians and their visitors of the future.

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Terence Heywood wrote the light-hearted poem about the Elm tree, *Ellum Entry*. He was born in Johannesburg and educated in England at Malvern and Oxford



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Gordon Nelson, author of *Spoiling the Landscape*, is professor of geography and vice-dean, faculty of arts and sciences at the University of Calgary. He was

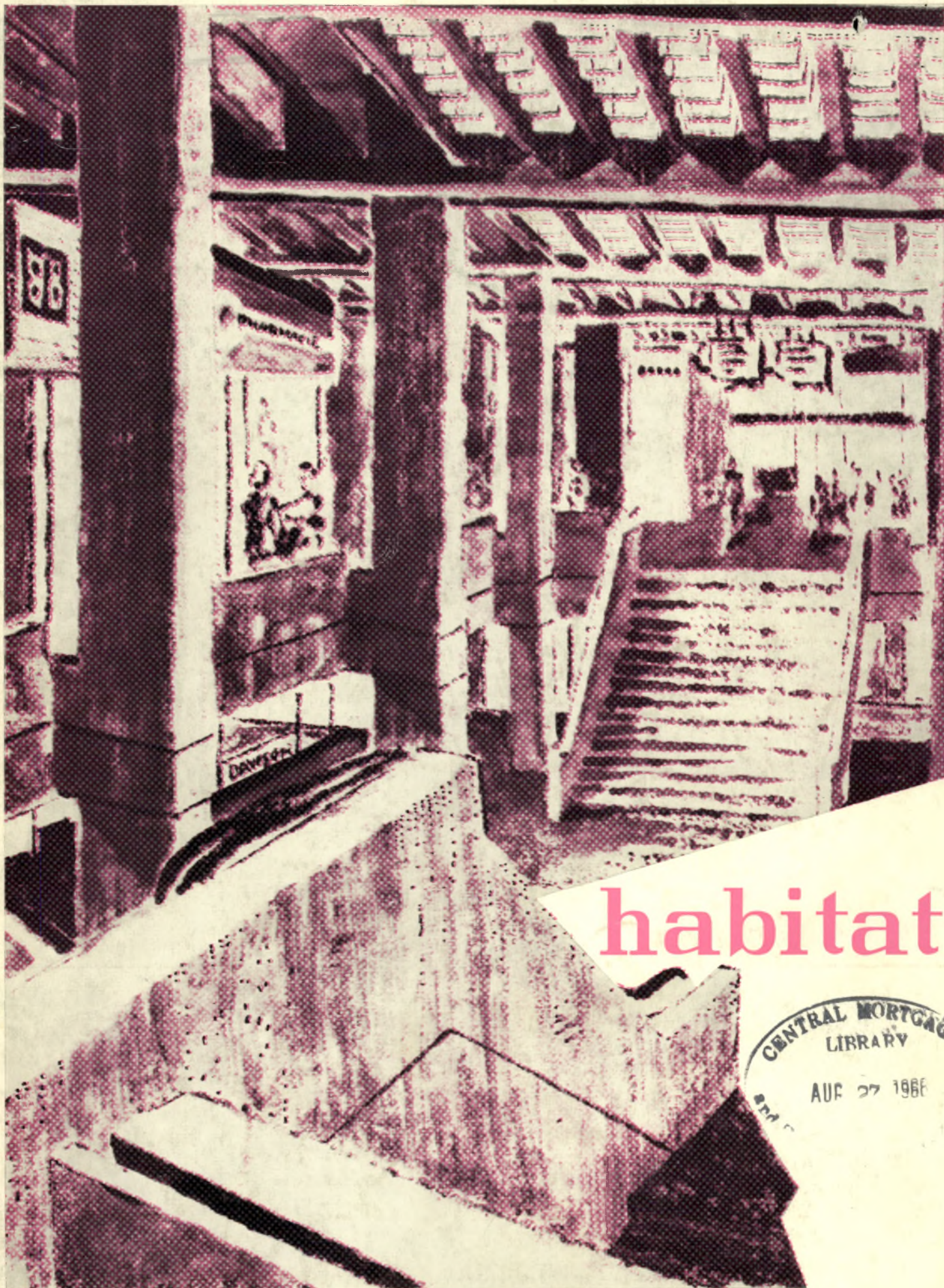


born in Hamilton, Ontario and educated at McMaster, Colorado and Johns Hopkins where was obtained a Ph.D. and was a Post-Doctoral Fellow. Dr. Nelson has conducted geomorphological, historical and land use research in the Banff National Park area since going to Calgary in 1960. He and his graduate classes are particularly interested in man's effects on the landscape and the significance of these in contemporary land use and planning problems.

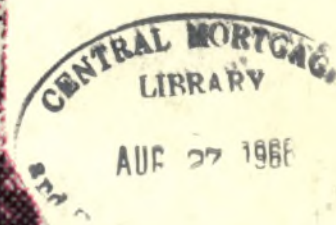
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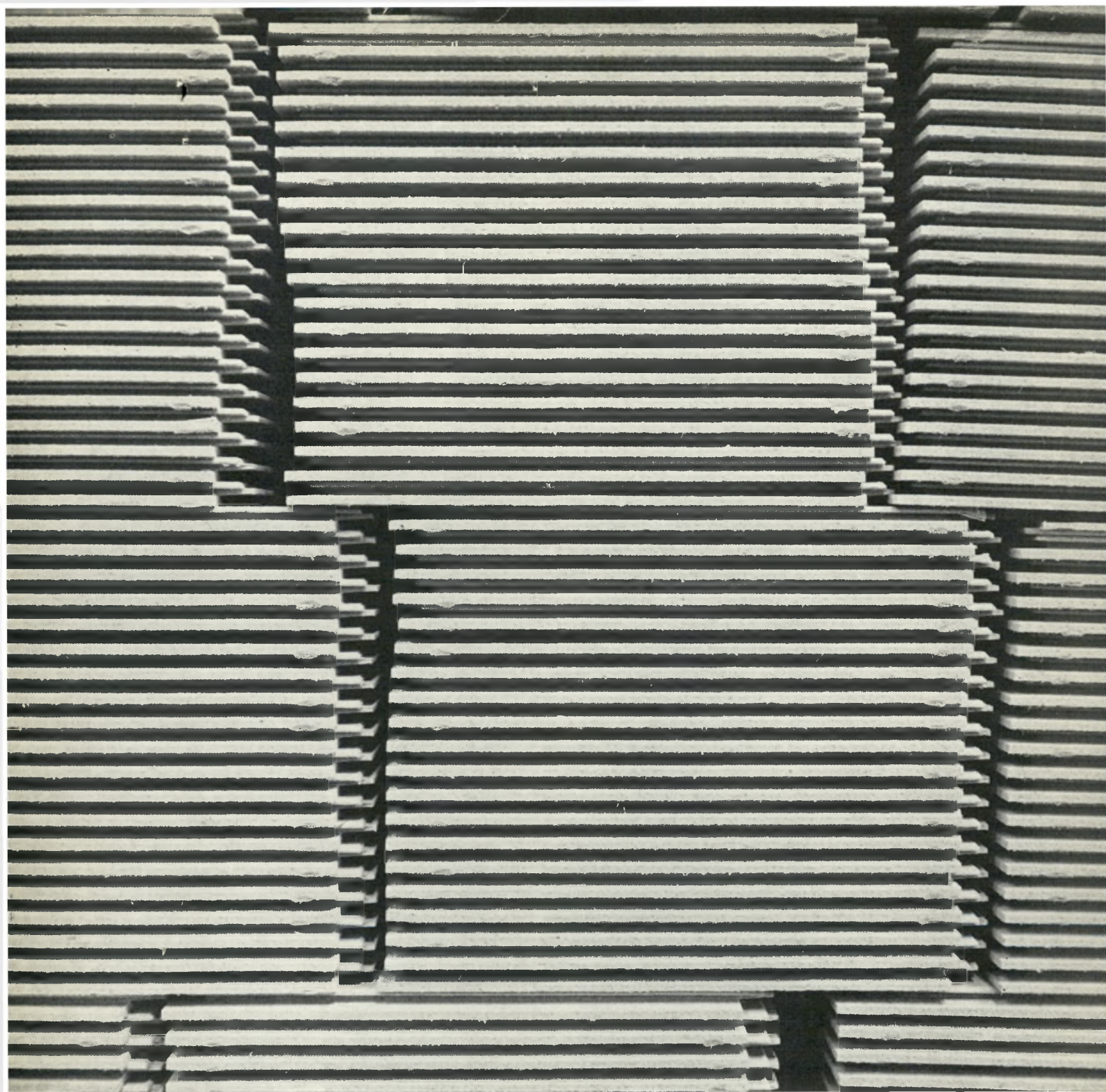
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inside cover:

A close-up of acoustic tiles. NFB Photo

Gros plan de carreaux acoustiques.

Photo O.N.F.



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USING SPACE

In his article in this issue of Habitat, Professor Bruce Anderson notes the reappearance, in some of the newest urban shopping malls, of the 19th century covered passage. Shopping is an ageless human activity, indeed, as Professor Anderson says, "the action of the shopper has changed little over the centuries . . ." Certainly some of the old passages and arcades he discusses remind us of this. They also underline the importance of the human scale — a relative dimension we ought not to allow the distance of years to diminish.

The advent of the huge covered shopping centres with their climate controlled environment are a welcome break for the consumer. But while we may like the personal convenience of parking without restrictions as an individual solution to suburban shopping, it is difficult to look fondly on one or two giant emporiums set in a sea of asphalt as a collective solution to the problem.

It seems we cannot have it both ways; but then, perhaps we can. For in the great gush of the 20th century we have come to learn that almost anything is possible. It could be that the lesson to be learned from the passages and arcades of earlier years is to use and sculpture space in the downtown areas and to make it as important a human factor as any other retail inducement, remembering that environment sets up rhythms and modes of its own.

There is an inherent attraction about the market-place, bazaar or arcade and it should remind us that fashion and taste — dazzling though they may be — are merely transient; the constant is people.

LE MODELAGE D'UN EMPLACEMENT COMMERCIAL

Un article du professeur Bruce Anderson publié dans ce numéro nous fait remarquer que les mails les plus récents ont des passages couverts, tout comme au siècle dernier. Le commerce est chose fort ancienne. Comme le dit le professeur Anderson, "le client a peu changé dans ses habitudes au cours des siècles" . . . Les quelques allées et passages construits depuis longtemps qui sont mentionnés dans son article nous le prouvent bien. Ils démontrent l'importance qui est accordée à l'homme lui-même dans cette façon de grouper les établissements — élément dont on ne doit pas minimiser l'importance avec le temps.

Le retour aux centres commerciaux à ciel fermé, cette fois climatisés, apporte un confort très apprécié du consommateur. Mais, quoique chacun de nous apprécie le parc-autos adjacent qui est indispensable dans les grandes agglomérations, il est difficile de trouver esthétiques ces quelques grands marchés sertis dans un tapis d'asphalte dont sont dotées nos villes.

Il semble bien que ce qui est avantageux pour l'individu ne plaît pas nécessairement à l'ensemble de la population. On peut espérer trouver une nouvelle solution. Car en ce XXe siècle au progrès bouleversant, le génie inventif a apporté des solutions à presque tout. On peut tirer une leçon de ces allées et passages à ciel fermé du temps ancien pour apprendre à façonner un emplacement où le facteur social est aussi important que n'importe quel autre moyen d'attirer le consommateur, se rappelant que l'atmosphère créée judicieusement amène un rythme et un mode de vie qui lui sont propres.

La place du marché, le bazar et le commerce qui se fait dans des passages à ciel fermé suscitent un intérêt indéniable; c'est pour cela que les modalités dans le style et le goût n'ont qu'une importance relative — tandis que le client qu'il faut satisfaire est l'élément constant. Miser sur ce qui lui plaît est un gage de succès.



PASSAGES AND ARCADES

by Bruce Anderson, who also did the illustrations

Today there is a reappearance of the XIXth century covered passage in recently constructed urban shopping malls such as Place Ville Marie in Montreal. As the action of the daily shopper has changed little over the centuries an approach similar to the pattern established in the old passages has been reinitiated and complex networks of covered and underground passages with links are being built in many cities.

In French the term "passage" applies to a narrow skylighted pedestrian shopping street which usually passes from one vehicular street to another through a block of buildings. Through peculiarities in the English language the same feature in England is called an arcade, or in Italy a galleria.

In most cases "passages" are architect designed and because of their hidden location off a traditional city street, they are little known and seldom discussed except for one or two famous examples such as London's Burlington Arcade or Milan's Galleria Vittorio Emmanuel. A great many unusual passages exist in Paris, each designed or planned by a different architect. Because each passage is a single entity, variation in style or system succeed together.

While the arcade is a peripheral happening along one or two sides of a traditional street with shopping occurring within, but only along one side, the passage is by its very nature designed to promote, encourage and simplify commercial activity.

The passage, in fact, is a narrow street with buildings at either side usually one, two or three storeys in height. Unlike a normal street the passage is roofed over with a full glass roof or domed skylights. Being very narrow and closed to vehicles, shops at either side of the passage can be surveyed by the shopper so that less walking is required. In some cases deliveries are made in streets directly behind the passage but generally carts or dollys are used to haul goods down the passage to shops.

Arcades are public property. Passages are private, because they do not follow regular city street layouts. They were built privately to borrow people passing along the city streets. By drawing pedestrians into the passage the developer could thereby extend and capitalize upon high land costs.



Above: **Rue St-Denis, Paris**

Opposite, left: **Passage du Grand Cerf** off the Rue St-Denis

The passage is even more isolated from cars and street noise than is the arcade and has a strange affinity to the character within the Arab souk.

Architect designed passages are not as widespread as arcades and seem to have been built mostly during the XIXth century.

Although most passages are two and three storeys in height, shops are restricted to normal ground level movement. However, in one unusual example in the English city of Leicester a multi-level galleried passage exists with shops at every floor. Elevators and escalators, along with multi-level connections through large complexes, make this idea feasible and practical.

Three unusual and highly architectural "passages" exist in London. Located off Pall Mall and Picadilly, these passages, like the Lido Passage in Paris, through their exclusive specialty shops cater to a wealthy clientele but provide exciting window-shopping for the majority.

The Royal Opera Arcade lies squeezed beside its high-rise neighbour, New Zealand House and provides a link between Pall Mall and Charles II street. Part of the passage has been demolished on one side to make way for the lobby of the new building.

A marble plaque at each entrance archway of the passage recalls its history — "London's oldest arcade. The design was completed by John Nash and built in 1817."

In order to meet the different levels of the two major streets, the passage follows a gradual slope. The use of arches to support the roof vault makes this passage an arcade in the true sense of the word.

Beautifully designed shop fronts with projecting bay windows fit between the structural pilasters. Shops, depending upon their size, can fit into one or more bays as all the fronts are the same. Only the names and window displays identify each store.

Inside each shop a narrow staircase winds up to a second skylit level. Within the passage large circular roof lights with glass and wrought iron domes provide sufficient light during the day, while in the evening before the gates at the ends of the passage are closed, large hanging lanterns light the way.

Perhaps the most delightful and pleasing of the English passages is the Picadilly Arcade. From Jermyn Street, the passage slopes up to meet Picadilly and the shop windows and ceilings follow it. The two-storey passage is much darker than the Royal Opera Arcade, as

only two large glass sky domes are introduced in the flat roof structure. Large hanging lamps throw an intimate glow on shop windows. The geometry of the shop architecture along the passage is extremely complex with two tall, curved glass, window panes and a central doorway between each set of pilasters. Decorative iron balustrades at the second-storey level attempt to echo the old London shop along the traditional street.

It seems fairly clear that the existence of such passages was based upon purely practical and economic considerations. The passage answers the problem of how to introduce more shops into a narrow site and still attract bypassers from the city streets. The English passages are privately owned, hence are private property so that iron gates at each end serve to close the arcade at night.

The success of the arcades is to some extent diminished by the design of the openings. People moving in a straight line on the street often miss the mouth of the dark passage. A wider mouth, different sidewalk patterns and curved shop fronts at the entrance helps, but a continuous system of linking pedestrian passages is necessary to extend the possibilities within the urban context.

Across the street from the mouth of the Picadilly Arcade is the mouth of the

Burlington Arcade which runs through a very wide block until it meets Burlington Gardens. Probably coincidentally, both Arcades almost link up, although the vehicular nature of Picadilly physically severs a connection between the two passages.

In the architectural detail of shops and overall system, this arcade is inferior to the others but as a "grand alley" it is unsurpassed. The longest and most strategically located of the passages, it attracts many people. Hanging flower-filled pots and lamps greatly enhance the narrow two-storey skylit space.

While this is probably the youngest of these passages, the simple system of two rows of shops on either side of a narrow pedestrian way with a glass roof, has not changed. The many separate and individual types of shops have been treated identically architecturally, but the result is not monotonous, since the goods themselves provide great variety and colour.

On a detailed map of Paris numerous passages are shown as normal streets. Streets they are, but of a very special type — narrow, scaled for use by pedestrians and covered with a glass roof.

While these Parisian passages are widespread and occur individually in certain areas such as the Cour de Commerce St. André in St. Germain des Près, the most unprecedented grouping of passages occurs along a single street — the rue St. Denis.

From the Seine the rue St. Denis, one of the oldest city streets, originally led northwards to the outskirts of Paris terminating at the great Porte St. Denis, a triumphal arch and monumental gateway into the city. The continuation of the street outside the old city was then called the rue du Faubourg St. Denis, "faubourg" meaning outskirts or suburb, and ever since this and other streets such as the rue du Faubourg St. Martin and the rue du Faubourg St. Honoré retain their old name even though they are enveloped by the expanded city.

Making its way north from the Place du Châtelet, the rue St. Denis serves as the eastern boundary for the central market of Paris. Lying on an axis perpendicular to the street, the enormous XIXth century iron and glass pavilions of Les Halles serve as the main market spaces for the city. Late at night trucks



Unsurpassed as a "Grand Alley" is London's Burlington Arcade. "Hanging flower-filled pots (at the entrance) and lamps generally enhance the narrow two-storey skylit space."

make their way through the network of narrow streets while tough, muscle-bound drivers unload crates of cabbage and vegetables to be sold the next morning. Further along the street many curious "passages" were designed by XIXth century architects in the same inventive and imaginative spirit as Les Halles.

The rue St. Denis is a narrow street with several slight turns within its length. Six to eight-storey unadorned vernacular Parisian buildings create an inclined

canyon-like atmosphere to the street with a fanciful roovescape of chimney pots, roof terraces, dormer windows and thin sloping firewalls which rise high above a cornice line and steep mansard roof.

In the area of Les Halles the street functions as a wholesale market lined with open-sided shops which display bulk quantities of food. Penetrating smells fill the street as one passes shops selling gruyère, large baskets of fresh strawberries or bananas. Street-level

shop fronts are painted a variety of greens, browns, yellows or reds and periodically, behind the glass doors of small hotels or in cafés, young good-looking girls stand and wait.

The rue St. Denis and its extension, the rue du Faubourg St. Denis, shine in the sun with a dream-like quality. Fast-moving cars travel one way down the street. Coloured awnings and signs project from the uneven façades, while shadows from jagged roof lines are thrown in strange patterns on opposite walls.

At a bend in the rue St. Denis the beautifully proportioned mass of the Porte St. Denis by Blondel becomes visible. The effect produced by this element is astonishing. Its presence interrupts the street to act as an encloser of space and a terminal element and yet the street continues through to reveal buildings and sky beyond.

Four important passages run into the rue St. Denis between the Seine and the great triumphal arch. Between the rue Tiquetonne and the rue Greneta, the Passage du Grand Cerf runs from the west side of the street through the block of buildings to the rue Dussoubs, while on the east side of the rue St. Denis, the Passage de Bourg l'Abbé links through to the rue de Palestro.

All the Paris passages are simple conventionally structured streets with the façades brought closer together and a pitched iron and glass roof providing protection from frequent rains. The passage is a very long linear strip in which shopping is made easy. The Passage de Bourg l'Abbé follows this pattern but has a glass, barrel vault roof.

The Passage du Grand Cerf is a three-storey iron and glass structure. Wedged in a narrow space between two shops on the rue St. Denis a two-storey doorway with mannerist brackets and pediment leads through the street-side building to the higher skylighted space beyond. Coloured signs of all shapes and sizes hang from the walls of the narrow passage. A mixture of classical and art nouveau forms set the background for intense shopping activity within the passage. Barbers, clothiers, stationers, hardware dealers and restaurateurs rent a space along the passage.

Ornamental metal tie-rods give lateral support to the high walls. High

above, a pitched glass roof lights the space. At night the concierge who occupies a small office and house at the end of the passage, closes the heavy iron gates at each entrance.

Further up the rue St. Denis towards the Arch, two more passages, the Passage du Caire and the Passage du Ponceau lead off either side of the street. A small doorway off the rue St. Denis leads through a building to the Passage du Ponceau which is a curious variation on the standard passage with several bridge-like parts filling the space at an upper level, allowing light to enter at alternate bays through the flat glass ceiling.

The Passage du Caire on the other side of the rue St. Denis is one of the most unusual passages to be found anywhere. On the inside of a highly ornamented XIXth century stone entrance-way the passage quickly assumes an informal character. Here the passage has allowed for a more spontaneous expression of commercial enterprise. The formal architectural aspect of other passages is gone and low two-storey vernacular buildings provide the backdrop. A light and airy aspect is given to the passage by the all-glass shop fronts and delicate pitched glass roof. Different coloured signs and advertisements hang in the space. A pleasant informal atmosphere is created. Many small printers have established themselves in the passage and from the depth of their shops, presses noisily work all day.

The Passage du Caire is very long and it branches out in many directions. Unlike the English passages narrow streets lead off the space at different points to give access to the rue du Caire, and the rue d'Alexandrie. The result, a network of covered pedestrian ways, is particularly congenial to shopping activities and establishes an important pattern within the local environment.

The beautifully decorated Porte St. Denis serves as a gigantic sculpture through which cars stream down from the north of Paris to the Seine. Here, a long distance from Les Halles, the street, renamed the rue du Faubourg St. Denis again assumes the character of a market street. Open-front shops line the street while at the curb, vendors with carts sell fruits and vegetables. People squeeze along the narrow sidewalks. Assort-

ments of knives in wooden boxes are placed at the side of the road. Crates are stacked in the gutter and sizzling chickens rotate on an open fire. Buttons, silks and ribbons are sold in a narrow passage. Men in blue overalls, fat women and dogs jostle one another. Piercing smells of ground coffee come from one of the stalls. Restaurants, pâtisseries, poissonneries and boucheries entice with aroma and merchandise.

In the distance the Porte St. Denis continually seems to change position as the street curves to the north. Long, narrow, wrought-iron balconies hang from stuccoed façades. A number of architectural passages open onto the rue du Faubourg St. Denis to heighten the activity along the street. Just after the Porte St. Denis, the Passage du Prado leads off the street as a one-storey skylit space until it meets a circular rotunda where a two-storey branch leads at right angles to meet the Boulevard St. Denis. Heavy cast 'art decoratif' beams support a roof skylight which is supplemented by neon and electric lights. Salesladies stand in the passage next to racks of clothes hung from hangers and openly display leather goods.

Further up the street is the Passage de l'Industrie — a narrow open-roofed street with arched entrance and small parts bridging across at intervals along its length. Next to it, the Passage Brady links through to the Boulevard de Strasbourg. A light greenhouse-type roof is supported between the two-storey buildings along the whole length.

The Cour et Passage des Petites Ecuries and the Passage Reilhac complete the network of architectural passages off the rue du Faubourg St. Denis. Throughout the length of the street, numerous small lanes between the buildings and passages give access to inner courtyards.

Even though the heavy flow of cars down the rue St. Denis makes it difficult to cross, each side of the street has a series of passages to provide a totally pedestrian field of action within the area. Considered in the total context of the long rue St. Denis and the rue du Faubourg St. Denis, these passages form important "linking elements" and give the environment special and unique characteristics seldom before considered in the design of the urban environment.

L'HOMME AU LOISIR

à l'organisation et à l'évolution de la famille. La forme même du logement, son volume par rapport à l'importance de la famille, la répartition de ses pièces, sa composition peuvent déjà donner plus ou moins de satisfaction aux formes de loisirs, selon que chacun aura sa chambre, une place suffisante dans les locaux, des possibilités de réaliser ses besoins de solitude, de lecture ou de bricolage, d'indépendance (matérielle, visuelle ou phonique) ou d'intimité avec certains autres membres de la famille, avec des amis. L'étude de Jocelyn Breton en cours à l'école d'architecture de l'Université Laval vise précisément à cerner les relations entre la famille et le logement, notamment en ce qui concerne les comportements de loisir.

Le voisinage immédiat, ou l'unité résidentielle, en tant que premier contact avec l'univers social externe, revêt une grande importance en termes de loisirs et d'échanges, et nécessite la mise en place d'équipements devant satisfaire une gamme aussi vaste que variée de besoins. A ce niveau il faut veiller à l'accessibilité, à l'intensité et à l'intégration des diverses formes d'activité quotidienne et de leurs équipements. On doit d'ailleurs s'interroger sérieusement au sujet de la banlieue résidentielle, telle qu'on la connaît aujourd'hui, pour savoir si cette forme de développement convient à l'organisation idéale des loisirs. La surface affectée à chaque logement amène un étalement excessif de l'ensemble, sur des surfaces trop importantes, d'aspect monotonne et d'où "tout est loin". L'absence de densité suffisante et d'intégration des différents équipements rend très difficile la mise en place et l'organisation de loisirs quotidiens qui devraient normalement se concevoir à proximité du logement et faciliter les lieux de rencontre, la vie en commun et les contacts humains.

Jane Jacobs dans son admirable livre — *The Death and Life of Great American Cities* — consacre plusieurs pages à décrire ce que la vie quotidienne peut générer de formes de loisirs. Elle refuse de croire à la désormais célèbre banlieue-campagne et insiste pour que les espaces réservés aux loisirs soient complètement intégrés au milieu et intensément utilisés. "The more successfully a city mingles everyday diversity of uses and users in its everyday streets

SCHL



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the more successfully, casually and economically its people live in and support well-located parks that can thus give back grace and delight to their neighborhoods instead of vacuity."

Il faut se demander sérieusement si ce rêve de reconstituer en ville certaines caractéristiques de la campagne, ou vice versa, ne risque pas de nous acculer à une situation contradictoire, détruisant à la fois les avantages de la ville et de la campagne, ne nous laissant en partage que les désavantages.

— Loisirs hebdomadaires

Il existe aussi une autre gamme de loisirs, liée cette fois au rythme des semaines et se projetant sur un territoire plus vaste, soit l'agglomération et son environnement immédiat, voire même parfois éloigné; ce sont les loisirs hebdomadaires. La durée de ces loisirs s'allonge sans cesse; elle est passée, par semaine, d'une journée à un jour et demi et à soixante heures consécutives pour la plupart.

Beaucoup de gens préfèrent profiter des loisirs hebdomadaires sur place, limitant leur déplacement à la zone urbaine ou à son environnement immédiat. Il importe donc de retrouver, dans un rayon limité, et avec des accès faciles, toutes les formes de loisirs tant d'ordre physique que d'ordre social, intellectuel et spirituel. Une certaine proportion des équipements adéquats pourra coïncider avec ceux nécessaires aux loisirs quotidiens, pourvu qu'ils soient suffisants pour les deux utilisations. Leur variété devra être plus riche encore et leurs qualités plus efficaces. D'autres équipements pourront se trouver au centre de la ville, notamment les organisations culturelles, théâtres, musée, exposition, etc. Enfin certains équipements devront trouver place à la limite de la trame urbaine, type de transition au milieu rural.

Mais il existe de plus en plus de personnes qui préfèrent s'évader de la ville et avoir accès à la campagne, au plein air. Cela pose tout le problème des résidences secondaires, qui se développent jusqu'à une distance de la ville qui est fonction de son importance et des facilités de déplacement. Ces loisirs hebdomadaires sont souvent partagés par des familles entières dont les divers membres peuvent avoir des goûts d'au-

"Le loisir constitue le temps dont l'homme peut disposer librement en dehors de ses heures de travail, pour se reposer ou se livrer à des occupations répondant aux nécessités de la vie quotidienne ou tendant soit à un développement de ses connaissances intellectuelles ou spirituelles, soit à une coopération au service de la culture générale, de la misère matérielle ou morale d'autrui, soit à un plein exercice de ses capacités physiques ou n'ayant d'autre objet que la récréation au gré de ses aspirations et de ses goûts personnels."

tant plus variés que leur âge diffère. Il faut donc chercher à les satisfaire par un éventail de toutes sortes de distractions.

En termes d'aménagement il importe de concevoir ces zones de loisirs comme faisant partie intégrante de l'ensemble des fonctions urbaines, même si une distance relative peut séparer l'agglomération de ces réserves naturelles d'espace. Ce sont là souvent les seuls poumons d'une ville. En contre-partie, il convient de procéder avec grande précaution afin de ne pas détruire le cadre naturel et ses principales caractéristiques et d'en laisser libre accès à la collectivité.

— Loisirs annuels

Enfin se pose toute la question des loisirs annuels. Vacances d'hiver et vacances d'été ont pris une si grande importance dans la vie de tous qu'il n'est pas possible de les passer sous silence. Les réalisations qui leur sont propres, les organisations touristiques, le développement des équipements de toutes sortes, d'hôtellerie, ou de campisme, stations d'été ou de sports d'hiver, routes touristiques, etc., donnent lieu à de nombreux bouleversements qui intéressent au premier chef l'aménagement du territoire. Encore là, certains espaces offerts aux loisirs hebdomadaires peuvent également servir aux loisirs annuels. Mais il y a aussi les grandes stations touristiques qui nécessitent des déplacements de plus en plus importants.

En terminant, j'aimerais à la lumière d'un exemple reprendre ici une

idée qui a germé il y a quelques années et qui semble ne pas vouloir prendre forme; il s'agit des zones de récréation en plein air, que d'autres appellent — stations de plein air. Il s'agit au fond d'utiliser certaines terres et forêts domaniales d'une superficie suffisante, aux fins de la récréation et des loisirs de la jeunesse, en songeant peut-être plus particulièrement aux jeunes de nos quartiers urbains les plus défavorisés, la zone grise. Voyez comme on revient vite aux problèmes urbains.

Les colonies de vacances et autres organismes, qui, il y a vingt ou trente ans avaient choisi des sites enchanteurs (Contrecoeur) se sont vues rapidement cernées par certaines formes d'activité peu compatibles avec l'exercice des loisirs en plein air (urbanisation, industrialisation, pollution de l'air et de l'eau). Plusieurs organismes cherchent à se relocaliser, mais cette fois en tentant d'éviter les erreurs du passé. L'idée à laquelle je faisais allusion précédemment est de réserver et de préserver de vastes espaces à ces fins et d'y regrouper ensemble ces différentes organisations, auxquelles d'ailleurs pourront venir se joindre d'autres mouvements de jeunesse qui recherchent les mêmes objectifs. Et en jouant un peu avec cette idée, on réalise rapidement qu'elle offre plusieurs avantages: l'augmentation du nombre des enfants en une zone donnée permet de concevoir une plus grande variété de loisirs et d'équipements tout en assurant une plus grande rentabilité; elle permet également de maintenir certains services collectifs et d'en augmenter la qualité; elle permet en outre les rencontres, les échanges et peut-être même une certaine socialisation entre des enfants qui autrement risquent de vivre isolés les uns des autres (je pense en particulier à certaines barrières sociales, économiques, ethniques ou religieuses). Or cette idée, pour voir le jour et se développer, impliquait trois choses: un territoire et des accès, un organisme de gestion et enfin des fonds (prenant pour acquis que les enfants et le besoin de loisirs existent). Je dois avouer que cette idée est devenue un rêve pour plusieurs, un cauchemar peut-être pour d'autres mais sûrement pas une réalité. Combien de temps faut-il attendre encore et à quoi tient cette inertie? J'aimerais vous laisser sur cette question.



20 YEARS OF HOUSING

CMHC 1946-1966

Part 4 by R. J. Lillie

The number of public housing units produced under the Federal - Provincial partnership formula (Section 35A) was disappointing; some 3,500 units were approved from 1960 to 1965, compared with about 6,000 units in the previous six-year period.

However, in 1964 new legislation was introduced which allowed a province, municipality or public housing agency (with provincial approval) to obtain a long-term, favourable interest loan from the Corporation for up to 90% of the cost of a project. The Province of Ontario has made excellent use of this provision (Sec. 35D); its agency, the Ontario Housing Corporation, was formed late in 1964 and in 1965 received approval for loans covering nearly 3,000 housing units, of which 1,318 were new units. The other 1,600 were existing units suitable for public housing, and were purchased from their owners.

Thus one province, in one year,

approved nearly as many public housing units as were built in the whole country in six years under the former "partnership" arrangement.

By the end of 1965, approvals had been issued for a grand total of 15,597 public housing units for rent. Up to the end of the period all provinces except Alberta and Prince Edward Island participated in the programme.

From 1948 until the end of 1965, about 19,000 lots had been authorized for development in public land assembly projects. By the end of 1965, the number of approvals for public housing units issued since 1950 amounted to 15,597.

In this whole period, a total of well over two million dwellings had been started in Canada; it will be seen that the public land assembly programme was indeed small in proportion to the whole need for serviced land. However, it may be expected that more vigorous provincial policies will result in more publicly assisted land development in future

years.

Late in 1960 an amendment to the National Housing Act authorized the Corporation to make loans to municipalities to assist in the construction of sewage treatment projects. The growing evidence of water and soil pollution was of increasing concern to governments at all levels, and it was hoped this offer of financial assistance would encourage municipalities to extend and improve their sewage collection and treatment systems. Loans under this section of the Act may be for up to two-thirds of the cost of the project, and are repayable over a 50-year term, at an advantageous interest rate.

The response to this offer of financial assistance has been very strong indeed. By the end of 1965, 932 loans of this type were approved, for a total of more than \$170 million. Each of the provinces has taken advantage of this legislation. Undoubtedly the programme has been greatly encouraged by provi-

sions, renewed from time to time, which allow forgiveness of part of the loan and accrued interest — if the projects are completed within certain time limits.

An amendment to the National Housing Act late in 1960 permitted CMHC to lend universities funds for the construction of student living accommodation. In general, these loans may be made for up to 90% of the cost of the project, at an advantageous interest rate and repayable over 50 years. In view of the tremendous financial problems faced by universities in dealing with campus expansion, this assistance has been eagerly welcomed and 21 such loans were negotiated in the first full year of operation. Between 1960 and 1965 a total of 111 projects were approved, the resultant loans totalling more than \$126 million; in this period the programme has provided accommodation for 26,000 students.

The original amendment permitted loans only to universities, and only for the accommodation of single students. In 1964 the pertinent section was broadened to permit making these to co-operative societies and charitable institutions interested in housing university students, and also to permit loans for self-contained quarters for married students.

The promotion and encouragement of urban redevelopment is considered by the Corporation to be one of its most important functions. The years 1960-1965 saw gratifying progress.

Generally speaking, the first formal step in a municipal redevelopment programme is the undertaking of an "Urban Renewal Study". Under the housing research provisions of the NHA, the Federal Government will contribute 75% of the cost. Before 1960, 27 studies had been put in hand, while 48 were initiated between 1960 and 1965. The total Federal contributions towards these 75 studies will be of the order of \$1.35 million.

In 1964, a change was made in the legislation allowing the Corporation to provide half of the cost of preparing an Urban Renewal Scheme. This examines in detail the social, physical and economic studies necessary to support the implementation of a project. Thirty such schemes were approved in 1964 and 1965, involving about \$800,000 in Cor-

poration grants.

Between 1960 and 1965 these studies and schemes culminated in the approval of 17 actual implementation projects, more than twice the number approved between 1948 (when the first slum clearance legislation was passed) and 1959. These projects comprise nearly 600 acres of land at an estimated net cost of nearly \$30 million to CMHC. The Corporation contributes 50% of the net cost of each project.

The volume of Home Improvement Loans, made to individuals by the chartered banks and partially guaranteed by the Corporation, maintained momentum at a level of about \$36 million a

provement loans represent a worthwhile volume of conservation and improvement of this stock, though a great deal of home improvement is financed other than through NHA home improvement loans.

It is interesting to note that for some reason British Columbia accounts for many more of these loans than we would expect on a basis of proportion of population. Perhaps the people of the West Coast have higher standards of upkeep, or perhaps the home improvement "industry" is better organized there.

Great fluctuations in the supply of mortgage funds are a vexing problem. In 1961, a technique of mortgage market-

CMHC



year, for a total of over \$220 million in the period 1960-1965.

In 1960, the provisions of the relevant section of the National Housing Act were broadened to permit these loans to be made to owners of rental property, as well as to home-owners. It was anticipated that this might greatly increase activity but this has not been the case. Loans made in respect of rental property account for less than ten percent of the annual totals.

At the end of 1965, after eleven years of full operation of this section, nearly 300,000 loans had been approved for a total of \$384 million. The whole housing stock in Canada is now about 6 million houses; the 300,00 Home Im-

ing was introduced in the hope that it might be one way of alleviating this difficulty.

Institutional trustees can purchase a wide range of bond investments, federal, provincial, municipal and corporation, these are always available for purchase at various interest rates and for terms varying from 5 to 30 years. A nationwide network of dealers in such securities maintains an orderly and efficient market. Such debt instruments may be purchased by telephone, are easy to safeguard and account for, and can usually be readily sold. Because a market is maintained, a trustee can know at any time what the market value of his "portfolio" of bond investments is



CMHC

Above: **Serviced land versus the Septic tank** became a battle which the Corporation has now almost won. In 1955, 30% of all NHA loans were made in respect of houses with septic tanks. By 1965 the proportion had dropped to less than 2%. Here land is being serviced at Duncan, B.C.

Opposite page: **Cosmetic surgery** on Bastion Square in Victoria, B.C. included a facelift and paint job. The technical term for such work is rehabilitation. But whatever the name the result was a project with a complexion beautiful enough to grace the most fashionable municipal occasion.

Right: **Appropriately rugged appearance to a men's residence** is this addition to Qu'Appelle Hall at the University of Saskatchewan. An NHA amendment in 1960 allowed CMHC to lend funds to universities for the construction of student accommodation.

worth. If he wishes, he can easily trade such securities, either to take advantage of profits accruing or to shorten or lengthen maturities, or to improve his rate of return.

This means that bonds are, generally speaking, a convenient and liquid form of asset. Unfortunately the same cannot be said of mortgages. These debt instruments are secured by individual properties, rather than by the general credit of governments and corporations; repayment may be affected by the personal circumstances of individual borrowers outside the control of the owner of the securities; in practically all cases the principal amount is reduced by payment in each month of its long term, which introduces accounting and re-investment difficulties; and "trading" is so uncommon that no ready market exists, and no quotations are available to measure market worth.

Mortgages are also expensive to initiate and to service. For these reasons, only the largest of the financial institutions have built up mortgage lending departments. The great insurance companies, for example, find there are not enough bonds on the market at all times to satisfy their need for investment media, and by virtue of having mortgage lending departments they are able to invest millions, at generally higher rates than bonds. Large insurance firms, trust companies and chartered banks can, therefore, make heavy investments in mortgages; but for smaller financial in-

stitutions and other trustees, particularly pension funds, mortgages have never been a traditional form of investment. It has been obvious for a long time that some improvement could be made in stabilizing the flow of mortgage funds, if mortgage loans originated by an equipped lender could be transferred to another lender, not equipped to make such loans, but willing to hold them once made. Such transfers of first mortgages from originators to other holders is the "secondary market" in first mortgage securities. (The term "secondary" is sometimes confused with second mortgages, which are not involved in this market at all). There has always been some trading in first mortgages, but usually only by special negotiation between specialized institutions.

To create a market there must not only be potential buyers, but sellers with a reasonable amount of goods. In 1961, the Corporation began a series of auctions of its own direct homeowner mortgages in an effort to develop a continuous market. Thirteen completed auctions were held between 1961 and 1965, in which mortgages to the face value of \$308,250,000 were sold to approved institutional bidders, including investment dealers.

There is no question but that a majority of these mortgage loans were eventually sold to funds or institutions not normally considered mortgage lenders. In doing so large amounts for new mortgage lending were released. The

CMHC



development of the “secondary market” is still a long way from completion, but the Corporation’s activities from 1960 to 1965 were a major contribution to this end.

In general, the supply of serviced land has never been equal to the demand. During the 50’s it became obvious that in many areas this problem was being “solved” in a most unsatisfactory manner, that is by the permitted use of individual septic tanks instead of municipal sewage disposal systems.

In 1965, for example, in the 58 metropolitan and major urban areas comprising most of Canada’s urban development, 30% of all NHA loans were made in respect of houses serviced by septic tank. Halifax, Sudbury and Vancouver were a particular problem, but the difficulty existed in all areas except in the Prairies. The policy of the Corporation hardened against the septic tank. By 1961 the situation had improved to the extent that in the same areas referred to above, only 12% of NHA houses lacked sewage services, and in 1965, the proportion dropped to less than 2%.

While the Corporation took a position of leadership in this matter, the provinces and municipalities also fought the septic tank as experience after experience showed the inadequacy of these installations. The availability of NHA loans to provinces and municipalities for sewage treatment projects, referred to elsewhere in this article, made the installation of proper sewage facilities practicable in many places where otherwise the financial problems would have been severe.

By the end of 1965, the only NHA

Before . . . this 19 year old flat-roofed bungalow in Kingston, Ontario was rehabilitated through an NHA mortgage it was deteriorating and uninteresting.

After . . . the loan had been made by CMHC and improvements carried out it was transformed into a gable-roofed, garage-attached home with a new exterior wall finish and substantial improvements inside.

Opposite page: **Housing trends of today and to-morrow** are evident in this Toronto scene, where apartments are rising in the midst of single-family dwellings.

housing loans made on lots serviced by septic tanks were in areas where the municipality had undertaken to have a sewage disposal system installed in not more than three years, or in “truly rural” areas. In rural conditions it was not practical to install piped sewage collector systems, and a sufficient acreage is available for the proper operation of a septic tank. If a septic tank system does fail in these conditions, only the owner is inconvenienced and endangered — he has no neighbours to collect the effluent from his septic tank.

The best year for housing in Canada before the 60’s was 1958 when nearly 165,000 units had been started. In 1959 this figure dropped to just over 141,000 and in 1960 dropped further to about 109,000.

The 1960 figure proved to be a low point, and the total of starts rose in each subsequent year, reaching 165,000 in 1965. All the provinces shared in this increase except Newfoundland and Nova Scotia, where the 1965 totals were less than in 1960.

During this six-year period, the total number of housing units started (744,467) greatly exceeded the number of new families formed (405,900). On a population basis, in 1960, 6.1 houses were started for each thousand of population; by 1965 the figure was 8.5 per thousand.

A very interesting feature of the housing starts in this period was a marked swing towards multiple-family dwellings. Statistics on housing starts by type are only available for centres of over 5,000 population, beginning in 1951, when less than 20% of starts were in the form of apartment units. Of all urban starts in the period 1951 through 1959, apartments represented less than 30%. However, in the period 1960 through 1965 the ratio climbed steadily until in 1965 nearly 55% of all urban starts were apartment units.

Housing starts during this period also showed evidence of the growing urbanization of Canada. In 1948, the housing starts in centres of over 5,000 population were just over 60% of total

CMHC



starts. By the late 50's the ratio rose to about 70% but by 1965 the figure was 83%.

Housing costs, as measured by the estimates of applicants for NHA mortgage loans, rose markedly from 1960 to 1965. The average cost of all single family dwellings, which was about \$14,600 in 1960, rose to \$17,400 in 1965, an increase of almost 20%. However, the cost per square foot of living space rose less than this, since the size of the average house rose during the period. The construction cost per square foot rose by about 8%, from \$10.60 to \$11.41, while the cost of the land component increased by more than 25%, from less than \$2,500 to more than \$3,000.

In 1965, regional variations in the construction cost per square foot were not very great, ranging from a low of \$11.32 in Quebec to \$12.77 in British Columbia. The variation in land costs was more extreme; from Quebec, with an average land cost of about \$2,000, to Ontario with an average cost of \$3,800, or nearly twice as much.

During this period, there was a much greater relative increase in the average costs of apartment units financed under the NHA. The average total estimated costs per unit increased by nearly 30% from less than \$9,800 per unit to more than \$12,700. The construction cost per square foot rose by some 17%, from 9.16% to 10.71%, while the land component rose by about 20% from about \$1,350 to \$1,600 per unit.

In the six-year period, about four billions of dollars of mortgage loans were required for new NHA housing. The

chartered banks supplied very little of this, in fact much less than 1%. The life insurance companies provided about 30%, trust companies nearly 23% and the Corporation about 45%.

These percentages of contribution to mortgage funds by various types of lending institutions show some interesting variations from the previous six-year period, when almost the same total was required (\$3.7 billion). In this period, banks made about 35% of the loans, insurance companies 31%, trust companies only 3% and the Corporation only 28%.

The big difference was, of course, the virtual withdrawal of the chartered banks. The life insurance companies contribution remained about the same, and the Corporation had to make up the difference, assisted by a much larger contribution by the trust companies. Direct lending by the Corporation was nearly half a billion dollars in the year 1965, and this was almost 60% of all NHA lending in that year.

It is not within the scope of this account of the Corporation's activities to treat of the capital market in Canada and of all the various factors which create wide swings in the availability of mortgage funds. However, it is important to note that in a growing country a large number of housing units must be provided each year; the necessary commitment of mortgage funds is therefore great, and is, of course, increasing with rising housing costs; if these funds cannot be provided from the normal sources, the Federal Government, acting through the Corporation, has been required to take up the slack. Housing, of

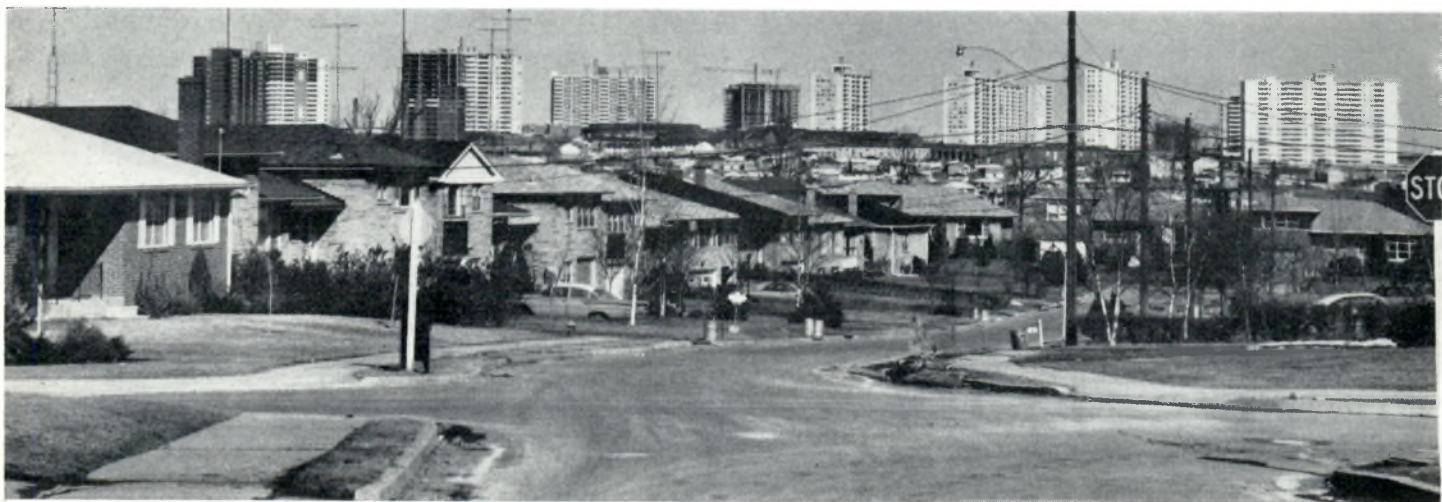
course, is only one segment of the economy and it must "compete" with others, such as necessary industrial and commercial investment, and the capital for all this can only be found from domestic savings or importation of capital.

During the period under review, the NHA mortgage requirement per unit rose in keeping with the rising costs of housing. Late in 1960, the maximum loan per house was increased to \$14,900 from \$12,800, and the ratio of loan to appraised value, which had been 90% of the first \$12,000 and 70% of the remainder, was raised to 95%-70%. In 1963 the maximum loan was increased to \$15,600 and the ratio increased to 95% of the first \$13,000 and 70% of the remainder. In 1965 the maximum loan for a house was raised to \$18,000.

Loans for apartment units were also raised. In 1960 the maximum loan per unit was raised from \$7,000 to \$8,750, and the ratio of loan to lending value from 80% to 85%. In 1963 the maximum loan was raised to \$12,000.

In 1965 the average NHA mortgage, for all types of unit, was about \$13,150 as against \$10,860 in 1960. This includes the smaller apartment unit loans and, as has been noted, the ratio of apartments to houses rose sharply during this period. The mortgage based on the average cost of NHA single family units in 1960 would have been about \$12,900; on the average cost in 1965, the mortgage would be over \$15,700. It will be seen that as costs and loan ratios rise, a constant increase in the supply of mortgage funds will be necessary to finance an equal number of houses.

GILBERT A. MILNE & CO. LIMITED





Quatrième chapitre par R. J. Lillie

20 ANNÉES D'HABITATION LA SCHL DE 1946 À 1966

Les logements sociaux et l'aménagement du territoire

La formule de participation fédérale-provinciale (article 35A de la LNH) visant la production de logements sociaux n'a pas donné de résultats satisfaisants; le gouvernement fédéral a approuvé la construction de 3,500 unités, tandis que durant les six années qui précéderent, il en avait approuvé environ 6,000.

Cependant, une nouvelle loi mise en vigueur en 1964 permit aux provinces et aux organismes dédiés au logement social d'obtenir de la Société des prêts hypothécaires à long terme et à intérêt modique, allant jusqu'à 90 p. 100 du coût en immobilisations des ensembles de logements sociaux. L'Ontario a profité grandement de l'article 35D de cette loi; elle a institué l'Ontario Housing Corporation vers la fin de l'année 1964, et, en 1965, cet organisme obtint l'approbation de prêts qui permirent de réaliser près de 3,000 logements. De ce

nombre, 1,318 étaient de nouveaux logements et 1,601 qui existaient déjà furent achetés et transformés pour répondre au besoin de logements sociaux.

Ainsi dans une seule province, on a approuvé en un an, des prêts pour presque autant de logements sociaux qu'on en avait construits dans tout le pays en six ans sous l'ancienne formule "d'association".

De 1950 à la fin de 1965, le gouvernement fédéral approuva des prêts pour 15,597 logements sociaux mis en location. Sauf l'Alberta et l'Île-du-Prince-Édouard, toutes les provinces profitèrent de ce programme.

De l'année 1948 jusqu'au terme de 1965, la SCHL autorisa le lotissement d'environ 19,000 terrains dans divers programmes d'aménagement de terrain appartenant à la municipalité. Durant toute cette période, plus de deux millions d'habitations ont été mises en chantier dans tout le Canada; il ressort donc que l'aménagement du territoire

réalisé durant cette période est infime par rapport au besoin de terrains équipés. Toutefois, il est permis de croire qu'une politique plus dynamique de la part des provinces favorisera davantage à l'avenir l'aménagement du territoire urbain sous la direction d'organismes gouvernementaux.

Programmes municipaux d'épuration des eaux-vannes

Une modification à la Loi nationale sur l'habitation, apportée vers la fin de l'année 1960, autorisa la Société à consentir des prêts aux municipalités pour les aider dans leurs programmes d'épuration des eaux-vannes. Les gouvernements à tous les paliers s'inquiètent de plus en plus en effet de la pollution de l'eau et du sol; c'est pourquoi, le gouvernement fédéral espère qu'en offrant une aide financière aux municipalités, elles seront encouragées à compléter ou améliorer leurs installations de captage et d'épuration des eaux-vannes. Les prêts accordés selon cet article de la Loi

Photo de gauche: A Montréal, des ouvriers s'affairent à minimiser la poussière qui résulte de l'action des démolisseurs.

SCHL



Ci-dessous: Ce secteur de Victoria connu sous le nom de Bastion Square est un exemple de rénovation urbain réalisée par des travaux de restauration.

peuvent s'élever aux deux tiers du coût estimé et sont remboursables en 50 ans; le taux d'intérêt est aussi intéressant.

En fait, la réaction à cette offre d'aide financière a été remarquable. A la fin de l'année 1965, 932 prêts de ce genre avaient été approuvés, ce qui représente plus de 170 millions de dollars. Toutes les provinces en ont profité. Le gouvernement a grandement stimulé ces programmes en prévoyant dans l'article en question un remboursement d'une partie du capital emprunté et de l'intérêt accru, quand les travaux sont terminés en deça de la date fixée de temps à autre par le gouvernement fédéral.

Programmes d'habitations pour étudiants

Une modification à la Loi nationale sur l'habitation, apportée à la fin de 1960, a permis à la Société de prêter aux universités pour les aider à construire des locaux d'habitation pour les étudiants. En général, des prêts de ce genre peuvent s'élever jusqu'à 90 p. 100 du coût de la résidence projetée; ils portent un intérêt fort raisonnable et l'amortissement se fait en 50 ans. A cause des graves problèmes financiers auxquels les universités ont dû faire face devant une expansion trop rapide, cette aide a été très bien accueillie, et durant la

première année, il s'est négocié 21 prêts de ce genre. De 1960 à 1965, 111 programmes de construction ont été approuvés, ce qui a engagé plus de 126 millions de dollars. Durant cette période, 26,000 étudiants ont pu trouver un logement dans ces résidences.

Cette première modification à la Loi ne permettait des prêts que pour des résidences universitaires et que pour des étudiants célibataires. En 1964, cet article fut modifié à nouveau pour que ces prêts soient consentis, en plus, aux sociétés coopératives et aux institutions à but charitable qui s'intéressent au logement des étudiants du niveau supérieur et aussi pour accorder des prêts à l'intention d'étudiants mariés, en vue de leur procurer des logements complets.

Le réaménagement urbain

La Société estime que l'encouragement au réaménagement urbain est une de ses fonctions les plus importantes. Dans ce domaine, il s'est produit des progrès encourageants, de 1960 à 1965.

En général, la première mesure à prendre en vue de réaliser un programme de réaménagement urbain est de mener une *étude de rénovation urbaine* portant sur tout le territoire municipal. Suivant les dispositions de la Loi nationale sur l'habitation, le gouvernement fédéral fournit à cette fin jusqu'à

75 pour cent de ce que coûte une étude. Avant l'année 1960, 27 études ont été réalisées. De 1960 à 1965, 48 ont été commencées. Au total, le gouvernement fédéral a versé 1.35 million de dollars pour ces 75 études.

En 1964, la Loi fut modifiée afin de permettre à la Société centrale de fournir une contribution égale à 50 pour cent de ce que coûte la réalisation d'une phase intermédiaire entre l'étude d'un projet et sa réalisation, c'est-à-dire la *préparation du programme de rénovation*. Il s'agit, en définitive, de dresser un plan précis de réaménagement complet, de restauration ou de conservation d'un secteur bien délimité. Trente plans de ce genre ont été approuvés en 1964 et 1965 pour lesquels la Société a versé environ \$800,000 au total.

Ces études et ces plans ont amené la mise à exécution de 17 programmes, qui furent approuvés par le gouvernement fédéral de 1960 à 1965. Ce chiffre représente plus du double des programmes approuvés entre 1948 (quand fut adoptée la loi pour la disparition des taudis) et 1959. Ces programmes ont permis de réaménager en tout près de 600 acres de territoire, ce qui a coûté près de 30 millions à la Société qui a versé chaque fois une contribution de 50 p. 100.

Les prêts pour l'amélioration de maisons

Les banques à chartre consentent à toute personne qui veut améliorer sa propriété des prêts garantis partiellement par la Société. Le volume de ces prêts s'est maintenu à environ 36 millions de dollars par année, ce qui a fait un total de plus de 220 millions pour la période allant de 1960 à 1965.

En 1960, l'article pertinent de la Loi nationale sur l'habitation a été modifié pour permettre aux propriétaires de logements à loyer de profiter de ces prêts. On s'attendait alors à une activité plus intense dans ce domaine, mais ce ne fut pas le cas. Les prêts accordés pour l'amélioration de logements loués n'ont pas atteint 10 p. 100 du total annuel.

A la fin de 1965, après 11 ans d'activité, près de 300,000 prêts, d'une valeur totale de 384 millions avaient été approuvés pour ce motif. Les pertes nettes, durant cette même période, ne se sont pas élevées à 2 millions. En tout,

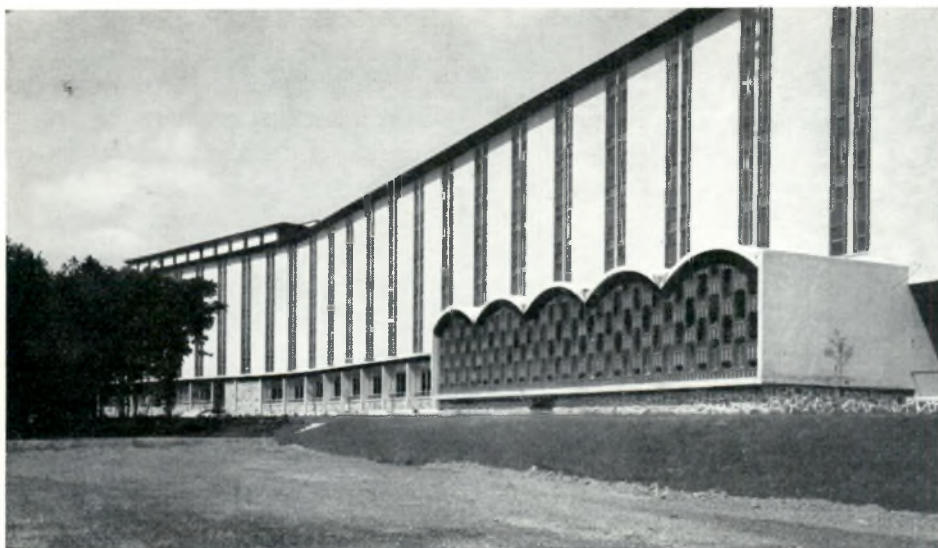


Photo de gauche: Cette résidence d'étudiants de l'Université Laval est l'une des nombreuses maisons construites au Québec à l'aide de capitaux obtenus du gouvernement fédéral en vertu de la Loi nationale sur l'habitation.

Ci-dessous: Afin de réduire la pollution de l'eau, cette usine d'épuration des eaux vannes a été construite à Sainte-Thérèse (Québec) grâce à une aide financière fournie par le gouvernement fédéral conformément à la Loi nationale sur l'habitation.

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on compte au Canada environ 6 millions de maisons; les 300,000 prêts pour l'amélioration de maisons représentent donc un volume remarquable de maisons conservées et améliorées — évidemment, il faut tenir compte du fait qu'un grand nombre de maisons ont été améliorées par d'autres moyens que par un prêt assuré aux termes de la LNH.

Il est intéressant de noter que, pour une raison quelconque, la Colombie-Britannique compte beaucoup plus de ces prêts que la proportion de la population l'aurait laissé croire. Est-ce que les gens du littoral du Pacifique sont plus soucieux que les autres Canadiens de maintenir leur propriété en bon état? Ou faut-il conclure que cette activité particulière est mieux organisée dans cette partie de notre pays?

Le commerce des créances hypothécaires

Il a été question précédemment du problème épineux des grandes fluctuations dans l'offre des fonds hypothécaires. En 1961, la Société a institué une nouvelle méthode de mise en marché des créances hypothécaires avec l'espoir de régler ce problème.

Les administrateurs d'établissements d'affaires peuvent constamment acheter une grande variété de titres offerts sur le marché: il y a continuellement en vente de obligations du gouvernement fédéral, des gouvernements provinciaux ou municipaux et des sociétés commerciales, à divers taux et dont l'échéance varie de 5 à 30 ans. Un réseau national de courtiers de ces valeurs maintient un marché efficace et méthodique. Ces effets de commerce peuvent être achetés

par téléphone; ils sont faciles à garder; leur comptabilité est facile à tenir; enfin, leur vente, d'ordinaire, se négocie promptement. Puisque le marché de ces valeurs est toujours actif, un dépositaire peut connaître en tout temps la valeur marchande des obligations qu'il détient. S'il le désire, il peut négocier facilement ces titres pour en retirer un profit en les vendant à un moment favorable ou pour en réduire ou prolonger l'échéance, ou encore pour améliorer son revenu.

Tout cela prouve que les obligations sont, de façon générale une forme d'actif facilement convertible. Cependant, on ne peut pas en dire autant des créances hypothécaires. Ces dernières ont pour gage une propriété immobilière plutôt que le crédit des gouvernements et des sociétés; leur remboursement peut être affecté par la situation financière de l'emprunteur sans que le détenteur de la créance ne puisse rien pour stabiliser cette situation; dans presque tous les cas, le principal diminue à chaque versement mensuel, ce qui crée des problèmes de comptabilité et de réinvestissement; enfin, les échanges de ces valeurs n'étant pas fréquents, il n'existe pas de marché courant; donc, on ne peut pas en connaître la valeur marchande actuelle.

De plus, les préliminaires et la gestion des créances hypothécaires sont onéreux. C'est pourquoi seules les plus grandes institutions financières ont établi un service de prêts hypothécaires. Dans le cas des grandes compagnies d'assurance, par exemple, comme il n'y a jamais assez d'obligations pour satisfaire leur besoin de placement, elles

peuvent, grâce à leur service de prêts hypothécaires, investir des millions de dollars à des taux plus élevés que ceux des obligations. Les grandes compagnies d'assurance et de fiducie ainsi que les banques à charte peuvent donc affecter d'importantes sommes à l'achat de ces créances; pour les petits établissements financiers et autres maisons de fiducie, les caisses de retraite en particulier, les créances hypothécaires ne sont pas une forme courante de placement. On constate depuis longtemps qu'on pourrait améliorer la stabilité du marché de ces créances, si les prêts hypothécaires négociés par un prêteur bien organisé pouvaient passer à un autre prêteur qui n'a pas l'organisation voulue pour en consentir, mais qui voudrait en détenir une fois qu'ils ont été faits. Cette vente de premières hypothèques par le créancier hypothécaire à des acheteurs de valeurs constitue le "marché secondaire" des premières hypothèques. (Ce terme est pris à tort parfois pour des deuxièmes hypothèques, ce dont il n'est nullement question ici.) Il y a toujours eu commerce de premières hypothèques, mais il se faisait surtout par voie de négociations particulières entre des institutions commerciales spécialisées.

Pour créer un marché quelconque, non seulement faut-il des acheteurs mais il faut aussi des vendeurs qui présentent un choix assez raisonnable d'ar-

Ci-dessous: Voici une maison de Kingston qui a été restaurée. Son propriétaire avait demandé un prêt hypothécaire pour l'amélioration de maisons situées dans un secteur désigné pour la rénovation urbaine. Avec ce prêt, il a pu faire poser un nouveau toit à pignon, aménager un passage couvert qui sert d'entrée latérale et un garage qui se trouve, de cet fait, rattaché à la maison; enfin, il a fait poser un nouveau revêtement au mur extérieur de la maison, le tout apportant une nouvelle apparence à la maison et plus de confort à son propriétaire.

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tibles à négocier. La Société a tenté de lancer un marché constant en 1961, alors qu'elle a organisé une série de ventes aux enchères des créances hypothécaires qui constituaient son propre portefeuille. La valeur nominale des créances offertes de 1961 à 1965, à l'occasion de 13 ventes, a été de \$308,250,000 au total. Ces créances furent vendues aux institutions qui ont soumis des prix, y compris des courtiers en placements.

Il n'y a pas de doute que la majorité de ces prêts hypothécaires furent vendus en dernier ressort à des caisses ou institutions financières qui ne consentent pas habituellement de prêts hypothécaires, ce qui a libéré de fortes quantités de capitaux pour consentir de nouveaux prêts hypothécaires. La constitution d'un "marché secondaire" est loin d'être chose faite, mais cette activité de la Société, de 1960 à 1965, y a contribué grandement.

La question très controversée de la fosse septique

La question de procurer des terrains bien équipés en services collectifs est revenue sur le tapis bien des fois; dans la plupart des cas les municipalités n'ont jamais pu en fournir autant qu'il en fallait. Durant les années 50, il fut évident qu'en bien des endroits, ce problème n'a pas été "résolu" d'une façon satisfaisante: on a permis l'emploi de fosses septiques individuelles au lieu d'installer un réseau municipal de dispersion des eaux-vannes.

Par exemple, en 1955, dans les 58 régions métropolitaines et urbaines importantes qui formaient alors la plus grande partie des milieux urbains au Canada, 30 p. 100 des prêts LNH furent accordés pour des maisons pourvues de fosses septiques. Halifax, Sudbury et Vancouver comptaient le plus de cas de ce genre, mais cela s'est vu un peu partout, excepté dans les Prairies. Notre Société fit alors sentir sa désapprobation. Aussi, dès 1961, la situation s'était améliorée à tel point que dans les régions mentionnées plus haut, seulement 12 p. 100 des maisons nanties d'un prêt LNH n'étaient pas raccordées aux services collectifs, et en 1965, la proportion était tombée à moins de 2 p. 100.

Alors que la Société centrale avait pris l'initiative en cette matière, les provinces et les municipalités s'opposèrent aussi à l'emploi des fosses septiques car des expériences successives prouvèrent l'inefficacité de ces installations. Le jour où les provinces et les municipalités purent obtenir des prêts LNH pour lancer des programmes d'épuration des eaux-vannes, ce dont il est question ailleurs dans cet article, il fut possible de poser les installations nécessaires dans bien des agglomérations qui, autrement, auraient été forcées de s'en passer.

Au terme de l'année 1965, la Société n'approuvait l'installation de fosses septiques que dans les municipalités qui avaient projeté d'installer un système d'épuration des eaux-vannes en deça de trois ans, ou encore dans les régions vraiment rurales. Dans le cas de ces régions isolées, il n'est pas profitable de pratiquer des canalisations d'égout collecteur, et le terrain ne manque pas pour installer une fosse septique qui fonc-

tionne parfaitement bien. S'il arrive qu'une ne fonctionne pas bien, seul l'usager en subit les conséquences, vu que sa fosse septique ne sert pas à collecter les détritux de ses voisins.

Les logements mis en chantier de 1960 à 1965

Avant les années 60, la meilleure année pour la construction d'habitations fut 1958, durant laquelle près de 165,000 logements furent mis en chantier. En 1959, le total baissa à un peu plus de 141,000 et en 1960, à environ 109,000.

L'année 1960 fut la moins active, car chaque année subséquente la mise en chantier a marqué une augmentation, au point d'atteindre 165,000 en 1965. Les augmentations furent générales, excepté à Terre-Neuve et en Nouvelle-Ecosse, où les totaux de 1965 ont été moindres par rapport à ceux de 1960.

Durant ces six ans, le total des logements commencés (744,467) a grandement excédé le nombre de familles nouvellement formées (405,900). D'après la population, en 1960, 6.1 maisons ont été commencées par mille âmes; en 1965, il y en eut 8.5 par mille âmes.

Il est intéressant de noter que durant cette période, les entrepreneurs se sont lancés dans la construction de maisons multifamiliales. Les statistiques sur la mise en chantier répartie par genre d'habitation n'existent que pour les agglomérations de plus de 5,000 âmes, à compter de l'année 1951; à ce moment-là, les appartements formaient moins de 20 p. 100 du total. De toutes les maisons commencées dans la période qui s'étend de 1951 à 1959, les appartements représentent moins de 30 p. 100. Cependant, de 1960 à 1965, la proportion n'a pas cessé d'augmenter, alors que près de 55 p. 100 de tous les logements mis en chantier dans les centres urbains étaient des appartements.

Durant cette période, on a pu constater que le phénomène de l'urbanisation s'accroissait au Canada. En 1948, les logements mis en chantier dans les centres de plus de 5,000 habitants, ne formaient qu'un peu plus de 60 p. 100 du total. Vers la fin des années 50, la proportion a monté à 70 p. 100, mais en 1965, elle se chiffrait à 83 p. 100.

MASS TRANSIT BY AIR

by Keith M. Henderson

Surface Problems and Surface Solutions

The problem of metropolitan transportation has been discussed by experts at considerable length and numerous solutions have been considered. Current stress is upon systems approaches which consider all present modes of transportation as parts of spatially-organized networks, with interdependencies among the component parts. Transportation, in turn, becomes a part of larger socio-economic systems. Air travel, except for inter-city movement by Vertical - Take - Off and Landing equipment, is not a critical part of these systems analyses. Its apparent high cost and low capacity have precluded consideration.

Implementation of surface solutions is proceeding at a rapid pace for both rail and rubber transportation. Rail demonstration projects, highway and subway construction and realignment, preferred lanes for buses, improved peak-period controls, one-way traffic movement, urban parking facilities, user charges and so on, are bringing about changes in the urban transportation pattern. But, as a greater proportion of the metropolitan area is devoted to automotive movement and parking, the limit is rapidly reached.

Symptomatic of such saturation is the debate among New City officials on the merits of providing additional

conveniences which will encourage automobile flow into the center of Manhattan, as opposed to restrictive measures designed to discourage use of private vehicles. Improvements can generate increased traffic resulting in a perpetuation of congested conditions. Nevertheless, the recently passed \$2.5 billion transportation bond issue in New York State, offering a broad range of solutions, reveals the value placed on convenient transportation by voters. Massive funding is being made available for surface facilities, while limitations of space and time continue to impose significant restraints.

These three compelling factors suggest the importance of considering short-haul movement of hundreds of thousands of people by air or air-assist:

1. The exhaustion of options on the ground.
2. Decreasing per-mile air costs, as surface costs per-mile rise.
3. The availability, through tested civilian and military applications of air technology such as 60-70 passenger helicopters and vertical-take-off and landing equipment.

Relating Costs and Benefits

Cost-benefit analysis is the usual means for determining appropriate economic solutions to transportation problems. Tempered with political and social considerations, it sets forth feasible alterna-

tives for policy makers. Capital and operating costs are related to all relevant benefits including ideally, noise, air pollution, safety, and aesthetic factors.

The statistical argument for mass short-haul movement by air is dependent upon the *weighting given to time savings and convenience*. Normally, operating costs are sufficiently high (\$500 or more per day for a helicopter) to offset any capital savings on right-of-way and ground construction. The use of hundreds of helicopters making continual runs within a given metropolitan area—necessary for mass movement—entails high per-seat, per-mile costs.

However, government subsidy of operating costs can shift this burden from the passenger and is economically justified since the total subsidy need





PHOTO'S BY SIKORSKY AIRCRAFT

not exceed the hundreds of millions to be devoted to capital, surface subsidies. Further, the general using public would benefit or balance economically through time savings, if such savings were judged to be of sufficient importance.

The essential argument resides not in current but in future conditions and is based upon an upward curve for surface per-mile travel costs in urban areas and a corresponding decrease in air costs as helicopters and vertical-take-off and landing equipment is mass produced, and operated on a round-the-clock basis.

Air Technology

The unusual machine (with Budd Sky-lounge) above, is the Sikorsky S-64 Skycrane (U.S. Army CH-54A), which is presently used in Vietnam for transporting "pods" such as field hospitals,

command posts or repair shops and for recovering aircraft downed in enemy-held territory. The S-64 is capable of carrying a 10-ton external payload including a bus-type pod which could collect civilian passengers along an assigned route on the ground and then attach to the Skycrane for air movement over congested areas.

Such an air-assist system is presently under study in Los Angeles to determine the feasibility of a helicopter air-lift from downtown points to the International Airport. A 40-passenger pod, similar in appearance to a bus, would pick up passengers and baggage from major hotels and the town terminal, and would then be lifted for approximately 12 miles to the airport, saving as much as one hour in travelling time.

The improvement over existing air-

port to downtown helicopter service available in New York, Chicago, Los Angeles, and the San Francisco Bay area, would lie in greater capacity and more convenient ground collection.

Sikorsky Aircraft claims that a Skycrane with a lift capacity of 17 tons is under design and cranes for 30 to 60 ton-loads are being studied. However, helicopter manufacturers including Sikorsky indicate in their publicity releases and in private conversations an inclination towards the "helicopter airliner" for mass urban transit. "The S-65, a 67-passenger helicopter, is Sikorsky Aircraft's answer to the short-haul air transport needs of the immediate future — and the all-important question of subsidy-free helicopter airlines. The proposed aircraft is a commercial growth version of the existing CH-53A, heavy assault transport helicopter built for the Marine Corps. The S-65 would be able to cruise at 191 miles an hour on 250-mile inter-city flights."

Presumably, large helicopters would also be technologically feasible for intra-city movement.

The several types of VTOL aircraft now under development will undoubtedly be supplemented by new equipment in the future. Other countries as well as the U.S. are experimenting with VTOL and STOL (short take-off and landing). For example, the French STOL, Breguet 941, can carry



60 passengers or 10 tons of payload at a speed of 270 m.p.h. and land on a 200-foot runway.

Further Demonstrations

Impressive accounts of air technology do not answer the basic questions as to mass intra-city movement in the "third-dimension." Assuming the availability of technology and even the economic feasibility, essential doubts remain on such problems as safety and noise.

Only through demonstration projects can the public and policy-makers be convinced of the utility of short-distance air travel. Experience in New York City with the New York Airways helicopter service from the top of the Pan American building in densely populated Manhattan indicates that initial worries over safety were unfounded and objections to noise from adjacent apartment dwellers and office workers were ameliorated by schedule accommodations and tacit acceptance of the inevitability of noise.

A proposal by the City of New York and the Port of New York Authority to construct an elaborate heliport on the East River has not given rise to great public protest.

One possible demonstration project in Manhattan would involve Skycrane lifting of bus pods from Upper Manhattan to the Downtown area, over the East River and the Hudson River. Pickup of scheduled buses would occur at Columbus Circle on the West Side and a corresponding point on the East Side of the Island and deposit would be in the vicinity of Wall Street. A continuous ten minute, two 'copter shuttle would completely by-pass the congested Mid-town area and, over a 6-hour period (3 hours in the early morning; 3 hours in the early evening) could carry in excess of 4,000 passengers. Ultimately, 100 skycranes could transport 200,000 commuters per day in the New York City metropolitan region.

Unlike fixed track equipment, helicopters could be shifted to other uses (cargo-carrying in the case of Skycranes) in the intermediate hours between morning and evening rushes.

An experimental Budd Skylounge passenger pod attached to a Sikorsky S-64 Skycrane is given a public demonstration in the United States.

The prospect of mass transit by air will require considerable adjustments in thinking and behaviour if satisfactory adjustment is to be made to such an environment. Fundamental value choices will be called for even after economic, technological and safety factors have been publicized.

For some time to come, the weight of expert opinion is likely to be against mass air-travel. The case is well stated by Fitch (1964):

"Helicopters, in spite of the vast technological improvements made in recent years, are still costly to operate. As a result, public transportation by helicopter is presently uneconomical except under unusual conditions.

"Their use in urban areas will be restricted also by size of the fixed facilities required for any volume operation. Landing areas 200 x 400 feet are required, plus additional areas for parking, loading, and transfer facilities. The noise levels of larger helicopters will make them unpopular neighbors in densely populated business and residential areas.

"No technological advances on the horizon promise to reduce costs of operation significantly. Therefore, it is unlikely that this mode, with its limited vehicle capacity, will play an important role in transporting large volumes of passengers in metropolitan areas in the future. Its principal role will be in specialized movements where terrain or traffic congestion inhibits rapid ground transportation.

"Various other types of aircraft are being designed for vertical take-offs and landings. While such craft may ultimately be used in inter-city transportation, it is doubtful that they would ever prove effective in volume urban or suburban transit operations because of their limited-unit passenger capacity and high costs."

In spite of such judgments, it is clear that planning opportunities are available in the airways. While air travel would never replace surface movement, it would add an additional component to the total urban transportation system.



*The world wants more uranium
and ELLIOT LAKE in Ontario
will supply a great deal of it . . .*

A TOWN DETERMINED TO LIVE!

by Robert Lundgren



CMHC

. . . But it has not always been this way. The town has ridden the peaks and troughs of boom and near-bust as the world market for uranium has fluctuated over our few atomic years.

Once crowned the "Uranium Capital of the World," Elliot Lake was conceived and built as a model town. Two major residential areas were developed. Separate sectors were set aside in the township for commercial and industrial enterprises. At the peak of its boom-town days, more than 25,000 people crowded into and around the townsite. Half of these lived in homes, the other half in trailers. Prosperity was the word everyone lived by.

Then came the announcement in November 1959 that the United States would not take up its options to buy Canadian uranium after 1963. Mines began to close and others substantially reduced their operations. Miners and businessmen and their families began the exodus to seek a living elsewhere. This was the start of seven long, lean years — years that scarred the face of the town and the hearts of its people.

Entire families abandoned homes, leaving no forwarding address to facilitate the formalities of foreclosure on outstanding mortgages. Others remained to become tenants instead of home-owners because of their inability to meet payments. Some lost self-respect. Homes

were boarded up, streets became deserted. A few people stood defiant, certain their town would rise again.

Churches were important during these years. They supported those whose confidence needed strengthening when the spirit of the community was at low ebb. Like his fellow ministers, Reverend R. H. Farrell and his Church, Our Lady of Fatima, gave encouragement when it was needed. The great majority of his congregation were good citizens who maintained their self-respect through the difficult years. A minority became social problems and in need of welfare.

Thoughtfully, he said, "A few months ago it was pointless to scold those who could not pay their rent. There were no jobs and they had no money. They knew also that CMHC would not evict them. Unfortunately, some lost the incentive to work and developed bad habits of idleness that persist today. Now there is work for everyone, but a few still need help and encouragement and the redemption of self-respect. You must understand, they once lost hope. And hopelessness undermines the proposition that for those who toil, there shall be bread."

Ernest Dixon is the principal of Elliot Lake High School, another member of that tough and resilient clan of citizens who showed their faith in Elliot Lake by remaining at their posts. He has been teaching continuously in the town from the time his high school had its modest beginning in the Alcan

Theatre eleven years ago.

The school is now housed in a modern building completed in the late 1950s and accommodating 630 pupils. Today it is crowded. Plans are well advanced for a new wing to be added in late 1968 or early 1969. With this addition, teaching and administrative space will meet the needs of 1,000 students and teachers.

"But on the other hand," he said, "seven years of deprivation had its impact on the school-leaving population. The majority of those who graduated between 1960 and 1965 and sought employment, were virtually compelled to leave Elliot Lake. A few have come back, but others are well established elsewhere. Then there were the drop-outs and the unemployed graduates who remained in Elliot Lake. Their numbers weren't great. But having undergone the experience of 'something-for-nothing' prevalent during the hard times, their initiative seems sapped."

Elliot Lakers take pride in another educational institution: the Centre for Continuing Education, brought in at a time when new activities were sorely needed to bolster the economy of the town.

The Centre has two basic functions. Through Federal-provincial government co-operation, it serves as a manpower training centre; and it offers summer courses in the fine arts, music, drama, and language instruction.

Indoctrination of Indian families to

habits and customs of daily living in a modern house was one of its first tasks. Eric Colwill, Supervisor, Information Services, said in October 1967, "We have ten Indian families taking training at the Centre now. They live in CMHC-owned houses in the townsite. While the husband is taking a training course here, the wife is given instruction by the Department of Northern Development and Indian Affairs on managing and running a home. And, incidentally, the merchants have gained financially in fitting these homes with furniture and appliances."

"Seminars will be conducted here on subjects that are not only topical but also controversial. The first conference is one of vital importance and is in preparation for the 20th anniversary of the 1948 United Nations pledge to advance the rights of all members of the human family. This special seminar is on the theme of 'Universal Human Rights and the Indian in Northern Ontario.' Discussion leaders will include many prominent Canadians, and a large number of Indians have been invited to attend. The Indians particularly will be encouraged to enter actively in the discussions to promote a better understanding of their position today in the modern environment. We also propose to emphasize the equality of the relationship between the Indian and the white man."

On April 8th, 1965, the Centre opened for training. By early 1966, eight Mississauga Apartment Blocks each with 22 units had been transferred from CMHC to the educational institution. Approximately \$800,000 was spent on renovation and by June 1966, this was complete.

Peak enrolment occurred in February 1967 with 210 students attending courses; in September this had dropped to just under a hundred. In 1966, 96 students registered in January and in July there were 23. Nonetheless, when the activities of the Centre become nationally known, it expects 20,000 pupils to pass through its courses each year. When that happens, the Centre will consider itself more than just the eastern counterpart of the Banff School of Fine Arts.

Jack Gauthier and his colleagues in the Chamber of Commerce and in the Industrial Advisory Committee worked

tirelessly during the years of crisis to maintain the life of the community. Their promotion of Elliot Lake to provincial and Federal government authorities was relentless and unabating.

Declared Jack Gauthier in 1961, "We have 173 lakes right here in our immediate area. We have some of the loveliest scenery to be found anywhere in the world, magnificent hunting and skiing facilities, curling rinks, bowling alleys, tennis courts. We've just built the finest golf course in the north, and our lake trout are the best sporting fish in the province. We have every kind of accommodation and convenience for the tourist's comfort."

In an effort to attract tourists, 70,000 brochures were printed in tabloid newspaper form and distributed in early 1961 throughout Ontario and the Northern United States. Its twelve pages extolled the virtues of Elliot Lake as a paradise for fishing, camping, boating, swimming and hunting.

A new provincial park was established a few miles north of Elliot Lake and the Ontario Department of Travel and Publicity issued literature to tourists at border crossing points and from information centres.

The tourist trade has been on the increase ever since the first 1,000 visitors came in 1961. In a few more months a new airstrip will be completed to add to the many facilities already offered to the tourist. Elliot Lakers consider their town and its surroundings to be an ideal vacation land through all the seasons. They will continue publicizing its virtues as a tourist centre with the intention of sparking even greater interest in Canada's hinterland.

In 1964, J. Douglas Grass, President of the Chamber of Commerce and a member of the Elliot Lake Industrial Advisory Committee, would have sold his home had he been able to find a buyer. A year later he had a change of heart. He purchased a site in the North Industrial Area and transferred his entire lumber and hardware business from nearby Spanish to Elliot Lake.

"Nineteen sixty-five was a year of change, and there was a good chance of developing a market for our uranium. Besides, Elliot Lake was my home so I decided to take another chance."

Douglas Grass conveys the impres-

sion of tireless energy; he is a businessman on the move. "I just can't get help to run this business," he said after he had taken another order. "Like so many other fellows in business here, I am manager, labor force, clerk, truck driver and delivery man combined."

Reflecting the views held by other men in business, he has great expectations for the future of Elliot Lake. He foresees the eventual development and sub-division of a third residential area. He observed that he and several other businessmen are prepared now to build new homes, not only as a sign of progress, but also as an expression of faith in the community.

"Besides, housing is tight here right now, and we could use more homes."

The Federal government, through its agency, Central Mortgage and Housing Corporation, has had a keen interest of the fortunes of Elliot Lake.

The late 1950s witnessed a rapid growth of Elliot Lake and were also a period of heavy direct and insured lending operations by CMHC under the National Housing Act. Without doubt, this activity was a major factor contributing to the establishment of this model town. Within a span of slightly more than three years, Elliot Lake was conceived and erected on difficult and rocky terrain. The town was complete with shopping and industrial areas, residential housing and services, and paved streets.

Subsequently, when fortunes ebbed, and homes were abandoned during the population decline, activities by the Corporation were, if anything, intensified.

Leading institutions, including those who had financed accommodation sponsored by the mining companies, claimed reimbursement of mortgages in default. This procedure is made possible under the provisions of the National Housing Act by which CMHC insures the value of the mortgage. In addition, there was a substantial administrative workload attached to direct loans made by CMHC to homeowners whose payments had become seriously in arrears.

Cases of families abandoning Elliot Lake, their homes and mortgage equity, without leaving forwarding addresses, created legal problems. Such desertions, whether prompted by fear or haste,



CMHC

Lived in the basement for two years while he completed two other houses on the street, Joseph Rade eventually completed this house in 1967. He began work on it in 1959.

compounded the difficulties of securing title on behalf of CMHC. Mining companies were offered houses erected on behalf of their employees but they declined to exercise this option.

Unquestionably, and with reluctance, CMHC's encounter with the destiny of Elliot Lake compelled Canada's national housing agency to assume the role of a landlord.

In 1965 when the population had dropped to about 6,600, the number of housing units owned by CMHC and its Mortgage Insurance Fund were at a peak. These totalled 1,484 single-family dwellings and rental units, and represented an investment of \$12,000,000 in Elliot Lake. In fact, CMHC became the owner of 70% of the entire housing stock in the town.

"At one time," said CMHC Branch Manager George Hayward, "more than 700 units were vacant, some of them for five years. But beginning in 1965, people started to return to Elliot Lake and the number of vacant houses has been steadily reduced. Furthermore, many occupants who had previously rented accommodation from us, have now purchased the homes they occupied as tenants."

At a meeting on November 28th, 1967, held in the Municipal Offices to discuss the housing situation in Elliot Lake, George Hayward told municipal and mining officials, and the Chamber of Commerce that the waiting list for accommodation amounted to 216 names.

In most cases, these families would face a waiting period of at least three months before obtaining a house.

He also described CMHC's accomplishments in housing, and outlined plans that extended into 1968.

On July 1st, 1967, CMHC had 271 vacant single houses and about 106 multiple rental units that needed work done on them before they could be occupied. By the middle of 1968, most of the vacant single houses should be occupied. Rehabilitation of multiple rental units will proceed more slowly, mainly because of the greater complexity of problems met in this type of structure. One of the most difficult of these has been concerned with heating arrangements.

Nonetheless, by late 1968, renovation of all vacant units is expected to be complete and the immediate demand for housing satisfied.

What was the policy of Central Mortgage and Housing Corporation during these years?

E. C. Nesbitt, Assistant Director of Mortgage and Property Division, Head Office in Ottawa, has been directly and closely involved with the housing difficulties in Elliot Lake. He had this to say:

"The Corporation's management policy was formulated with a view to encouraging people to remain in Elliot Lake and to preserving the existing housing stock. There were both human and practical considerations. Rents were reduced and geared to income; some units rented for as little as \$45.00 per month. A substantial maintenance program was carried out, the object of which was to improve occupied properties and protect the exterior of vacant units.

"The Corporation followed the policy of rehabilitating only sufficient housing units to meet foreseeable demand. Because of our experience with vandalism to vacant housing units, it was not considered prudent to spend large sums of money on housing accommodation which may remain vacant.

"Today as units become available, they are offered to the people at the top of the waiting list. Houses for sale are on a first-come, first-served basis. Any person may make an offer on a house, vacant or occupied, subject, of course, to

the existing tenant's right of first refusal."

On arrears of rental and mortgage payments, he explained, "There has been a great improvement during 1967. Our Elliot Lake office administers about 765 mortgage accounts. A year ago, 87 of these were in arrears, today there are only 40. This is still a high ratio compared to other locations, but then, Elliot Lake has undergone a serious and difficult time."

What lies ahead? The current demand for housing will probably be met by mid-1968 through the renovation of existing stock. But, with world markets once again seeking uranium from Canada, news of additional contracts can only mean further growth for Elliot Lake.

Mining companies are anticipating increased operations from 1970 through to 1981. A labour force substantially larger than the number of currently employed miners is forecast. If production of uranium ore increases as projected, up to 1,500 new employees would be needed collectively by Dennison Mines Limited, Rio Algom Mines Limited, and Stanrock Mines Limited.

Businessmen will be faced with increased activity and the need for additional employees. The Elliot Lake Centre for Continuing Education will probably double its staff from the present 50 to 100 in the near future. Townspeople look to a permanent population of 12,000 or more by 1970.

If all goes according to plans, the completion of the CMHC renovation program of existing housing will meet the current demand. But the town will certainly need many more homes in the near future if its growth meets expectations. In the space of a few months, the problems of unemployment, vacant housing and unpaid taxes that harried municipal officials, have become incredibly reversed. Already, a citizens' group, representative of the community, is examining housing in the longer term.

The people of Elliot Lake find their new prospects stimulating. The eyes that observed the sorrow of their town during the first half of the 1960s, look ahead to the time when Elliot Lake will be like most other towns of 12,000 people — a community with character, spirit and steady employment.

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Central Mortgage and Housing Corporation
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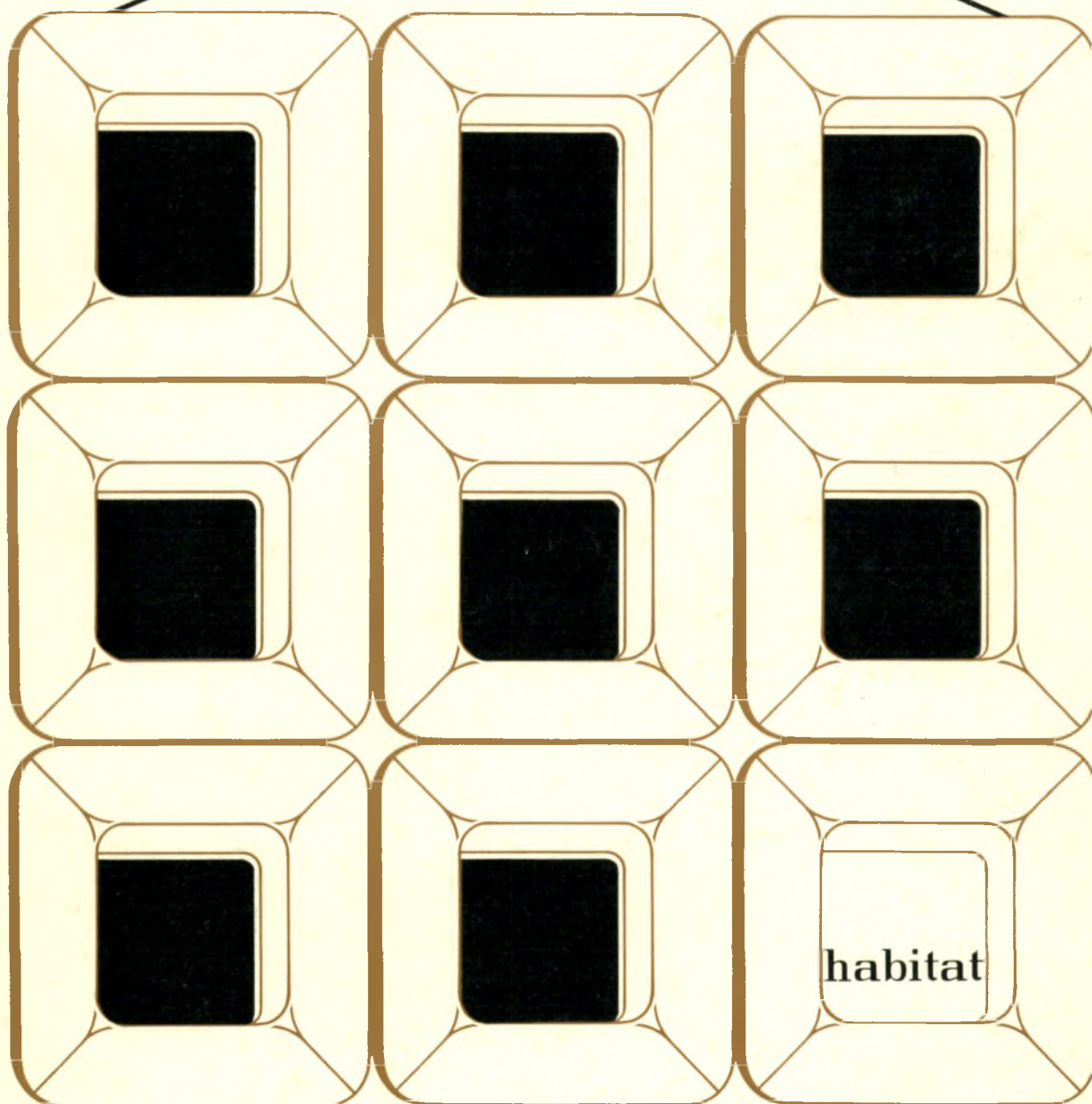
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habitat

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Inside Cover:

Aluminum Coiled Strip. NFB Photo

Couverture intérieure:

Aluminium en rouleaux. Photo ONF

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FACTORY HOUSING AND MODULAR CO-ORDINATION

"The manifest successes in the system production of housing in northern Europe are becoming more appreciated in Canada, or at least less easily depreciated." This half-humorous comment comes from R. E. Platts' article on system housing in northern Europe.

Factory construction of housing requires, apart from an assured market, a well organized structure — architects, labour, capital, municipality and both levels of government. In Canada, for a number of reasons, there are few companies who have been able to implement methods of system housing. Yet the latent drive for building efficiency must eventually lead to industrialization, and industrialization must mean some prior sort of component or modular co-ordination.

Earlier in the year, CMHC endorsed the Federal Department of Public Works' announcement indicating the Government was adopting modular co-ordination in architectural design and construction.

It will be some time before any programme within CMHC can be fully implemented, but the system itself is set out in the Canadian Standards Association's "Code for Modular Co-ordination in Building" and it is explained in Canadian Building Digest No. 8 — a publication put out by Mr. Platts' own Division.

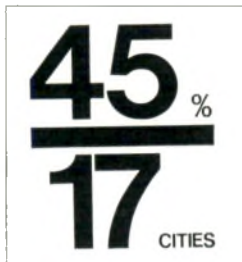
L'ÈRE DE LA COORDINATION MODULAIRE APPROCHE

"Les succès évidents obtenus dans la production d'habitations au moyen d'éléments modulaires dans le nord de l'Europe reçoivent une attention de plus en plus approbative de la part des Canadiens; du moins est-elle moins réservée qu'autrefois." Cette remarque aigre-douce vient de la plume de M. R. E. Platts qui s'est exprimé ainsi dans un article touchant la construction par éléments coordonnés dans les pays nord-européens.

La construction d'une usine d'abris par éléments modulaires préfabriqués exige, en plus d'un marché assuré pour une longue durée, une organisation bien agencée comprenant des architectes et des ingénieurs, de la main-d'œuvre, une certaine mise de fonds, et la collaboration des gouvernements aux trois paliers. Au Canada, pour diverses raisons, peu d'entreprises ont pu appliquer des méthodes de construction où l'on utilise des dimensions modulaires. Pourtant, un désir à peine latent d'efficacité en construction nous conduit forcément à l'usinage, et ceci exige la détermination d'un dénominateur commun appliqué aux éléments.

Au début de l'année courante, la SCHL a appuyé le ministère fédéral des Travaux publics quand celui-ci annonça qu'il adoptait l'idée de la coordination modulaire dans la création architecturale et la construction.

Aucun programme ne sera définitivement établi en tout point dans un très proche avenir au sein de la Société, mais le procédé par coordination modulaire a été exposé dans le "Code pour la coordination modulaire en construction", publié par l'Association canadienne de normalisation; et l'on peut se renseigner sur ce sujet en lisant le Digeste de la Construction au Canada no 8, publié par la Division de recherches en bâtiment, dirigée par M. Platts lui-même, du Conseil national de recherches.



THE CRISIS

Failure to understand the nature of the crisis in urban renewal is failure to understand the nature of the urban industrial society. Since it is also evident that a very substantial proportion of the people who inhabit Western industrial societies are, or will soon be, residents of metropolitan areas, it is not unreasonable to suggest that we are also living in *the metropolitan society*.

In the United States the 1960 Census revealed that just under 63 per cent of the total population resided in 212 standard Metropolitan Statistical Areas; the corresponding figure for Canada from the Census of 1961 was 45 per cent of the Canadian population resident in 17 Census Metropolitan Areas. If we apply the United States' definition of a Metropolitan Statistical Area, which is more flexible than the Canadian, this proportion would have been 49 per cent. There is no doubt that more than half of Canada's population in 1967 resides in metropolitan areas, defined in the Canadian Census as a population of 100,000 or more persons resident in an urban municipality with an additional population in adjacent or surrounding municipalities. Moreover, the number of metropolitan areas defined in this manner will increase in number throughout the balance of the century. It will be recalled that the Royal Commission on Canada's Economic Prospects 1955-1980 predicted that about two-thirds of the Canadian population would be metropolitan by 1980.

The bare statistical facts tend to obscure the major changes which have occurred and which continue to occur in the urban industrial society. In order to understand the impact of programmes of physical planning, it is essential, in the first instance, to understand the nature of the metropolis; in the second instance, the nature of the metropolitan society; and finally, the impact of that society upon individuals and families resident within it. Transcending all of these, however, is the fact that the metropolis is far more complicated than any pre-

45 %
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CITIES

by
Albert Rose

IN URBAN RENEWAL

vious aggregation of population, and the interrelationships between social and physical aspects of life and, thus, between social planning and physical planning are far more important than ever before.

THE NATURE OF THE MODERN METROPOLIS

1. The metropolis is growing very rapidly. The most obvious feature of the huge new city is its dynamic quality. The modern metropolis is growing very rapidly, both in population and from a spatial point of view. Its growth used to be compared with that of a huge pancake: that which was poured into the centre gradually moved and spilled over the edges. This pattern was characteristic of the 19th century and, perhaps, through the first thirty to forty years of the 20th century. It will be recalled that the prevailing theory of population growth held that as societies became increasingly urban and increasingly more affluent the birth rate and family size would decline; it was once predicted and widely held that by the 1940's and 1950's the total populations of such countries as the United States, the United Kingdom, France, and so on would not only have levelled off but would have declined in absolute terms from their peak figure. We know now that during 1920-39 these prophecies seemed likely to be fulfilled. The fashion after World War I was towards smaller families and the deep depression of the 1930's further increased the pressure on family formation and child birth. Since the onset of World War II, however, the picture has changed radically and at least from 1940-59 the situation in almost all nations (and in almost all urban areas within the nations) was that of a rapidly rising rate of family formation and birth rate per thousand of population, and thus a substantial increase in family size. Total population increased, and within the modern metropolis it was further assisted by the continuous migration from rural areas, villages and small towns to larger urban centres. In Canada these trends were further compounded by the immigration of 3,000,000 persons since January 1, 1946.

The spatial expansion of the metropolitan area has made it necessary to redefine the boundaries of most metropolises. Urbanization has spread rapidly beyond the boundaries of the central city to the point where it became evident within a very few years after World War II that urbanization was, in fact, primarily suburbanization, particularly since so many of the major central cities in the United States lost population between the Censuses of 1940 and 1950, a trend which continued through the Census of 1960. The rapid growth of the modern metropolis has, however, had a series of social consequences which are still in the process of discovery and examination. It is clear, as well, that the problem of providing social welfare services has by no means been solved.

2. Expansion of the metropolis has tended to concentrate the needy. Although it is true that during the past quarter-century the older "pancake theory" of metropolitan growth has lost force, there still remains some vestiges of the movement of newcomers into the urban core, where they find housing, employment, friends and the kind of community they wish, but this is followed by their major movement, or that of their children, out of neighbourhoods of first settlement into more distant areas within the city or beyond its boundaries. This process has been accompanied more recently, however, by a new pattern of settlement, which jumps the traditional "port-of-entry" requirement in that newcomers move directly upon arrival into areas of employment, housing and community located well beyond the older areas of the urban core and often miles beyond the central city. Despite this new pattern of post-war metropolitan settlement, the fact remains that social change within the entire area has tended to concentrate needy individuals and families within the central city, to the detriment of its social and physical development, while giving the suburbs a somewhat false picture of what might be loosely termed "freedom from want".

Since 1945 most new young families which were first formed and settled in the central city felt it desirable and worthwhile to purchase a home, usually a single detached house on a forty or fifty foot lot in a new housing development. Since the central city was almost entirely built up before 1940, these new opportunities were afforded mainly in the expanding suburban areas which began to grow rapidly during the first five years after World War II. Their growth in the United States and Canada was greatly advanced and supported by the mortgage provisions of the respective national housing acts in the two countries.

The loss of new young families with children left the central city with the following above-average characteristics (if one considers social and demographic characteristics throughout the metropolitan area):

concentrations of single persons, especially single elderly persons and elderly couples without children living at home; families with a total income well below the average; families whose male head was likely to have far less than average educational attainment and thus a spotty record of performance within the employment market; families of low income with relatively large numbers of children; families where no male head was present, either through death, desertion, or incarceration; families wherein either parent was chronically physically or mentally ill; families who were tenants.

By contrast, the rapidly expanding suburbs in the modern metropolis were populated, in the main, by the obverse of these social and demographic factors. The suburbs tend to have more than average proportions, as one examines the entire metropolitan areas, of the following groupings:

intact families headed by two parents under the age of 45, with two, three or four children; young families with well above-average family income; families headed by a male who has had more than a high school education and is likely to have had a college education with one or more degrees; families whose aspirations for their children include a university education and often a professional career; families who own their own homes.

The most needy members in the modern urban society are elderly persons (whether single or married) and large families of relatively low income. Both subgroupings are far more likely to suffer the incidence of social problems — ill health and family breakdown — than are the totality of households and families. Since they are relatively poor persons and families, they are likely to inhabit poor housing, which they may own or rent, but a far greater proportion are likely to be tenants. The needy in our society tend to be concentrated, therefore, within the older, more deteriorated neighbourhoods within the urban core.

3. The modern metropolis is affluent. During the past quarter-century the standard of living within Western urban industrial societies has increased considerably by comparison with the past but in this affluence an important proportion of urban residents does not share equally, if at all. These individuals and families who receive few of the fruits of the expanding economy are the very persons who have been

described in the previous paragraphs concerning the central city. For the most part, they have little education, little skill, little to offer in the labour market and thus a poor employment record, but their needs for additional income are continuous and pressing and exert a substantial pressure upon their children. These are families who are confirmed in their poverty and who tend to perpetuate their culture of poverty over more than one generation. Since the pressure for additional income is always severe, their children tend to leave school as soon as work is legal and feasible and thus they repeat the experience of their parents in terms of little education, little skill and little to offer in the labour market. When they marry and raise their own families the cycle of poverty is repeated over and over again.

In this new affluent society, however, it is not as easy to be poor as it may have been fifty or one hundred years ago. Most individuals and families are no longer poor, as Galbraith pointed out in *The Affluent Society*, and this general affluence rather than general poverty puts more instead of less pressure on those families who do not share in the general progress and expansion of the national economy. Since most people are not poor, it is more difficult for many to understand why some people cannot measure up, why some families cannot do what some families seem to be able to do, and why some families cannot, for example, provide decent adequate housing accommodation while the great majority of families have been able to raise a down payment, acquire a mortgage and purchase a home. During the past twenty-five years it has often been said that the tenant has been viewed as second class in North America. This has certainly been true of families whose income fell into the lowest third or the lowest half of the income distribution, nor has it really been changed by the expansion and availability of large numbers of apartment dwellings since 1958-59. The poor large family and the poor single elderly person, whether tenant or homeowner, is of the greatest concern to the social welfare system and, it must be admitted, is the very family who stands astride the path of the urban renewal process; they are of the greatest concern to the physical planning system as well.

THE NATURE OF THE METROPOLITAN SOCIETY

1. The metropolitan society is impersonal. It has been said so often, and yet it bears repetition to emphasize, that the social system in the modern urban society is far different from that which prevailed in the older rural society. In the latter, which existed in Canada until perhaps the mid-1920's, the entire family lived and worked together. Within the rural family there was customarily food, shelter and work for everyone, regardless of age, sex, or status within the family. The needs of the young and the elderly were taken care of within the individual family, or within what has become known as the "extended family", which included the aunts, uncles and cousins related to the primary family unit. For the most part family needs were met within the family.

In the modern urban society, however, these older social patterns have been completely swept away. The "nuclear family,"

consisting of parents and children, is the primary unit and there is no room within its household or its income structure to take care of unmarried relatives, elderly survivors, or other related persons. Moreover, it does not provide work for its members and they must seek employment (and thus income) in the broader community. If they are not equipped to earn an income for the support of the immediate family, then the family becomes dependent upon other sources of help. There is little or no help to be sought or received from the extended family, except within certain metropolitan enclaves populated by newcomers from a particular cultural or geographical setting.

So the modern metropolis is the site of an impersonal society. In the older urban areas, of course, neighbourliness was the city equivalent of family support in the old rural setting. As the metropolis grew and expanded, however, and as mobility increased within it, neighbourliness and the values held within the small community in the city tended to disappear. Within the old slum or blighted areas there are still vestiges of some considerable importance that are worth supporting if they can be nurtured and perpetuated. Nevertheless, the family is mainly on its own in the modern metropolis and if it fails for any one of a dozen reasons it becomes dependent upon the society as a whole and upon the programmes which that society has developed to meet human need. These programmes in turn depend upon the nature of the political economic and social philosophy held by the nation as a whole, as expressed by its inter-governmental programmes.

2. The metropolitan society is complex. The society of the modern metropolis is not simple. Its vast geographical area and its vast population are the two most obvious elements which serve to complicate life for the person who is either disadvantaged in making his way within it or suffers some disability in his normal living standards. Housing has always been scarce in the modern metropolis and scarcity inevitably connotes a relatively high price. Even the rentals and prices of housing fifty years ago, which today appear pitifully small, were substantial proportions of typical incomes. This situation has not changed in any fundamental way, at least not for those families who cannot, by their own means, take care of their housing requirements. The cost of a reasonable standard of living in a modern metropolis is higher than that in smaller urban centres or in rural areas. Accommodation of these costs places a tremendous pressure on the head of the family and on his wife. To seek employment in the modern urban setting the applicant must really have access to private means of transportation, even though the public transportation system is generally quite adequate. This means that to take advantage of the opportunities available in distant parts of the area he must own a car, maintenance of which is a costly business; and a car is no longer a luxury but a necessity. This is merely one example of the obvious fact that in the metropolitan society the luxuries of the past have become the necessities of the present and, as necessities, they are far more costly than they were when they were considered luxuries.

The main complexity within the metropolitan society rests

in the network of local authorities, a network that must be understood if the individual and his family are to have access to the physical, social and health services provided for him through many governmental programmes. Access to such programmes is extremely difficult for the family which is disadvantaged by lack of education, lack of skill or lack of income, and those persons for whom many welfare state provisions were designed have been able to make the least use of these provisions, since they do not understand how to obtain the benefits intended to assist them.

3. The metropolitan society is seductive. Despite the fact that many individuals and families are left behind in the general expansion of the modern metropolis and become charges upon the public purse through various health and welfare programmes, the large city continues to attract thousands of newcomers.

The metropolitan area promises an interesting, diverse, and sometimes exciting form of life for persons who have lived either within relatively narrow physical and social horizons or in those parts of the world which are generally economically depressed — the underdeveloped or developing nations. The urban society in the Western world apparently offers the economic opportunities and the social and cultural diversity which much of the world's population continues to seek. In any event, they flock to the cities and will continue to do so, although a substantial majority of newcomers will be disappointed. From the point of view of older residents, the burden of supporting increasing numbers of persons who do not have the capacities required in the metropolitan labour market and who must be supported in a reasonably adequate manner is a vexing problem.

As far as Metropolitan Toronto is concerned, its network of social, health and community services is more adequate, when viewed as a totality, than that of any other metropolitan area in Canada. As a consequence, it continues to attract newcomers from underdeveloped areas within Canada itself and, because of its relatively liberal welfare policies, it seems to attract many large, dependent families who merely move from areas of distinct poverty to the welfare rolls within the metropolitan area. Although the cost of living is quite high in the Toronto area, there has been a determined effort in recent years to upgrade the amounts of welfare assistance and these amounts very often exceed the average incomes earned in other parts of Canada by fully self-supporting families or family heads. These newcomers have tended to concentrate at the heart of the urban core and, in 1967, comprised a noticeable proportion of the tenants within available public housing accommodation.

4. The self-image of citizens and their roles have changed in the 1960's. All of the foregoing has been a fair and reasonable interpretation of social and economic tendencies, particularly during the period 1940-59. During the past seven or eight years, however, a number of new factors have entered the situation, some of them implicit within the social service

system and some of them extending from well beyond the fields of welfare and housing into the heart of social and physical planning in the metropolis. It is not to be assumed that there was a sudden change about 1960, since many of these tendencies had been developing for many years before and, in the United States at least, since the introduction of the concept of urban renewal into the 1954 amendments to the United States National Housing Act of 1949.

These new tendencies might be described briefly as follows:

(a) A new emphasis in social welfare services upon the multi-problem family. The revelation in the early 1950's that in St. Paul, Minnesota, about 6 per cent of all families absorbed more than 50 per cent of all available social welfare and health services gave statistical validity to what many people had long suspected. In the United States and Canada during the next decade, tremendous emphasis was placed upon research and demonstration projects whereby a multiplicity of services were made available to families with a multiplicity of problems, and who had previously been served by many competing and overlapping agencies.

(b) The new emphasis in the 1954 Housing Act upon citizen participation in urban renewal as one of the seven essential matters to be covered satisfactorily in the workable programmes. Since the workable programme was a condition of approval for urban renewal grants, many communities began to examine the associations through which citizen opinion was voiced and, if agencies did not exist, new organizations were created to give persons in the community an opportunity to be heard when the physical redevelopment of their cities and, more specifically, their own neighbourhoods were being planned. This emphasis gradually became more specific and more narrowly interpreted to imply that the residents of urban renewal neighbourhoods should be given every opportunity both to comment on plans put forward for the renewal of their neighbourhoods and to participate in the development and amendment of these plans in line with the views and preferences of affected families.

(c) A new emphasis upon the protection of relocated families and commercial enterprises. The whole question of relocation was another aspect of the workable programme which assumed full sway following the 1954 amendments to American housing legislation. In the previous fifteen or twenty years there had been little emphasis upon the problem of relocation of families displaced by public action in slum clearance and urban redevelopment programmes. In part this was because many housing programmes involved the creation of public housing on the cleared sites and affected families were likely to be rehoused temporarily in old accommodations nearby and later in the new public housing in the same area. The failure of American cities to plan relocation adequately led to more and more stringent regulations concerning planned relocation of displaced families in so-called standard housing at rents they could afford to pay. The strong emphasis upon planned relocation fur-

ther reinforced the possibility that affected "clients" in urban renewal neighbourhoods would be given an opportunity to voice their views and to participate in neighbourhood planning.

(d) The new emphasis, after 1960, on the "War on Poverty". After the election of the Kennedy administration the emphasis in social welfare, broadly interpreted, switched abruptly from the multi-problem family to a much wider spectrum of possibilities known loosely as the "war of poverty". The passage of the Economic Opportunity Act in 1964 opened vast possibilities for new programmes in old neighbourhoods and designed to meet the needs of the very group of families left behind in the central city as the metropolis spread, as the prosperous economy became more affluent, and as old neighbourhoods continued to deteriorate and were slated for public urban renewal activity.

The war on poverty further reinforced the concept that citizens had the right to participate in programmes designed, presumably, to break down the generational cycle of poverty. The Office of Economic Opportunity was required to enforce as far as possible the legislative stricture that poor people be permitted to participate in programmes designed to alleviate their poverty. The Act used the phrase "involvement of the poor" but it did not specify how this was to be accomplished. In almost all the programmes developed during the past three or four years, however, this matter of transferring some form of power to poor people, or their representatives, in designing and implementing anti-poverty programmes, has been a most difficult and contentious issue. The experience gained in these activities is necessarily available and used in the response of neighbourhood residents to urban renewal programmes.

(e) The new emphasis on Civil Rights during the past decade. This is of particular importance in American metropolitan areas where central cities are substantially populated — more than 50 per cent in Washington and Philadelphia, for instance — by members of racial minority groups. The Civil Rights movement has given disadvantaged newcomers and older residents in the central cities the moral basis for their organization and opposition to many public programmes (including urban renewal) which threaten to make life even more difficult while the community attempts to better the aesthetic, physical, or social aspects of living standards.

All of these tendencies have been present in greater or lesser degree within Canada, but their impact has been most noticeable in the largest metropolitan areas, Montreal and Toronto. The latter is acknowledged to be the Canadian city in closest touch with American social and economic development, and its relationships with American business and financial institutions make it inevitable that there is a rapid and free flow of ideas and people from American urban areas to Toronto.

45%
17
CITIES

THE SOCIAL IMPACT OF RECENT URBAN RENEWAL ACTIVITY IN TORONTO

Although the initiation and development of the Regent Park North Housing Project from 1947-1958 can be viewed as an early form of urban renewal activity, it is probably more accurate to date Toronto's true experience in this field from the publication of the first Urban Renewal Study by the City of Toronto Planning Board in 1956. In that report the Board identified two major planning areas for future investigation and potential public action, namely, the Spadina Planning Area and the Don Planning Area. In fact, almost all of what may be regarded as urban renewal in the City of Toronto during the past decade falls within the boundaries of these two substantial areas. The further identification by the Board in two subsidiary or follow-up studies, published in 1957, of the Moss Park and the Alexandra Park Redevelopment Areas was a further giant step along the way to the renewal of important sectors within the urban core.

The Alexandra Park Urban Redevelopment Project, as it later came to be known, has been considered for a long time to be a classic illustration of what should and what should not be done in planning and implementing an urban renewal scheme. The views of many observers, including this one, have changed significantly on these several points during the past two or three years. During the nine years which elapsed before the Alexandra Park Project was formally launched most observers considered the delays to be intolerable, the mistakes of the planners inexcusable, and the overall planning design incomprehensible, not to mention the fact that prior to 1964 the time required to prepare and transmit plan after plan through the various federal and provincial channels, and the revised plans required after that date, to be interminable. In the past two years, however, many observers have come to change their minds on certain fundamental aspects

of the Alexandra Park situation, particularly on the question of citizen participation and involvement as a consequence of the relatively smooth transition from a deteriorated neighbourhood to a redevelopment project. In particular, the whole question of relocation seems to have been well handled.

The most significant factor in the Alexandra Park situation has been the presence, throughout the entire decade, of the St. Christopher Neighbourhood House on Wales Avenue, a short distance from the project. St. Christopher House has played a classic role in the evolution of the Alexandra Park project, serving in almost any and every capacity that would prove useful to the residents and the city planners alike. The residents of the neighbourhood wanted to organize a committee — it was St. Christopher House that helped them to understand the requirements of committee organization, procedure and democratic participation. The residents of Alexandra Park wanted accurate information from city officials, appointed and elected — it was the staff of St. Christopher House who attempted to secure this information and to transmit it to the entire neighbourhood through the duly elected committee of residents. The residents wanted explanations of various plans and information concerning their personal future as homeowners and as tenants — it was St. Christopher House, together with civic officials, that arranged one or more public meetings and attempted, more or less successfully, to have accurate information transmitted. The most important element was the fact that a social welfare service, with various kinds of skills inherent among its staff members and with access to many resources, was constantly present to help the worried and often frustrated residents of the neighbourhood in their long wait for concerted public action. At the same time, this Neighbourhood House was working at its usual function of acclimatizing newcomers, particularly from abroad, to the requirements of a downtown urban area and an industrial society with its employment and other requirements. As in the past, the agency offered language instruction, general advice, information concerning nutrition, hot lunches for children, meals-on-wheels for elderly people, recreational programmes, and so on. It became the intermediary between public bodies and hard-pressed citizens; it helped them to become involved in urban renewal planning insofar as such involvement is possible within the Canadian context.

In hindsight, the time involved in this process now seems to have been well spent. During the years 1957-65 there seemed to have been a great deal of time wasted and frustration was rampant. Today this long process of preparation seems to have meant the difference between a reasonably smooth transition from an old neighbourhood to a new redeveloped neighbourhood in which slum clearance, public housing and rehabilitation of certain dwellings will be accompanied by a good deal of local public activity in making the neighbourhood a far better place to live. It is precisely this lack of preparation that has been missing in all of the new urban renewal schemes initiated since Alexandra Park, and yet in each case an attempt has been made to translate the lessons of Alexandra Park into reality. The advocates of attention to the social impact of urban renewal have apparently had their main point accepted,

that is, the Development Department of the City has attempted to provide, by appointment or through grants to private agencies, the kind of help that St. Christopher House has provided in Alexandra Park. Unfortunately, however, another of the arguments of most students and critical observers during the past decade also struck home, namely, the strong need for a speedup in the entire process. It appears now that the two objectives are incompatible. Time is required, and apparently a good deal of time is required to prepare residents for the kinds of physical and social changes which are implicit in modern urban renewal programmes. The attempt to speed up the entire process by the early appointment of a social worker (on the staff of Woodgreen Community Centre in the case of Don Mount Village, and on the staff of Central Neighbourhood House in the case of Trefann Court) appears to have failed. If this is so, the failure has been due in part to the reasons stated and in part to a misunderstanding by officials of the increased knowledge and understanding among the residents of urban renewal areas. Difficulties have also arisen because of the presence of a new breed of community worker whose role is still in the process of development.

The residents of downtown urban areas throughout North America are more conscious than ever before of the difficulties facing them, should their neighbourhood be designated for urban renewal. Moreover, during the past two years they have become quite aware of the fact that, in the midst of the most severe housing crisis faced in North America since 1940, they are being threatened with fundamental changes in their physical and social living arrangements. Most citizens, whatever their social class or economic position, are well enough educated to read the newspapers, to listen to the radio, to watch television, and they are aware, superficially at least, of the many major social and economic tendencies described in this presentation. They are also aware of the views of social workers and politicians that they themselves should throw off their accustomed passivity and enter into the planning of their own future. Many are no longer content to accept life as a fatalistic venture in which what is going to happen is going to happen and they can say and do nothing about it. They intend to examine plans for their own neighbourhood very carefully and for many reasons. Perhaps the two or three most outstanding reasons are implicit in their own socio-economic characteristics, namely, that many are elderly persons and many elderly persons are homeowners; that many are the heads of large families with a relatively low total family income; and that many are long-term residents of neighbourhoods which the public authority now considers to be deteriorated.

In all of these moods and aspirations the residents of urban renewal areas are encouraged and assisted by an entirely new breed of community worker. The term community worker is deliberately used, as only a very few of the persons working directly in poor neighbourhoods in North America today are, in fact, trained or qualified social workers. Many have had some training or instruction in the social sciences; many come from the fields of education, public health, and the ministry

or religious activities of one sort or another. Some, indeed, are graduate social workers who have been trained in the fields of community organization and community development. Without regard to the nature of their educational background most of these community workers are convinced that individuals and families in poverty, and thus in miserable housing conditions in the urban core, have had a "poor deal" during the past quarter-century and are likely to have an even worse future, since they stand, as has been said before, squarely in the path of urban renewal.

A great deal is known of the experience with relocation of families and with the social impact of urban renewal in many North American cities, and the consequences, as far as they have been revealed, are uniformly bad from the point of view of the original residents. They are displaced to make way for new housing which, in American cities, may be under private auspices for middle and upper-middle income groups. If they are Negro, they believe that urban renewal has become "Negro removal". They find that relocated families have been rehoused in accommodation which is no better and sometimes worse from a physical point of view and, usually, more costly from an economic point of view. They are disrupted in their familiar modes of community life and often transferred a long distance away from friends, medical contacts, and familiar areas of recreation, shopping and community life. This new breed of community worker is determined to help those who reside in urban renewal areas by informing them as far as possible of their rights and responsibilities in the process, and by encouraging them to make the best possible deal within the urban renewal scheme. This requires skill in organizing residents' or citizens' committees, information to be able to advise residents accurately as to the nature of the scheme and its probable course, and support from some established community organizations. Needless to suggest, these approaches, which run counter to the traditional public view of the social worker as a handmaiden of the establishment, are difficult for most elected and appointed public officials to accept. The community worker does not consider himself to be the person who anaesthetizes the residents of the urban renewal area to an acceptance without question of the public scheme. He is likely to be an *agent-provocateur*. He is likely to be an organizer who initiates public meetings or marches on City Hall. He is likely to cause trouble. He may even find that his organization has been captured by some political party or other, which seizes the opportunity to embarrass the party in power, either in City Hall or in the provincial government. He may be the willing or unwilling partner in this latter enterprise. In any event, he is determined to help a section of the most disadvantaged people in the modern metropolis to achieve the best possible future as a consequence of public physical and social policy. He will argue for better terms in expropriation proceedings. He will argue for resident involvement in urban renewal planning. He will argue that schemes are premature or inadequate. In many of these respects he may be quite correct. His task, however, is to ensure people in poor housing in our worst neighbourhoods have the opportunity to help themselves in the process of urban development.

Le vieillissement des villes

par
Harry N. Lash

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On parle savamment du vieillissement et on s' imagine que la ville a son cycle de vie, que c'est un cycle qu'on peut observer et qui se répète. Un tel cycle n'existe pas et n'a jamais existé peut-être. La condition actuelle d'une ville, l'état physique et les conditions sociales actuelles de ses quartiers vétustes, âgés, sont spécifiques à notre temps, différentes, nouvelles, et d'ailleurs particulières au site et à l'histoire de cette ville.

Quelques observations (voire hypothèses) sur les particularités de nos quartiers vétustes

D'abord, les zones dites "à rénover" prennent des proportions inégales par rapport à l'ensemble de la ville. Selon une étude du Service d'urbanisme de la ville de Montréal, 35 p. 100 des quartiers résidentiels n'ont "aucune espérance de vitalité". Cette conclusion découle de la définition de la limite de vie d'une habitation, laquelle, dans l'étude précitée, est établie à 55 ans. Le coût de rénovation du tiers de la ville s'élèverait à \$150,000,000 par année, pendant 40 ans. Mais, au bout de 40 ans nous aurions un autre tiers de la ville à rénover, soit tous les logements construits jusqu'à 1952. Je discuterai ailleurs de la validité du critère de 55 ans comme limite de la "vie" d'une maison; pour le moment je souligne l'étendue actuelle et future de ces zones "âgées". La croissance urbaine a pris une vitesse vertigineuse au début du siècle; ce n'est qu'aujourd'hui que nous en subissons les effets accablants. Le problème actuel des taudis est quantitativement beaucoup plus accablant qu'auparavant.

La quantité des vieux quartiers est d'autant plus grande que nous avons perdu, aujourd'hui, le moyen le plus efficace d'éliminer les taudis — la conflagration. C'est un désastre que d'avoir perfectionné notre système de protection contre l'incendie. En effet, les anciennes villes — Paris, par exemple — n'ont pas un problème de vieilles maisons tellement plus grave que le nôtre. Certaines villes européennes ont profité des bombardements de la guerre pour devenir, sous certains aspects, les villes les plus modernes du monde. A Montréal, la démolition annuelle de logements pour toute cause, excepté les projets de rénovation urbaine, ne dépasse pas 1/2 p. 100 du stock, ce qui implique une vie "naturelle" moyenne par logement d'au moins 100 ans!

Au 19^e siècle, le problème des taudis ne se posait pas comme tel, tout le monde étant alors plus ou moins mal logé.

Les zones que nous qualifions de vétustes aujourd'hui n'auraient pas mérité cette qualification il y a 50 ans. Certes l'âge, les effets du temps sur les matériaux de construction ont contribué à la détérioration de ces maisons, mais plus importante encore est l'évolution de la technologie. Logement dépourvu de bain ou de douche, d'eau courante, de placards? Pas de chauffage central? Pas de garage? Pas d'électricité? Choses peu importantes aussi récemment que 1910. Les logements étaient bien construits selon la mode de l'époque, mais ils sont maintenant dépassés par la tech-

nologie. Or, il est possible qu'on assiste prochainement à une explosion technologique dans la construction domiciliaire. Pourquoi la maison de demain ne serait-elle pas portable et en plastique? Une telle explosion, quoique susceptible d'améliorer grandement le logement en général, ne peut faire autrement qu'aggraver le problème du vieillissement des villes. La marge de 50 ou 60 ans que nous nous donnons aujourd'hui comme critère arbitraire pour définir ce qui est vétuste, pourrait demain devenir 25, 15, voire même 10 ans. La rénovation mettrait alors en cause la ville entière.

Donc, deux facteurs distinguent la vieille ville: l'étendue des secteurs vétustes et le nombre énorme de logements qui s'y trouvent; et le "gap" technologique entre ces logements et les logements modernes. Ces deux facteurs agissent dans le temps pour aggraver le problème.

Les moyens employés pour combattre le problème datent du début du siècle, quand l'économie et les valeurs sociales avaient fait suffisamment de progrès pour qu'elles permettent de définir le taudis comme un problème spécifique. Rappelons-nous qu'à cette époque la question portait sur des secteurs restreints et un nombre limité de logements. Achat, démolition et reconstruction en ont semblé être la solution pratique.

Mais survint alors un autre problème, sous la forme d'un paradoxe: la valeur

que prend un taudis qui ne devrait pas en avoir. Les pouvoirs publics ont dû payer en expropriation un prix qui devenait souvent la plus grande partie du coût d'un logement neuf.

Il y a plusieurs explications courantes pour cette valeur résiduelle fort élevée, mais elles sont toutes insatisfaisantes. Cependant, ce à quoi on ne peut échapper, c'est qu'elle existe. De là à conclure que la ville ne peut pas s'offrir l'achat de ses quartiers vétustes, il n'y a qu'un pas.

Il faut donc réexaminer le problème dans toutes ses vraies dimensions, et y déceler des approches adaptées aux besoins.

Proposition: Un régime de rentes

Le régime de rentes pour le logement et la pension de vieillesse des individus offrent quelques éléments de comparaison. Quand notre société s'est aperçue que le système social et familial avait changé et mettait les personnes âgées dans une situation assez désespérée tandis qu'en même temps le nombre et la proportion de ces personnes augmentaient, elle a institué les systèmes de pension.

De même pour le logement, nous faisons face à une situation sans précédent, à la solution de laquelle les méthodes traditionnelles ne suffisent plus. Une intervention du gouvernement s'impose. Dans le système proposé, le propriétaire ou les propriétaires successifs de tout logement occupé paieraient une cotisation annuelle calculée d'après la valeur locative du logement et d'après un taux fixé selon la vie théorique du logement (elle-même établie en tenant compte du type de construction et des matériaux utilisés). Les gouvernements pourraient aussi contribuer au fonds ainsi constitué. Lorsque le logement atteint son âge limite, le propriétaire fait son choix: ou bien il touche l'argent accumulé au compte de sa maison, et la maison devient alors la propriété des pouvoirs publics; ou bien il restaure sa maison selon des devis approuvés par les pouvoirs publics. Dans ce cas, les coûts de rénovation lui sont remboursés à même le fonds de pension, la maison est cotée pour une période de vie additionnelle, et

le cycle recommence.

Au début de son fonctionnement, le fonds de pension serait utilisé pour la rénovation des secteurs vétustes, sans attendre que les logements d'un secteur donné aient accumulé à leur propre compte tout ce qu'il faut pour payer les coûts de rénovation ou d'expropriation — ce qui corrobore le principe même des pensions de vieillesse. De même, les propriétaires de maisons neuves ou relativement récentes ne pourraient pas toucher d'argent — sauf exception, peut-être.

Un tel régime des rentes, s'il est basé sur une vie hypothétique des logements de 50 ans, pourrait fonctionner sur une cotisation annuelle par logement à peu près égale à celle des taxes scolaires actuelles. Au bout de 50 ans, le logement aurait à son compte l'équivalent de sa valeur au moment de la construction.

Il est évident que les fonds requis pour reconstruire tous les logements ayant atteint 50 ans d'âge ou encore pour les restaurer plusieurs fois afin d'atteindre l'âge moyen, disons 200 ans, avant que les causes "naturelles" réussissent à les remplacer — ne seront pas disponibles en employant les moyens actuels.

Le "filtering down"

Une maison délaissée par ses occupants fortunés dégringole l'échelle des loyers et tombe entre les mains d'une famille moins fortunée qui, elle, déménage aussitôt pour la laisser tomber encore plus bas. L'appellation du processus nous donne une image qui est l'envers de ce qui arrive réellement. Les logements ne bougent pas, au contraire, ce sont les occupants qui bougent. Il serait donc plus correct de dire "filtering up" que "filtering down", et cela avec une énorme différence dans les résultats de cette opération. La politique du logement au Canada est largement basée sur le concept du "filtering down", si bien qu'on ne devrait pas s'étonner que les mécanismes ne soient pas adaptés au processus du "filtering up" et que la politique ne réussisse pas. Pour que le processus démarre, il faut exercer une pression sur les gens qui occupent les paliers supérieurs de la hiérarchie des logements, pression qui devrait prendre

la forme d'une attraction réelle pour les nouveaux logements. Ni les prix ni les facilités qui caractérisent les banlieues sont une puissante force d'attraction, les gens y déménagent quand ils n'ont pas d'alternative. En même temps, à l'opposé, il n'y a pas un stock suffisant de vieux logements pour accommoder l'accroissement de la population pauvre. L'accroissement annuel de la population métropolitaine compte une proportion de pauvres nettement supérieure à celle de la population totale. Le coût des loyers du dernier et plus vieux palier du logement est assez élevé et celui des loyers du palier supérieur suivant est plus élevé encore sans pour autant donner des avantages marqués. Il y a donc le moins de mouvement possible vers le haut dans ce processus de filtration.

Malgré la faillite de la politique de "filtering down", les conditions d'habitation se sont grandement améliorées depuis une quinzaine d'années. Le taux de ménages à deux ou plusieurs familles est à son plus bas niveau, les chambreurs ont presque disparu, le nombre de ménages surpeuplés par rapport au nombre de pièces disponibles est assez minime, le nombre de logements sans facilités essentielles — sanitaires et autres — a diminué au point où ce n'est plus une cause d'inquiétude. Cette amélioration est surtout due à l'accroissement du revenu familial ou personnel. Sans pour autant "filtrer" dans d'autres paliers résidentiels, les familles ont pu se passer de l'apport financier d'un ou plusieurs chambreurs; elles n'ont plus besoin de partager un logement avec une autre famille et elles ont pu s'offrir un logement avec une pièce de plus. De même, les propriétaires des vieux logements ont dû installer douche ou baignoire et rafistoler les cuisines, au risque de ne pas trouver de locataires ou, plus ennuyeux encore, des locataires temporaires et instables.

De là la conclusion qu'un des moyens les plus efficaces d'améliorer les conditions d'habitation est d'augmenter les revenus réels des gens. Mais en même temps, il est essentiel de ne pas démolir les vieux logements avant qu'ils ne deviennent tout naturellement inoccupés.

En somme, le problème du vieillisse-

ment des villes est inséparable du problème de la croissance des villes. Aussi longtemps que nous bâtissons les nouvelles parties des villes uniquement en fonction des besoins des riches, nous aurons des taudis habités par les pauvres au centre. Dans la conjoncture actuelle il n'y a aucun espoir d'éliminer les taudis uniquement par la construction de logements à loyers dits "modiques". L'exemple d'autres villes le prouve. A Londres, aujourd'hui, où pendant les vingt dernières années 70 p. 100 de la construction d'habitations était affectée au logement public (Council Housing), les taudis existent toujours. Dans un rapport sur le projet de rénovation du secteur "Covent Gardens", on signale la présence de plusieurs milliers de taudis surpeuplés, sans baignoire, où les facilités sanitaires sont partagées, et ainsi de suite.

Quelques options:

1. Code du logement — Une solution partielle, incapable d'apporter une amélioration marquée. Les propriétaires n'économiseront jamais suffisamment d'argent pour défrayer les modifications majeures, ne prévoiront jamais l'amortissement et la dépréciation de leurs logements. Le Code du logement nous assurera des logements qu'on peut qualifier de "décentes", mais il n'est pas assez puissant pour franchir le "gap" technologique.
2. Nouvelles villes, villes satellites, comprenant des logements à loyers modiques et construits sur des terrains achetés à bon marché. Voilà une autre solution partielle. Son plus grand défaut, c'est qu'elle ne convient ni aux besoins ni aux budgets des pauvres qui y seraient démenagés. On aurait à subventionner non seulement leur logement, mais aussi la voiture familiale qui leur serait indispensable.
3. Abandon de la vieille ville — Cette solution est sérieusement préconisée dans certains milieux des Etats-Unis, bien qu'énoncée dans des termes moins brutaux. De puissantes sociétés immobilières projettent de bâtir de nouvelles villes dans des endroits déserts, d'y aménager des communautés de 500,000 per-

sonnes, avec tout le génie technologique. La vieille ville, disent-ils, a servi. Tout comme une voiture périmée, on devrait la jeter. C'est une autre expression du "used-kleenex philosophy". Cette solution doit être rejetée pour tous ceux qui croient fermement en la ville — la ville vivante — comme instrument qui, selon les mots de Lewis Mumford, "protège et transmet la civilisation".

Les problèmes soulevés par la rénovation urbaine actuellement pratiquée au Canada

Quoique la nouvelle politique de la ville de Montréal apporte des améliorations importantes au mécanisme traditionnel, on ne peut pas échapper à certaines de ses conséquences, qu'il soit amélioré ou non.

Parmi ces conséquences, on trouve les suivantes:

1. Il faut faire une "déclaration" comme quoi tel secteur est sujet à une étude de rénovation urbaine. Implication publique de pauvreté, d'insuffisance morale, de la présence de crimes et de vices de toutes sortes, même si le rapport officiel nie explicitement ces implications. Le public ne lit que les manchettes. Résultat: les occupants du secteur en question sont hostiles aux pouvoirs publics.
2. Laps de temps considérable, à mesurer souvent en années, entre la "déclaration" et la première action concrète dans le secteur en question.
Résultats:
— Gel effectif du marché immobilier du quartier, causant une certaine privation injuste aux propriétaires.
— Relâche de l'entretien des logements, décrépitude rapide.
— Fuite d'une portion de la population vers les secteurs vétustes environnants, avec ses conséquences malheureuses.
— Les gens sont frappés d'avis légaux incompréhensibles, qui sont souvent, à ce stade, en conflit avec les campagnes d'information du public, sinon en conflit

entre eux.

3. Réalisation du projet:
— Coût énorme de l'acquisition des terrains par voie d'expropriation.
— Perturbation de la vie sociale du quartier, avec les conséquences néfastes connues des sociologues.
— Hostilité générale de la population, avec ses conséquences sur la vie politique.
— Création d'un ghetto, qu'on le veuille ou non.
— L'absence dans les projets d'habitation d'une certaine qualité d'animation, d'individualité, peut-être d'élégance ou de luxe minimal. Ceci est surtout dû encore au coût d'acquisition, lequel, étant très élevé, entraîne des pressions pour économiser dans la construction.
4. Exploitation du projet:
— Enlaidissement de l'endroit causé par une préoccupation constante du coût d'entretien et des problèmes de surveillance.
— Multiplication des règlements imposés à la communauté de l'extérieur.
Le projet ne devient jamais leur projet.
— Manque ou faiblesse d'organisation sociale spontanée.
5. Autres difficultés:
— Problèmes de coordination des améliorations de toutes sortes avec le projet: équipement scolaire, social; rues, trottoirs, aménagement de parcs, plantation d'arbres, etc.
— Problèmes de participation de la population à la préparation du plan de réaménagement, difficulté de le leur faire comprendre, de les faire participer et coopérer à sa réalisation.
— et j'en passe.

En somme, le système actuel de rénovation urbaine est très bien conçu pour soulever une opposition farouche de la population directement touchée.

Pourquoi donc mène-t-on un tel effort?

Il faut croire que la pression est une réaction contre l'existence, dans une société opulente, de la pauvreté flagrante.



fortifiée par une certaine appréhension du monde criminel. L'évidence de ces conditions, ce sont les taudis. On s'est donc attaqué aux symptômes de la maladie.

La solution, s'il y en a une, est par contre de s'attaquer à la maladie réelle, c'est-à-dire, aux revenus insuffisants des pauvres.

Si l'on accroît les revenus réels, sans toutefois s'attaquer simultanément au problème de rajeunissement des vieux quartiers, on risque deux conséquences :

- Ou bien la construction de nouveaux logements à la périphérie sera suffisante pour la nouvelle demande créée, et dans ce cas nous aurons toujours les vieux quartiers sur les bras bien que partiellement vacants;
- Ou bien la structure des loyers se transformera pour accaparer une plus grande proportion des revenus, et dans ce cas nos vieux quartiers resteront pleinement occupés, avec cette différence que les occupants ne seront plus "déficitaires" selon les barèmes officiels. Dans ce dernier cas, le problème des défaillances physiques des édifices n'est pas réglé.

Les habitants des secteurs vétustes, des taudis:

1. Les pauvres. Les familles et les personnes seules, pauvres, dans un état continu de pauvreté, dont le cycle de pauvreté se répète de génération en génération. Ils habitent les taudis parce que les loyers

y sont bas. Mentionnons spécialement les personnes âgées, seul sous-groupe important.

- 2. Les ambitieux.** Les familles ou individus qui ont choisi d'habiter les taudis parce que les loyers leur permettent d'économiser sur la portion de leurs revenus affectée au logement, préférant consacrer davantage à d'autres fins. Souvent ces familles se trouvent regroupées dans un même secteur à caractère ethnique. Elles y trouvent de l'entraide familiale, elles y font fortune — la génération suivante habitera la banlieue, les Italiens, par exemple.
- 3. Les anonymes.** Ce sont les inadaptés, les criminels. En fait, c'est le groupe le plus difficile à définir parce qu'ils sont officiellement introuvables lors d'enquêtes. Ils sont les premiers à fuir devant les démarches des autorités, mais ils ne fuient pas la ville, seulement le quartier.
- 4. Les indigènes.** Les gens, souvent propriétaires, qui ont toujours habité le coin, qui ont toujours fréquenté la même église, et qui ne quittent pas le quartier malgré son déclin physique et social, malgré le fait qu'ils peuvent s'offrir ce qui serait, à nos yeux (mais pas aux leurs) un meilleur logement.

Evidemment, il y a des groupements et regroupements de toutes sortes; il y a une mobilité entre classes: par exemple, les ruraux qui émigrent vers la métropole, s'établissent dans une grande proportion

dans les vieux quartiers — les uns tombent graduellement dans la classe pauvre, les autres passent au rang des ambitieux.

De ces quatre grands groupes que je viens d'énumérer, les *anonymes* vont probablement presque toujours échapper à toute initiative de rénovation urbaine. Il y aura toujours des taudis quelque part pour les accueillir, sinon au centre de la ville, aux bidonvilles alors. Seules des initiatives à caractère strictement social peuvent les récupérer.

Les *indigènes* et les *ambitieux* nous posent un problème d'ordre éthique. Ils ont choisi leur habitation, ils l'acceptent, ils cherchent même des conditions que nous trouvons inacceptables. Avons-nous le droit de leur imposer notre choix?

Les pauvres ont besoin d'aide. Ils ont besoin de *se faire aider*, mais pour cela ils doivent prendre conscience de leur situation. Le logement pour eux n'est pas à l'origine de leur pauvreté. Ces conditions physiques d'habitation sont marginales à leur condition. Autrefois la majorité des taudis favorisaient les maladies infectieuses comme la tuberculose. Ils manquaient de chauffage, on y trouvait des accumulations d'ordures, des chambres non ventilées, des murs troués, des fuites d'eau. Mais aujourd'hui ces conditions sont des exceptions dans les zones vétustes.

Evidemment, nous ne pouvons pas rester inactifs tant que ces exceptions demeurent, mais les plus grands pro-

blèmes des pauvres en rapport direct avec l'habitation sont: le fardeau du loyer et le manque d'espace.

Ces deux problèmes seuls ne justifient pas la démolition immédiate d'un logement qui n'a pas d'autre faute que d'être vieux et mal entretenu. On devrait trouver une autre solution à ces deux problèmes.

Quant aux indigènes et aux ambitieux, à moins d'une preuve incontestable que leur choix de logement se fait au détriment du bien public et cela directement à cause de la situation du logement, pourquoi diable les déranger? Offrons-leur mieux, mais laissons-les libres de l'accepter ou de le rejeter.

Il reste quand même qu'il existe certains secteurs vétustes qui, selon toute probabilité, devraient être réaménagés très prochainement. Il est certain, par ailleurs, qu'à la longue tous les secteurs vétustes auront besoin d'être réaménagés. S'il y a un progrès technologique rapide dans l'habitat, ce problème viendra dans 20 ou 25 ans; s'il n'y en a pas, ce sera dans 50 ou 75 ans.

La "Corporation Communautaire", une suggestion positive:

La Corporation Communautaire serait établie seulement grâce à l'initiative de la communauté — c'est-à-dire, de la population du quartier vétuste ou de l'unité urbaine. Elle aurait une étendue territoriale bien définie, la population résidente se chiffrerait entre 40 et 150 mille personnes. Les gouvernements de tous les niveaux encourageraient la mise sur pied de telles corporations; les organismes de bien-être aideraient par l'animation sociale, mais la Corporation ne pourrait naître qu'avec la collaboration de la communauté.

Les capitaux, au début de la vie d'une Corporation, seraient fournis par les gouvernements. Le conseil de direction serait composé de représentants de la municipalité, des organismes locaux, des occupants et des propriétaires. Les actions seraient détenues par les gouvernements et les autres groupes précités; l'entreprise privée pourrait en acheter.

Les objectifs de la Corporation Communautaire seraient, en gros:

- D'abord, de susciter l'intérêt de la population dans la confection du plan et d'assurer la participation de la population dans les importantes options prises au cours de son élaboration.
- La préparation d'un plan de développement social, économique et urbain de son territoire, avec les objectifs précités.
- D'assurer la collaboration et la coordination des organismes publics pour les éléments du plan qui sont de leur ressort — écoles, parcs, cours de recyclage, services spéciaux de bien-être, etc.
- D'assurer la coordination dans l'exécution du plan.
- De réaliser les projets de construction, de démolition et de réaménagement qui sont les éléments essentiels du plan.
- D'acquérir, vendre, louer et exploiter des terrains et des immeubles, qu'il s'agisse de logements ou d'autres fonctions.
- D'exécuter ou de faire exécuter à l'occasion certains travaux publics pour le compte de la municipalité ou autre autorité publique.
- D'entreprendre des programmes d'information du public, d'animation sociale, etc.
- De verser certaines subventions aux personnes impliquées, tels les frais de déménagement.
- De mettre sur pied ses propres services avec le personnel requis.
- De faire le plus gros profit possible compatible avec les objectifs du plan.

Comment peut-on envisager que la Corporation fasse un profit?

C'est possible si on combine la proposition de Pension de Vieilles Maisons avec la proposition de Corporation Communautaire.

C'est à la Corporation que seront cédées les vieilles maisons dont les propriétaires auront pris la pension.

C'est la Corporation qui décidera si la vie d'une vieille maison doit être "renouvelée" par l'injection de fonds accumulés au compte de la maison.

Sur demande de la Corporation et si la chose est nécessaire pour la réalisation du plan, le propriétaire doit lui céder sa propriété. Il sera compensé à même le fonds de pension sur la valeur réelle de la maison ou en devenant actionnaire privilégié de la Corporation. Les propriétaires devenus actionnaires partageraient une certaine proportion des profits de la Corporation, plus les revenus gagnés selon les capitaux que représente leur propriété. Un propriétaire peut évidemment vendre ses actions au moment qui lui semble bon. Dans l'alternative, la Corporation peut lui céder des terrains d'une valeur égale.

Mais les activités les plus importantes de la Corporation resteront toujours les programmes pour le développement des ressources humaines.

L'avantage de la Corporation Communautaire, c'est qu'elle assure l'initiative locale. Elle offre à la population le moyen de *se faire aider*, dans la mesure qui lui est convenable, selon ses propres critères et valeurs. La Corporation pourrait susciter l'enthousiasme de la population plutôt que son opposition. Elle serait moins sujette aux pressions de "l'establishment" qui impose des choix étrangers. Son plan serait conçu petit à petit et la réalisation s'échelonnerait sur une période d'au moins dix ans.

Vous me direz que mes suggestions reposent sur une base inacceptable, une sorte de nationalisation des terrains et des immeubles qui s'y trouvent. Peut-être. C'est au moins une nationalisation plutôt différée — le processus peut durer 200 ans avant qu'il ne soit terminé. Songez au fait qu'il y a 200 ans notre civilisation émergeait d'un régime à demi-féodal où les terrains appartenaient à la classe aristocratique, peu nombreuse, qui, elle, acceptait les responsabilités publiques conséquentes à ce droit de propriété. Peut-être que dans 200 ans nos idées actuelles auront évolué quelque peu.

SYSTEM HOUSING

– THE SHELTER INDUSTRY IN NORTHERN EUROPE






by
R. E. Platts

The manifest successes in the system production of housing in Northern Europe are becoming more appreciated in Canada, or at least less easily depreciated. Some recognition is granted to the relevance of the leading system schemes to our own production of urban housing. Less well understood is the industry structure that has spawned the healthy system ventures — the total structure, encompassing producers, labour, the design and control professions, and the State itself. Certainly this deeper picture of vertical integration produces extremes of reaction here: uneasy disparagement from some, acclamation from others.

In the light of the surge in multi-family housing in Canada and the interest of some large producers in full systems, the Division of Building Research arranged a field and factory study with leading system contractors in Northern Europe, September 1966 to September 1967. Eight systems were given fairly complete study on large projects usually in full output, while field reviews of less depth were carried out on eight others. Quite apart from the study's purpose of assessing the realities of production and design of the advanced systems, the flow of projects yielded tacit insight into the strength of the integrated industry. The technical realities are summarized below with confidence; some inter-relationships of the industry structure are then sketched knowing that lessons are there.

The New State-of-the-art



The sampling of system housing in the 1-year field study was broader than the narrow selection of main studies would suggest. In several cases a single system was observed in two countries on varied projects, sometimes subject to such extremes as excellent job management on one project as opposed to little at all on another, and fragmented markets with scores of small systems enterprises in one country as against grouped markets and co-ordinated large enterprises in another. The secondary studies allowed selective sampling of a further variety of evolving systems and subsystems. From all of this a composite picture of the best of system housing can be given. Remarkably, a few single system ventures exhibit many similar attributes.



Among the largest contractors the controversy between full system building and improved traditional building is largely over — the decision has been taken, the systems machinery developed and set in motion. Central plants are operating two shifts a day and the sites are geared to the plants to form a true assembly line extension of the plant, no matter how far the one is from the other. The full systems of relatively few large finished parts and few site trades promote good order and fast flow, and in fact demand them, to make economic use of equipment and stock. A single crane and crew of seven will maintain a surprisingly steady pace of 120 and even 150 lifts a day to erect 2 to 3½ dwellings a day, or two or more floors a week on high-rise blocks.

The large-panel concrete systems now include in precast form all crosswalls and gables, floors, elevator shafts, stairs, landings, lobbies, refuse chutes and ducts, sometimes unit bathrooms and partial kitchens and even precast foundations and basements. The panels are erected ready for direct painting or wall-papering after minimal patching. The interiors and services — which together involve ⅔ the cost of a building — are now advanced subsystems: precise light partitions, doors, cabinetry, trim and closet-walls prefinished in vinyl film or baked enamels, and cast-in-panel services and trim raceways together with

the unit cores. All of this is quickly placed and joined within the precise structure with negligible handling damage. The same interior subsystems are now being adopted within steel frame systems. These are evolving toward the use of preformed covers between floor and suspended ceiling planes as fire protection to attain the large-part simplicity of the precast buildings.

Such total systems allow completion of large projects — low-rise complexes or high point blocks — within half a year. Thus, fast turnover and the attendant savings in construction financing have become as important in the systems picture as reliable cost control, quality control, and direct cost savings. In comparison with traditional jobs, full system contractors speak of direct savings of 10% and even 20% with a further 5% gained through shortened construction financing. Starting with sand and gravel (but not including cabinetry manufacture) these contractors use about 800 man-hours to produce a three-bedroom dwelling unit with flexibility of design; some require as little as 500 man-hours, more or less evenly divided between factory and site. (Site labour alone for apartments in North America is reported to be typically 1100-1400 man-hours.) Furthermore, it must be stated that in Scandinavia such systems are expected to, and do, produce a higher level of design and quality than is nor-

mal here. Amenities are comparable; hardware, openings, cabinetry and finishes are generally better, and so are the technical points of sound, thermal and weather control, precision, interchangeability — and simplicity. All this is not an average picture in any country: it is the state-of-the-art recently attained by the leading contractors after years of development.

Production Requires Market Continuity

First let it be stated that the housing task in much of Northern Europe is not significantly different from our own. Particularly in Scandinavia, the population is grouped in relatively isolated, mushrooming pockets, and all want high quality cold-climate housing. The proportion of multi-family housing is now also comparable, housing projects are about the size of our larger ones, and private contractors produce them. The identity of the client is the point of departure from our familiar picture. The housing client in Northern Europe is often a large, independent non-profit society or co-operative, or the State itself in its municipal or other form. Alternatively, the State may choose to set policy as if it were the final client, in its simple mandate that people be well housed. The effect, strengthened in the last few years, is the fostering of a market continuity and reliability not prevalent here.

left:

Rising above London: Wates point block

below:

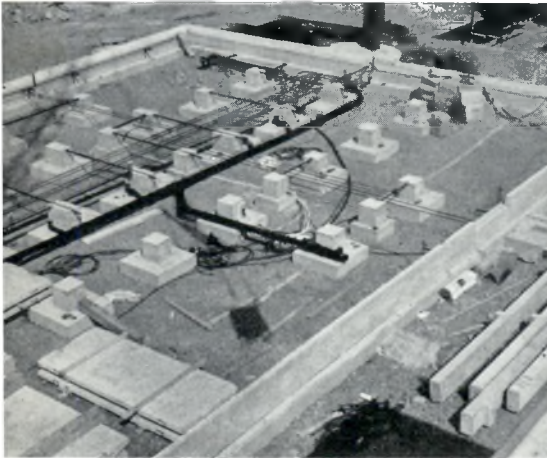
Precast foundations and district heating lines, Skarne, Sweden

below — 1, 2, 3:

*12 M Jespersen, John Laing Ltd.,
Livingston New Town, Scotland*

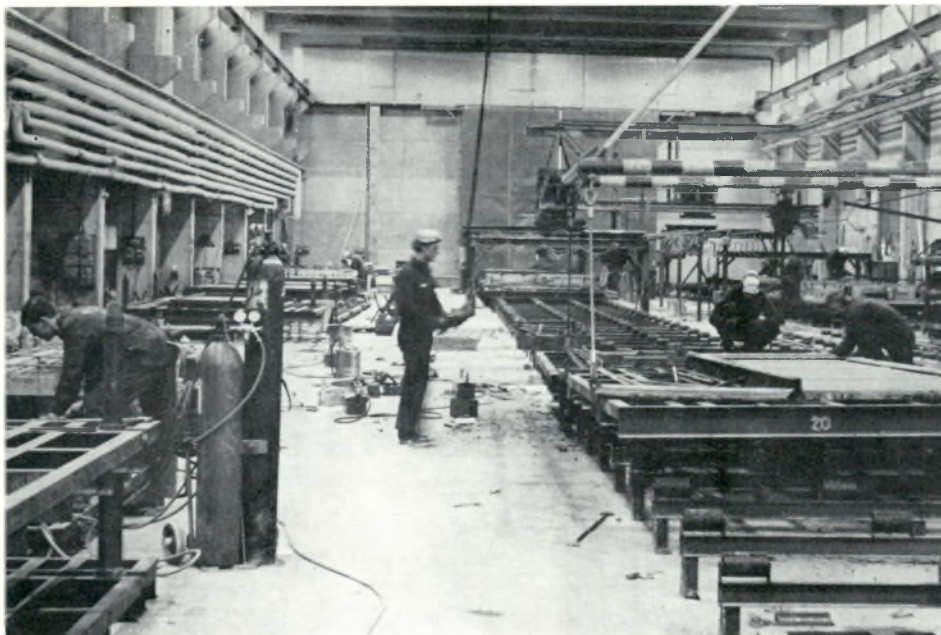
*Sandwich wall using tubular extruded
particle board. Otto Kreibaum AG,
Germany*

*“Rain screen” outer envelope wall
panels, Larsen and Nielsen, Denmark*



The intent of such planning for market continuity is to increase productivity in the housing sector — the only way to get new housing into more hands without cutting back on other needs or desires. Subsidization is not a large factor in the areas that have shown the total system advances. Rental subsidies for families with children appear to be of the same order in Scandinavia as the Family Allowance in Canada. The building financing facilities may make no distinction between system and traditional approaches but may demand a qualifying level of productivity. Equally important is the tying of State credit funds to long-term planning: in some areas financing is available in blocks of 2 to 5 years if the company can show a program committed to clients for that period of time. This of course favours the larger companies who use vertically integrated systems to win such a market with predictable price and quality.





The company can aspire to compete for projects anywhere, free from locally-imposed diversity. The building regulations are increasingly performance codes and are uniform in actual adoption and use. Municipal approval itself is most often in the hands of a technical man, while the central authority is there as the final arbiter if needed. The contractor can comport himself as a true manufacturer for an important mass market, a national, reputable, permanent enterprise with access to capitalization befitting the job.

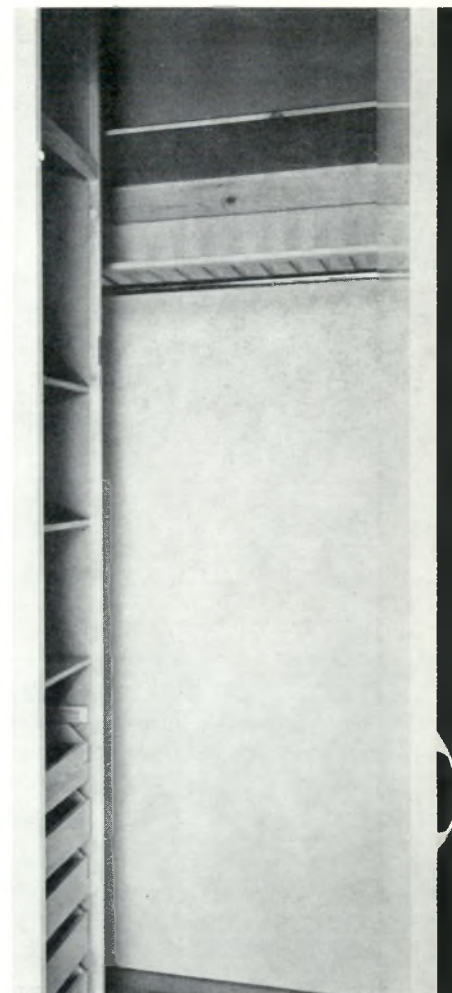
It can be argued that the cause-and-effect picture given above is too clean-cut and favourable. Examination of the rather different situation elsewhere, however, supports the same interpretation of the interdependence of the industry and its politico-economic environment. Despite the attention long given to housing problems and system innovation in the United Kingdom, the market there remains very fragmented and the industry largely so. In municipalities small and large, "lay committees" must authorize all projects and construction methods. Companies must sit before each public authority to discuss possible access to a job that is usually small or discontinuous. When large contracts are won, the local authority may not comprehend the projected system, speed and seldom assembles, clears and releases the land in time: thus many system jobs are delayed. The much-discussed "con-

sortia" grouping of municipalities has rarely been put into effective practice — the recent scheme of the Yorkshire Development Group is one laudable exception. Several such large package jobs are allowing full-flow production with techniques approaching total systems, with control of all supply inputs, to very good effect. Otherwise, the scores of partial systems that have sprung from builders and architects are vying for scattered small projects, with their shops running at half capacity or less.

Production Requires Producers

The successful total system building ventures in Northern Europe are generally the creation of heavy engineering contractors, not of normal builders or architects and seldom of materials groups. They have come from large concerns who can contribute the management, capital, planning and technical forces required for the mammoth job of housing production. Having little intimacy with the local, fragmented building world of authorities, distribution chains, crafts, design professions and the legal mystiques of land, they tend to see the business as a simple matter of: "Housing for the millions means housing by the millions".

These ventures reflect a philosophy that may still be surprising in the building business but is a first principle in any serious mass production industry: one interest — the producer — must con-



left to right:

Façade line, A-Betong plant, Sweden; Jespersen system, Denmark, this is the same as the Jespersen System in Denmark.

Kitchen and closet-wall units (photo P. E. Malmstrom, Jespersen, Denmark).

Detail of Elementhus assembly, Sweden

Polar Folkhuset sectional house, Helsinki



trol all input to create the desired finished product. In Scandinavia the producer fits comfortably into the scale of the other forces behind housing: the large client, along with the state's interest and controls; the comprehensive consulting organization, which sometimes is united with or is the producer; and the comprehensive industrial union. Quite often the most exemplary jobs are executed as "Totalkontract" schemes, which are something akin to "package deals". The producer assembles and develops the land and produces the housing complexes offering the client the desired program of design, place, time, quality and price.

The scale of these enterprises is not altogether alien to Canadian contracting. A factory producing over 1,000 units a year, 2,000 if on double shift, costs in the order of \$1,200,000. Site equipment to match the factory's double shift, erecting on site on one shift, would cost about the same, so that the investment is over \$3,000,000. The road-builders and dambuilders of Canada often have more than this investment in plant.

The producer owns the concrete factory and offers the complete building structure as a fairly flexible closed or semi-closed system, as described earlier. Design freedom is quite broad, especially on large projects. The producer may also make all services and the modular

prefinished "interior systems". More often he will co-ordinate and buy such interior systems from the several advanced manufacturers who now serve most of Scandinavia. These offer "open" or "catalogue" kits of remarkable quality, finish and precision. The producer is free to form flexible layouts confident that their precision matches the structure's accuracy: tight runs of 40 ft. of combination partitions and cabinetry were seen to fit against precast cross-walls within an end tolerance of several millimeters. This is not academic, it is done.

Such control can be traced back with the interior systems themselves to certain small-house prefabrication ventures in Scandinavia begun two decades ago. These established that wood house components can be precise and prefinished with revealed joints and no on-site cover-up, whether the components form final structure or quality cabinetry. Such developments have extended through the interiors of multi-family housing blocks and now include complete exterior wall systems as well. As the large producers are free to choose any materials, on a cost/performance basis within a rational building code milieu, it is now common to find prefinished wood frame walls (incorporating various noncombustible skins) enclosing system buildings low and high. The component suppliers offer such choices with assurance of tight control of qual-

ity and delivery scheduling; the producer pulls all these capabilities into the total system.

All Men in All Seasons

Four attributes can now be seen in many fast-paced total system projects that together give a healthy tone to the building process: (1) most of the men are reasonably free to work at a wide range of tasks and receive quick training to fit man and task; (2) the working conditions, safety aspects and amenities are very good; (3) system "close-in" and protective measures can keep both materials and men in comfortable order in all seasons; (4) the morale and pride of labour reflects the foregoing — and results in more houses, well produced.

The first attribute is one of the significant by-products of the accommodation between organized labour and equally-organized industry in Scandinavia. Comprehensive industrial-type unions can cover the total system building scene, factory and field, with nothing to gain (and much to lose) from fighting for narrow definition or protection of "craft" interests. Furthermore, the very simplicity of the precise, dry, large-part systems encourages the rational use of men. No electrician can argue that his skills are necessary to set in place a 5-ton floor panel because it contains one ceiling outlet. The on-site trades are becoming "assemblers" or general "monteurs."



left to right:

Skarne flexible "open dwelling" system. This particular system allows the owner to alter partitions, cabinet wells and even kitchen units as desired.

Polar system blocks, Helsinki

Because the building as an end product is the interest and responsibility of the one party, the producer, the interaction of all job factors is seen and understood. Management as much as labour knows the benefits of good site offices, cafeterias, locker rooms and facilities, and even clothing design. The comprehensive union sits down with management in the project planning stages and helps professionally with the feasibility assessments, incentive and piece-rate schemes, and even the project schedule and the "learning curve" allowances.

Job roads are completed and preventive maintenance schedules set up so that delays or equipment breakdowns are no longer a critical part of the scene. The large-panel systems now close in quickly and in the winter the heating lines and radiators can be hooked up as each floor is erected. Each storey can then be heated to allow grouting or patching to go ahead. Oil fired construction heaters feature flexible exhaust and intake ducts so that the interior air remains harmless to man and mortar. Except for the in-

terference of high winds with panel "montage" (and this is being resolved) the work runs smoothly in most weather conditions. More than half the labour is done in the heated factories and shops in any case, and this fits the tacit policy assumption found in Northern Europe: the preference and evolution of labour is toward indoor working conditions.

And in Canada

The mounting need for urban housing will continue to encourage the trend to multi-family complexes. At the same time, some of the European pattern of political - economic encouragement of low-cost housing, rational land assembly and production continuity is beginning to appear here. Still well ahead of such forces is the industry's increasing correction of its fragmentation: the leading housing and office complexes downtown or in suburbs or "New Towns" are quite normally creations of single interests, the developer-builder-owners. Certainly among these active groups there is no aversion to the "package" philosophy:

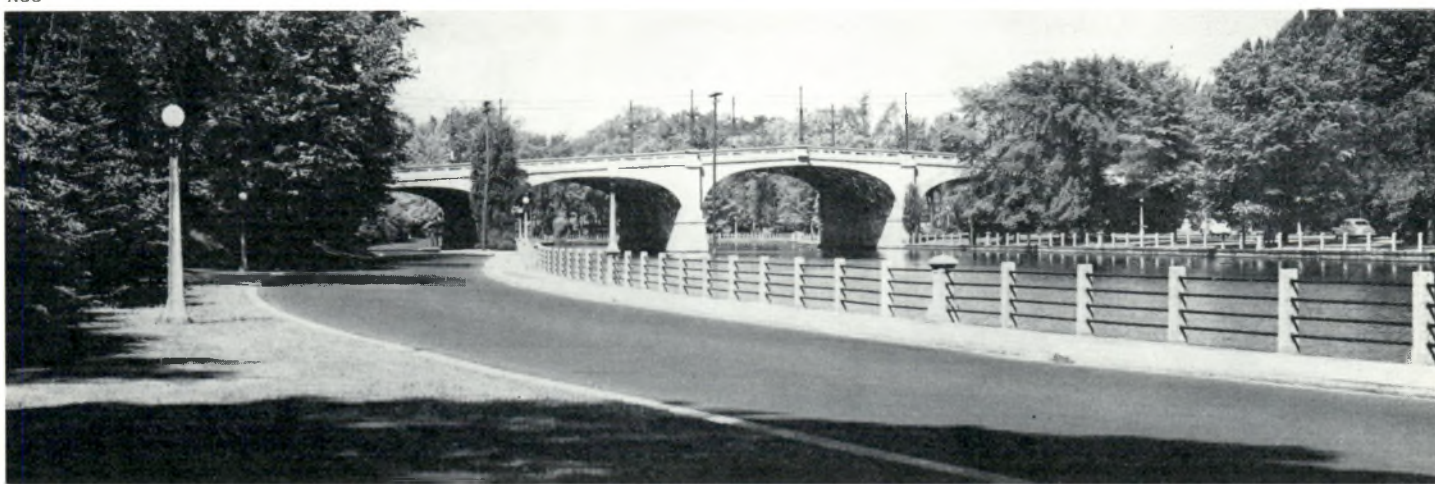
the advantages of the "totalkontract" approach are fully appreciated. The coordination of all inputs — including design — is the basis of any true industry.

Well pleased with the year-round effectiveness of partial factory systems in single family housing, such larger forces across Canada are now assessing the multi-family system successes in Northern Europe. Organized labour is also becoming conversant with the need for industrial union coverage of the evolving building industry. Already such comprehensive factory - field arrangements have been set up with precast concrete producers. Evident too is a stronger appreciation of the need for uniformity of building codes to allow the evolution of healthy national or at least regional enterprises. While still obscured by the traditional local, fragmented interactions between clients, builders, suppliers, crafts, design professions and land and legal interests, the potential inherent in the total system approach is better perceived and the industry is responding.

OUR CAPITAL AND ITS DESIGN

by JOHN LEANING

NCC



*Above:
Bank Street Bridge from Driveway below.
Bank Street Bridge a municipal structure
crosses the Federal Government Driveway
and Canal.*

In Togoland, Peru, New Delhi or Washington, Ottawa is the capital of Canada, just that. In Canada, Ottawa is a medium-sized town in the East, just 120 miles west of Montreal, enthroning the Government of all Canada, and having a mixed-up jurisdiction of two provinces, ninety municipalities and the Federal Government to boot, with everyone speaking English and French at the same time. Its appearance reflects just that.

It was not always so. When Queen Victoria (or was it Sir Edmund Head the Governor-General) chose Ottawa to be the capital in 1857, she chose it to be the capital of a **single** province — the United Province of Canada — in which Ottawa was reasonably central. It was Confederation ten years later that muddled the town's jurisdictional scene and from then on it assumed a split personality; on the one hand it was the capital of Canada and on the other hand it was an assorted collection of municipal governments half of whom derived their powers from Toronto, the capital of Ontario, the other half from Quebec.

This curious and somewhat unique situation has had a very real bearing on what Ottawa looks like today. The problems it has posed

to those with an interest and concern for townscape are fascinating and highly instructive.

Those who criticise the Federal Government for not seeing to it that the ninety assorted municipalities, now making up the National Capital, match up to international design standards must realise first that the Federal Government can only control the appearance of the land it owns. It possesses no rights to zone private property. Thus the majority of residential and commercial property and much of the rural areas and industrial zones lie outside its power.

How then have the Governments, Federal, Provincial and Municipal, guided (or not guided) the order and appearance of our Capital? At the turn of the century the Federal Government found itself in a lumber-industry town. What else could the guardian of the Federal Taxpayer do other than endeavour to make the best of a difficult situation by covering up the City's architectural problems with trees and bushes and by endeavouring to make sure that such government buildings as were seen did not offend the tastes of the times?



This situation extends to this day with, however, a few noticeable differences. The life and vigour of the 19th Century lumber town has largely disappeared due to industrial automation and the disappearance of the working class. After a period of languor extending from the depressed 20's to the affluent 50's, the local business and political community has wakened up to find itself in a capital of international significance. This awakening has produced such strikingly pleasant municipal and private developments as the Sparks Street Mall, the upper campus of Carleton University, the Skyline Hotel Block development, and some significant out-of-town developments such as Kanata and the Cité des Jeunes in Hull. But many of the small-time local merchants and politicians still live in the depression of the 30's intellectually, culturally and visually. Fortunately for Ottawa and Canada, however, the decisions which have formulated the appearance of our Capital have not entirely been guided by small-time businessmen and politicians.

Ottawa is the Capital of Canada. Whatever adverse features may pertain in most of the other cities of Canada are, therefore, not excusable here. The quality of the environment in Ottawa should be second to no other Canadian City and must be judged not by an Ottawa Valley yardstick or even a Canadian yardstick but only by international standards. Ottawa, both in the public and the private domaine, is to be compared with Paris, Rome, Washington, Moscow, Stockholm and London, and not merely Calgary, Regina, Winnipeg or Quebec City.

With this in mind some of those businessmen and politicians of a wider turn of mind have seen that aesthetic principles of international origin should be applied to design of our environment — both buildings and landscape, in order for Ottawa to properly meet its position in life. It is no longer plausible for the citizenry to erect what they please, albeit

on their own land. Everybody, including people from Washington, London, and Togoland, see their efforts from the street along with all the other private ventures adjacently. They have to raise their standards and make reasonably sure their ideas fit in with their neighbour's to produce in the end something worth looking at after the visitors have penetrated through the veil of greenery provided by the Federal Government. These standards of design have to be set with the advice of professional people who have had some training in the matter of urban design and who have achieved some professional repute in Canada. Therefore, the National Capital Commission in 1954, and the City of Ottawa in 1958, set up the Advisory Committee on Design and the Building Appearance Committee, respectively, to advise the Federal Government on the one hand, and the municipality on the other, on what they should permit in terms of design on Federal Government land and major streets of the City.

Like all Committees these may have made regrettable recommendations from time to time, but on balance one hesitates to think what Ottawa would have looked like by now without their advice. Administrators and businessmen alike have squirmed from time to time under the biting criticism of these two Committees, and politicians have sometimes wished they had not passed the bylaws setting them up. In philosophic terms these Committees may be considered to be the aesthetic conscience of the Federal and Municipal Governments. A third Committee — The City of Ottawa Signs Committee, was also originally a professional committee but its criticism on design matters then was so censorious as to be uncomfortable to the body politic who, under pressure from the advertising industry decided to give up the fight and make the Committee a purely political one in terms of representation. Considering that signs cover up a fair proportion of the architecture and landscape architecture of our

City, this was a regrettable but not irrevocable decision.

The setting up of Committees to deal with our problems are one of democracy's ways of avoiding the worst and, inadvertently, sometimes avoiding the best. When these Committees are composed of individuals who are professionally qualified to render opinions on the subject at hand we are likely lay individuals at its head to decide whether a matter is dealt with fairly and **for the general good** but when that government appoints Advisory Committees of politicians to render opinions and judgement on technical subjects, the result can be generally to the detriment of all. Fortunately, the two Design Committees of the Federal and Civic Governments mentioned before **are** composed of professional people — architects, planners and landscape architects. Their influence for good has extended far beyond their statutory boundaries.

If one examines the recommendations of the two Design Committees operating in the government domain, I believe one can say that international yardsticks are used or intended to be used in as much as they are the best yardsticks of the architectural, planning and landscape architectural professions in Canada.

Governments, however, even in Ottawa with its many overlapping jurisdictions are limited in what they can do beyond the domain they actually own. The Federal Government owns about 15% of the land in the National Capital Region — any building on that land is controlled as to appearance by the recommendations of the N.C.C.'s Design Committee. The City of Ottawa upon the recommendations of its Committee has control over maybe another 5%. That means that about 20% of the environment of the National Capital is subject to some sort of visual control. Couple that with the fact that



architects and other designers are employed to design under 20% of all buildings that are erected and it will be clear to all that there is a vast grey area of no control and no design. This largely includes much residential work, most industrial buildings, almost all temporary structures, most street furniture, signs and a fair proportion of commercial buildings — maybe 70% of all structures erected in the area.

What is the conclusion we draw from this situation? Some think that the jurisdictional problems of our environment would be answered by the reaction of a Federal District. This would undoubtedly cure some administrative problems but we would still have the large no man's land of private ownership unless the Government were to buy all the land and buildings in the region — at which our minds and those of the Treasury Board boggle. Even with a Federal District the 70% of structures and 80% of land in the region would still go undesigned, unplanned and uncontrolled physically and we would still have our problem.

The fact that so much building work goes up without the skills of an architect, landscape architect or other designer would not have

mattered 100 years ago. At that time man's ability to build (and destroy) was far less than it presently is. Nature's ability to heal the wounds caused by man in maturing his building materials and weaving a veil of greenery around them, was quick enough to mollify any damage done. Further to that, because of the limitations of the techniques available, building structures were human in scale. Squalor and overcrowding of the less fortunate was however prevalent and hence our present day demands, in the form of building bylaws, for space about buildings (a demand which is no longer reasonable in many instances, especially in suburban areas). But squalor is no longer a problem of any size in most of our cities — our problem is the quality of our environment and, in suburban areas, monotony due to lack of visual stimulation and contrast of building forms.

Our society is so complicated that it no longer suffices to suffer ad hoc solutions. It sufficed up to a century ago and produced the charming variations in the old towns of the world. Today such a method only brings chaos of a colossal order. Only by regarding **all** of our townscape as a visual problem — a problem for the designer to handle — will we achieve order and maybe beauty.

Sparks Street; the old and the new Store owners had the foresight to employ an architect for street and building improvements.

*Opposite:
Parliament Buildings seen from the
Ottawa River.*

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En aval du barrage à Grand'Mère, par Stuart Wilson*



Inside Front Cover/Couverture intérieure avant

*An old clapboard building at
Merrickville, Ontario. NFB photo*

*Vieux bâtiment en planche à clin à
Merrickville, Ontario. Photo ONF*

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LOVABLE PLACE NAMES

Most of us have favourite, lovable place names, Grand'Mère, Tuktoyaktuk or Sioux Lookout. They spark our imaginations with fanciful pictures that only reality corrects.

It may be the hard, metallic glitter of Uranium City, the euphony of Flin Flon, the abandon of Happy Adventure or the charm of Badger's Quay.

We use place names in our daily conversation, sometimes without much thought. The ancient city of Timbuktu in Central Mali is often used as a standard of measurement against which impossible distances or unlikely periods of time are judged. The British use John o'Groat's for the same purpose.

And just as the epitome of British place names is perhaps Chipping Norton, though it would probably be replaced by Llanfairpwllgwyngyllgogerch-wyrndrobwllysiliogogoch, in Wales, if it were just a little easier to pronounce, so in Canada it is West Elbow Creek that probably takes pride of place. No doubt the skeletal influence of Moose Jaw is evident in its name, possibly even the magic of Medicine Hat. The latter city was advised by the poet Kipling to retain its romantic name when the possibility of a change was once discussed.

Perhaps Kipling remembered his parents named him Rudyard after Rudyard Lake in Staffordshire, a serene and beautiful stretch of water that was a lovable place for them not only in name, but in reality.

LE CHARME D'UN NOM DE VILLE

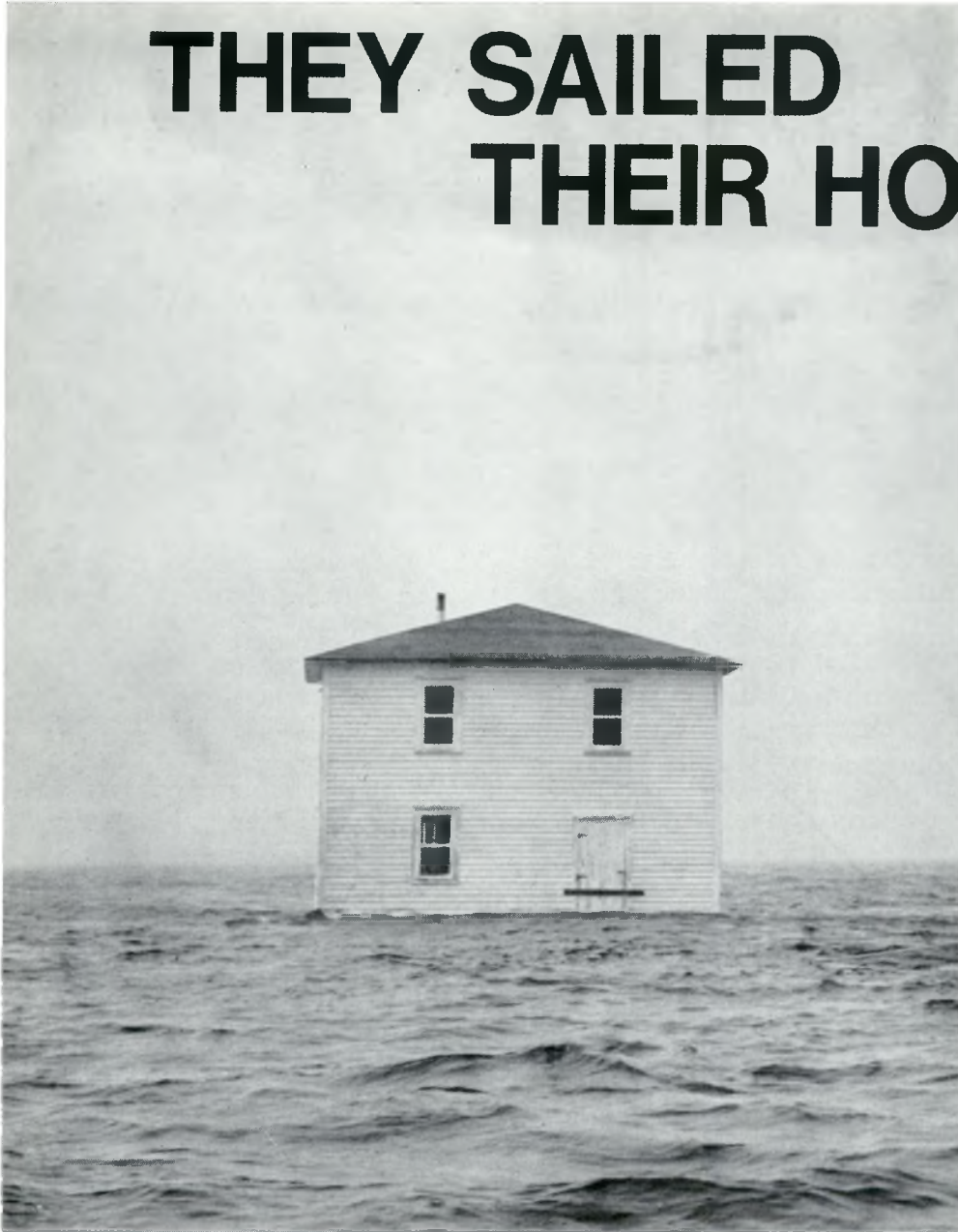
A la plupart d'entre nous, il est arrivé d'être pris par le charme de certains noms de ville . . . Grand'Mère, Carcajou, Ile-à-la-Crosse . . . Ils frappent l'imagination par ce qu'ils représentent: que le nom rappelle les minéraux, comme Asbestos, qu'il évoque la vie facile comme Beauséjour, qu'il soit euphonique, comme Beloeil ou simplement charmant, comme Claire-Fontaine.

Au Québec, on a nommé Sainte-Rose-du-Déglé, pour évoquer l'idée d'un lieu lointain, cette localité située au nord-est, près de la limite du Nouveau-Brunswick. Et tout comme Chute-aux-Outardes représente fort bien les noms typiques des villages québécois (ce qui pourrait être Wahwashkesh pour nos Amérindiens, ou Tuktoyaktuk pour nos Eskimos), ailleurs au Canada, c'est Portage la Prairie qui pourrait faire l'orgueil d'un Canadien de vieille souche. Vous conviendrez aussi que Pouce-Coupé est très frappant ainsi que Cap-aux-Os.

Un jour qu'on discutait du nom de Medicine Hat, le poète Kipling avisa les autorités de retenir ce nom très pittoresque. Peut-être Kipling se rappelait-il à ce moment que ses parents l'appelèrent Rudyard en souvenir du lac de ce nom dans le Staffordshire, belle nappe d'eau qui leur plaisait bien. Le charme de ce lac serein est passé au nom lui-même dans l'idée des parents, ce qui les a portés à le donner à leur fils. Les férus de toponymie ont fort à faire chez nous pour découvrir l'origine de Ruisseau-à-Rebours, Grand-Plaqué, Exploits, Fort Qu'Appelle, Sans-Souci, Toutes-Aides, Brèche-à-Manon . . .

THEY SAILED THEIR HOMES

by Reid Manore



Freeman Wareham is not in the moving business or in the development business. But over the past year he has moved more than forty entire households, houses included, to Arnold's Cove at the head of Newfoundland's Placentia Bay. In addition he has directed construction and rehabilitation projects of considerable magnitude and has personally initiated a private land assembly which boasts semi-serviced lots for \$600 a piece.

As the general store owner, which is listed as his main occupation, Mr. Wareham has succeeded in re-vitalizing a dying community. His store sells everything from coffins to refrigerators, from girdles to maternity gowns and

literally serves the customers from the 'womb to the tomb.'

Arnold's Cove is one of 1100 small settlements dotting the rocky coasts and islands of Newfoundland. Thirty years ago there were 1300 such communities but the number has steadily decreased ever since.

The 'outposts,' as they are affectionately called, are being abandoned for larger designated growth centres offering the amenities of municipal services, education and hospital facilities considered necessary for survival in the modern age.

Arnold's Cove does not fit the mould

ACROSS THE BAY to ARNOLD'S COVE



exactly. It was not selected as a government assisted and approved growth point and consequently underwent serious hardships in the initial stages. Today these difficulties have been overcome and it is wholeheartedly supported by both senior levels of government.

Several years ago Arnold's Cove was in the same position as many of the other outports — slowly fading out of existence as inhabitants moved on to more prosperous areas. But when Freeman Wareham decided to relocate his family and business from Spenser's Cove, a community on an island in Placentia Bay, things began to happen. The Wareham family has been in business for nearly 65 years serving the

scattered population around them and the decision to move could not have been easy. Indeed, Mrs. Wareham resisted, or so the story goes, and only agreed to move on the condition that her original house be transported brick by brick to the new site. Mr. Wareham obliged, perhaps with tongue in cheek, and floated the house into Arnold's Cove only to have his wife exercise a woman's prerogative and decide a modern bungalow would not be such a bad idea after all. Today the bricks are safely stored away and the lady of the house seems content to leave them there. No doubt when the Warehams decided to move they influenced others to follow. Out of 350 families in the Spenser's Cove area only eight remain.

The idea of centralization is not new to Newfoundland families. For decades families have watched their livelihood slowly disappear as modern fishing vessels and processing plants came into operation. Generally outporters did not have to be urged to move. Their course for survival was obvious and they were prepared to step into the twentieth century.

Those that could, moved on their own initiative to locales offering a new chance for better employment and security for their dependents. As early as 1954 the provincial government realized the plight and problems of their rural population and offered a \$150 grant for those wishing to relocate. The

assistance gradually increased to \$600 over the following decade and by 1965 some 115 communities involving 8000 people were moved. In 1965 the Federal government entered into an agreement with the Province of Newfoundland and Labrador whereby Ottawa would pay 70 per cent of the centralization grants. Since 1965, households have been eligible for a \$1000 grant plus relocation expenses for furnishings, livestock and equipment. In addition there is a \$200 grant for each member of the household up to a maximum of 11 persons. In other words, a family of five may receive \$2000 in resettlement grants and to date more than 900 families have taken advantage of this increased assistance.

In 1967 the Federal Minister of Fisheries signed an agreement with the provincial government which allowed for a special grant of up to \$3000 towards the purchase of a lot in an approved fisheries growth centre where fully serviced lots are being assembled. In addition a grant of \$1000 is provided towards the purchase of a lot in any other approved relocation centre.

Despite these reasonable terms the centralization program has not been accepted without criticism. Perhaps the most outspoken comments have come from the well-known Canadian author, Farley Mowat who has called it 'a sadistic scheme' to force people to abandon good homes which have been in the family for years in order to move into an urbanized society which they do not want or understand. The rebuttals have come fast and furious. Harold Horwood writing in the St. John's Evening Telegram recently quoted one of the outporters as saying:

"He, (Mowat) never had to live in Muddy Hole or Lally Cove. The only place he's lived is in Burgeo — a modern town with a big fish plant. He never had to go down on the rocks in leaky old sea boots and pick kelp and mussels for something to eat."

Perhaps the most rational words came from A. B. Perlin, Editor of the St. John's Daily News when he wrote in

the October 1967 issue of the Atlantic Advocate:

"If, to enjoy a fuller life with far greater opportunity for themselves and their children, they must leave ancestral settlements of which history has been one of struggle for bare survival, I may have the right to philosophize but not to criticize . . . The people on the move in Newfoundland are striving to escape from age-old isolation and I feel that if there were not a policy of assisted migration, it would have been provided by popular demand."

Centralization is inevitable in Newfoundland as it is throughout the world. True, Newfoundland is still considered a rural province, but with industrial projects progressing or planned, employees are an invaluable resource. The unemployed and previously self-supporting fisherman may well meet the demands of the labor force of the future. If he does it will be for the mutual benefit of himself and the province.

The major fisheries growth centres such as Marystown, Burin, Grand Bank and Fortune on the Burin Peninsula all have Federal-Provincial land assembly projects underway and offer employment in expanding fish processing plants. In the case of Marystown, the fastest growing centre on the Peninsula, a modern ship building industry is now operating with a full plate of contracts.

But Arnold's Cove is a different quintal* of fish. While it now has the status of an approved centralization area it is not considered of major importance. Economically it offers little in the way of industry or fish processing. Other than the Newfoundland Pulp and Chemical Mill now being built within commuting distance no major industry is planned.

But the dynamic Mr. Wareham could not be halted. He obtained several old barges and began floating houses and customers from the islands in Placentia Bay into Arnold's Cove. He offered interest free loans for those families requiring short-term assistance. He

organized a crew of handymen (he prefers the term "handymen" to carpenters, plasterers and plumbers) to rehabilitate and modernize the houses entering the town. He laid out streets and arranged for water and sewer facilities to be available. Over the past 24 months approximately 75 houses have been brought into the town and the flotilla continues. His son is busy constructing new houses as is one other contractor in the town. With government assistance now available Arnold's Cove may expect to continue expansion in the years ahead.

Perhaps the biggest selling point for Arnold's Cove, besides Mr. Wareham of course, is its location. It is five miles from the Trans-Canada Highway (compared to 100 miles for Marystown). It is centrally located 100 miles west of St. John's and 100 miles east of Gander providing large urban centres within a two-hour drive.

Wage-earners will be able to leave their families for months at a time to work on the Grand Banks or commute weekly to St. John's without worry or fear for their isolated dependents. Education facilities are readily available. Arnold's Cove has one five-room school and another school is under construction.

K. M. Harnum, Director, Fisheries Household Resettlement Program describes Arnold's Cove as a holding centre where families will be able to regroup and decide on the future. Mr. Harnum considers the opportunity given to the younger generations to visit the rest of their province as very important. Newfoundland, like the rest of Canada, must consider its youth its most valuable asset.

Wareham has accomplished a great deal on his own. He feels he has aided the community. Before he arrived in Arnold's Cove services were practically non-existent. Today sewer and water is being installed and 90 per cent of the homes are connected to main lines.

As in the outports, housing is remarkably good, noticeably well-maintained and a source of pride to the owner. And

**A quintal of fish represents 112 lbs.*



"More than forty entire families, houses included" have been moved.

Wareham's new housing is affordable. He has built a new two-bedroom home of approximately 800 square feet for under \$6000. Other houses floated into the town have needed extensive rehabilitation. In one instance Wareham's men modernized a house to include a new bathroom and kitchen as well as structural improvements for \$1400. In this particular instance the owner had \$2200 in grants and had been given a free lot. He now has a much improved house in a better location and a healthy bank account.

In another case Wareham purchased the shell of a house on one of the islands for \$100 and transported it to the town. Extensive rebuilding has cost \$5000 but the finished product is a spacious three-bedroom home which he expects to rent for \$75 a month when the new pulp mill begins operation.

Another new resident was able to have his lunch in his own kitchen enroute to Arnold's Cove. The wood stove was naturally operational.

Arnold's Cove and Freeman Wareham are by no means unique in Newfoundland. Other towns and entrepreneurs are at work moving families and expanding town sites. The charge is on with no letup in sight.

Newfoundland has been described as the great ship moored to the Grand Banks whose fisheries brought wealth and prosperity to the West Country merchants of England. But over nearly 1000 years of history the province has broken many anchors and now sails proudly on her own. Things are happening in Newfoundland — big things — advances in education, industrial development. People are on the move and

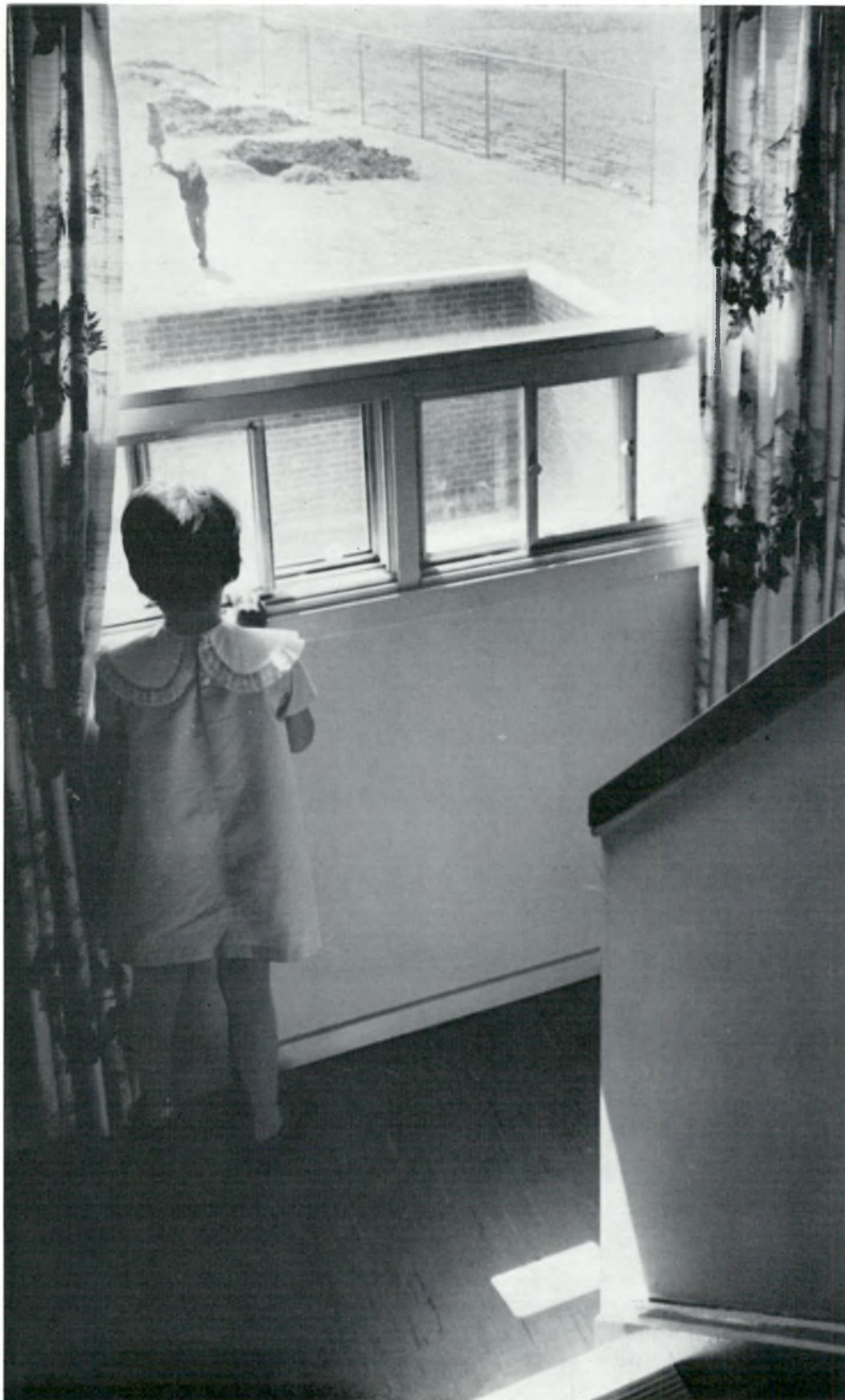
the economic gap between Newfoundland and the rest of Canada is being closed. If entrepreneurs like Freeman Wareham are any example of the type of people in Newfoundland today, Premier Smallwood and his colleagues have the situation well in hand.

Le rôle de l'Etat:

construire des logements?
— subventionner ceux qui les construisent?
— ceux qui les habitent?

par ROGER MARIER

SCHL — DON MOHER



Le problème qui fait l'objet de cette communication est celui de la contribution de l'État dans le cadre d'une politique générale du logement. Pour pouvoir soulever les questions pertinentes à l'action de l'État sur le plan de l'habitation domiciliaire, il est nécessaire de situer d'abord cette action dans le contexte des conditions économiques qui régissent la production et la consommation de services de logement.

I. Une définition du problème

Comment se pose le problème du logement au Québec? On peut dire que dans l'ensemble il n'y a pas de pénurie quantitative d'habitations domiciliaires. Il n'y a pas non plus de surplus de logements. Cependant, une partie des logements disponibles laisse à désirer sur le plan de la qualité si l'on se réfère aux normes minimales acceptables.

Récemment, des difficultés se sont manifestées dans l'ajustement de l'offre de logements aux changements de la demande. Le nombre de nouveaux logements a diminué considérablement en 1966. Même si une reprise s'est effectuée en 1967, l'augmentation des prix des maisons est de nature à diminuer la quantité demandée et peut engendrer au cours des prochaines années un écart entre les habitations disponibles et les besoins de la population.

II. La production de logements

Au plan de la construction d'unités résidentielles, le fonctionnement de l'industrie de la construction est considéré comme relativement efficace. Les hausses de prix des matériaux de construction s'expliquent surtout par la rareté engendrée par la demande con-

currente du secteur de la construction commerciale, industrielle et institutionnelle, et non pas par l'inefficacité de l'industrie elle-même. La hausse de l'impôt sur les matériaux de construction a aussi contribué à l'augmentation de ces prix. Quant aux hausses de salaires, elles ont résulté de la rareté de certains travailleurs spécialisés et de la politique efficace des syndicats; elles sont souvent compensées, au moins partiellement, par le progrès technologique, l'accroissement de l'offre des travailleurs et l'affaiblissement conjoncturel de la demande.

Le principal facteur de la diminution récente de la production de nouveaux logements a été la pénurie de fonds hypothécaires résultant de la demande considérable de fonds sur le marché des capitaux et qui s'est soldée par une hausse des taux d'intérêt hypothécaires. Le gouvernement du Canada a pris des mesures pour corriger cette situation.

Cette diminution de la mise en chantier de logements jumelée à la migration vers certains centres, surtout les centres métropolitains, est de nature à faire pression sur les prix; à ces éléments s'ajoute l'augmentation du coût de capital résultant des taux d'intérêt élevés. Le résultat le plus clair de l'action de ces facteurs est de réduire la demande de la part des consommateurs à revenus modestes et d'élever le niveau des revenus dans lesquels les chefs de famille ne trouvent pas trop prohibitif d'acquérir une propriété.

Au delà des faits énumérés, c'est encore l'augmentation des prix des terrains qui a récemment causé le plus de difficultés à l'habitation domiciliaire. Comme l'écrivait tout dernièrement Michael Wheeler, "le prix des terrains est la principale cause de cette hausse spectaculaire du coût de la construction"; cette hausse aurait été de 12.4 p. 100 de 1965 à 1966 dans le cas des lots construits en vertu de la Loi nationale sur l'habitation.

III. La consommation de services de logement

S'il ne semble pas se poser de problèmes fondamentaux au plan de l'industrie de

la construction de logements, sauf pour ce qui est du marché des terrains, comment se définit la situation du logement du point de vue des consommateurs? Nous savons qu'un certain nombre de familles ou d'individus vivent dans des logements qui ne répondent pas aux normes minimales établies: ce qui signifie que ces personnes ne peuvent consacrer les sommes suffisantes à l'obtention d'un logement convenable. C'est là un problème de distribution des revenus et, pour certains groupes sociaux, une question de pauvreté. Bien plus, si le prix des logements s'accroît plus rapidement que les revenus des économiquement faibles, ce groupe s'accroît et le problème devient plus aigu. La société ayant intérêt à ce que les conditions de logement ne se détériorent pas trop, on reconnaît généralement que l'Etat doit formuler une politique de logement social et public visant à améliorer les conditions pour les personnes à faibles revenus.

L'action de l'Etat au plan des diverses modalités de financement ne peut remplacer mais être seulement complémentaire à une politique efficace d'utilisation des terrains, de maintien en bon état du stock existant, d'application de normes de qualité dans la construction et l'aménagement de l'habitation domiciliaire et d'élimination des taudis — autrement dit à une politique efficace d'incitation à la réduction des coûts de la construction de bonne qualité.

IV. Les moyens d'action de l'Etat

Nous examinerons ici quelques-uns des avantages et des faiblesses, dans l'ordre suivant, des subventions aux constructeurs de logements, des allocations de logement aux consommateurs et de la construction publique, tout en tenant compte des propositions formulées plus haut.

La première alternative suggérée au programme établi par l'I.C.A.P. parmi les mesures qui visent à accroître le nombre et surtout la qualité des logements à la disposition des économiquement faibles est celle des subventions aux constructeurs. Mais pourquoi

accorder de telles subventions? Des subventions gouvernementales à une industrie peuvent se justifier si l'ensemble des producteurs font des pertes certaines et si, à la fois, l'Etat juge que cette industrie doit être maintenue pour le bien général. C'est le cas des subventions à l'agriculture et à l'industrie de la production aurifère. Ce n'est pas le cas de la production de logements.

Si un régime de subventions n'est pas nécessaire pour retenir des entreprises dans l'industrie de la construction, un tel régime pourrait-il être utilisé pour faire baisser les prix des propriétés ou des loyers à l'avantage des personnes ou des familles à faible revenu?

Un tel objectif peut-il d'ailleurs être facilement atteint? En premier lieu, à moins d'un marasme général dans l'industrie de la construction, on ne peut s'attendre à ce que les constructeurs diminuent leur marge de profit parce qu'ils oeuvrent dans le domaine du logement social. En second lieu, n'y a-t-il pas danger qu'au contraire, les constructeurs augmentent leurs profits? Si la demande est considérable, l'établissement d'un plafond nominal de prix n'empêchera pas les constructeurs de varier la qualité des maisons construites et de s'approprier une partie ou la totalité de la subvention sans diminuer leurs prix de vente ou de location.

Des contrôles pointilleux deviendraient nécessaires pour s'assurer que les subventions se reflètent dans une diminution du prix réel d'une partie de la construction domiciliaire nouvelle. Cependant, ce dernier résultat, s'il est atteint, peut affecter de façon adverse la rentabilité de la location ou de la construction de logements en marché libre.

Dans le cas où les subventions ont pour but de diminuer le loyer payé par les personnes qui occupent un logement social, un contrôle serré non seulement des normes et des coûts de construction, mais aussi des conditions de location, serait nécessaire. En effet, les locataires constituent une clientèle "captive" quand ils profitent de logements à un prix inférieur à celui du marché libre.

Les subventions aux constructeurs

peuvent donc présenter de nombreux désavantages. Il y a lieu de se demander aussi si ces subventions correspondent aux besoins prioritaires des constructeurs pour qui la disponibilité des terrains, la carence des capitaux et la réalisation rapide des travaux d'infrastructure présentent les difficultés majeures qui se reflètent sur le prix des logements et requièrent l'intervention des pouvoirs publics.

Une deuxième solution pour une politique de logement social est celle de l'octroi de subventions aux usagers. Ces subventions peuvent prendre la forme d'allocations de logement versées aux familles nombreuses ou aux personnes et aux familles à faible revenu.

Les allocations universelles de logement aux familles nombreuses auraient l'avantage d'aider l'ensemble des familles. Elles seraient de nature à accroître la demande de logements d'une dimension adéquate à la taille des familles. Elles pourraient apporter du même coup une assistance aux familles à faible revenu puisque nombre de ces familles sont aussi des familles nombreuses. Un régime universel d'allocations de logement apparaît aussi d'application relativement facile. Il présente cependant des désavantages.

Les allocations universelles de logement aux familles nombreuses se donneraient à toutes les familles, même celles qui ont un revenu assez élevé pour satisfaire à leur besoins par leurs propres ressources. Il est cependant possible de pallier partiellement cet inconvénient en incluant ces allocations dans le revenu taxable. Mais tonifier la demande sans tenir compte de l'offre comporte des périls. En l'absence d'un contrôle des prix du logement, les propriétaires seraient induits à augmenter les loyers, même si la production était suffisante pour correspondre aux besoins. Il existe peut-être des cas — logement rural ou logement des petites villes qui se développent peu — pour lesquels une allocation universelle de logement aux familles nombreuses ne déclencherait pas une pression inflationnaire des prix. Ce n'est cependant pas la situation qui prévaut au Québec. En dernier lieu, une telle politique lais-

serait pour compte les économiquement faibles qui ne sont pas compris dans les familles nombreuses ou qui n'ont pas d'enfants, telles les personnes âgées.

Des allocations de logement versées en fonction du revenu présentent encore plus de difficultés. Une telle mesure comporte les désavantages inhérents aux allocations universelles de logement. Elle requiert de plus l'évaluation des revenus des bénéficiaires, une tâche plus délicate au plan administratif que celle qui consiste à tenir compte du nombre des enfants.

Une dernière solution est celle de la construction de logements par l'Etat, c'est-à-dire le développement d'un secteur de logements publics ou de logements sociaux. Il s'agit dans ce cas de logements construits et administrés sous la responsabilité d'organismes publics. Le logement social peut très bien ne pas se limiter à la construction de maisons unifamiliales, mais aussi favoriser le développement de grands ensembles comprenant des services communautaires extensifs.

Une administration de logements sociaux pour être rentable doit percevoir des sommes suffisantes pour payer l'amortissement des coûts de construction, l'intérêt sur le capital et les frais d'entretien. Ces sommes, elle doit les percevoir des usagers, l'Etat comblant le déficit entre les revenus et les coûts. La pratique en vigueur au Canada jusqu'à maintenant a été de percevoir des usagers un loyer correspondant à environ 20 p. 100 du revenu familial, conformément à une échelle qui tient compte des charges familiales (Carver — Upwood).

Le principal problème du logement social est lié aux critères d'admissibilité et aux conditions d'occupation de ce type de logement. Une discrimination devient inévitable entre le grand nombre des familles qui ne peuvent se procurer un logement convenable sur le marché libre en raison du nombre limité de logements disponibles dans le secteur du logement social. Il est possible d'établir un système de points — il en existe d'ailleurs — qui tient compte des revenus des familles, de

leur taille comme des conditions difficiles de logement qui sont les leurs. Dans le cas de la rénovation urbaine, il faut aussi tenir compte du déplacement forcé des familles.

Le revenu des familles est de plus susceptible de varier. Il faut y adapter le loyer, processus qui implique une intervention constante de l'administration dans la vie des familles. Si le revenu des locataires s'accroît à un niveau qui leur permettrait de se procurer un logement sur le marché libre, l'administration du logement social se voit dans la difficile situation ou d'évincer le locataire ou de le motiver au moyen d'une surcharge à quitter les lieux. Certains locataires préfèrent payer une surcharge, même importante, pour s'assurer que le propriétaire adaptera de nouveau son loyer à ses revenus si le locataire en cause doit faire face ultérieurement à une diminution de revenu à cause de facteurs tels que chômage ou maladie.

On pourrait envisager de ne pas déplacer les locataires à mesure que leur revenu change. Il y aurait nombre d'avantages sociaux à adopter une telle méthode, mais il en résulterait aussi une certaine discrimination par rapport à d'autres personnes se trouvant dans une plus mauvaise situation économique ou de logement.

L'administration du logement social pourrait se trouver simplifiée si elle percevait du locataire le loyer économique, quitte à laisser aux programmes de transfert de revenu, soit sous forme d'assistance sociale, soit sous la forme plus automatique de paiements de sécurité sociale, le soin de suppléer aux revenus individuels.

Le logement public tel qu'on le connaît a aussi souvent pour résultat d'accentuer la ségrégation des pauvres et des économiquement faibles des autres groupes de la société. Cette situation peut être corrigée par l'insertion de groupes restreints d'unités de logement social dans des communautés "normales" ou par le développement de grands ensembles prévoyant des types d'habitat pour plusieurs groupes sociaux.



GRAND'MÈRE

THE TOWN WITH THE LOVABLE NAME

by Stuart Wilson

The powerful St. Maurice River rises in the distant lakes of Abitibi, sweeps through forested mountains and taps the resources of northern uplands. Its waters are a conveyance for millions of logs and a major source of hydro-electric power.

On an island in the rapids, upriver from the former waterfalls at Shawinigan, there once stood a tall, columnar rock whose jagged outlines, when seen in the sharp light of a clear atmosphere, resembled the craggy aquiline-nosed features of an aged but hardy grandmother—grand'mère. The rock greeted Indians and “les coureurs-de-bois” as they portaged their canoes around the rapids.

The anthropomorphic monolith bred a legend. An Indian brave sadly left his betrothed and set out for the hunting grounds to the north. The lovers promised eternal allegiance; but the hunter did not return. The bride-to-be awaited. Old age came and slowly glazed her features.

Grand'Mère is situated at a point on the northern bank of the river where steep rapids formerly cascaded freely. The Laurentian Mountains lie further back, immediately to the north, and their foothills barely reach the edge of town.

Formerly only a portage on the river and an isolated post where a fur-trader might halt temporarily, Grand'Mère is a young city, barely sixty years old.

The original village was built on the higher level of a plateau which merged, in the range behind the settlement into the foothills of the Laurentians.

In 1852 the region was opened up for forestry. Opportunities for industrial development were foreseen in 1880 and by 1898 the land immediately adjacent to the rock was incorporated as a village. It was incorporated as a town, 1901 and a city in 1910.

At the beginning of the settlement a high proportion of the inhabitants worked in pulp and paper. Now, with many new industries, employment is more diversified.

Today, distant river and plain stretch beyond intimate domesticity screened by multi-coloured washing hanging from trceries of clothes-lines suspended from back balconies. Sheds and roofs jut from rocky shoulders over waving tree-tops and look down on boys playing with racing-carts made from old wheels and boxes. Square blocks with front and rear balconies contain three-storey flats. A catalogue rug hangs over the railing of a balcony cat-walk. Oil drums, clothes lines, dog houses and swings for kiddies stand beside parked cars in small yards hemmed in by board sheds and picket fences.

Clean asphalted streets rise and swell over hills and bumps, or stretch flat-out in long, harsh lines between interspersed poles, scattered trees and rows of dwellings. A grey spire overlooks neighbouring streets, high on it a delicate cross glitters. The spire caps an arcaded octagonal bell-tower set — between spiky urns — on an empanelled balustrade crowning a tall square tower. Large colonnaded and entablatured windows pierce stone walls. Two cupolas on subsidiary towers with Pal-



adian openings act as supports to the central motif.

In 1906, the parish raised a solid, cut-stone Roman Catholic church on the south side of the main street, facing the intersection of a road which led off to outlying farms and villages in backlands between the river and the mountains. The village grew up within the point of a promontory, and the main thoroughfare was laid out as a straight line.

Sixth Avenue is the principal street.

Route 19 curves into it at the south-westerly limits of the city and the Avenue then travels over a flat plateau continuing bluntly and directly along a central strip of headland with southerly views down sloping streets over the St. Maurice River valley and the high plain beyond.

On the northern side, behind the eastern end of Seventh Avenue, the bluff is flanked by a steep-walled depression or gorge, at the bottom of which flows a little river. The "Rivière Grand'Mère," or Welsh River, is a slow-moving creek

which meanders in close, leisurely loops eastwards towards the St. Maurice, where it cascades into a tree-lined bay, —the home territory of a flight of wide-winged gulls. Formerly the hollow was filled with rank woods and damp meadows, but the municipality has recently spruced up the area and converted it into a neat and self-consciously civilized park. Now the stream flows sullenly along the slow sinuosities of an ornamental hard-edged canal and through a weedy miniature lake.

The main street is lined with a mixed lot of buildings. Newer three-storey flat-faced brick commercial buildings—some of which have been jazzed up with coloured panels and strip-mouldings—are set in amongst older brick buildings, from which project, amongst neon signs, glassed-in balconies of an almost Cairene or near-eastern appearance. The interstices between are filled with older traditional balconied and steep-roofed wooden structures which possess more of a regional and vernacular character.

Bright lights shine at night from harsh signs, and from the fronts of restaurants, stores and hotels. Traditional retail outlets such as heavily stocked hardware stores, a private grocer and butcher, or a fruit and biscuit shop are still in business, but the new large chain-store has appeared. Restaurants with cute façades and pecky interiors vie with the smooth-panelled plastic plant slickness of steak-house or barbecue. Beauteous waitresses take orders impatiently and politely serve food. An

open stand, off the pavement in a narrow space between buildings, sells “les patates frites” and “les chien-chauds.” A group of youthful but hairy rebels hang out on the sidewalk near the snack-bar. Tin signs make a background whirl of colour. Leather-jacket types park their angry motorcycles nearby. A blast of noise projects them from the sidewalk lounging area and rockets them down the main drag. An older jet-set screech high-powered cars round corners.

A young lady takes a languorous and studied pose as she leans back against the ornamental base of a large torchière on the stairs in front of the church. The artist, with a pencil line, sketches in plaited black hair with coloured bows, dark hair lying across large bright eyes, smiling lips. A brush washes in curved surfaces and rounded forms. Heads look over a balcony rail at a parade of folk, young and old. Black ink lines move up, down, diagonally, across, to stitch in and block out slabs of sun on white-painted carpentry. Kids, importunate kids, get in the way of the artist. They step on paints and squeeze tubes. High-pitched voices ask, “What are you doing? Why? Why? . . .” “Mais c’est beau!” their sisters murmur.

The large, tall-spired and boldly dominant stone church, l’église St-Paul, formerly the bishop’s seat, flanked by a large, new, stone presbytery on one side and a small park with bandstand on the other, occupies the older heart of town. A large, brick convent-school for girls (Le Couvent de St-

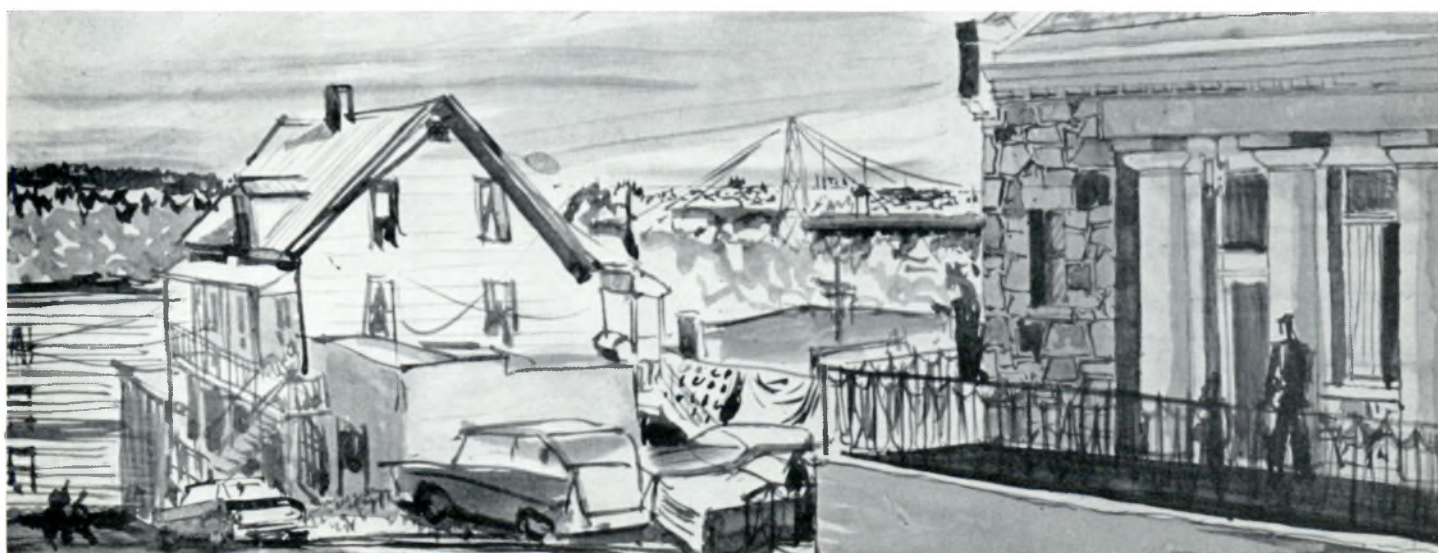
Louis - de - Gonzague) taught by the Ursuline Sisters is situated on Fifth Avenue, immediately behind the church. On the adjacent block is Collège Sacré-Coeur, and a new school building (L’Ecole Lionel Groulx). Just below on Third Avenue is the arena and baseball field. “Les Zouaves” have their clubhouse nearby.

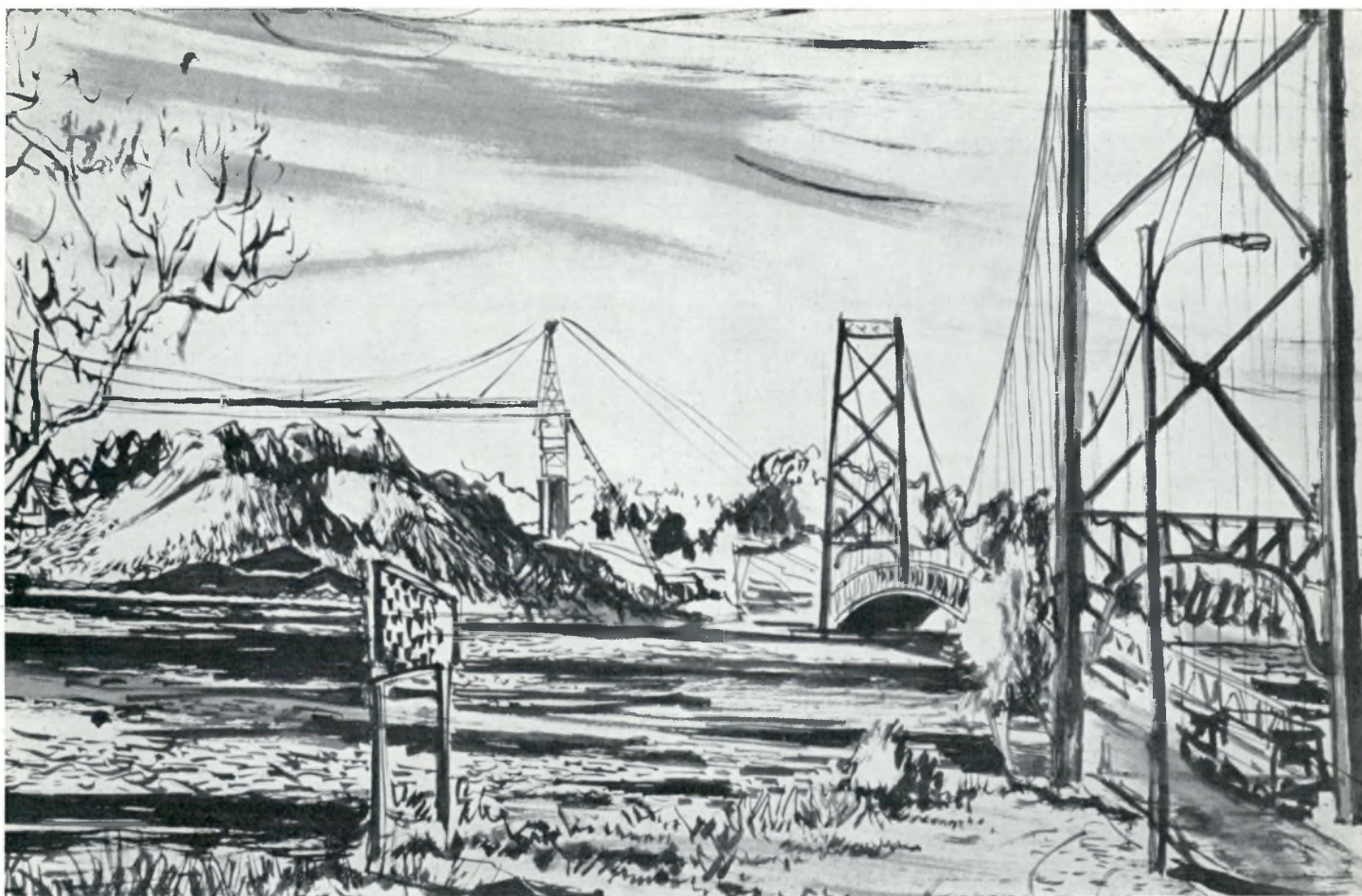
Open countryside can be most easily reached from this part of town by taking the road in front of the Church of St. Paul leading off Sixth Avenue and continuing over the ravine-like park. The route leads through streets of houses, skirts a golf-course and continues past scattered ranch-villas into a rural landscape, where it meets with a country road. A turn to the left leads to the still relatively unspoilt village of St. Flore, while to the right the road continues up the sunny valley and skirts the left bank of the St. Maurice. About five or six miles above Grand’Mère is the site of the former rapids of Les Piles now covered by placid water retained by the power-dam.

The new cathedral, La Cathédrale St-Jean-Baptiste, is located further west on Fifth Avenue in the newer and flatter part of town which has gradually spread over farmers’ fields. Facing the church on the north side of the street is Parc St-Jean-Baptiste. Adjacent to the church is a new school.

left: A starry passage.

below: The eastern end of 6th Avenue.





Bridge with log piles.

In 1880 the industrialist John Foreman linked the hydraulic power of the river with the resources of the forest. Two years later the river had been partially dammed and the construction of a mill for mechanical pulp begun. Powered by a 5000 horse-power turbine the mill opened in 1890. Forty tons of pulp was produced a day. Earlier financial difficulties led to the take-over of the plant by the Laurentide Pulp Company who carried on operations until 1895. In that year construction was started on a new mill and factory for the production of bi-sulphate pulp, newsprint and cardboard. Production commenced December 1898. Additions were made in 1902 and 1904, and by the latter date the mass-production of newsprint in Canada was begun.

In 1916 the Laurentide Pulp and Paper Company expanded the plant. The river was dammed and a power-house built. Unfortunately this undertaking threatened to inundate the island in the rapids on which the Grandmother rock rested. Careful studies were made and

the stone was marked out in numbered sections. Dynamite unlocked the image from the river-bed. The rock was reassembled and erected on the crest of a hilly slope on the south side of that portion of Seventh Avenue closest to the river.

By 1920 and '21 two of the most modern machines were installed in the plant. Constant change and the addition of the most up-to-date machinery has since more than doubled the production achieved in 1921. The plant is known at the present as the Laurentide Division of the Consolidated Paper Corporation, and is one of the five divisions managed by this organization. The division centred upon Grand'Mère is not only engaged in the operation of the mill and its machinery but it also supervises forestry operations and maintains a modern research laboratory and centre.

The stony Grandmother, when re-located, overlooked a lower land, lying beside the river near the gateway and

time-office of the pulp and paper plant. The lodge was constructed from peeled and dark-stained logs in steep-roofed Viking style. The programme of capital investment carried out by the company at that time led to the development of works which possessed engineering and architectural quality. This accomplishment is made evident today by the excellent design and workmanship which can be seen in the original concrete dam, brick power-house and early brick plant buildings, as well as in smaller and more domestic structures.

The clean lines of the exterior of the power-house show a filiation with the fortress-like quality of the Cathedral of Albi, and the finely wrought massive brickwork in the arches and piers surrounding the large windows of the old plant buildings speak of a craftsmanship that has become more rare.

To one side of the time-office, and beside the river, stands the delicate spidery steel framework of a gantry-like conveyor which runs high over tall

conical hills of piled logs, gilt at the top and silvery grey at the bottom. Short-length, peeled, cellulose-rich logs from the coniferous trees of nearby and more distant forests furnish the raw materials for the paper-mill. Cables run up at an angle from heavy concrete anchor blocks sunk into the ground, to the top of two widely-spaced slender towers and loop between in a catenary. At equal spaces off the smooth curve, vertical hanger-rods support a narrow horizontal platform containing a conveyor-belt system. The conveyor spills logs at appropriate intervals onto the apexes of tall log cones. At one end, an inclined plane with conveyor leads to the elevated horizontal bridge and a plane of lesser inclination connects and brings logs up from the river. Logs float down the river in shore-to-shore flotillas and are cordoned off by chained booms into broad swathes of redly gleaming floating cylinders which fill the river above the dam.

A small company town was originally laid out around an opulent green park. Straight streets encompassed the park and winding streets led into them. Mountains of pungent odoured logs overlooked tidy and picturesque clapboard houses on quiet and neat tree-lined avenues. The reserved appearance and the varied forms of the architect designed houses stemmed from European sources influenced by American modalities. The park now forms the spine-like axis of lower-town and contains an eclectically romantic stone building with steep-pitched roofs and a conically-topped, stone turret reminiscent of Normandy. The building embodies an assembly hall, and other facilities for social and cultural activities.

At one end of the park, on a lawn which sweeps down to the river bank, and near the mouth of the river which is the gull's home, stands the Inn. Nearby is a small white-painted wooden church of restrained classical proportions. Formerly Presbyterian, it is now of United Church denomination.

In this area of Grand'Mère the corporation owns fifty-five dwellings, L'Auberge Grand'Mère, meeting halls, tennis



Looking along 6th Avenue.

courts, and a golf-course. L'Auberge Grand'Mère, like other social facilities, was erected by the Laurentide Pulp and Paper Company for workers and guests of the firm. These amenities, as well as the plant, changed hands and became one of the divisions of a larger complex when the Laurentide Company merged with the Consolidated Paper Corporation Limited. The many-gabled white clapboard and stone Auberge is bent around a courtyard away from the river. Tall dormers stand up pertly from steep roof slopes and look down at the stone basin of a fountain. The comfortable interiors, fitted with panelling and beamed ceilings, contain antique furniture, paintings and other artistic objects formerly belonging to the Menier family, famous in France for chocolate. Henri Menier bought Anticosti Island, situated in the Gulf of the St. Lawrence, and conceived of grand plans for colonization and development. The rich furnishings of the Inn previously decorated the Menier mansions on the island, now owned by the CPC.

L'Auberge Grand'Mère is well-known and of high repute, particularly among golfers, who come to play on the nearby golf-course, which has the reputation of providing a sporty game due to the hazards ingeniously arranged on the broken and rolling terrain. During the crisp winter, guests may set out for ski-slopes and cross-country trails, skate on a nearby rink or sit deeply-wrapped in fur-robcs while being driven through the green spruce on sleighs.

Between the Laurentide Inn and the log-piles, Second Avenue curves to connect with a steel bridge that links with Route 19, the road to La Tuque, higher up the river. The bridge is a cable suspension structure which presents a graceful sight as it spans the river in one swoop. Dr. D. B. Steinman, the famous bridge designer and builder was associated in the design of the Grand'Mère Bridge, built in 1927-29. A new type of suspension method, often employed since, the rope-strand cable (which consists not of packed parallel wires but of twisted strands,) was first

developed and used by Steinman and Robinson on this structure. Among Dr. Steinman's many achievements are the Florianopolis Bridge, Brazil, 1926, an eye-bar chain suspension structure; the Carquinez Strait Bridge, California 1927, a cantilever structure; the rope-strand cable bridge, St. John's Bridge, Portland, Oregon, 1929-31 (Robinson and Steinman); the reconstruction of the Roebling Brothers famous Brooklyn Bridge 1950-53; as well as the five-mile long, first aerodynamically stable bridge, the Mackinac Bridge, Michigan, 1958.

Although the Grand'Mère Bridge was located strategically on the river, its position in the town is unfortunate. Large trucks from the west come off Route 19 down Sixth Avenue, along Fifth, down the hill at First Street and along Second Avenue to connect again with Route 19 in its progress northwards. As a result, traffic noise and movement shatters the peacefulness of tranquil living areas.

North of the Inn a narrow, country-like road leads into the woods and crosses the creek by a short bridge to gain access to a small network of roads,

one of which leads to the Club House of the golf-course. Here and there amongst openings in the woods are the large pleasant rural residences of paper-plant executives.

At the foot of the stone stairs leading down the small hillside park at the base of the Grand'Mère rock is a sturdy church built from local rubble on the simple traditional lines of an Anglican parish church.

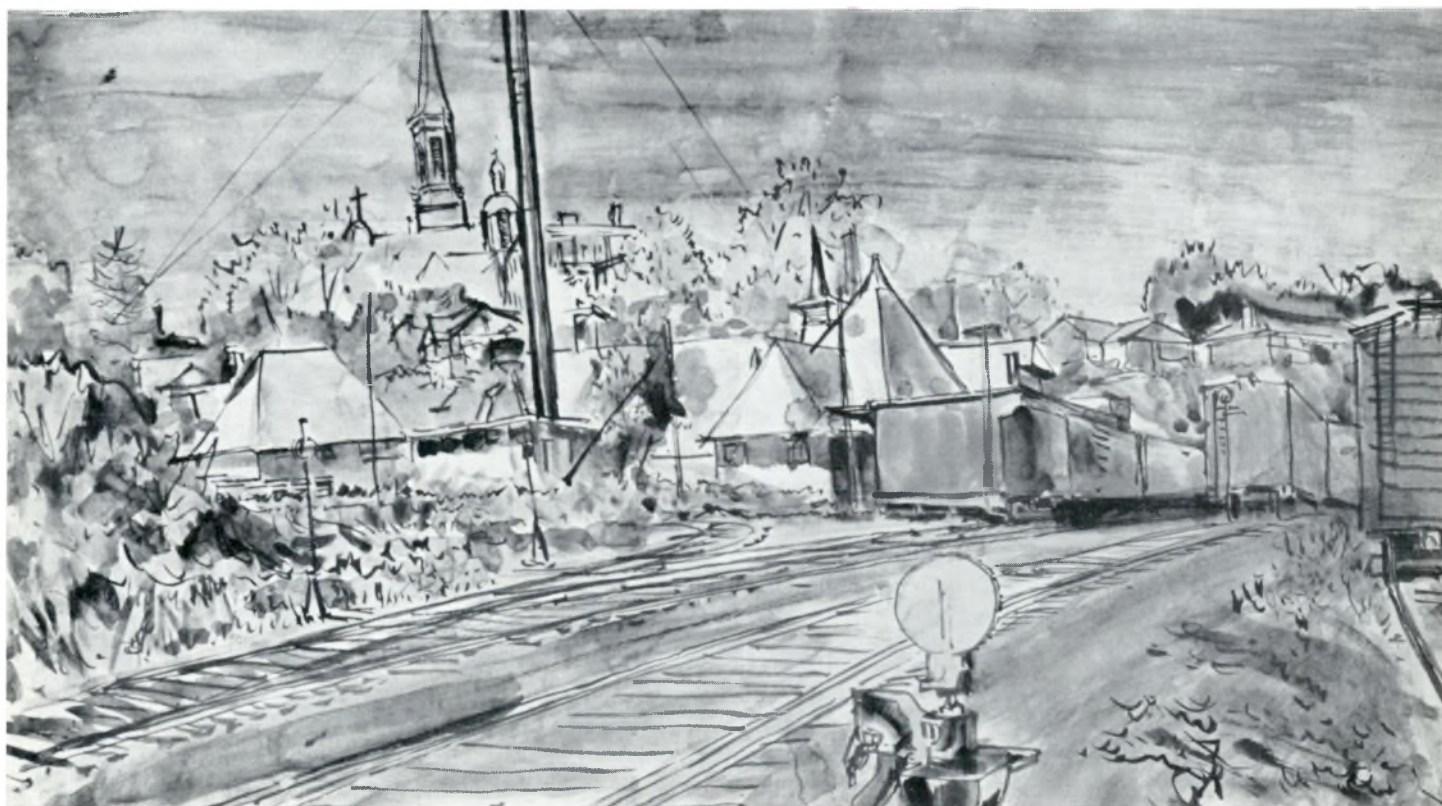
Across the river near the end of the bridge stand the sweeping roofs and silo towers of the barns and service buildings that were once part of the former company farm, but are now partially rented out for small industrial occupancy. Carefully designed and built buildings and facilities for former uses, now outdated, are often uncared for or harshly altered to accommodate new employment.

From adjacent meadows a distant view of Grand'Mère reveals a tree-covered prominence with blue hills as backdrop. Tense silhouettes of delicate structures for industry and transport rise above the verdure and contrast

with heavier and more opaque buildings for education and religion. Beyond the bridge the road runs through forests or enters into openings of sloping farm fields. A shattered and isolated pine tree looks down on the shining river. Against a mountain dark-green with pointed trees a chapel spire arises. Houses cluster along the road and shuffle down hill. Pancake light reflectors on poles announce a village. Domestic TV antennae tickle the junction of sky and mountain.

Upstream the log-laden St. Maurice flows through narrow passages between tall mountains or widens into pools in broader valleys. The sculptured land-pattern is ancient and was modelled during the Ice Age and before. At Les Piles a ferry occasionally plies between two riverside villages. At St-Jacques-des - Piles, a canoe manufacturing centre, and a water-side community on the left bank, is sited on lower ground above the water-level, while the village opposite, St-Jean-des-Piles, is built on both sides of the road to La Tuque, halfway between river and mountain-top and spills away from the church-steeple in parallel avenues stepped into the steep slope to the river.

The CPR siding.



A magnificent prospect of the river and of the surrounding tree-covered mountainous country may be obtained from different levels in both settlements. Landscapes of somnolent repose and peacefulness or of dramatic scale and action where majestic headlands pile high over the river may be seen by looking across the river or up the valley.

On the narrow stretch of flat land beside the river is a factory for the manufacture of wooden handles. Standing in a field on the hill-side above the main road is a large barn converted into a "Centre d'Art", which holds exhibitions, concerts, recitals and expositions of painting, sculpture and handicrafts as well as serving as the studio of Bellerive, a painter and organizer of the cultural centre. Nearby is the studio of "Stelio" a painter from Milan who has settled here. He teaches "les arts plastiques" in Grand'Mère schools, paints abstractions and works in a roomy attic under a mansard roof of an old gracious deep-balconied house. It once served as a convent and provided living accommodation for the sisters who taught in the local school, but which now contains a teen-age snack bar and recreation room or "Une salle de danse" with juke-box.

Pulp, paper and the generation of power are no longer the only industries in Grand'Mère. To-day, shoes, cement, metal castings and welded assemblies, as well as a wide range of textile are produced there. The knitted sweaters of Grand'Mère have earned a high reputation and an old established firm, whose plant was recently destroyed by fire, makes boats and canoes. The industries of Grand'Mère form a continuum with the modern chemical and other power-consuming industries of Shawinigan.

Down river, towards Shawinigan, plumes of grey and yellow fume and smoke rise from stacks and chimneys. Railroad cars on sidings wait outside clusters of sheds, towers, shafts and turrets. Power lines sag from the skeletal arms of transmission towers and lope over field and forest.

Caterpillar tracks stamp old soil into new patterns. Tawny red and yellow broad-leaves flash against blue-green conifers. The view of an old barn is framed in the complex geometry of disembodied coachwork. Fat cows munch lush grass in rolling dairy-farm pastures. Grey and white barns lurch against hills. Milk cans stand on a ramshackle platform.

The St. Maurice River valley or "La Mauricie" as it is known to a majority of its people runs through the heart of Quebec and is a main stem for electrical power, pulp and paper, chemical and metallurgical industry.

La Mauricie shelters and supports the modern economy which is still based on the land. The northern shield holds the water. Forests protect water and supply logs. The river bears logs to the mills. River-power, converted into electrical power, activates the machinery and the various processes of mill and factory. The productivity of the valley depends upon a protected balance of natural features.

Nodal, linear, lattice-like or net-work configurations of human and technological movement have developed upon the supporting environment and now influence habitat. Processes and organizations, machines and structures have altered the landscape. Transport, communications, human dwelling places, industry, agriculture and forestry make divergent demands and exhibit variations in tolerance which require reconciliation.

Although the city of Grand'Mère is only seven miles up-river from the larger centre of Shawinigan, and the highway connecting the two towns is lined almost continuously with strip development, still Grand'Mère, as a place to live, is quite distinct and has a separate character.

Years ago, shortly after the first Great War, power was free to all who lived near the pulp and paper plant. Lights shone brightly and continuously. During the winter lower-town looked like a picture from a kid's fairy-tale book. In those days the Boston Advertiser with

all its funnies and exciting magazine section could be bought in the largest general store as easily as "La Presse" or "The Montreal Star". Automobiles were beginning to appear in town and on the country roads. A walk westwards along present-day Sixth Avenue passed through a country area. Farm-house followed farmhouse. During the summer the front doors would be open, especially in the early evening. Large and prestigious cast-iron wood-burning stoves with polished chrome curlicues could be seen shining splendidly from within. A glance would reveal the family pride and housekeeping ardor of the woman of the household.

In town during winter, milk from the farmer or small dairy was often delivered in large canisters by little boys with wooden sleds pulled by large dogs. Life and its various aspects were less shielded from public view. The carcasses of slaughtered animals could be seen hanging in a shed behind a butcher's shop. Clouds of colourful insects would be attracted to hover over blood, guts and offal. Painful events affected youthful minds; the shooting of a powerful horse incapacitated by a broken leg; thick slabs and blocks of blue-green ice cut from the frozen river, and hauled slowly uphill in flat sleds drawn by teams of horses.

Winter was either cold, dark and stormy, or crystal clear and transparent with blue sky above and blue shadows on the sun-tipped snow. Snowshoeing was great sport and moccasins or beafs were worn with one of three pairs of socks rolled down over the top like coiled sausages.

On Seventh Avenue at least three bakers kept shop. The odour of baking bread hung over the street daily. Urchins could be seen bringing home the family bread, a yard-long loaf wrapped around the centre with a sheet of newspaper. Ambling along, they would pick the crisp crust off the projecting ends and stuff the morsels into their hungry mouths. A trip to a nearby lake in the forested mountains meant a feed of beans deep-baked in molasses and pork bits washed down with coffee brewed in tall jugs from freshly ground



coffee-beans and broken eggs.

Although life remained rooted in the immediate soil, exoticism manifested itself occasionally via rail transport. Both railroads then ran full blast. Today only the CNR handles passengers at ungodly hours, but a bus-line operates when there are no strikes. Years ago, one day in late spring, a circus came to town as a cavalcade of colourful vans on the CP line. Gypsies and carnival types magically raised the big top, side-shows and painted banners on the baseball field. Lions and tigers arrived F.O.B. in barred wagons. They paced the straw and growled suspiciously at small fry.

The parade was a tremendous success. A large elephant ambled down the main street past the church, dwarfing the houses. Mississippi musicians in gorgeous uniforms filled a red and gold wagon with their rag-time band. Gilded cages followed. Inside were monarchs of the jungle reinstated in splendor. Plains Indians rode by wearing feathered bonnets while pistol-totin' cowboys cantered behind or held a tight rein on their prancing horses, foaming at the bit. A bilingual barker

urged one and all to see the big show and rodeo.

Though the tempo has changed today, Grand-Mère, equidistant between Montreal and Quebec, exhibits a certain tranquillity and displays, to visitors, a demure air. In daytime the town is a model of decorum and restraint. However the bar-maid at the hotel suggested that Grand'Mère had a life of its own. She claimed that Grand'Mère was as lively as Shawinigan Falls and added: "Il y a des fois que ça brosse même plus à Grand'Mère qu'à Shawinigan."

Grand'Mère does present a certain complexity at night, or in the evening, especially on weekends; and does possess several hotels which compete for trade, while beer-halls, night-clubs and café-bars in hotel premises offer refreshment and entertainment. For the up-to-date, swinging generation, or the lover of intimate spectacle, there are the gyrations of go-go girls. Featured shows in hotels change weekly and troupes of travelling entertainers, singers, dancers and gag-men from the big city keep high spirits stirred up. The star of each show gets the principal billing, and the name appears in

above: At the intersection of 6th Avenue and 4th Street.

top right: A view of 7th Avenue.

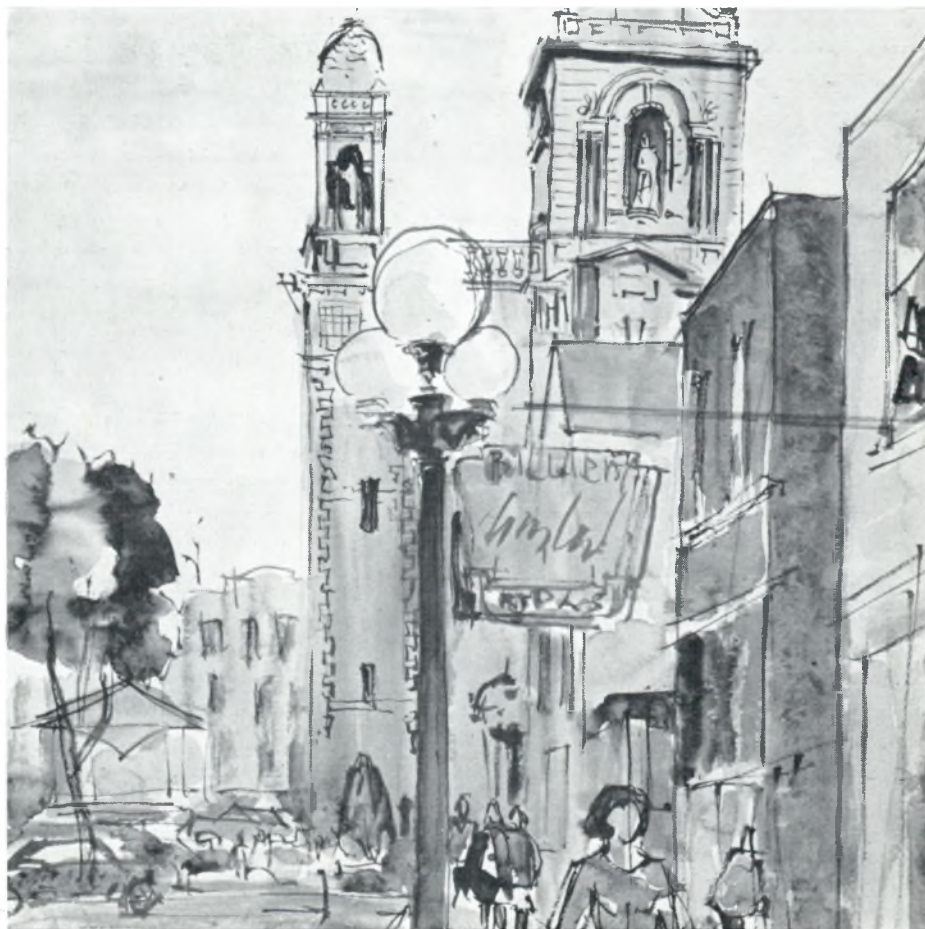
lower right: St. Paul's Church.

large letters on placards fixed to plate-glass windows.

When showtime arrived and “le grand spectacle” began, Letarte took over “la grande salle”. An artist in raucous comedy and ribald song, his ear-splitting style and frenetic delivery had been handed down directly from the high Montreal tradition established by “La Bolduc”, “Les Ti-zoune”, “La Poune” and other popular comedians, near the celebrated intersection of Main and Ste. Catherine Streets. Untranslatable jokes caused the evening to be given over to earth-quaking laughter. Who else was featured on the bill it is now difficult to remember.

One thing sure, this was no Heartbreak Hotel. Walking through the cold air to a warm bed, that theme song of the forelornness of so many other places came rocking, throbbing mockingly from previous memory, “So lonely — . — lonely — . — b — a — b — e — e!

A white mist rose from the river and filled the valley. The Rivière St-Maurice flowed silently onwards.





HOUSING FOR INDIANS AND METIS IN NORTHERN SASKATCHEWAN

by RICHARD W. BAILEY

This article was written earlier in the year on completion of an experimental program of housing for Saskatchewan's native people. The experiment was so successful that a further \$1.7 million program of 300 units has begun with financial assistance under the National Housing Act.

In 1965 the Federal and Provincial Governments initiated a two year housing programme in the Northern Affairs Region of Saskatchewan for Metis and enfranchised Indians of low income.

The area comprises approximately 100,000 square miles — almost half of Saskatchewan's 220,000 square miles. It has been estimated that in 1961, about 10,000 of Saskatchewan's 30,000 Indians lived in that area, and about 6,750 were enfranchised (i.e. living apart from reservations and having relinquished dependence under the Indian Affairs Act). The Metis population was estimated at 5,520 in 1962. The economic activity in this area is based on fishing, trapping, mink ranching, tourism, with timber and mining activities prevailing only in certain areas. Employment is offered in these activities, and others sponsored by the Provincial Government, such as road building programmes. Because of the inadequate employment situation and because of the short seasonal duration of those available, most of the area experiences underemployment.

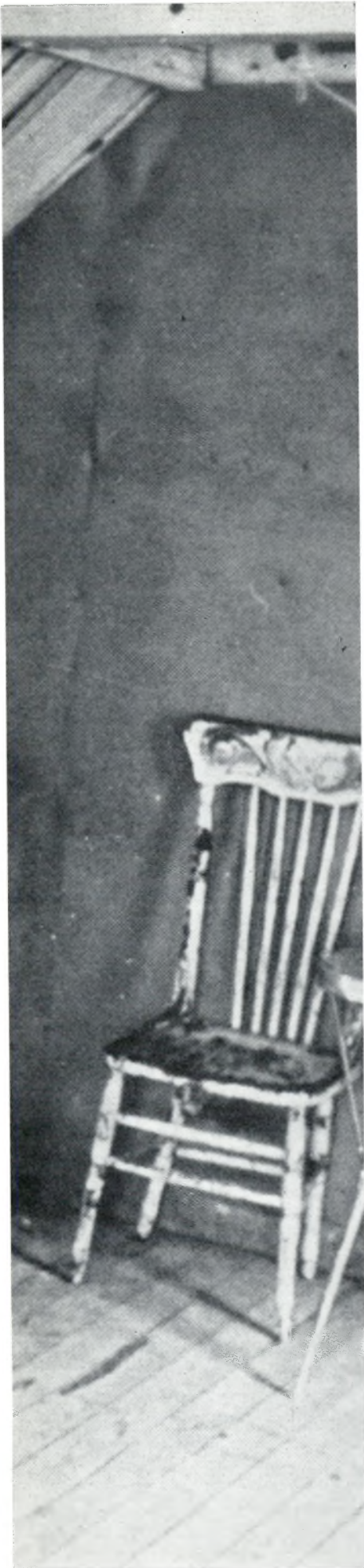
In 1962 the Provincial Government conducted a door to door housing survey to determine the actual housing conditions in the area. The information obtained from 52 units in Cumberland House, as one example, is:

- (a) 31 log and 21 frame
- (b) 46 substandard chimneys
- (c) 2.6 rooms per house
- (d) Average age of houses — 20 years
- (e) 56 families in 52 houses
- (f) 50 square feet of floor space per person
- (g) 8.9 people per house

Indians and Metis incline to remain in Northern Saskatchewan even when they have the means to travel to areas of better opportunity. Before the "white" settlement, a major characteristic of Northern Saskatchewan Indians, as of most Prairie Indians, was their hunting and gathering activities; the male population had little agricultural skill. Today, that nomadic characteristic still prevails somewhat and accounts for, in most cases, the "transient" nature of the Indians. Consequently, many Indians prefer the independence of the more isolated northern area as opposed to the necessary stability and standardization required in the city.

Metis, whose ancestry is mixed Caucasian and Indian, have somewhat the same traits, but are confronted with additional problems because of their inherited "half-breed" nature.

To so briefly describe the deplorable situation of these people in the manner above, is unfair to their plight. The Center for Community Studies in Saskatoon pointed out in its 1963 publication "The Indians and Metis of Northern Saskatchewan" that the birth rate in the area ranks among the world's highest, in fact the rate is above that commonly associated with the population explosion; that if it were not for welfare payments, some communities would rank among the world's economically poorest; that in 1962 the largest company in the area, with 564 employees, had only 8 Indian and Metis on its payroll; that in the two years 1960-61 and 1962-63 the cost of social aid increased about 80%; that in a 1961-62 survey the average house was 18 feet by 20 feet and was occupied by 6 persons; and that a 32 year old Metis with a wife and 8



children can survive on an annual earned income of \$240 plus \$548 per annum his wife collects as family allowance — an extreme example, but factual.

It is not a simple matter of labelling these northern residents as “lazy” or “unstable” but rather the opposite. Their traditional occupations are difficult and strenuous, and they do them very capably. What Indians and Metis avoid, however, is monotony, for they do not value the ascetic attitudes of the white population. To work for the sake of working within a system of rewards and punishments, such as rates of pay and deductions for absenteeism has not been, nor is it, common among these people.

Notwithstanding the lack of industry and productivity of the north, the Province has been directing much social aid into the area. Part of the Province's theory has been that the provision of better living conditions for the people will generate increased activities in commerce, industry and self-betterment. The aid programme has included housing, but apparently the level to which the Province aspired and the number of units needed to overcome the situation proved too costly.

Consequently, the Provincial Government requested assistance under the National Housing Act for a Federal-Provincial housing programme which would, hopefully, provide the northern residents with better opportunities of social and economic advancement. An agreement was ultimately entered into in July 1965.

Partnership Arrangement

Because of subsidization and the special nature of the proposal, the housing programme was limited to 100 units which were to be built over two years on an experimental nature. A master agreement was entered into with the Provincial Department of Natural Resources (DNR) under NHA Sec. 35A and this served as the basis for designation agreements between the Partners for the development of projects in each community during the two

year period. The Province undertook to administer the programme, including construction arrangements.

Capital costs during construction and the potential operating deficits encountered by the homeowners were to be shared 75% and 25% by the Federal and Provincial Governments respectively.

Co-operative Concept

It was intended that the Province would foster the formation of co-operatives and that projects, upon completion, would be conveyed to the local co-operative on a blanket mortgage basis. The co-operative would in turn sell the individual houses to its members under an agreement of sale.

For various reasons the co-operative system met with little success. Project administration was often unsatisfactory due, in part, to the lack of competent persons to manage them. Some failed because members who were eligible for land grants under the Veterans' Land Act could not take advantage of their eligibility as a member of a co-operative. Others failed because arrears of some members had to be carried so the co-operative could meet its commitments to the DNR. As a result, Order-in-Council PC 1966-788 of May 5th, 1966, authorized, inter-alia, the deletion of the co-operative requirement from the initial authority granted July 23, 1965.

Even so, two co-operatives in La Ronge and Cumberland House still exist and are operating satisfactorily. In the other communities, the homeowners deal directly with the DNR.

Financial Arrangements

It was estimated that the houses would cost \$4,500 of which \$500 would be provided by a Provincial grant and \$500 by owner equity in the form of cash or labour. The \$3,500 balance was to be secured by a 15 years mortgage financed 75% by the Federal Government and 25% by the Provincial Government. The operating deficit, i.e. the difference between the pur-

chaser's payment and the amount required to amortize the loan, taxes, and insurance, was forecast to be \$13 per unit per month and was to be shared by the Partners on a 75%-25% basis.

During the early stages of the programme the Province sold 33 houses at the estimated cost of construction. However, the actual construction costs exceeded the proposed sale prices by an average of \$1,063 a unit for these 33 units. To resolve the matter, the Province provided an additional grant of \$500 a unit in the form of paid labour, and by agreement the balance of the capital loss representing an average of \$563 a unit was shared by the two partners on a 75%-25% basis. The agreement was also amended to permit the sale of houses at less than construction cost.

Experience indicated that the \$500 equity required by the purchaser was too high and was reduced to a minimum of \$200. It was also considered that the repayment scale was too high and it, too, was subsequently reduced. Monthly payments that were initially 22.8% of an income of \$154 and 11.7% of an income of \$51 were reduced to 20% and 10.5% respectively.

Based on information received for 84 of the 94 houses constructed (construction costs and sales figures for the 10 unit Green Lake project have not yet been received), a comparison of the original estimates and the actual costs can be made as shown in Table I.

The low monthly subsidy of \$2.44 indicates the average income was higher than anticipated, particularly in the early stages of the programme. The average monthly income of the 84 homeowners is approximately \$184.

Mortgages are established on a yearly basis although most homeowners make monthly payments towards the annual amount. Many of the homeowners do not have a regular monthly income, so monthly payments are not always possible. The DNR or the co-operative calculates for the individual his monthly payment amount from various sources.

		(Average Per Unit)	
		Estimated	Actual
Construction Cost		\$4,500	\$4,400
Owner Equity	\$500		\$537
Provincial Grant	500	1,000	500
			1,037
Mortgage Loan		\$3,500	\$3,363
Monthly Payment Required to Amortize Loan, Insurance & Taxes			\$29.96
Actual Monthly Payment			\$27.53
Monthly Subsidy		\$13.00	\$ 2.44

Table I

There are periods of relatively higher earnings during January, April, June, July, August and December depending on the individual's main source of income. Payments are usually made during these better income periods.

Arrears are also maintained on this annual basis. At present, 79 of the 94 homeowners are in arrears for a total amount of \$18,164. Although this is a high amount, it must be remembered that the purchasers have not been accustomed to making payments for shelter and can only make payments in their higher income months as noted above. It was expected arrears would increase during the low income months. On the other hand, certain of the homeowners would be in arrears for simple default reasons. The DNR considers that through its own and the Department of Welfare's efforts, payments will increase in the upcoming spring months, and payment records will improve in the course of time.

The homeowners make their payments to the regular DNR field staff residing in the various locations, or to the two existing co-operatives. Payments are also made to the DNR's Prince Albert Office by mail and occasionally to the Prince Albert staff travelling in the region. In other cases, the DNR has instituted a system of payroll deductions for those homeowners working for the Department.

With regard to the resale of houses built under the programme, three houses have been sold to date: two at Air Ronge and one at Buffalo Narrows. In the process of resale the homeowner

locates someone able to pay him his equity, obtains the approval of the DNR and transfers the land. The new purchaser then takes over the mortgage payments. None of the new purchasers to date have required subsidies, since two of them are receiving enough welfare assistance to meet the full payment, and the other has a high enough income to meet the required payments.

Some accounting problems have been encountered in administering the overall programme, but because of their technical and procedural nature they are being worked out by the DNR and CMHC accounting staff—it is reported the solutions are evolving satisfactorily.

Aspects of Homeowners' Incomes

It has been the Province's policy that to qualify for housing under the programme, a Metis or enfranchised Indian family must have an annual income of less than \$3,600. This means the aggregate income of all members of a family from all sources except family allowance.

It is sometimes difficult to confirm incomes of families due to their lack of record keeping. An initial income assessment is made by the DNR by discussing with the individual his own and his family's sources of income. In instances where the DNR want to verify the figures obtained, records are available in the DNR office to check the individual's fur sales, and the gross income of his commercial fishing operation is available from the various dealers in the area. Incomes are veri-

fied again at the time of occupancy and income reviews will be conducted each December in the same manner as in the initial assessment. Downward adjustments in income and hence mortgage payments can be made by DNR at any time, while upward adjustments are made only annually after the income review. In general, DNR believe that because of their experience and knowledge they can arrive at fairly accurate income figures.

The Housing

The 94 housing units included in the programme were constructed in the following communities:

Community	No. of Units
La Ronge	2
Air Ronge	9
Buffalo Narrows	21
Ile-a-la-Cross	16
Beauval	5
Turner Lake	10
La Loche	10
Cumberland House	11
Green Lake	10

Construction costs varied somewhat due to the remoteness of the communities, adverse weather conditions, variations in both the cost of materials and skill of the labour. The house plans were prepared by the DNR and consisted of 2, 3 and 4 bedroom frame designs with space heaters and outside toilet facilities. (The four-bedroom plan was not requested by any applicant.) Full or partial basements were provided in five instances. Floor areas varied from 500 square feet to 768 square feet and the bedroom count averaged 2.6 per unit.

Ten log houses were built early in the programme at La Loche, but due to extensive twisting the logs proved unsuitable. (They were subsequently lined with aspenite board.)

By using standardized plans, it was easier for DNR to:

1. supervise the local labour working on the projects;
2. order materials;

3. keep inventories simple and small;
4. obtain better prices when tendering electrical services etc.;
5. keep specifications minimal.

The original designs were approved by CMHC's Chief Engineer as in reasonable conformity with the minimum building standards, and they are considered adequate by the Province after being modified somewhat over the two year period. Use of the designs is restricted to the designated areas.

The houses were built on several blocks in each of the communities. Each of the blocks may have 2, 3 or 4 houses set apart or in groupings; it was not the Province's intention to build in groupings but rather to utilize the available land best suited for the housing. Generally speaking, the settlements are being developed and planned in an orderly fashion.

Social and Economic Aspects

The Provincial Department of Welfare has placed 25 to 30 welfare workers in the region. Among their other duties, the workers are teaching the homeowners techniques of "home management". It is reported that most take pride in the appearance and cleanliness of the new homes; in many cases new furniture has been purchased, fences have been erected and painted, and some houses have been landscaped with trees and shrubs. Families with up to 11 children which once occupied one and two room shacks or tents are now living in much larger homes. The Province employed a firm of consulting engineers to complete a study on the cost of sewer and water for many northern centers, due partly to pressure from local people which indicates their increased interest in housing conditions.

Mr. G. N. Sneyd, Manager of the CMHC Saskatoon Office, has visited the area and reported that "... the houses I visited were well maintained and the housekeeping was average ... adequate housing is providing the incentive for them to improve their way of life."

The DNR has said that the employment provided to the local people during the construction of the houses is of considerable importance to the economy of the areas involved: approximately 120 persons received a total of \$65,300 during 1966. About 85% of the homeowners are gainfully employed during a part of the year. Employment is continually increasing due to the construction of community halls, fish plant facilities and road building.

The Saskatchewan Department of Welfare anticipates the programme will benefit the children mainly, because as they move from isolated rural to settlement areas, schools and generally increased opportunities will become much more available; (20% of homeowners come from outside of settlement areas). The Department considers that although the housing is improving local conditions, assistance cost has generally increased in the northern areas, but for reasons that are not surprising: (1) population increase; (2) rising living costs with no reciprocal rise in earnings; (3) discontinuance of many means tests; (4) harvesting of natural produce is decreasing; (5) industrial development is nominal. On the other hand, only 15% of the homeowners are presently totally dependent on welfare; approximately 60% receive some form of welfare assistance at one time or another over 12 months. The Welfare Department reports further that the housing left unoccupied when local inhabitants move into housing in the project is renovated and occupied almost 100% by welfare recipients.

The Province's Department of Education has written about the programme: "... it is the consensus of those involved in education in the north that better housing conditions are most desirable in providing a more suitable environment for pupils endeavouring to pursue their studies. ... The Northern School Board officials of the Department of Education would like to see the housing conditions in the north further improved wherever possible by means of additional or similar housing programmes to those carried out in the past." At present, the Province is

adding classrooms to existing schools as well as constructing new schools in all the communities involved.

Conclusions

Although the programme cannot be fully assessed at this early stage, there is clear evidence their housing has improved the lives of most of the participants and that the arrangements of the programme should be available to as many needy Indian and Metis as possible. The Province is recording trends in the communities as they apply to the effects of the housing, and is following up the projects by supplying and encouraging increased light industry and employment situations. Bearing in mind, however, that there are now approximately 20,000 Indian and Metis in Northern Saskatchewan, the 1965-67 programme has barely scratched the surface.

Other aspects of the homeowners' income outlined in the agreement with the Province consisted of the following points;

1. (a) "Family income" means the aggregate income in whatever form received of all members of a family, whether earned income or transfer payments, except family allowances.
- (b) "Family" means a natural family consisting of a family head and one or more persons related by blood, marriage or adoption and in addition to a natural family may include other persons known to have lived regularly as an inherent part of the family group and whose earnings and resources are available for use in meeting the living expenses of the group, but shall not include a group of unrelated persons living together, lodgers or persons living alone.
2. Each "Family" occupying each of the houses will be charged in accordance with their "family income" as listed in Table II.

3. In no case will a "family" be required to pay more than that required to meet the full operating costs of the house occupied by it.
4. In order to provide for families receiving income at irregular intervals, adjustment will be made annually at December 31st to ensure payments are related to total annual income.

Cumberland House

Population of approximately 900. Trapping, local labour and commercial fishing are presently the main occupations although a start in farming and ranching has been made. Guiding provides a seasonal income for several residents. Some lumbering activity is present. A small number of residents often emigrate to other areas for employment while leaving their family at Cumberland House, and return home in the off seasons. Cumberland House has two stores, three churches, a 16-room school, a nursing station, a bulk fuel distributor, a hotel, a fish packing shed, a pool hall, a curling rink, a legion hall and RCMP and Department of Natural Resources offices. This settlement is an old Metis community.

Ile a la Crosse

Population is approximately 950. Most men in the community earn a living at various labouring type jobs. Commercial fishing and trapping are the major activities. Employment is available for some men and women at the hospital and

mission. Ile a la Crosse has two churches, two stores, one cafe, a hospital, a 19 room school, a curling rink, a community hall and RCMP and Department of Natural Resources Offices.

La Ronge

Composed of the Village of La Ronge and the adjacent unincorporated subdivision of Air Ronge. Population is approximately 1,500. This is a community with numerous sources of income when compared with other northern settlements. Mining, commercial fishing, trapping, flying, tourist guiding and outfitting, prospecting, lumbering, construction and several other occupations provide a fairly high level of employment. A training programme is in effect at La Ronge for Indian and Metis people to provide a basic education and to develop work habits acceptable to employers. This programme appears to be succeeding quite well.

This community has facilities found in any settlement of comparable size. There are several stores, garages, a hotel, a liquor store, two banks, a fileting plant, three air transport companies, four cafes, bowling alleys, a theatre, numerous tourist operators, 29 classrooms and several other services.

There are many white people in this community and housing standards are well above the surrounding smaller settlements.

Beauval

Permanent population is now approxi-

mately 500. Commercial fishing is the main industry of this area with trapping and local labour positions making up most of the balance of the employment opportunities. A considerable number of Metis are employed at a large residential school as labourers and domestics and the other labour positions depend to a large extent upon the construction programmes of various governmental departments. Beauval is served by two stores, one church, and a ten room school. During the winter of 1966-1967 a combined curling rink and community hall was built as a winter works centennial grant project.

Buffalo Narrows

Population is approximately 1,000. Employment is chiefly labour, fileting, commercial fishing and trapping. Several residents own mink ranches or work for mink ranchers. Buffalo Narrows has two stores, a nursing station, a hotel, a bulk fuel distributor, a garage, and two fish plants one of which is also a fileting plant. This community is the centre of a fairly large fishing operation in the area. Three companies provide air service. The Provincial Government has approximately 20 employees working in and near Buffalo Narrows. These people are mainly employed by the Department of Natural Resources and the Department of Welfare. Other facilities in Buffalo Narrows include a theatre, a curling rink, a community hall, a 12 room school, three churches, a government liquor store, two taxi firms, and RCMP and Department of Natural Resources area offices.

Monthly Family Income	Monthly Payment	Monthly Family Income	Monthly Payment	Monthly Family Income	Monthly Payment
\$	\$	\$	\$	\$	\$
50-54	5	120	23	190	39
55	6	125	24	195	40
60	7	130	25	200-204	42
65	8	135	26	205	43
70	9	140	27	210	44
75	11	145	28	215	45
80	12	150-154	30	220	46
85	13	155	31	225	48
90	14	160	32	230	49
95	15	165	33	235	50
100-104	17	170	34	240	51
105	18	175	36	245	52
110	19	180	37	250	54
115	21	185	38		

Table II

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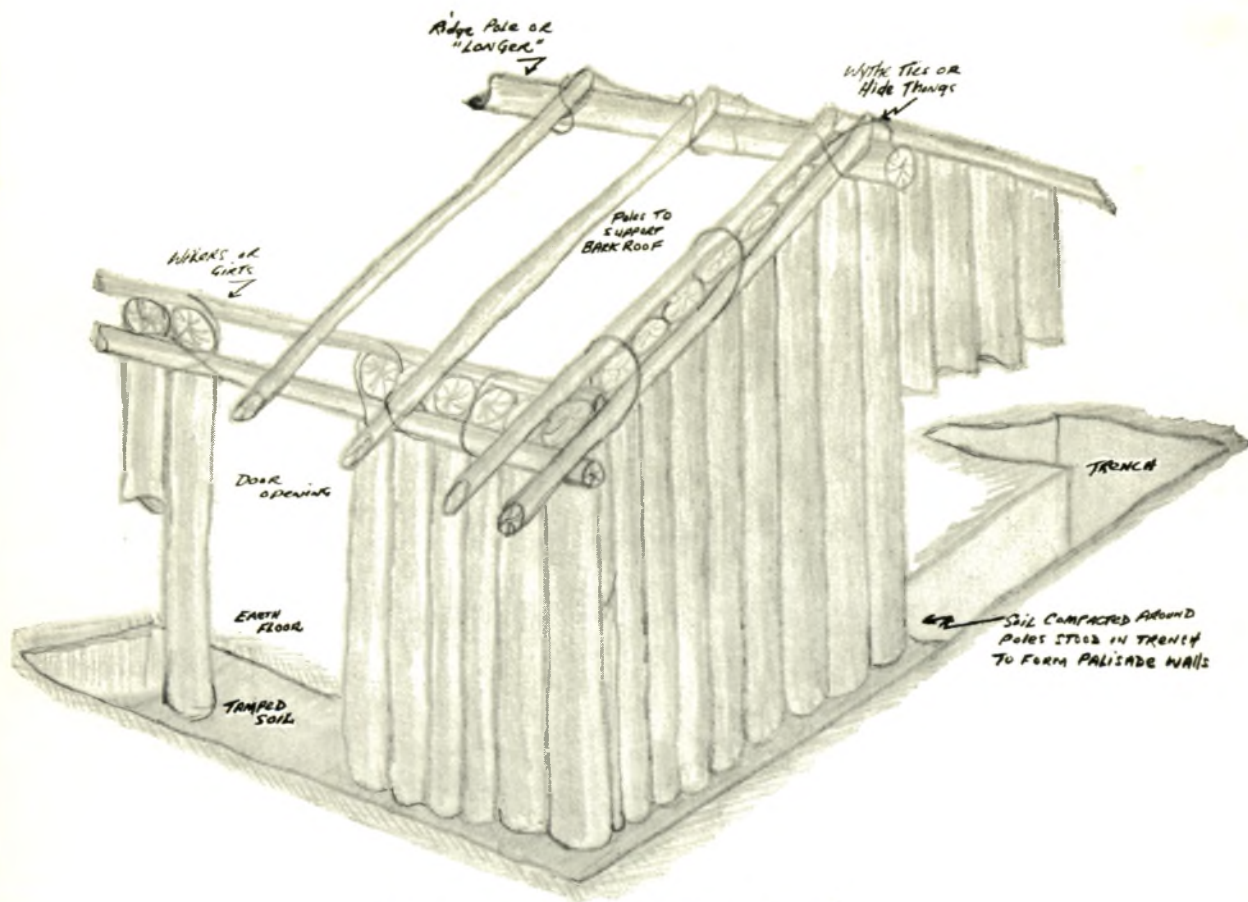
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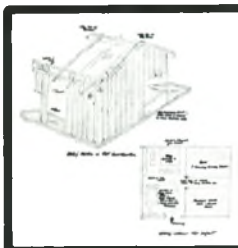
habitat



EARLY METHOD OF TILT CONSTRUCTION



habitat



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Outside Cover/Couverture extérieure
Sketch by D. C. Tibbetts
Esquisse par D. C. Tibbetts

Inside Cover/Couverture intérieure
Photo by Robert Lundgren
Photo par Robert Lundgren

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Les opinions exprimées par les auteurs des articles ne sont par nécessairement celles de la SCHL. Il faudrait adresser toutes les communications au rédacteur en chef, M. E. H. Q. Smith.

OF SHELTER, HISTORY AND CANADA

Shelter, in the history of this land, has taken a most interesting variety of forms; from the igloo, tepee and log cabin it has gone all the way through the Georgian and Gothic traditions and on to our present international styles.

The igloo and tepee were indigenous to the country. Thanks to their primitive but efficient ability to function in adverse conditions they still see use — in modified forms — today

By contrast, the tilt and log cabin, precursors of civilization, owed their existence to the skill of settlers from the New World and an abundance of forest in the East. Even the prairie sod house, developed by settlers who had no alternative material but the earth around them, was European in form.

It was understandable that settlers and immigrants should look to their homeland for inspiration, they had no other architectural roots to fall back on. But in doing so they left a valuable legacy of forms and traditions.

The article by D. C. Tibbetts underscores this and, as we enjoy the amenities of our roomy split-levels and elevator serviced high-rises, it also reminds us how far we have come in form, style and substance, thanks to the endurance of those early settlers and pioneers.

APERÇU DE L'HABITATION AU CANADA

L'habitation, au Canada, a pris bien des formes; il y a eu l'igloo, la tente des Peaux-Rouges, la cabane "en bois rond" qui tendent à disparaître; nous voyons encore des maisons du siècle dernier, pseudo-georgiennes et pseudo-gothiques; enfin, il y a la maison moderne qui se veut parfois pratique, parfois un rappel de certains styles européens, comme le chalet suisse, la maison de ferme basque, sans oublier la maison de ferme canadienne.

L'igloo et la tente répondaient bien aux besoins de nos indigènes. Ils correspondaient sans doute au genre de vie nomade qui est en régression.

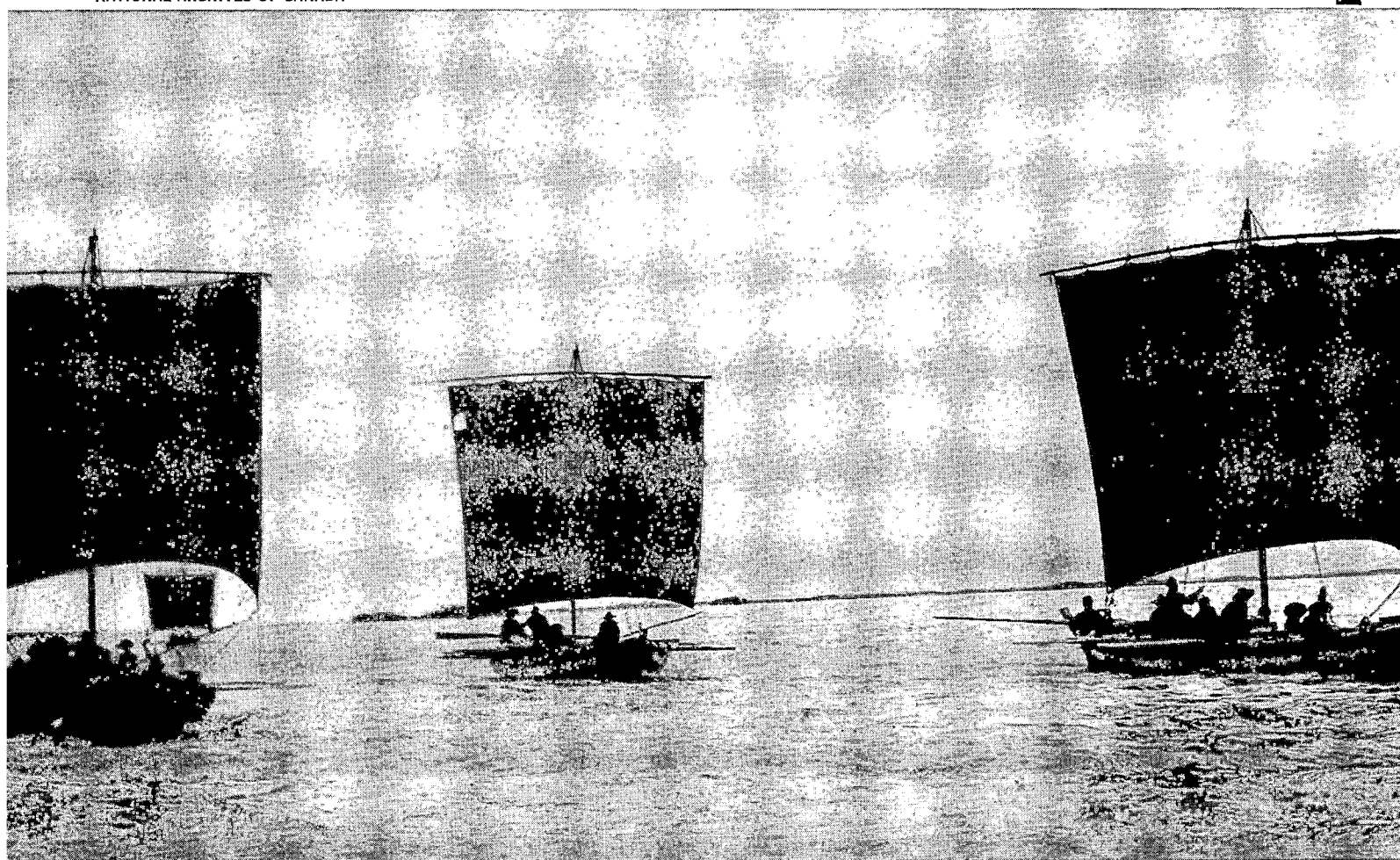
Par ailleurs, la cabane de planches et celle de troncs d'arbres, qui sont la première forme d'habitation des blancs en Amérique, témoignaient de l'habileté de ces pionniers à utiliser les matériaux locaux. Même la hutte de terre des prairies imaginée par les colons qui n'avaient pas d'autre choix de matériaux, avait un style européen.

Il était tout naturel pour nos devanciers et les immigrants de construire leurs demeures dans le style de celles qu'ils avaient habitées jusqu'alors; leur connaissance en architecture ne leur permettait pas de faire autrement. Mais ce faisant, ils nous ont légué un héritage précieux de style et de traditions dont nous devons reconnaître la valeur.

L'article de M. D. C. Tibbetts souligne ce fait et, tandis que nous jouissons de l'agrément de spacieuses maisons à mi-étages ou d'appartements dans des immeubles pourvus d'ascenseurs, il faut nous rappeler que si nous sommes maintenant si bien installés en cette prospère Amérique, c'est grâce à la persévérance des pionniers et des colons.

TRANSPORTATION IN THE JAMES BAY

NATIONAL ARCHIVES OF CANADA



York boats under sail.

For nearly three hundred years the only interest shown in the James Bay Lowland was taking out fur pelts for the markets of Europe. Small ports and 'factories' developed within the Arctic watershed and those at the lower end of the Bay became part of the glory of the Hudson's Bay Company.

The only means of travel was by canoe, York Boat or sledge. The interior was a stranger to transportation until the air age in the 1920's. And it was not until 1932 that an overland facility, the railway, reached the Moose River, from which the townsite of Moosonee was developed.

Today, there is much interest in the economic advancement of this part of the Canadian Northland. And as the industrial frontier penetrates the hinterland and seeks out the natural resources in the area, it dictates the need for more communications routes and facilities.

by RICHARD G. BUCKSAR

LOWLAND

Historical Aspects

The James Bay Coastal Plain of the Hudson Bay Lowland has long been of commercial interest to prospective entrepreneurs, but its wealth has been reserved only for those with the courage, vision, strength and capital necessary for speculation and exploration.

The search for the Northwest Passage and the riches of the Indies led the unfortunate Henry Hudson to discovery and ultimate disaster. The Bay was not about to give up its wealth without serious conquest.

Finally the gateway to the riches of the Lowland was opened from the south by that insidious voyageur Pierre Espirit Radisson. History would remember him as the voyageur's voyageur, but fate would rob him of the wealth of the Bay. In writing of Radisson and his accomplice brother-in-law, Medart Chouart (Sieur des Groseilliers), Douglas MacKay said in his book *The Honourable Company*:

"A more daring pair of unscrupulous international promoters cannot be found in the history of commerce. Glib, plausible, ambitious, supported by unquestionable physical courage, they were completely equipped fortune hunters. They knew more about fur trading than any men of their time, and they were artful enough to exploit their knowledge and sell their services to the European powers. Fortune hunters they were, and they made fortunes for their employers, but, true to their stamp, they never held to the wealth they brought themselves."

In June of 1668 the *Eaglet* and the *Nonsuch*, with Radisson and Chouart aboard, sailed down the Thames outward bound for the Bay. Radisson's ship, the *Eaglet*, was dismantled somewhere in the Atlantic and was forced back to England. It then became the task of Chouart to breach the wealth of the Bay from the North, alone. His voyage was successful, he reached the southern end of the Bay in late Sep-

tember and prepared for winter, and trade with the Indians.

Although the winter was harsh, the beaver trade flourished. Chouart returned to England the following summer with a prime cargo of beaver pelts and thus consolidated the enterprise which would become known as the Hudson's Bay Company.

Seeing the economic advantage of the fur trade into Hudson's Bay, on 2 May 1670, Charles II signed the charter and thus deeded Rupert's Land to the Governor and Company of Adventurers trading into Hudson's Bay.

"Whereas Our Deare and entirely Beloved Cousin Prince Rupert . . . (et al) have at their owne great cost and charge undertaken an expedition for Hudsons Bay in the North West part of America for the discoverie of a new passage into the South Sea and for the finding some Trade for Furs, Mineralls and other considerable commodities . . . there may probably arise very great advantage to us and our Kingdome . . . wee do give grant and confirm unto them the sole Trade and Commerce . . ."

Following the great incorporation, Radisson and Chouart returned to the Bay anxious to trade and explore. Radisson, a master of his trade explored, while Chouart established trade with the Indians. It was during this expedition that Rupert's House (Quebec) was established as a permanent post in 1670. Three years later, Moose Factory was established and thus became the oldest permanent settlement in Ontario. As a result of Radisson's explorations, additional posts were established throughout the watershed area.

The unlimited authority of the Hudson's Bay Company in the North officially ended on 1 July 1867 when Canada was proclaimed a Dominion by the authority of the British North America Act. The Act also made provision for the admission of Rupert's Land and the Northwest Territories into the new Confederation. Fur trad-

ing continued, but the autonomous power of the Hudson's Bay Company was ended.

To-day the Company is the only commercial trading organization in the Arctic region of Hudson's Bay, but the James Bay region is competitive and contrary to public opinion the Company does not presently have a monopoly over trade in this area. Their success in both areas has been due to relative financial stability, for an ever-increasing capital outlay is required for success in this remote land.

Concern for the James Bay watershed and hinterland was slight until the coming of the railway era. As the transcontinental lines were completed at the beginning of the twentieth century, thoughts were given to extending spur lines into the Northland in the hopes of attracting agricultural settlement. The Temiskaming and Northern Railway, now the Ontario Northland Railway, was purposely established as such a colonisation route.

Gold and silver discoveries at Cobalt and the Porcupine diverted much of the attention and the railway did not reach Cochrane until 1908. With the initial impetus lost, it was an additional twenty-four years before the line was completed to the shores of the Moose River.

The site and situation being adequate for development, prompted the railway builders to construct a town, Moosonee, at the "end-of-steel." The town is on the western bank of the estuary some twelve miles from James Bay and four miles from Moose Factory Island.

Recent Developments

The harbour as Moosonee is, at present, relatively shallow and only usable by small craft. Ship movements in the Moose River are controlled by the tide as far up river as Moosonee. Ships that use the Bay must time their arrival and departure to coincide with high tide. Modernisation of the facilities at Moosonee would require dredging and extensive development.

The idea of an Ontario ocean port on



Transport by rail is a service performed by the Ontario Northland Railway, an arm of the Ontario Government.

James Bay was indicated as early as 1885. The Ontario government conducted feasibility surveys for remedial works in 1911 and again in 1915. In the seasons from 1959 to 1962 the Federal Department of the, then, Mines and Technical Surveys took an extensive series of soundings in the Moose River and on James Bay with a view towards conducting a feasibility survey. The survey has not yet been undertaken. Interest in the construction of a seaport at Moosonee increased when extensive iron deposits on the Belcher Islands in James Bay, and more recently of the magnetite bodies at Great Whale, Quebec, were discovered.

If Great Whale is developed, there is still a possibility that the ores would be shipped through Moosonee and the Ontario Northland Railway, but in this case the element of uncertainty is greater. It is also conceivable that a railway could be constructed in the Province of Quebec to the Great Whale area. An alternate route for shipment of the ores could be through the Hudson Strait, but the shipping period would then be limited to three months as opposed to the five months through James Bay and Moosonee.

Considering the alternate route, the ore would be shipped through Hudson Strait to the Rype Islands near God-

thaab, the capital of Greenland, on the west coast of that island, thence to western Europe. Four ships would be required to move some five million tons of ore during each season. An agreement was reached with Denmark in September 1958, whereby a Danish Company would be formed to construct and operate a port at Rype Island.¹

Initially, serious consideration was given to the exploitation of the Great Whale iron ore deposits, but when, in the early sixties, the United States steel industry experienced a serious slump, interest in the development of additional iron ore bodies decreased. During the past year, there has been a considerable improvement in the iron and steel industry on this continent, but the emphasis now is on the gigantic iron ore developments in eastern Quebec and Labrador, and these are not likely to be operating at full capacity for some years. While the development of the Great Whale iron ore reserves is still a possibility, it is unlikely to materialize for some years.

The immediate prospect, therefore, does not inspire optimism. The Great Whale deposit totals seventeen square miles in extent and is known to contain approximately 920 million tons of ore, but has not been worked since 1963.

The property is being held by Great Whale Mining Limited for future development. The same firm owns an extensive iron ore prospect of approximately 100 square miles on Belcher Island.² Apparently there are no present plans to develop these properties, and it is unreasonable to expect that an economical operation will be developed on these two properties for a number of years.

Transportation By Water

From time to time a voice is raised in favour of a harbour at Moosonee, in the expectation that a sea port on James Bay will generate economic activity and stimulate development of this area.

Ships can only move through Hudson Strait for three months, and while in the southern part of the Bay the shipping season is longer, it again is limited to only five months. Current economic development in Northern Canada and along the shores of Hudson's Bay and James Bay is minimal.

Transportation costs in the North have been a major factor in limiting development. The great distances freight has to be moved is another factor which must be considered when reviewing transport costs. To reduce the high costs of transportation in James Bay, the Hudson's Bay Company, servicing

eight settlements on a regular schedule, has initiated a tug and barge arrangement.

Of the eight settlements which were commonly supplied out of Moosonee, only three could be serviced by vessels having a maximum of nine-foot draft. This restriction precluded the use of other than small, shallow-draft, self-powered vessels which, due to unloading and loading delays, could not compete with the relaying of freight on non-manned barges.

In the spring of 1962, the first tug, *Rupert River*, and two one-hundred-fifty ton, well-deck barges were launched into service. These barges and tugs handled twice the tonnage of the powered, shallow-draft supply vessels previously in use. The shift also permitted a reduction of crew members from nine to five. Favourable results prompted the inauguration of a twelve per cent reduction in freight rates in the area.³

The innovation proved successful and in 1963 the Company launched a combined dry-cargo/bulk-oil barge of 300 tons capacity. During the winter of 1963-64, a 65-foot twin-diesel tug and an additional barge of 1,000 tons capacity was constructed. On its delivery voyage from Owen Sound and Kingston, Ontario, to Moosonee, it more than demonstrated its feasibility in the Hudson Bay and James Bay freighting service. An outstanding feature was its ability to go hard ashore and offload with forklift and pallets as opposed to the more conventional off-loading methods.

At present there are two tugs, the *Rupert River* and *Churchill River*, and four barges operating on the Bay. Where the average tonnage has been between three and four thousand tons annually, it increased to 5,096 in 1966, an appreciable difference. As developments in the Hudson's Bay Basin take place, it can be assumed that such coastal operations will continue to build up.

Hydro: Influences and Contributions
Present estimates indicate that approxi-

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Transport by water was the earliest method of travel in the James Bay area. The size of the Moose River can be seen from this photo.

Transport by air, even under severe conditions, is maintained at the Moosonee air strip.

mately two-thirds of Ontario Hydro and an appreciable portion of Hydro-Quebec will be thermal electric by 1980. Despite the present concern and emphasis on thermal electric generation, the era of hydro-electric development is not over.

Recent developments with the extra-high-voltage, long-distance transmission lines have shown it is economically feasible to develop hydro-electric power in the far north for other than local use. In 1963, Ontario Hydro constructed four major hydro-electric generating stations in the James Bay area — Otter Rapids on the Abitibi River and Little Long, and Kipling on the Mattagami River. These stations are capable of producing 551,000 kwh.

During 1963, the first sector of the extra-high-voltage line was completed. This was a 227 mile stretch from the Pinard Transformer Station located

near the Abitibi Canyon Generating Station, to Sudbury. These lines will eventually be extended southward to a point near Toronto.⁴

Hydro-Quebec has not, as yet, begun to tap the reservoir of power in the James Bay region, but is contemplating a move in that direction. A current preliminary study shows that the rivers on the Quebec side of the Bay have vast potential. The area of Rupert's House contains a potential of nearly 75 million kwh.⁵

Transportation By Road

Hydro developments are also having an effect upon road development to the south of the Bay. The Ontario Department of Highways has recently completed a road from Smooth Rock Falls to Fraserdale on the Ontario Northland Railway. Hydro-Quebec is planning similar developments from the town of Mattagami. Ontario's present



Transport by road, like most transport provisions in this part of the Northland, often has to be carried out under very tough weather conditions. Here a snowmobile 'school bus,' able to operate over difficult winter terrain, carries its important cargo to school in warmth and safety.

roads are some 140 miles from the Bay and Quebec's 170 miles.

If these Hydro roads are eventually extended to the Bay, both provinces would be in a position to exert pressure to have their respective portions of the Bay serviced from their own terminals at Moosonee and Rupert's House respectively. Just what effect this will have upon current operation of the Ontario Northland Railway is a matter of conjecture and highly dependent upon the economic developments in the region. Detailed figures are not available, but it is obvious that with only three mixed trains a week and occasional summer specials the Ontario Northland Railway is not self-supporting.

To divide the present limited revenues and traffic with a highway, or possibly two, would certainly mean a drop in revenue and a possible review on the justification for keeping the railway line open and spending money on its maintenance. Since the railway is owned by the Province of Ontario, such a review and decision would be made at the executive level of the Ontario Government. This, however, is assuming that the traffic would remain static which would scarcely be the case.

Conclusion

It is not apparent that significant changes will take place in the traffic patterns of the James Bay area in the foreseeable future. The construction of a harbour at Moosonee or Rupert's House, additional roads, or significant mineral developments would undoubt-

edly bring about considerable change, but there are no present plans suggesting that development of this nature will take place in the next few years.

Providing that the opening of a route to Rupert's House would not be too upsetting, it can be hoped that Hudson's Bay Company will continue to expand their barge traffic on the Bay, which in turn would probably oblige the Government to gradually undertake remedial work at Moosonee. Such continued remedial developments at Moosonee could reach a point where ocean shipping might be attracted to the port.

The development of port facilities at Moosonee seems to be primarily a political question. It takes only a glance at the map to see its strategic feasibility. Until such facilities are available, however, its economic importance is impossible to forecast.

If the government does propose to carry out an immediate plan of action for the development of port facilities at Moosonee, there would no doubt be negative feelings and vehement pressure exerted against such a "waste of money" by some of the competitor ports on the Great Lakes and the Seaway. The government, furthermore, is committed to using those maritime ports which were depressed by the opening of the Seaway. These ports would also object to a major development at Moosonee.

In such an undertaking, the government would run counter to the sectional interests of these other ports.

Railways serving these points might also exert pressure. In contrast to this obvious power, the James Bay Lowland has sparse population and consequently limited voting power.

Although current thinking is apparently opposed to extending developments and improving transport facilities in the James Bay area, future developments and consequent population growth will eventually force growth and development. If the James Bay area is to grow and prosper, then transport facilities must expand to meet the demands of this, the Arctic industrial frontier.

Footnotes

¹H. F. Wiemer, *The Possible Effects of a Seaport at Moosonee on the Economy of Northeastern Ontario*. (A brief presented to the Northeastern Ontario Development Association.) Multilith (undated), p. 10.

²Correspondence with the Ontario Department of Economics and Development, 1964-67.

³Correspondence with the Hudson's Bay Company, Winnipeg, 1964-67.

⁴Correspondence with the Hydro-Electric Power Commission of Ontario, Toronto, 1964-67.

⁵*Potentiel Energetique des Rivières du Nord du Québec: Rapport Préliminaire*, Ministère des Richesses Naturelles, Québec, 1965.

Où est la meilleure solution

*En 1934,
cette maison était
condamnée à la
démolition.*

Pouvons-nous loger convenablement tout le monde? Pourquoi n'y sommes-nous pas parvenus jusqu'à présent?

Pour répondre à ces deux questions qui nous occupent aujourd'hui il faudrait d'abord en poser deux autres: qu'entend-on par convenable? et que veut dire "tout le monde"? Le "convenable" est conventionnel et dépend d'une certaine société. "Tout le monde" par contre se réfère à la totalité humaine, totalité qui comprend bien des sociétés particulières. Ce qui convient à l'une d'entre elles ne convient pas nécessairement à une autre. Les besoins d'un résident de New-York ne sont guère les mêmes que ceux d'un paysan du Tchad, et même s'ils étaient les mêmes, ce dernier, de par sa pauvreté ne pourrait point prétendre les satisfaire. Le problème du logement en pays dit



par HANS BLUMENFELD

sous-développé, est différent et bien plus grave qu'en pays riche, tel qu'ici.

Donc, il ne s'agit pas de l'homme en général et de son habitat, mais d'une portion infime de l'humanité, soit de nous, les Canadiens.

Comment définir alors ce qui convient à nous les Canadiens? On se réfère donc à des normes? Mais ces normes, comment sont-elles établies?

Elles sont établies à partir d'une moyenne: tout ce qui se trouve au-dessus, on le considère comme du luxe tandis que ce qui se place en dessous devient "non convenable".

Au sens large, je peux donc répondre, et peut-être cyniquement, à la première question: non, il n'est guère possible

que tous les Canadiens soient logés convenablement. Car alors, il faudrait qu'ils fassent partie d'une société parfaitement égalitaire. Pareille société, comme vous le savez, n'existe nulle part, ni dans les pays dits de libre entreprise ni dans ceux appelés socialistes.

Permettez-moi donc de formuler autrement la question telle que je l'ai fait, aussi bien moi que d'autres chercheurs, il y a quelque cinquante ans. Pourquoi le marché, qui semble si bien fonctionner quand il s'agit de satisfaire les autres besoins vitaux, tels que la nourriture et les vêtements, ne fournit-il point les logements convenables nécessaires? Qu'est-ce qui rend le logement si différent? Il en diffère, il est vrai, parce que sa longévité diminue l'effet de la demande sur la qualité de l'offre. Mais cette différence ne se manifeste que pour la classe moyenne, elle ne frappe que très peu ou presque pas le cas particulier qui nous occupe, le cas de ceux qui ont un revenu modique et dont le logement a donné naissance à ce qu'on est convenu d'appeler le problème des taudis.

Or, il me faut faire un aveu. Plus je me penche sur le problème, plus je conclus que sa formulation est viciée: cette prétendue différence entre le logement et les autres besoins vitaux n'existe guère pour les pauvres, ils manquent de tout.

J'ai été particulièrement influencé en ce sens par l'expérience de Stockton-on-Tees.

Dans cette ville industrielle du nord de l'Angleterre, la municipalité avait entrepris la démolition d'un quartier de taudis et le relogement des résidents dans des logements sociaux, les "Council Housing" d'Angleterre. C'était pendant la dépression et faute de moyens, la municipalité, dut s'arrêter à mi-chemin. Le directeur de la Santé publique de la ville, le docteur McGonigle y vit une opportunité exceptionnelle de déterminer l'effet d'un bon logement sur la santé des habitants, parce que les résidents des taudis non encore démolis constituaient un parfait échantillon de référence.

(PHOTO: SERVICE DE L'HABITATION, VILLE DE MONTRÉAL)



Quelle ne fut pas la surprise du bon docteur de constater que la santé de ceux qui habitaient les belles maisons nouvelles était pire que celle de ceux qui vivaient encore dans des taudis. La différence était évidente même parmi ceux que travaillaient encore; elle se faisait catastrophique parmi les chômeurs.

Il en découvrit la cause: les loyers des nouvelles maisons étaient plus élevés. La différence n'était pas grande. Tout comme les bons conseillers municipaux de Stockton, nous l'aurions aussi considérée comme négligeable. Mais en analysant le budget des familles, le docteur McGonigle se rendit compte qu'il n'y avait point d'autre moyen de trouver ces quelques sous de différence que de réduire les dépenses consacrées à l'alimentation.

Vous me direz peut-être que tel était le cas en Angleterre pendant les années 30 alors que nous vivons ici au Canada une période de prospérité sans précédent. Notre situation serait alors tout à fait différente.

Moi, je le croyais aussi. Pourtant il y a quelques mois, j'ai pris connaissance d'une petite enquête de la "Family Service Society" de Toronto sur les

conditions de vie de 23 de ses assistés. Dans tous ces cas, sauf deux, le père de famille gagnait un salaire. Malgré cette situation favorable, 21 cas de malnutrition aiguë ont été relevés.

Un peu plus tard, j'ai lu dans les journaux qu'une enquête de grande envergure, réalisée par le Conseil des Oeuvres de Montréal, révélait qu'en ce qui concernait le logement et l'alimentation, une situation nettement déficitaire prévalait dans 50 et 44 p. 100 des cas respectivement.

Quelle en est la signification? Quelles sont les conclusions à tirer de ces faits inquiétants? Pour moi, la conclusion que je peux en tirer c'est que le problème du logement n'existe pas comme tel. Ce que nous appelons le problème du logement, ce n'est qu'un autre aspect du problème de la pauvreté. On n'est point parvenu à loger tout le monde jusqu'à aujourd'hui parce qu'on n'est point parvenu à abolir la pauvreté.

Mais, il n'est point nécessaire d'insister sur le fait que tous et chacun sauraient disposer d'un logement convenable s'ils en avaient les moyens. Néanmoins, il me paraît utile de répéter que le fait d'avoir au Canada des milliers de familles mal logées relève de la très

Ces maisons sont destinées à la démolition pour des raisons de "rénovation". Pouvons-nous nous en passer?



grande différence entre le coût d'un logement et le montant que chaque famille peut ou veut payer.

Pouvoir ou vouloir, ceci implique deux questions. En ce qui concerne la capacité de ces familles, une redistribution du revenu national en leur faveur s'avère nécessaire et ce, quelle que soit sa forme. Une partie des revenus des plus favorisés, doit être reportée sur ceux qui le sont moins. Evidemment, il s'agit là d'une option politique, ou si vous préférez, d'une option de moralité politique. Les électeurs du Canada, les électeurs du Québec sont-ils prêts à consentir pareils sacrifices pour venir en aide aux moins fortunés de leurs concitoyens?

Quel en sera le prix? Il y a quelques années, la "Philadelphia Housing Association" a calculé qu'aux Etats-Unis, pour fermer la brèche, deux milliards de dollars seraient nécessaires annuellement. Je dirais qu'ici au Canada, dans les prochaines années, il en faudrait à peu près 300 millions par an. C'est là beaucoup d'argent. Mais quand même, c'est bien moins qu'un pour cent du revenu national. Ce n'est qu'un cinquième de ce que nous payons pour ce qu'on appelle, par euphémisme, notre Défense Nationale.

Je vais revenir aux diverses formes que peut prendre une telle subvention au logement. Mais avant, je veux insister sur l'autre point. Pourquoi y a-t-il des gens qui refusent d'affecter à leur logement de 20 à 25 p. 100 de leurs revenus comme ils pourraient et devraient le faire, selon les experts. Je veux insister sur ce point parce que, à ce sujet, je suis de plus en plus inquiet et que personne n'en parle.

Le pourcentage de 20 à 25 p. 100 établi comme norme pour les logements publics subventionnés est fondé sur la moyenne des loyers payés par les familles à faibles revenus pour des logements privés qui, en général, sont de qualité bien inférieure. On ne saurait donc contester la justesse de cette norme. Mais par le fait même de dire que ces familles *devraient* affecter, de leurs revenus, un pourcentage déterminé à leur logement, on s'arroge le droit de dresser leur budget. Peut-on l'accepter dans une société qui se veut démocratique? Serait-ce compatible avec le respect des droits de l'individu et de la dignité de la personne humaine? Nous autres technocrates du logement, de l'urbanisme, du secours social, sommes-nous meilleurs juges de leurs besoins que ces familles elles-mêmes?

Je me permets de vous citer quelques exemples. L'enquête sociale, effectuée dans le cadre du projet de rénovation de la Petite Bourgogne, a révélé que certaines de ces familles, habitant de très mauvais logements, possédaient par contre un chalet en montagne et, évidemment, une voiture pour s'y rendre. La vie de ces familles, sera-t-elle plus saine et plus heureuse si elles vendent leur chalet, et peut-être leur voiture, pour se payer un logement convenable?

A Hamilton, dans un autre secteur de rénovation urbaine, des familles, ayant un revenu mensuel de 500 dollars et plus, habitaient des taudis qu'ils louaient à 40 dollars par mois, le tiers presque de ce qu'ils paieraient dans un ensemble d'habitations publiques. Evidemment, ces ouvriers de l'acier préféreraient recouvrer ces 80 dollars ainsi économisés pour satisfaire des besoins tout autres que celui d'un logement convenable. Je ne sais point ce qu'étaient ces besoins, peut-être s'agissait-il d'une voiture de luxe ou de boisson. Ils ne sont que des sots alors, dira-t-on. Peut-être. Mais nous autres, ne réclamons-nous pas le droit de faire, nous aussi, des sottises à notre manière?

Souvent, les raisons invoquées pour ne

pas affecter au logement cette proportion "normale" du revenu ne relèvent guère de la sottise. On a besoin d'argent pour se nourrir, pour se vêtir, pour s'instruire.

Dans un autre secteur de rénovation, appelé Trefann Court, à Toronto, projet dont l'exécution n'a pu se poursuivre à cause de la résistance unanime et bien organisée des résidants, il y avait un couple, avec une très lourde dette. Pour s'en libérer, mari et femme ont travaillé tous deux de longues heures. Aussi, pour réduire leurs dépenses au minimum, ils se sont contentés d'un logement des plus mauvais. Ayant appris que ce logement allait être démolì, ils ont alors demandé s'ils auraient droit à un logement public et si oui, quel en serait le coût. Ils y avaient droit et le loyer dépendait de leur revenu. Ayant indiqué leur revenu, on leur a calculé le loyer: il serait de 150 dollars par mois. Evidemment, ils ont refusé. Mais où iront-ils quand la maison sera démolie? Ils n'ont pas d'autre option que de louer un autre taudis, sûrement pas mieux et probablement plus cher que celui qu'on détruit.

Bien des enquêtes ont été faites sur le relogement des familles déplacées par la rénovation urbaine aux Etats-Unis et au Canada. Leur nouveau logement est parfois de qualité supérieure, parfois égale, parfois pire. Mais le coût du loyer est presque toujours plus élevé.

C'est inévitable en fait. Le prix du logement, comme celui de tout autre bien, est réglé par la loi de l'offre et de la demande. En détruisant des logements, on en diminue l'offre, et tous ceux qui en ont besoin à bas prix en souffrent en plus de ceux qui ont été chassés par la démolition. La guerre contre les taudis est ainsi devenue une guerre contre les victimes des taudis.

Il demeure bien étrange que nombre de personnes intelligentes et de bonne foi se refusent à le constater. L'existence de taudis évoque une réponse émotive. On a honte d'avoir dans sa ville cet aspect de la pauvreté. C'est loin d'en être le seul, mais c'en est le plus visible. Ce qui se trouve dans la rue se voit: pas ce qu'il y a — ou ce qui manque — dans les pots de cuisine. Or, on ne s'attaque qu'aux symptômes.

Il y a plus d'un demi-siècle, le grand urbaniste écossais, Patrick Geddes, disait: "The policy of sweeping clearance should be recognized for what I believe it is: one of the most disastrous and pernicious blunders . . . the large populations thus expelled would be driven into existing worse conditions in other quarters." Démolir les taudis, ce n'est pas les abolir: au contraire, c'est en assurer l'expansion. Ce n'est pas une mesure de progrès social, c'est une folie criminelle.

Il y a une logique néfaste dans les volumineux rapports que requiert la

SCHL comme preuve justifiant la nécessité d'une opération de rénovation urbaine dans telle ou telle section d'une ville. On y trouve des tableaux de logements surpeuplés, des logements où le nombre de personnes est supérieur au nombre de pièces.

Eh bien, s'il en manque, il faut en ajouter! Mais on propose au contraire d'en diminuer le nombre. Logique étrange! Si un homme est mal vêtu, on ne l'aide point en lui ôtant son pantalon: on lui en achète un neuf ou on lui répare le sien.

Le coût d'une nouvelle habitation convenable pour une famille de trois enfants est d'environ 18,000 dollars, ce qui requiert un loyer mensuel de 150 dollars, bien au-dessus des possibilités de la majorité d'entre elles. Peut-être vaudrait-il la peine d'analyser, très brièvement, les détails de ce coût. Il comprend le coût de l'emplacement, de l'équipement urbain, de construction, d'exploitation, ajouté aux taxes et à l'intérêt.

La valeur de l'emplacement est la capitalisation de la rente préférentielle qu'un usager — industriel, commercial ou résidentiel — est prêt à payer pour s'y établir plutôt qu'à tout autre endroit. La spéculation accapare cette valeur, elle ne la crée pas.

La valeur de l'emplacement est créée par la communauté. Là où le terrain

(PHOTO: SERVICE DE L'HABITATION, VILLE DE MONTRÉAL)



Maisons restaurées (Philadelphie)

urbain appartient à la municipalité, tel qu'à Stockholm par exemple, la ville demeure le bénéficiaire de cette valeur qu'elle a créée, elle-même. Et plus encore, elle exerce un contrôle efficace sur son développement. Voilà pourquoi je considère la prise de possession du terrain urbain par le secteur public comme l'une des réformes les plus importantes. Mais sa réalisation sera longue. Et ce qui importe, c'est qu'elle ne réduira guère le coût de ces terrains. Les vendre ou les donner à bail à meilleur marché encouragerait le "sprawl", leur gaspillage par de trop basses densités.

Les basses densités entraînent des frais bien plus élevés pour l'équipement municipal. Il est donc important de les augmenter. Mais, pour les familles avec enfants tout au moins, on ne peut pas créer de conditions favorables, si la densité dépasse de beaucoup 30 logements à l'acre net. Bon nombre de nos lotissements, tant publics que privés, ont une densité plus forte. Il n'y a donc que peu d'espoir d'y comprimer ici le coût du logement.

Dans les fonctions résidentielles, l'élément principal de l'investissement demeure, bien entendu, le coût de construction du logement lui-même. On parle beaucoup de le réduire par la rationalisation de l'industrie du bâtiment — arriérée sans doute — et par la préfabrication. Bien des procédés de préfabrication ont été développés un peu partout. Les plus répandus et les plus systématiques dans leur application au domaine résidentiel ont été faits en Allemagne de l'Est, dans la République Démocratique Allemande. On construit surtout des maisons à quatre étages, sans ascenseur, très uniformes, avec un nombre réduit d'appartements-types. J'y ai reçu l'assurance que le coût de construction a été ainsi réduit de 18 p. 100, ce qui correspond à une réduction de 15 p. 100 du coût global. Ce n'est point négligeable, mais c'est loin d'être décisif.

Tant pour le locataire que pour le propriétaire d'une maison unifamiliale, ce qui compte le plus, c'est le coût annuel, dont l'essentiel reste bien le

coût d'exploitation, entretien, chauffage . . . L'entrepreneur qui construit des logements pour les revendre au plus vite s'en occupe peu; l'acheteur n'en comprend pas grand-chose. Pour ces deux-là, ce qui compte c'est le coût initial. Ce n'est que plus tard que le second s'aperçoit qu'il a contracté une mauvaise affaire. On a fait plus attention dans le cas d'habitations publiques. Voilà l'une des raisons de leur coût initial plus élevé, plus élevé que le coût de celles que construit l'entreprise privée. Quand même, leur coût d'exploitation reste considérable.

Un pourcentage assez élevé du coût annuel représente la taxe foncière. C'est une taxe fort régressive. On sait bien que la proportion du revenu affectée au logement demeure en raison inverse de ce revenu. A Toronto, les ménages qui gagnent moins de 4,000 dollars par an en payent plus de 30 p. 100 pour le loyer, tandis que ceux qui gagnent plus de 10,000 n'en payent que 15 p. 100 ou moins. Ainsi la taxe municipale prend deux ou trois fois plus du revenu des pauvres que de celui des riches.

Politique étrange! Tandis que le gouvernement dépense des millions de la main droite en vue de permettre à la population d'accéder à des logements convenables, de la main gauche il en reprend des centaines de millions qui deviennent de ce fait même inaccessibles. A long terme, rien ne contribuerait plus à améliorer la situation du logement que le remplacement de cette source régressive du revenu municipal par une taxe progressive, préférablement par l'allocation à cette municipalité d'une partie de l'impôt sur le revenu, proportionnellement à l'étendue de sa population.

Malheureusement, ce n'est qu'à long terme que l'abolition de la taxe foncière amènerait le résultat escompté; à court terme, seuls les propriétaires en tireront les bénéfices.

Ce qu'on pourrait et ce qu'on devrait faire immédiatement, c'est d'arriver à l'élimination de sa contrepartie la plus fâcheuse: le fait de décourager l'investissement dans les logements existants.

Présentement, le propriétaire qui investit pour améliorer et moderniser sa maison est automatiquement pénalisé par une hausse de taxes. Dans certaines limites, cette taxe peut bien être abolie sur de tels investissements.

Dernier élément important du coût annuel, le taux d'intérêt¹. Le principal moyen mis en oeuvre par le gouvernement fédéral pour encourager la construction de logements, a été et demeure encore l'assurance des hypothèques et, de plus en plus, les prêts hypothécaires directs, à un taux légèrement supérieur à celui qu'il paie pour ses propres obligations. Ce taux est présentement assez élevé. Le résultat, c'est que le coût d'exploitation d'une maison construite avec une telle aide financière est si élevé que seule une moitié de la population, ceux qui sont les plus favorisés peuvent en profiter.

Certains gouvernements européens accordent pour les constructions résidentielles, des prêts à un taux d'intérêt bien inférieur à celui qu'ils paient eux-mêmes; c'est-à-dire qu'ils subventionnent un certain nombre d'habitations. Depuis, l'expérience a prouvé que parmi les bénéficiaires figurent des individus qui gagnent bien plus que la majorité de ceux qui, par leurs impôts, paient de telles subventions.

¹Les conditions de remboursement influent également sur ce coût d'exploitation ainsi que l'intérêt.



Ce qu'il faut subventionner, ce sont les ménages en soi, tous ceux dont 20 p. 100 de leur revenu ne suffisent pas à payer un logement convenable.

Avec une telle politique, chaque ménage sera libre de trouver le logement qui lui convient pourvu qu'il soit conforme à certaines normes minimales qu'il ne serait pas trop difficile d'établir. Il pourrait alors choisir le voisinage qu'il préfère, de type ancien ou moderne, selon ses goûts. Et ce qui est plus important, il pourrait devenir propriétaire de son logement, en appliquant cette subvention à l'amortissement de l'hypothèque.

Pareille politique tendrait à ce que chacun soit logé convenablement, sauf ceux qui ne pourraient pas ou refuseraient de payer à cette fin le 20 p. 100 de leur revenu, pour des raisons que j'ai tenté d'expliquer. Elle coûterait, je l'ai dit, quelque 300 millions par an.

Augmenter subitement la demande effective dans de telles proportions entraînerait sans nul doute une hausse des prix et des loyers. Il serait donc nécessaire que l'offre soit aussi augmentée au préalable. Il faudrait ainsi construire un grand nombre de logements. Il faudrait les construire au coût le plus bas, sur des terrains vacants.

Sous plusieurs rubriques, les ensembles construits par des coopératives ou par des sociétés à dividendes limités peuvent bénéficier de l'aide du gouvernement fédéral. Il y a lieu de libéraliser et d'étendre ces avantages. Les municipalités et les coopératives ne sont pas les seules à pouvoir s'engager dans de telles entreprises. Dans plusieurs pays européens, comme en République Fédérale Allemande, les caisses d'assurance sociale, les syndicats, les églises, les sociétés fraternelles se sont chargés de la construction et de la gestion de tels ensembles d'habitations.

Evidemment, il faudrait obliger ces entreprises à accepter les familles subventionnées. Ce serait bien préférable à ces habitations publiques que, comme d'autres folies, nous avons copiées de nos voisins du sud. La désignation en

elle-même est fautive: ces institutions sont loin d'être "publiques" comme le sont nos parcs et nos écoles, c'est-à-dire accessibles à tous. Au contraire, l'accès en est strictement limité. Là-bas, on les appelle "ghettos of the poor", et on en connaît les néfastes conséquences sociales. Si de tels phénomènes ne se sont point produits chez nous, il faut en rendre témoignage à la santé d'esprit du peuple canadien ainsi qu'à celle des gérants de ces habitations. Elles demeurent quand même loin d'être populaires; bien des familles déclinent l'offre de s'y loger. Chez les résidents de La Petite Bourgogne, c'est un refrain constant: "on ne veut pas des Habitations Jeanne-Mance."

Le type d'ensembles dont j'ai parlé, c'est-à-dire des logements à prix modique mais non subventionnés comme tels, peut tout aussi bien se concevoir par l'acquisition, le réaménagement et l'exploitation de maisons existantes que par la construction de nouvelles. C'est important, car bien des ménages préfèrent rester près du centre-ville plutôt qu'en périphérie.

L'actuelle législation sur la rénovation urbaine peut être plus efficacement utilisée. Elle autorise le gouvernement fédéral à contribuer à tout projet de rénovation urbaine mis en marche par une municipalité. Elle a permis l'utilisation de fonds fédéraux à l'acquisition de secteurs déjà construits, généralement assez importants, à la démolition de structures payées au prix fort et à la revente subséquente du terrain ainsi déblayé, soit à l'entreprise privée, soit au secteur public, pour une fraction du prix d'acquisition. La différence est donc couverte par cette contribution — à fonds perdu — du gouvernement fédéral. On comprend alors l'attrait de cette formule pour les administrateurs municipaux; c'est-à-dire un des rares instruments disponibles pour soutirer de fortes sommes du trésor fédéral. Mais pour les résidents du secteur en cause, il en résulte la destruction de leur communauté: le tissu que forment les liens de voisinage se trouve ainsi déchiré. Cette menace crée une vive anxiété, voire le désespoir.

Au meilleur des cas, des habitations

publiques sont construites sur l'emplacement déblayé. Mais, le coût total d'une telle opération est fantastique. Dans les cas des Ilots Saint-Martin, première étape de la rénovation de La Petite Bourgogne, il représente 40,000 dollars par logement. En construisant des logements identiques sur un terrain non encore exploité, tel que le domaine Saint-Sulpice, cette somme suffirait à la construction de deux unités.

Il faut sans doute des logements convenables à bas prix aussi bien près du centre qu'en périphérie. Mais, à peu d'exceptions près, il faut les procurer par la conservation, la restauration et la modernisation des structures existantes. On a tenté de le faire aux Ilots Saint-Martin, mais on a décidé qu'il n'y en avait qu'une vingtaine qui en valaient la peine. Le coût de reconstruction est estimé à 13,000 dollars par unité, presque autant que la moyenne de 14,000 dollars requise pour la construction d'un nouveau logement. La comparaison n'est pas tout à fait exacte, car les anciennes unités sont plus grandes que les nouvelles prévues. De toute façon, si l'on accepte les chiffres, les possibilités de restauration semblent bien limitées.

Par contre, à Philadelphie, la "Philadelphia Housing Authority" a acheté en 1958-1959, quarante unités de 5 à 6 pièces à un prix moyen de 5,960 dollars. Le coût de restauration n'a été en moyenne que de 2,763 dollars. Pourquoi à Montréal la même opération coûte-t-elle près de cinq fois plus cher? Parce qu'ici, on a insisté pour que, sur chaque détail, l'unité restaurée atteigne les mêmes normes qu'une nouvelle, tandis qu'à Philadelphie, on s'est contenté d'un logement convenable, sans être pour autant parfait. Il me semble bien plus important d'avoir cent logements convenables que d'avoir vingt habitations modèles.

Ce que je propose, c'est que l'autorité responsable en matière de rénovation, acquière, de gré à gré ou par voie d'expropriation, toutes les propriétés dans le secteur en cause, tout comme elle le fait à présent, et que le gouvernement fédéral lui octroie une contribution, tout comme il le fait à présent;

mais qu'au lieu de démolir les structures existantes, ladite autorité procède à une transformation graduelle et continue de ce secteur, par étapes délibérées.

Pendant les six premiers mois, elle se limiterait aux exigences que requiert une bonne gestion, déblayant les cours, entretenant les trottoirs, faisant les réparations courantes . . . Pendant ce temps, elle procéderait à deux enquêtes bien détaillées. La première consisterait en l'évaluation des structures et la détermination de leur durée de vie probable, compte tenu des divers niveaux d'investissements. La seconde évaluerait les besoins et les désirs des locataires. Celle-ci ferait découvrir sans doute bien des problèmes qui exigent le concours d'autres organismes. L'autorité instituerait ainsi ce qu'on appelle la rénovation sociale.

Ce ne serait qu'après une étude bien poussée des résultats de ces deux enquêtes qu'on développerait un plan de transformation par étapes successives. Sans doute, il serait modifié au fur et à mesure de son développement. J'y donnerais priorité, non à l'élimination de ce qui est mauvais, mais à la création de ce qui fait défaut: des petits terrains de jeux pour les enfants d'âge préscolaire, des coins pour planter des arbres et pour installer des bancs, des terrains de stationnement auxquels on ajouterait peut-être un centre communautaire, une clinique, des magasins . . .

Evidemment, cela nécessiterait quelques démolitions. Mais les familles délogées ne seraient point forcées de quitter le quartier. De temps à autre, il y aurait toujours des départs. Le logement ainsi libéré serait mis en bon ordre et serait alors offert au ménage qu'il y aurait lieu de déloger — au même loyer qu'il paie actuellement.

On procéderait de la même façon pour les familles qui devraient déménager, soit à cause du mauvais état de leur logement, soit à cause de l'urgence des réparations majeures.

Sans doute, après quelques années, on réaliserait également de nouvelles maisons. Mais durant toute la durée de

l'opération, la vie de la communauté continuerait sans interruption.

Evidemment, le procédé est compliqué. Il exige nombre de tâches difficiles et de travaux méticuleux. L'autorité aura donc besoin d'une équipe bien qualifiée, comprenant tout aussi bien des sociologues, des assistantes sociales que des architectes, des ingénieurs et des administrateurs. Les résultats ne seront pas spectaculaires: la démolition des taudis et l'inauguration des grands ensembles de construction sont bien plus photogéniques. La méthode proposée manque de sex-appeal politique. Mais, elle est bien plus humaine et, j'en suis convaincu, bien plus économique que celle employée jusqu'à présent.

En somme, il faut trois programmes simultanés et coordonnés:

- construction d'un certain nombre de logements à prix modique sur des terrains vacants;
- restauration et réaménagement des vieux quartiers;
- et des subventions pour tous les ménages dont le revenu ne permet pas de payer le loyer d'un logement convenable.

Cela coûtera très cher, trois cent millions par an, et ne pourra se faire sans une réallocation assez convenable des ressources nationales. Considérant les réalités politiques, il présuppose une réallocation du pouvoir qui dispose de ces ressources. C'est-à-dire que pour loger adéquatement tout le monde, il faut une révolution — tranquille ou bruyante, selon les circonstances — mais une révolution assez profonde et radicale.

La remise à neuf de cette maison en a prolongé la durée de plus de 30 ans.



The Newfoundland Tilt

Possibly the earliest form of shelter devised by European settlers in the New World was the Newfoundland Tilt. It made ingenious use of available materials — poles, moss and bark. Construction was in the *vertical* palisade fashion, an arrangement which might appear unusual to many Canadians to whom the *horizontal* fastening of the log cabin is more familiar.

by D. C. Tibbetts

The walls of the original tilt consisted, essentially, of vertically arranged poles (sometimes fastened into a trench outlining the shape of the dwelling) with the interstices caulked with moss — a process known as ‘chinsing’ or ‘chintzing’.

The roof consisted of small pole rafters covered with rinds (spruce or fir bark) with a hole left at one end to let in light and let out smoke. Tamped earth provided the floor, and an open fire supported on some flat stones provided heat for cooking and for a minimum of comfort in winter.

The first tilt constructed by Europeans may have been built in Newfoundland in the early 16th century, as forty or fifty houses were reportedly there by 1522. In addition, the ‘fishing admirals’ of the day left a few crews behind each winter to cut timber for building cook-rooms, fish stages, vats, wharves, and boats. During this period the tilt, although not much improved over the Indian’s wigwam, did imply a less nomadic existence. In those days of raids and hostile edicts, it was also somewhat of an accomplishment for a family to grow a new ‘shell’ on short notice should one be destroyed.

The Newfoundland tilt, in its role as a home of sorts and in its various other uses, persisted throughout the 19th century. Similar shelters were erected by the founders of Lunenburg, Nova

Scotia, and also by the early New England Colonists. Alice Morse Earle, in her “Home Life in Colonial Days,” describes early attempts in New England to construct shelters — “. . . forest trees of every size and variety, yet no mills and few saws to cut boards, . . . plenty of clay and ample limestone, yet no bricks and no mortar, . . . grand boulders of rock, yet no facility for cutting, drawing, or using.” Soresly in need of shelter, they had to use many poor expedients and be satisfied with rude coverings.

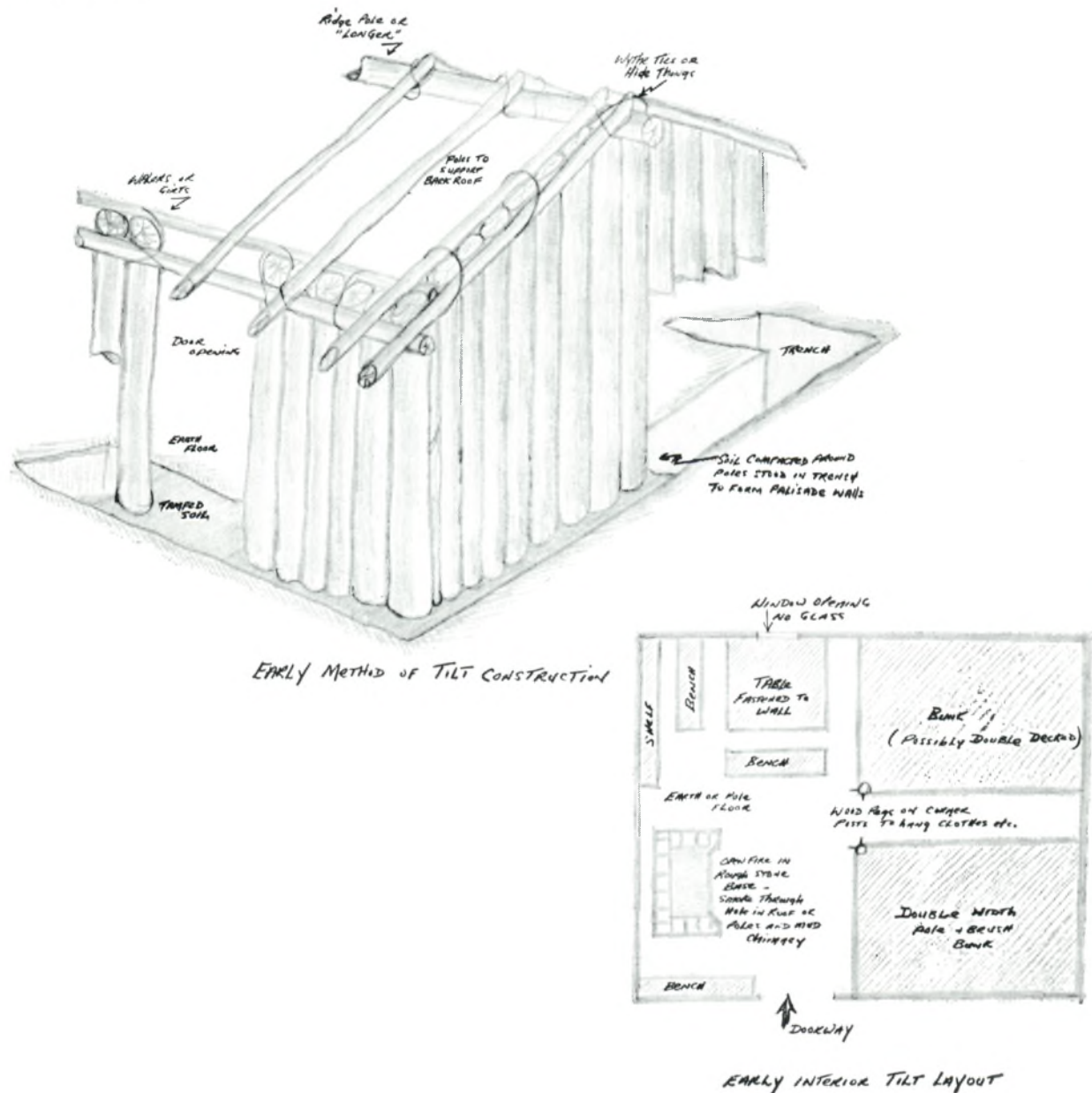
A favourite method of the New England settler building his first ‘cut down’ in the virgin forest was to dig a square trench about two feet deep, of dimensions as large as he wished the ground floor of his house to be, and then to set upright all around this trench (leaving a space for a fireplace, window, and door) a closely placed vertical row of logs all the same length — usually 14 feet long for a single storey and, if there was a loft, 18 feet long. The earth was filled in solidly around these logs, keeping them firmly upright; a horizontal band of ‘puncheons,’ (split logs smoothed on the face with an axe) was sometimes pinned around within the log walls to keep them from caving. Over this was placed a bark roof of squares of chestnut bark or shingles of overlapping birchbark. A bark or log shutter hung at the window, and a bark door hung on with hinges or, if very luxurious, on leather straps, completed

the home. This was called ‘rolling-up’ a house, and the house was called a ‘puncheon-and-bark’ house. A rough puncheon floor, hewn flat with an axe or adze, was truly a luxury. There is a clear parallel here with the Newfoundland tilt.

By the end of the 18th century the tilt, as a home for the ‘established’ settler, was developing into a house. By this time the typical fisherman’s house and that of the established planter had a hinged door, a few small windows, also pit-sawn stud or plank walls with both the roofs and walls clad with shingles of cloven fir.

The early missionaries to Newfoundland kept very good journals, and some of their experiences can be related here to further define the nature of the tilt, the people it sheltered, and the other several uses to which it was put. The Reverend Edward Wix in covering the period February to August 1835, makes some interesting entries in his journal:

“By 9½ o’clock we reached Chapel Arm, where, and at Little Gut in its neighbourhood were about 70 souls, chiefly from New Harbour, for winter’s work. Assembled 24 people, all who had not gone into the woods for their work before our arrival, for full service at the ‘tilt’ of William Pollett. The ‘barber’, a vapor so called from its cutting qualities was distinctly visible upon the water this morning. It rises,



I believe, from the air being colder than the water.

"One 'tilt' was visited by me on the Isle of Valen, the dimensions of which were only 12 feet by 10 feet and I found living in it a man and his wife—the master and mistress of the house—two married daughters with their husbands and children, amounting, in all, to fifteen souls. I was fortunate enough to come out upon the shore in Fortune Bay, exactly where there were houses, and a very decent young man and his wife, having only left their 'winter tilt'

that morning, had cleaned up their neat summer house, and lighted a good fire, as though for my reception."

He was not always so favourably impressed and mentions . . . "My eyes, which have been much tried by the glare of the sun upon the snow, and by the cutting winds abroad, are further tried within the houses by the quantity of smoke, or 'cruel steam' as the people emphatically and correctly designate it, with which every tilt is filled. The structure of the 'winter tilt', the chimney of which is of upright studs, stuffed or

'stogged' between with moss, is so rude, than in most of them in which I officiated, the chimney has caught fire once, if not oftener, during the service. When a fire is kept up, which is not unusual, all night long, it is necessary that somebody should sit up, with a bucket of water at hand to stay the progress of these frequent fires. An old gun barrel is often placed in the chimney corner, which is used as a syringe or diminutive fire-engine, to arrest the progress of these flames; or masses of snow are placed on top of the burning studs, which as they melt down, ex-



tinguish the dangerous element. The chimneys of the 'summer houses' in Fortune Bay are better fortified against the danger, being lined within all the way up with a coating of tin, which is found to last for several years."

Anspach, in his history of 1819, while describing some of the better Newfoundland homes also has something to say about the tilt . . . "They call tilts temporary log houses, which they erect in the woods to pursue their winter occupations. Tilt-backs, or linneys (lean-to), are sheds made of studs, and covered with either boards or boughs, resembling the section of a roof, fixed to the back of their dwellings towards the wind. They have only one fire-place in a very large kitchen, partially enclosed with boards, and having within a bench on each side, so as to admit 8 or 10 persons. Under these benches they manage convenient places for their poultry, by which means they have fresh eggs during the most severe winters. These chimneys are likewise by their width extremely fit for the purpose of smoking salmon and other kinds of fish or eatables, as the only fuel used in them is wood which is found at no great distance."

R. Bonnycastle, writing in 1842, gives his description of a tilt . . . "It was about 18 feet by 14 feet and consisted of one apartment only in which the whole family squat around a scanty fire. This dwelling, which was as lofty as a barn, was built of poles or sticks of very small diameter, placed upright, irregular together, and braced every here and there. The chimney, formed of rough unmortared stone, adjoined the roof, which was also of poles, at one gable end, and was finished above the ridge pole with boards or short slabs of wood. The roof had been covered with bark and sods, and some attempts had been

made originally to stop or caulk the crevices between the poles, both of the roof and walls, with moss or mud; but these substances had generally disappeared, and in every part of this wretched dwelling, was the light of heaven visible, and everywhere must the rain have fallen in it, excepting towards the gable, opposite the chimney, which had some pains taken with it, and where the unfortunate family slept in their rags.

"The house had evidently been built in better days, upon too large a scale; but even this hut is good, compared with some of the 'summer tilts,' which are constructed to carry on the fishery in the little harbours and coves, where, very often, a huge boulder or projecting rock forms the gable, or actual reredosse, as our ancestors called the only chimney, or substitute for a chimney, and from this 'chimney-rock', a few slight poles built up erect in an oblong form, with a pole-roof sloping against a bank, or rock, the whole covered with bark, when it can be had, which is seldom, or with turf; and with turf piled up against the side walls, without a window, and with only an apology for a door; and the whole interior scarcely affording standing room; compose the only habitation of the poor fisherman, and his generally numerous family, the smoke escaping always from an old barrel, or a square funnel of boards placed over the fire.

"When winter set in, or as soon as the fishing is over, this tilt is abandoned, and the family retires to the woods, and erect another somewhat better tilt and there they are somewhat more comfortable."

Julian Moreton, while travelling in Newfoundland, had his share of unusual experiences and in 1863 writes

about an encounter with a fishing party (a man, his wife and little boy) from Fair Islands . . . "Their only shelter for the night was a shed, such as is called a 'back-tilt', made of a punt's sail strained along the ground on one side, and supported at an angle of about 45° from the ground by stakes. The ends are walled in with boughs, and the whole front is open; whence its name, being a 'back-shelter' only. In front of the tilt there was a fire burning, with a kettle hung over it to boil. We were kindly and gladly welcomed. The bed was of boughs, and my pillow was a sealskin filled with biscuit, commonly and rightly named hard bread.

"Many families leave their usual dwellings in the fall of the year, and remove for the winter into the woods far up the country, where they remain till nearly the end of May. Their purpose is to fell and square timber, saw board, cleave coopers' staves, make birch hoops for casks, or build boats. Their houses in the woods, named 'winter tilts,' and required only to serve one winter's use, are of very simple construction. A small space is cleared of all wood except two opposite trees, growing at such a distance apart as is a suitable length for the house. A 'longer' (ridge pole) is extended from one to the other of these trees, and seized to them at the proper height for the roof ridge. The four walls are made of the trunks of trees set close together perpendicularly. Slender young trees are used for rafters, and these are covered with fir rinds to form a roof. The floor is made of 'longers,' a flat rock forms the hearth, and the chimney is simply a space left uncovered in one end of the roof. No window is made or needed, the 'chimney' admitting sufficient light. The chinks between the sticks of which the walls are made are caulked, or as these people say, 'chintzed' with moss.

No labour is spent in dressing any timber in the tilt; even the rind (bark) is kept on."

The Reverend William Wilson in 1866 stated that . . . "The Newfoundland tilt can lay no claim to any ancient order of architecture, but is in its style perfectly original. The walls are formed of rough spruce sticks, called studs, of about 6 inches diameter, the height of the sides six feet, and of the gables about 10 feet or 12 feet. The studs are placed perpendicular, wedged close together, and the chinks or interstices filled with moss. This is the only defence against the cold. A ridge-pole passes longitudinally from the gables on which the round rafters are notched. These are covered with rinds, or the spruce bark which has been used during the summer as covering for the fish-piles. These rinds make the tilt water-tight. A hole is left in the rinds about four feet square, which serves the double purpose of a vent for the smoke and an aperture for the solar rays to permeate the dwelling. The tilt has seldom any window. The floor is made with round studs like the walls, which are sometimes hewed a little with an adze.

"A few stones, piled five feet high form the fireplace. These stones are placed close to the studs, which, being thus exposed to great heat, will often ignite. A vessel full of water was always at hand to extinguish the kindling spark; it required no small skill to throw water from that vessel up the chimney in such a manner as to prevent its return, surcharged with soot, upon the head of the unfortunate operator. A rough door, a few shelves, and a swinging-table fastened to the side of the building, exhausts nearly all the boards usually used for such structures."

The Rev. Wilson goes on to say that in a tilt like the above, with the only addition of a rough, boarded floor, and two windows, brought from the mission house did he and his family spend the winter of 1827-28. "In the 'mission-tilt,' however, we had three apartments, two sleeping apartments, and one large room, nearly twenty feet square, which was our kitchen, our parlor, my study, and also our chapel where we held public service and class-meetings during the winter. Our tilt was erected upon the bank of Fresh-Water Pond, and, as we were surrounded by some

20 Wesleyan families we called the locality of our winter residence Wesley Vale."

In "The Treasury of Newfoundland Stories" is *The Duck Hunt*, an account of two Newfoundland boys travelling to Gull Island December 28, 1878 in a quest for sea birds, only to lose their punt and be trapped on the island. They spent their nights on the island in a hut or tilt erected earlier for the use of seal hunters by the operators of the Tilt Cove Mines. This camp or shack was built of plank and clad with clapboards. With typical Newfoundland ingenuity, they obtained the necessary materials from this tilt to build a boat, and on New Year's Day, 1879, they crossed the 15 miles to Tilt Cove and safety.

The word tilt has been used in Newfoundland to convey the same meaning as that of the term camp as used on the mainland. In many ways, mainland camps were used for the same purposes as tilts — as winter shelter for woodworkers and their families, in the summer as fishing shacks both inland and along the coast, as permanent residences, and, more recently, improved versions used as holiday camps or cottages. Tilts have not always been built from poles and moss, any more than have camps continued to be log cabins. Farley Mowat in his book "Westviking," refers to some of the early Norse shelters at Epaves Bay as sod tilts, whereas others might have used the word camp or hut to describe the same thing.


The tilt is still used as temporary shelter in Newfoundland the same way that other Canadians use camps or huts for hunting, fishing, and logging activities. Although these camps or tilts have been modified over the years to include boards, building papers, windows, smokepipes, and hinged doors in their construction, it is still popular to refer to them in Newfoundland as tilts.

Author's note: I am indebted to Dr. Louise Whiteway of Saint John's for a copy of her excellent paper, "Towards an Art of Architecture in Newfoundland." Dr. Whiteway's paper won the annual Arts and Letters competition in Newfoundland a few years ago, and contains a number of references used in the preparation of this article.

The remains of a tilt.



NRC



The exploding metropolis is a concept that has received much attention in the past decade. Widely thought of as a post-war phenomenon, this expansion of our suburbs is merely an acceleration of something that has actually been taking place for many years now.

OTTAWA'S FIRST suburb

by Eric Minton

Suburbia is an old idea. Rosedale, Westmount, English Bay, Grande Allée, the very names recall an era before World War I.

In those suburban developments of an earlier age, substantial single family houses were built that are still in good use and in good repair half-a-century later.

An appreciation of time and leisure are reflected in their architecture. Spacious lawns and carriage drives reflect the values of sound community planning in those years when the automobile was still a novelty.

These values are reflected today in an area in the center of Ottawa that, due to the accidents of local history and geography, still stands as a civic entity although now surrounded on all sides by the infinities of a rapidly growing city.

The "Glebe," as it is known, was originally — and, perhaps, not unexpectedly—a Clergy Reserve, deeded by the Crown in 1837 to St. Andrew's Presbyterian Church. This area of 178 acres had as its boundaries Carling Avenue and Fifth Avenue on the north and south sides, and Main Street and Bronson Avenue as the eastern and western limits.

Today the Glebe is a somewhat larger area, bounded by the Queensway on the north side, by the Rideau Canal on the east and south, and with Bronson Avenue still serving as a western boundary.

The growth of the Glebe is an Ottawa story, but one that has distinct echoes in the histories of other Canadian cities. It began when the tracks for the new street-railway were laid. On a day in June in 1891, the first electric street car set off, bell clanging, down Bank

Street for the Exhibition Grounds at Lansdowne Park on the edge of the city. The piper bell of the street car eventually drew the whole city out there with the prospect of fast transportation and land awaiting development. Some pioneers in fact were already well-established there in that summer of long ago.

In 1871 James Whyte, one of the leading merchants of the town, built a large residence on the Canal Road on the north side of the waterway at mid-point between what is now Bank Street and Bronson Avenue. The Basilian Fathers are the current occupants. One year later John Mutchmor moved into his handsome new home on Bank Street near Holmwood Avenue. This building still serves the community as the Protestant Home for the Aged.

In 1882 the development of this southern section of the city was further



Now a residence for senior citizens this imposing structure on Bank Street was built as a private home in 1872.

Row Housing of pre-World War I days is given a handsome setting by National Capital Commission's well-kept lawns on the Driveway.

Photo far left:

A touch of tranquility downtown is provided by reflections on canal waters and the shade of trees, in this area of the Glebe.



encouraged by the building of the new Canada-Atlantic Railway terminal on the west side of the Rideau Canal at the end of Elgin Street. The Queensway now uses this early traffic artery. Two other institutions were also established in the Glebe at that time: the Central Canada Exhibition buildings opened at Lansdowne Park in 1888 and the Manufacturers Building, which is still standing is a lively example of the architecture of the period. For the sporting fraternity there were the races at Mutchmor Park.

The original city limits on the south side had been set at Gladstone Avenue, when the city was incorporated. Annexation in 1889 extended the new limits to the Canal. By Act of the Provincial Legislature, the Glebe became part of a small but growing city.

With rapid transit assured on two main north-south streets, Bank and Elgin,

the Glebe began to develop as a suburban community. The building of the Driveway from Elgin Street and Laurier Avenue over the now-familiar route to the Experimental Farm, between 1900 and 1903, gave added impetus to city growth on the south side.

As part of this program Clemow and Monkland Avenues were laid out; Clemow Avenue was paved west from Bank Street. At about the same time, 1903-1904, a large low-lying area between Second and Third Avenues was filled in with sand taken from the land along Carling Avenue.

In the Glebe, on the avenues from First to Fifth, east of Bank Street, no specific architectural style is evident. The original houses, which were largely built before 1914, ran from simple frame houses to an extended use of row-housing and walk-up apartment blocks of no particular distinction in design.

This pattern of conventional housing was frequently broken up by the construction of substantial houses on large lots, set well back from the lot line, and with an expanse of front or side yard for both work and play. On the long blocks, west of Bank Street, growth was slower. In these formative years housing did not extend much beyond Kent Street.

Between Powell and Carling Avenues a special change gradually took place. A series of distinctive homes, both east and west of Bank Street, were indicative of style and wealth of the owners. An address in this part of the Glebe showed that the owner had property or position, probably both.

The Ottawa Improvement Commission, the forerunner of the present NCC, beautified the area with special attention to sidewalks, trees and shrubs, street lighting, and the creation of

Central Park, a green area that is still a community attraction. Careful preservation of the entire neighbourhood by the NCC, the City Planning and Works Department, and by the present-day owners, still brings a style and standard of living to the heart of the city, now frequently absent in large metropolitan areas.

Elsewhere in the Glebe, house construction was unplanned and haphazard. Housing standards were lower, and fifty years later small pockets of blight show the results of an erratic growth and development in part of the community. Fortunately, these blighted areas, so obvious after the 1939-1945 period, have now largely been removed or rehabilitated, so that, generally speaking, the Glebe today possesses housing stock suitable for both upper and middle income groups.

As housing went up on the Avenues, a thin line of stores and other commercial properties began to appear on Bank Street. The corner store was also well-established at an early date. Many of these institutions are still in business. Modern merchandising methods long ago replaced the pickel barrel, but friendly informality is still evident, a neighbourly change from the impersonality of the supermarkets on the main streets.

The development of the Glebe can also be traced in the old records of the first schools and churches built in the district. First Avenue Public School opened its doors in 1898 at about the same time as St. Matthew's Anglican Church then a small frame structure. Mutchmor Public School on Fifth Avenue was also built in the nineties with additions in 1911 and 1920 as housing density increased and new families moved into the district. The separate school, Corpus Christi also dates from this early era.

Roman Catholic families attended Mass for some years in a temporary chapel on the south side of Fourth Avenue near Percy Street. Blessed Sacrament Parish, as it was known, was formed in 1913. The church itself came 19 years later.

The Methodist Congregation worshipped originally in Moreland's Hall, on Bank Street, but in 1913 Glebe Methodist Church was organized. A new name was chosen at the time of church union in the nineteen-twenties. It is as St. James United Church that it is now known.

With the passing of time, the need for a local collegiate institute became inevitable. Glebe Collegiate under Principal McDougall opened in 1922, the last word in secondary school education. The adjoining High School of Commerce, opening in 1929, was a further refinement. The two buildings were considered as second to none in the province. The original high standards are still maintained.

Ottawa Ladies College on Carling Avenue is also well remembered. From 1914 to 1942 this private school specialized in the education of young ladies. Army khaki predominated during World War II years. Later as Carleton College the premises played a vital part in the establishment of the new post-war Carleton University.

Schools however closed on Friday afternoon. A whole generation thought

Friday night or Saturday afternoon best spent at the Avalon Theatre. This spacious cinema opened in 1928 at the corner of Bank Street and Second Avenue, an imposing building distantly related in colour and design to the architecture of Spain, and later Florida. But in an age before television, and radio for many people, style was immaterial, as the silent screen brought the thrills of the "western", or the laughter of the great comedians, to a happily unsophisticated audience.

The city, in its expansion, has long since rushed past the Glebe. Side yards and vacant lots disappeared in the final stages of development after 1945 when post-war housing filled in the remaining acres, particularly on those streets just off Bronson Avenue where house construction had declined in the years after 1930.

Today the Glebe is still a lively, liveable area. Renovation, home improvement and a strict enforcement of the zoning by-laws, still give an address in the Glebe that certain distinction it had years ago when the open street-cars would take the crowds out Bank Street on an August evening to the Exhibition Grounds.

CMHC - RON LANDRY



Carefully maintained houses like these are to be found in many parts of the Glebe. Painting and renovation has enhanced their value over the years.

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Canada

habitat



We can often recall the toys of our childhood because there are so many memories attached to them.

Ministry of State for Urban Affairs
Département d'Etat chargé des Affaires urbaines



habitat



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Outside Cover/Couverture extérieure
Princess Mary of Teck's Doll's House.
Photo: British Information Services.

Inside Cover/Couverture intérieure
Chandelier in the Parliament Buildings,
Ottawa. NFB photos.

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THE BEST RESOLUTION

By now winter is upon every Canadian community. The grey, misty hues of November and December have given way to the deeper tones of January. By custom it is a time for reflection and rejoicing.

The winter solstice, nearly coincidental with Christmas, was from almost time immemorial a period of rejoicing and the ancients observed it with the rites and ceremonies peculiar to their cultures.

In Canada, the last few days of the old year are celebrated largely as a religious festival while the first few days of the new one are, generally, given over to merry-making. The religious festival is a time of rejoicing because nearly two thousand years ago humanity was given the good news that a long-promised Saviour had been born who would deliver mankind from all the problems it was subject to. The New Year is a time for evoking past events and entertaining bright expectations for the future.

But whether celebrating Christmas or welcoming in the New Year, it is the home that is the centre of our observances and activity. In it appreciation, goodwill and benevolence are developed and expressed. Perhaps the best resolution we can make for the New Year is to carry these sentiments from our homes to our daily lives and on into the months ahead.

DÉTERMINATION POUR 1969

L'année 1968 a été marquée d'événements retentissants dans le domaine de la politique et de l'équilibre des pouvoirs, de la médecine, de la conquête de l'espace, de la contestation, de la science et des arts. Il semble en avoir émergé une prise de conscience, un éclat du verbe, une cacophonie de paroles et d'accusations. Tout cela nous le porterons avec nous en 1969.

Peut-être devrions-nous, en ces jours où nous retournons traditionnellement vers la source de jouvence de notre foi ou vers une reprise de l'intimité et des échanges familiaux qui se font dans tous nos foyers, refaire le lien entre ces valeurs solides et la contestation, entre l'humanité et les progressisme radical, entre nous et nos conquêtes.

Voilà probablement la bonne résolution que nous devons garder de ce temps de fêtes au long de 1969. Elle nous rendra plus prêts à refondre ce que 1968 n'a qu'inspiré en valeurs progressives et fondamentales pour l'année à venir.

A dictionary the size of a postage stamp, a cook book that fits into the bowl of a teaspoon, an entire dinner service set out on one dinner plate . . . all part of the Lilliputian world of the doll's house which has delighted children and adults alike for over three centuries.

Doll's houses originated in Germany at the beginning of the seventeenth century and were used as carrying cases by smiths to show their wares to prospective customers. As the artisans travelled on horseback, full-size furniture, china, pewter or silver were too cumbersome to carry so a miniature was made as a sample of the product and later sold as a toy. The doll's house was a convenient place to continue the display of these miniatures.

The earliest doll's houses were commissioned for a wealthy owner and handcrafted. They were expensive and beautifully made, with furniture and ornaments ordered from the same craftsman who made the original article. Since each small article was made by the individual craftsman who worked in that particular trade, the labours of many artisans were needed instead of one professional toymaker. Many doll's houses were equipped with locks to guard their valuable collection of miniatures. These early pieces were works of art and were not intended for the amusement of children.

English doll's houses date from the reign of Queen Anne in the early eighteenth century. Since the monarch was interested in them, they became more popular and began to be used as toys. Until the end of that century, "baby houses," as they were called (a doll being a child's toy baby), were exclusively toys of the upper class. Then they became more popular and began to appear in stores. By the beginning of the twentieth century, they were being mass-produced for the general public.

The changes in doll's houses through the centuries mirror the changes in domestic architecture and their furnishings show the evolution of our life style. One

The Romance of the Doll's House

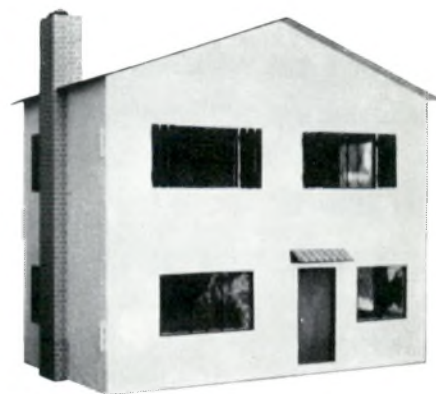
by Cecylia Podoski

Doll's houses are often examples of contemporary life. They reproduce the architecture of their times and their interior furnishings reflect the style and manners of their period. This makes them historically valuable and people are usually fascinated by historical pieces because of the glimpse they give us of the past. Miniaturisation adds to this. For instance, imagine . . .

early German doll's house, dating from 1673, contains a magnificent collection of furnishings from Nuremberg of that period.

The "Westbrook bay house," built in 1705 for the daughter of a wealthy British property owner, is a particularly interesting "period piece." Both furniture and ornaments date from the same time as the house itself and reflect the fashionable living of Queen Anne's era. The dining room floor is uncarpeted, while the one in the living room is covered in a hand-embroidered carpet. (Pile carpets were not in vogue during the Queen Anne and early Georgian periods of the first half of the eighteenth century.) Other interesting furnishings include a circular card table which folds across the centre on iron hinges and a ceiling-high bed with draw curtains and a quilted bed cover. Every part of the bed is covered in fabric to conform to the style of that era.

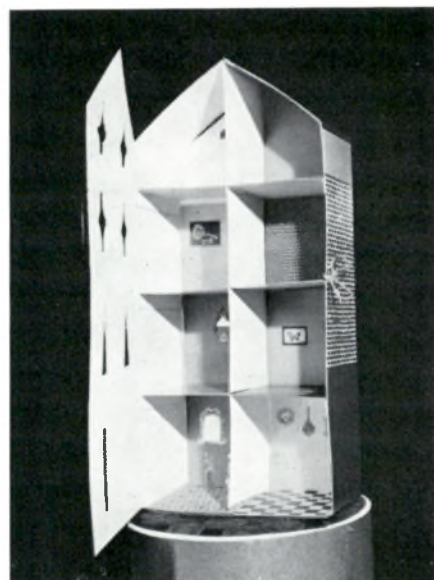
Perhaps the world's most famous doll's house is Queen Mary's, presented to the monarch by the British people in 1924 as a token of national goodwill. Leading artists, artisans and manufacturers contributed samples of their work to this miniature mansion representing a monarch's family home. Unlike most doll's houses which are cupboard-like structures, the walls of the Queen's doll's house form an outer case which slides



COURTESY J. HERZBERG, VICTORIA

Doll's houses, as toys, were originally made for the wealthy. To-day they are available to children at every income level. For example the rather expensive hand-made wooden model above is in complete contrast to the mass-produced cardboard model below it.

COURTESY AMPERSAND, OTTAWA





This beautiful doll's house was made in 1897 for a little girl who was twelve years old — Princess Mary of Teck. She grew up to become Queen Mary. All the furniture in it was acquired by the Princess.

up and down on all four sides thus giving the viewer a three-dimensional view. The exterior is made of wood carved to look like stone. The interior is comprised of four floors — upper mezzanine and nursery, second floor with salon, royal bedrooms and bathrooms, first floor with library, dining room, kitchen, pantry, and storage rooms and basement with wine cellar, games room and garage.

The house itself is but 100 inches long on its main north and south facades and 62 inches on east and west. The base is 116 inches by 72 inches and 39 inches high. Famous artists have painted the watercolours and oils which adorn the various rooms, famous musicians have added their musical scores, and writers their literary works. No detail has been forgotten. There are jams and marmalades in the pantry, pots and pans of every type in the kitchen, French wines in the cellar and six motor cars in the garage. A pea was specially grown to put under the mattress of the princess royal's bed recalling the fairy tale "The Princess and the Pea." The doll's house is still on display at Windsor Castle.

The best-known doll's house in the

United States today is thought to be the fairy castle built for movie star Colleen Moore in 1928. It is made of aluminum and its highest tower is only 12 feet from the floor. All well-known fairy tales are represented by something in the castle—Hans Brinker's silver skates are there, so's Prince Charming's golden sword and King Arthur's Round Table. The chairs of the Three Bears are minuscule. Each one can sit on the head of a pin and the largest (for Papa Bear?) weighs only 1/500,000th of an ounce! The library contains an unusual collection of first editions. Unlike the books in Queen Mary's doll's house whose pages have been photographed and reduced in size, these small books were made of blank pages and authors wrote part of their works in them. The handwriting of such famous authors as Conan Doyle, Sinclair Lewis, Lloyd C. Douglas and Edna Ferber is thus on display.

Why are people fascinated with doll's houses and other miniatures and models? For one thing, there is undoubtedly a major challenge in outfitting a doll's house, reducing everything to conform to scale and still having everything in perfect proportion and de-

tail. Simple as this may seem, it nevertheless presents some difficulties.

Everything in Queen Mary's doll's house was to be on the scale of one inch to one foot. Where skill was the sole criterion, the model is accurate down to the microscopic keys which lock the doors. However, problems arose, besides the obvious one of reducing everything to 1/12 its normal size, as small things do not behave in the same way as their large counterparts. In some instances, the articles were scaled down anyway, notably in the case of tablecloths and other linens which, when reduced to 1/12 their normal size, seemed starched even though they were not. In a few cases, substitute materials were necessary as when fine fishing line replaced the steel normally used in elevator cables — fishing line is more supple. Where physical properties play a part, the model is inaccurate of necessity. For example, the water pipes are larger than 1/12 their normal size as capillary action would prevent water from flowing if they were smaller.

The ingenuity with which small furnishings are made also captures the imagination. In Colleen Moore's fairy castle, the bearskin rug on the floor of the Prince's bedchamber is made of ermine skin with teeth taken from a mouse. The gold hairbrush which is part of the world's smallest toilet set is 3/4 of an inch long and set with diamonds. The bristles are silver fox. The diamond and emerald chairs in the Princess' bedchamber were once dress clips belonging to Miss Moore. The gold and ivory organ in the Chapel has over 100 keys and, although each is only 1/16 of an inch wide, it can really be played.

There is great beauty in smallness. Deformities which can easily be seen when things are life-size disappear and the charm of the whole can be viewed all at once. What a wonderful way to recapture the joy of childhood and the magic of the make-believe world by creating a doll's house as marvellous as the ones mentioned here.



UN DÉFI GLOBAL

par André Saumier

L'habitat urbain d'aujourd'hui et de demain n'est pas facile à cerner et nul n'oserait dire que quelques jours de réflexions et de discussions peuvent suffire à faire le tour du problème. La synthèse nécessairement hâtive qui suit sera donc parcellaire et incomplète.

Trois dimensions

Il arrive quelquefois que les discussions se polarisent presque automatiquement par une sorte de réflexe qui nous est cher, autour des deux extrêmes du continuum "initiative privée—initiative publique". Sans minimiser l'importance de ce continuum qui est devenu par moment une dichotomie, je structurerai plutôt mes remarques autour de trois

dimensions qui m'apparaissent fondamentales et interdépendantes et qui reflètent également les préoccupations de tous les intéressés à cette question: l'axe de la ville, l'axe de la société et l'axe de l'habitation.

Il est apparu en effet que l'on ne peut prétendre régler en profondeur l'un de ces trois problèmes sans avoir réglé les deux autres, et ce n'est pas par hasard que je place celui de la ville en tête de liste, même si je me propose de ne l'aborder qu'en dernier lieu. Sans doute ceci ne signifie-t-il pas que les difficultés de l'habitation ne peuvent être surmontées d'aucune manière avant que les contradictions de la société et de la

ville n'aient été levées dans leur ensemble. Il reste quand même que certaines équations sociales et urbaines fondamentales doivent être résolues, au sens mathématique du terme, avant de pouvoir assigner une valeur définitive à l'"X" qu'est l'inconnue "habitation".

L'habitation

Considérons donc d'abord l'habitation. Il me semble clair que la situation de l'habitation au Canada et au Québec ne peut encore être décrite d'une façon précise. Nous ne disposons que de quelques-unes des principales variables descriptives de notre stock d'habitations, tandis que d'autres aussi fondamentales nous échappent. Je ne connais par

ailleurs qu'un seul modèle analytique complet du secteur de l'habitation, celui qui a été élaboré pour San Francisco, de sorte que notre connaissance synthétique des éléments quantitatifs et qualitatifs du paramètre "habitation" est encore embryonnaire. Elle n'est surtout pas propice à une analyse dynamique projetant le futur, qui ne soit pas grossière, superficielle et même dangereuse.

Ampleur du problème

Quelques conclusions émergent cependant, qu'il faut relever avec force. Parlons d'abord de l'ampleur du problème du logement au Canada. Il faudra construire plus de 750,000 habitations nouvelles d'ici 1970.ⁱ Pour atteindre cet objectif, les sommes consacrées à la construction résidentielle devront grimper en moyenne, en dollars constants, de 8.4 p. 100 par année; de 1963 à 1966, cette augmentation n'a été que de 3.2 p. 100. En outre, les conditions actuelles des marchés de l'argent public et privé permettent de prévoir, pour 1968 et 1969, des possibilités de financement pour moins de 300,000 nouveaux logements.ⁱⁱ Il est de plus possible d'anticiper un ralentissement massif de la construction de pavillons dans nos grandes villes d'ici quatre ou cinq années, à cause du coût exorbitant des terrains qui mine la rentabilité des constructeurs privés bâtissant à grande échelle. Du simple point de vue de l'offre et de la demande globale, on peut donc prévoir une crise aiguë du logement au Canada et au Québec d'ici peu.

ⁱ Chiffres de 1967. D'après le rapport annuel 1967 de la SCHL, ce chiffre est maintenant de 585,000 logements. (note de la rédaction)

ⁱⁱ A plus long terme, on prévoit que l'augmentation de la population, au cours des années '70, va nécessiter la production de 1.1 million de logements dans les cinq premières années et de 1.3 à 1.4 million au cours des cinq années suivantes. (note de la rédaction)

Solutions

La solution de cette crise, du point de vue macro-économique, peut venir de deux sources: l'intervention financière de l'Etat, en l'occurrence le gouvernement fédéral, ou l'entrée massive du secteur privé. La première intervention, qui accentuerait encore le rôle dangereusement grand du gouvernement fédéral et des gouvernements provinciaux

comme intermédiaires financiers ne semble guère possible dans le cadre actuel à moins d'une augmentation sensible de la fiscalité, solution peu attrayante pour le contribuable. Il faudrait donc stimuler l'entrée des fonds du secteur bancaire et parabancaire dans la construction domiciliaire. Ceci implique que le marché des hypothèques devienne beaucoup plus intéressant, entraînant en retour une montée sensible du coût de l'unité d'habitation. Or le secteur financier privé, depuis plusieurs mois, se retire visiblement et dramatiquement du marché hypothécaire; le marché global de l'argent est lui-même extrêmement serré et le demeurera durant de longues années encore, surtout si nous voulons maintenir une économie de plein-emploi. La venue à la rescousse du secteur privé demeure ainsi fort aléatoire et, en tout état de cause, se situerait dans un contexte inadéquat. Nous sommes dès lors rejetés vers la solution gouvernementale nécessitant un transfert important des différents postes budgétaires vers celui de l'habitation. Cette solution, pour ne pas entraîner elle-même des conséquences très sérieuses, ne peut se concevoir que dans le cadre d'une planification à l'échelle du pays. Je vous laisserai supputer vous-même les probabilités d'une telle innovation.

Perspectives

Les perspectives globales de l'habitation sont donc plutôt sombres pour le Canada, pour le Québec et pour nos grandes villes. Cette situation, si elle est alarmante, ne nous est pas particulière. On la retrouve aux U.S.A., en Europe de l'Ouest et de l'Est, et bien sûr dans les pays en voie de développement. Il semble même qu'elle soit moins catastrophique au Canada que dans la plupart des pays du monde.

Nous pouvons donc conclure, d'une façon au moins préliminaire, que la solution en profondeur échappera à une région, à une province ou même à un pays pris isolément; elle devra plutôt venir soit d'une action concertée d'un grand nombre de pays, soit d'une modification radicale à la nature même du problème, c'est-à-dire par la découverte et l'acceptation d'un nouveau concept du logement. Ainsi, l'avion a révolutionné la nature fondamentale du pro-

blème du transport des hommes sur la surface de la terre, et le téléphone automatique celle des communications orales. Pour ces deux raisons, il me semble trop théorique de nous attarder longuement à des tentatives de solutions globales.

Le déséquilibre global entre l'offre et la demande, identifié plus haut, peut cependant masquer des équilibres partiels et, plus particulièrement, des déséquilibres infiniment plus aigus que la moyenne. Dans l'impossibilité d'une solution définitive et totale, c'est sur ces équilibres partiels et déséquilibres aigus qu'il faut concentrer notre attention. Sur les premiers, afin de ne pas lancer des interventions qui auraient directement ou indirectement l'effet de les transformer en surplus; sur les seconds, afin de concevoir et de mettre en oeuvre des politiques qui permettront de les atténuer au maximum ou tout au moins d'en circonscrire l'ampleur.

Le logement social

Je parle évidemment des habitations à loyers modiques sous toutes leurs formes. Il apparaît qu'une politique éclairée de logement devra, en toute priorité, concentrer ses faibles ressources sur ce secteur et laisser les autres aux bons soins du financement privé. Une telle décision libérerait à court terme des ressources importantes et permettrait de monter une offensive vigoureuse, plus efficace que les efforts timides tentés jusqu'à présent. Elle implique également une volonté arrêtée de réduire au minimum les démolitions de structures déjà existantes — il faut rappeler que la voirie consomme dix fois plus d'unités d'habitation que la rénovation urbaine — et de concentrer les efforts sur la mise en place de nouveaux logements salubres au moindre coût possible. Les gouvernements doivent définir ici des politiques permettant l'utilisation maximale des fonds trop limités dont ils disposeront; donc acheter et rénover au lieu de construire et louer au lieu d'acheter, tout comme l'homme d'affaires qui loue son outillage pour conserver son capital. Un fonds de \$50,000,000 par année, par exemple, pourrait permettre de faire construire aux fins de location 150,000 logements d'une valeur locative de \$90 par mois; il permettrait au contraire de construire,

aux fins de revente, 35,000 habitations fort modestes — or, on nous a assuré qu'il y a 150,000 personnes mal logées dans la région de Montréal.

Le problème social

Des allocations de ce genre doivent naturellement s'insérer dans le cadre d'une politique cohérente d'assistance sociale. C'est ici que le problème de l'habitation débouche sur le problème social dans son ensemble. Notre politique d'assistance a été critiquée souvent et longuement et son caractère grosso modo archaïque ne peut être contesté. Cet archaïsme a plusieurs causes dont je ne signalerai que deux pertinentes à notre propos.

En premier lieu, cette assistance est composée de mesures fragmentaires, isolées, souvent mutuellement incompatibles. Au lieu d'être axée sur la promotion et le recyclage dans les structures socio-économiques en place ou à créer, elle est centrée sur la simple survie physique de ceux qui, pour une raison ou une autre, se trouvent en dehors du mouvement général de prospérité. Nos législations actuelles relatives à l'habitation et à la main-d'œuvre remédieront peut-être à cette situation. Deuxièmement, et ceci est plus grave, elle est conçue essentiellement par des administrateurs — dont il ne s'agit pas de mettre en doute la bienveillance, en étant un moi-même — trop souvent coupés de la réalité qu'ils prétendent atteindre. Une politique efficace d'insertion des pauvres dans le monde qui les entoure doit au contraire refléter en première analyse les besoins et la perception de la réalité des pauvres eux-mêmes.

Une expérience à vivre

L'articulation de ces perceptions aux centres de décisions a fait l'objet de discussions longues et souvent passionnées. Si le principe me paraît incontestable, les modalités de son application demeurent controversées et les accusations mutuelles d'irresponsabilité ne manquent pas. Il demeure passablement clair, toutefois, que les processus classiques de la démocratie ne sont guère efficaces dans ce domaine, ne serait-ce que parce que les pauvres se situent par définition en dehors des circuits établis et opérants, cette aliénation étant un élé-

ment essentiel du phénomène de la pauvreté. On ne saurait donc dire qu'il suffit de replâtrer les circuits déjà en place, car ils n'atteignent pas ces couches de la population qui sont précisément celles qu'il faut rejoindre. Le secteur de l'habitation constitue un champ privilégié d'expérimentation dans ce domaine, où des formules neuves et prometteuses, comme celle de l'animation sociale, sont actuellement mises à l'essai.

Il est cependant essentiel que, parallèlement à ces mécanismes de participation du bas vers le haut, soient mis en place des mécanismes de participation du haut vers le bas, c'est-à-dire des administrations vers les administrés. L'exemple de New Haven, choyée par les millions de la Ford Foundation, dotée d'organismes de participation supposément révolutionnaires, fière d'un programme, sans égal aux U.S.A., de rénovation urbaine, où cependant des émeutes sanglantes eurent lieu en août dernier, montre les dangers de la participation unidirectionnelle. Le maire avouait en effet que, tout compte fait, la cause profonde des émeutes était non pas la faiblesse des moyens financiers ou la mauvaise volonté des fonctionnaires, mais l'insuffisance des voies de communication que la publicité officielle déclarait ouvertes et bien utilisées.

Une société métropolitaine

Cette société de demain présentera enfin une caractéristique nouvelle et fondamentale: elle sera franchement métropolitaine. Le Film "Montréal horizon 2000" le démontre encore une fois. En 1970, la population des grands centres urbains au Canada sera au bas mot de 15 millions d'habitants sur une population totale de 24 millions, une augmentation de 4.5 millions d'habitants de 1966 à 1970 — soit presque exactement la population actuelle combinée de Montréal et de Toronto. Cette explosion quantitative modifiera radicalement la complexion intime de notre société; elle soulève dès maintenant des questions angoissantes dont la complexité défie encore l'analyse et auxquels nous consacrons d'ailleurs des ressources infimes de recherches.

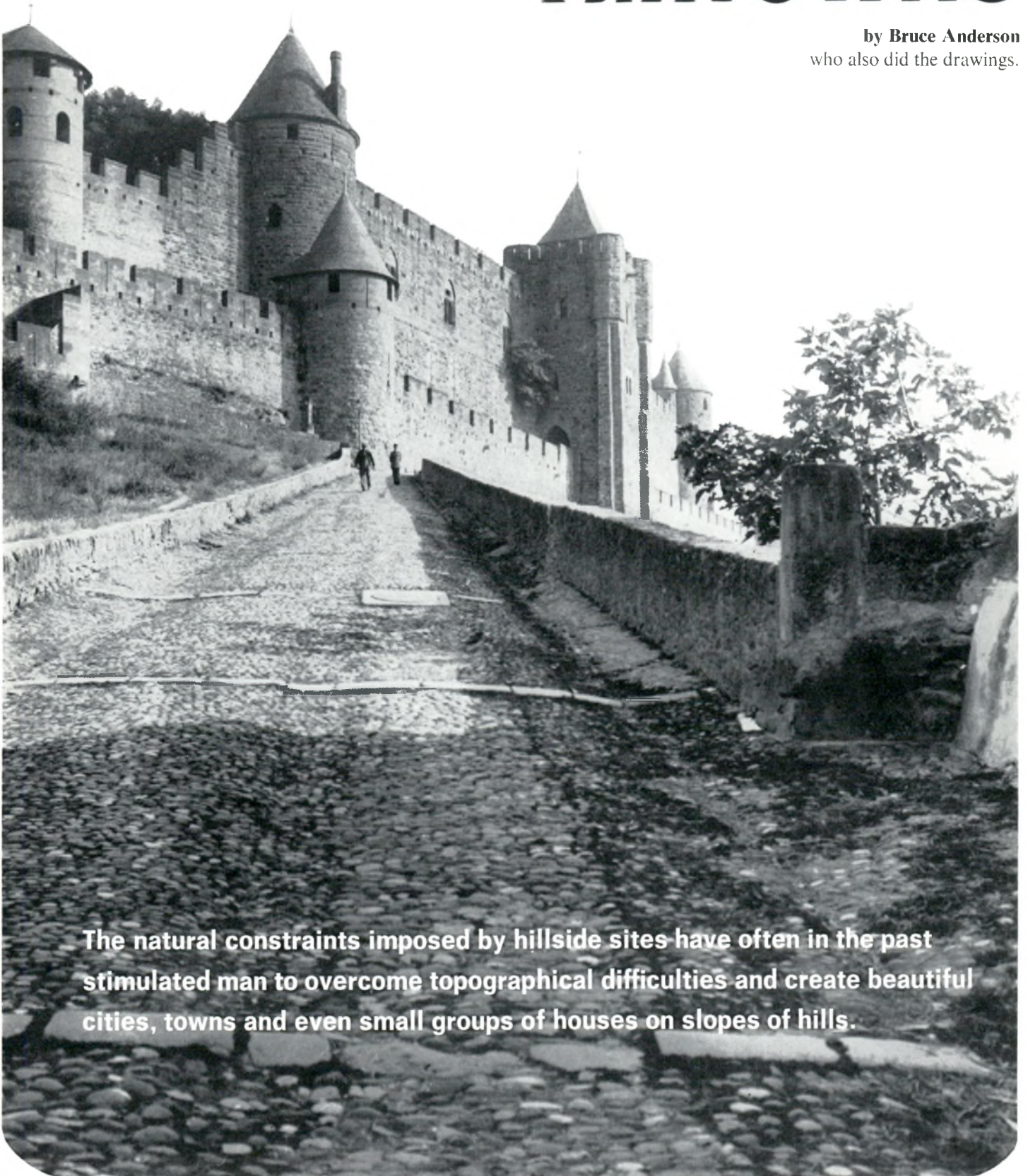
Un extraordinaire défi

Nous arrivons ainsi à une époque véri-

tablement historique, non pas tant à cause des révolutions et des guerres qui secouent notre planète, mais parce que l'homme devra bientôt se mesurer à ses propres créations. Ces créations issues de son génie, cet environnement nouveau qu'il aura créé, lui renvoient sa propre image. Calcutta, entassant 60 millions d'habitants en l'an 2000, constitue le plus extraordinaire défi jamais lancé par l'homme à l'homme. Ce défi nous confronte nous-mêmes et est à la mesure de nos ultimes moyens. Nous voulons tous une ville à vivre par l'homme. Cette ville n'est pas, ne peut pas être, celle d'aujourd'hui; son citoyen ne sera donc pas l'homme d'aujourd'hui, ni son habitat celui qui nous est familier. Voilà certes un défi digne d'être relevé parce qu'il vient non pas de quelque force naturelle brutale et aveugle, mais du plus profond de nous-mêmes. C'est un défi global; nous ne pourrons le relever que globalement.

Some Mediaeval Hilltowns

by **Bruce Anderson**
who also did the drawings.



The natural constraints imposed by hillside sites have often in the past stimulated man to overcome topographical difficulties and create beautiful cities, towns and even small groups of houses on slopes of hills.

Throughout history, towns have been built on slopes, cliffs and hilltops to provide the natural protection and military advantages gained from the inaccessibility of such locations. Whether protection and fortification were required or not, man's intuition and common sense have always pointed out the advantages and optimum living conditions provided by building on a hillside.

Stimulating prospects and vistas over surrounding countryside are usually the special attributes of such towns. While closeness and compactness of buildings is characteristic of hilltowns, there is inherent in such clusters the abstract quality of "borrowing space" from the surroundings. Cascading or terracing dwellings down a hillside increases privacy in gardens, provides interesting views from most houses, eliminates a great deal of overlooking and gains from "microclimate."

Microclimate refers to the climate of a small area which is influenced by surrounding man-made structures, adjacent vegetation and related topography. In the spring the north sides of slopes may be frozen and brown while the south slopes have grass and flowers. Hence buildings which are well located on a hillside site receive cool breezes in the summer and benefit by the sun's rays to shorten the winter period.

Having rejected the styles and vocabulary of past monumental architectural traditions, architects today have looked to the vernacular traditions of the past for direction and inspiration, finding it in the hilltowns of Italy and the towers of San Gimignano.

Much can be learned from mediaeval and more recent towns built in the vernacular tradition. But to blindly copy their visual and sculptural qualities as in some contemporary groups such as the Morse and Stiles Colleges at Yale University is sheer eclecticism and indicates a misunderstanding of the lessons which hilltowns have to offer architects and urban designers. Too often the contemporary architect is overcome by the pure visual aspect of the narrow Italian or Spanish street used by donkey-pulled carts and lined with stuc-

coed or rubble stone buildings, and he fails to restate any lessons from such environments which might be applicable to today's problems.

Hilltowns designed in past ages evolved slowly from the little changing needs of people. The processes of growth or decay and change occurred over a long period, and what exists today represents the collective achievement of many minds working together with traditional materials and processes, and an established vocabulary.

Recently, architects have become very aware of the mediaeval hilltowns and as Reyner Banham has said:

"We are also driven to acknowledge the profound environmental wisdom that lies concealed in the inarticulate traditional practices of the vernacular builder"

The importance of observing and discussing certain environments resulting from building towns on a hillside lies in an understanding of the design objectives or goals from which an admirable consistency and high quality of environment slowly evolved.

One of the most striking characteristics of old hilltowns is their pedestrian environment. Like Venice, natural topographical features have made them inaccessible to the motor vehicles of present-day life which have already destroyed so many of our historic cities. Again, by their very nature, hilltowns are picturesque and it is perhaps this very quality which is lacking in contemporary urban design. Networks of narrow streets scaled to people, spontaneity and unexpected design along with a subtle consistency in the use of materials for buildings, roads, sidewalks and stairways have in most cases all contributed to the creation of a pleasant environment for living.

Carcassonne

Situated at the summit of a low hill and surrounded by ramparts begun by the Visigoths in the Vth century, the multi-towered town of Carcassonne witnessed

a bloody history. The stronghold was enlarged and strengthened in the middle ages after 1260 and became one of the most strongly fortified of all hilltowns.

Within the confines of the protective walls and on the virtually flat summit, a mediaeval town slowly developed with church, shops and all the town functions necessary to withstand a long siege. Unlike most open hilltowns, the purely military function of Carcassonne destroyed any of the other advantages of liveability which characterize a hillside site.

As the need for protection from invasion diminished at the end of the middle ages and as further growth inside the old walls became impossible, a new city grew around the base of the ramparts.

Menton

Located on the Côte d'Azur at the French-Italian border, the old part of the town of Menton is one of the most interesting and unusual of all south-European hilltowns. The town is packed in tightly behind eight-storey pastel yellow, brown and white pot-bellied buildings which follow the winding road along the water. A continuous, flat, rust-coloured, closed arcade containing cafés, ice cream parlors and small restaurants along the Quai Bonaparte provides a solid base for the seven-storey houses above, which, individually expressed, zig-zag in and out to provide corners for small terraces, balconies, roof gardens and inset porticos leading to streets high on the slopes behind. This asymmetrical setting serves as a background for the intense activity of terrace dwellers, dogs, cats, birds in cages and small boys who dart in and out of dark openings in the façades.

From the shore road, barrel vaulted staircases push through the buildings and lead up to the first street. Very narrow major streets run horizontally along the slope. Again, the vertical connection to the next higher street is made by vaulted staircases, inclined planes or stepped ramps which pass under and up through the buildings.



Flower pots, bird cages and singing canaries hang in the street, people talk and chatter — sun-tanned children play ball where streets or landings widen — old men sit on stairs.

From the street, openings without doors reveal long flights of private stairs leading to upper and lower dwellings, while occasionally, winding staircases in open-air stair-towers give access to flats above. Houses, or wide retaining arches with a terrace above, bridge the street. What appears to be a private basement staircase at the end of a narrow street is actually a link to the street below.

In Menton, stepped ramps and stairs are streets and serve as a successful means of access to houses. Finally, in the topmost parts of town, streets become so narrow that they are virtually passages allowing only a single person to pass at a time. As pedestrian traffic decreases towards the top of the hill, the size of the street narrows.

Placed off-axis near the summit stands the church, linked to the lower town in the grandest Baroque tradition by a formal monumental staircase. In front of the church the small square provides a special release from the intense grain of the town. Old Menton is not "quaint" or "fixed-up" as so many tourist hill-towns, it is simply a town in the state of being. Poor, French-Italians workers live in this area, protected from the speeding automobile traffic along the coast.



Blois

Approached across a single long masonry bridge over the Loire River in central France, the old town of Blois spreads majestically over a hillside. Shining rubble stone houses with steeply pitched slate roofs swirl up the slopes and surround soaring spires and a famous château.

Built during the reigns of Louis XII, Francis I and Louis XIII the Château of Blois ranks high in the annals of French history, but growing up around it at the same time, a modest vernacular town has developed with a unique pattern.

The oldest part of the town located on the steep slopes combines an unusually complex organization of buildings, stairs, stepped ramps, high garden walls and retaining walls to produce a delightful and unified environment.

From the square of the mediaeval cathedral of St. Louis, stairways in several directions drop over massive retaining walls and pass beneath one of the oldest mediaeval Blésois houses, "maison dite de Denis Papin" which bridges the serpentine street below.

Named the rue Pierre de Blois, an unparalleled ramped staircase street called the Grands Degrés St. Louis winds steeply down in a wide semi-circular arc until it meets the rue des Papegaults, which in turn curves back up and around the heavy buttresses of the cathedral to link the whole network of streets together. In the Grands Degrés St. Louis, large, flat, stone doorsteps placed over the wide water gutters provide a means of entering arched doorways into dwellings.

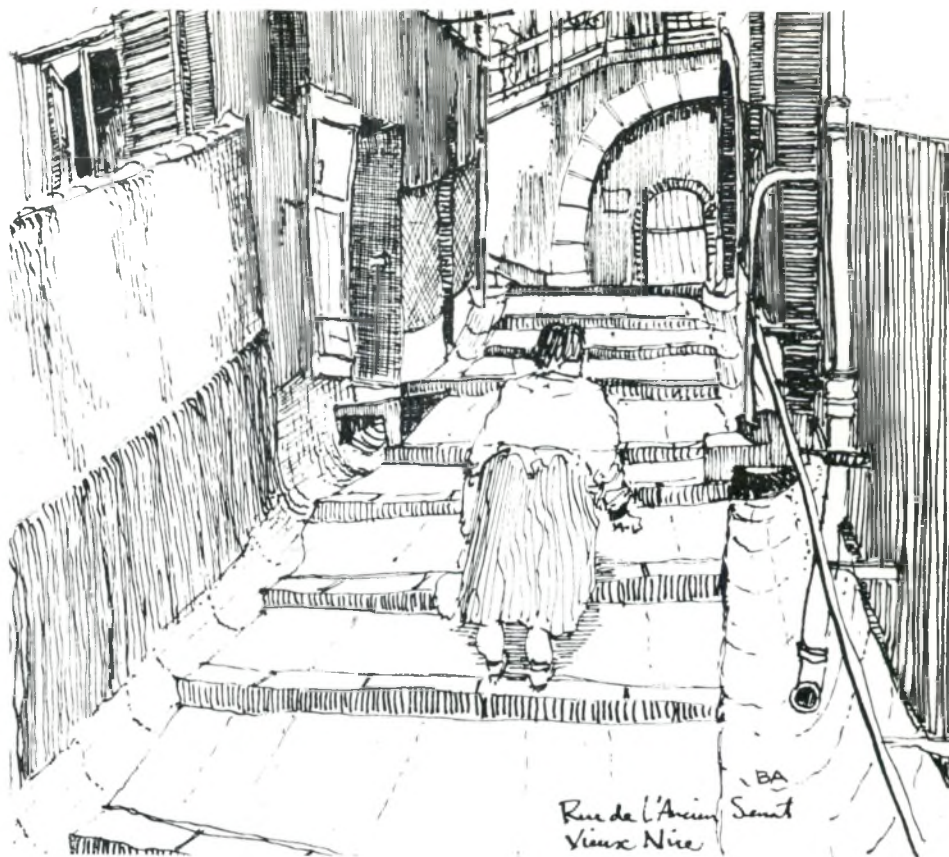
Walled gardens fill in small spaces and corners between grey stone or stuccoed houses to give a continuous façade to the street. Vines and plants grow over private garden walls and cantilevered upper storeys add a sense of intimacy.

Children play hide and seek on stairs, landings, and platforms which jut from the square above. On Sunday as one passes the heavy buttressed walls of the cathedral, singing and music filter through the narrow passages.

Nice

Unlike the Promenade des Anglais, the old town of Nice is seldom frequented by the tourist population of the city.

Situated in an out-of-the-way corner of the larger city, the town of vieux Nice climbs partway up the mountainside to the foot of jagged cliffs. On its fringes, the large flower markets are daily centres of activity where brown-faced growers gather to sell their fragrant crop.



Poor Niçois live in four- to six-storey buildings with flat unornamented stuccoed façades which undulate along winding streets. The buildings themselves are quite peculiar with simple unadorned and shuttered openings and overhanging eaves. Attached to the street façades, cast-iron drainpipes with numerous knuckled joints feeding tentacle-like branches remove rainwater from high eavestroughs and waste from the many rooms.

During the day, jovial and strong-scented Niçoises hang dripping clothes from brackets or window sills, or gossip at the traditional wash place under open arcades where clothes are washed in blue soapy water in long, smooth, stone troughs. Red-faced men sip cool aperitifs in dark old-fashioned cafés.

Narrow ways change to staircases and stepped ramps as buildings climb the hill. Occasional widenings bring sunlight into the dark spaces.

In several streets under faded red and blue canvas awnings, people shop and bargain. Freshly killed salt water fish,

large clams, slimy octopus, living snails, trout from high mountain streams. Large cuts of meat hang from butchers' hooks, lizards and eels. Hot pizza and paste-fruits.

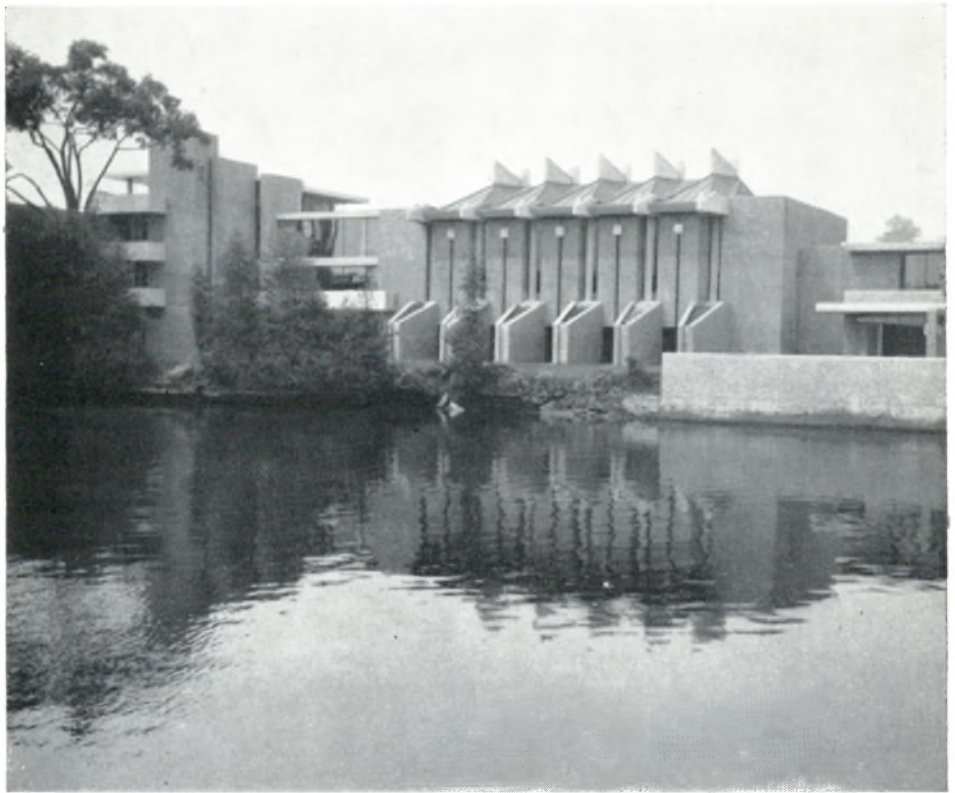
At the side of a small square, a richly decorated Renaissance church façade adds brightness to the town.

*Banham, Reyner, *The Crisis of Decision*, Arquitectura 63, E.T.S. de Arquitectura, Ciudad Universitaria, Barcelona.

The problem of Flexibility in Design

by Ronald Whiteley

A unique design is more difficult to change or add to, as this photo of Trent University shows.



Every designer is aware of the problems of flexibility in design. Sometimes this is only a vague feeling that the end-product should be capable of being used for a little more than was originally intended. On other occasions, and with many designers, it is a desire to make the design so elastic that its use is unlimited. No matter how attractive such comprehensive flexibility may be it is a virtually insurmountable difficulty.

Typical of the kind of problem encountered is, say, that of a school with eight classrooms, an auditorium, and other facilities which is to be planned and built with a completion date set for one or two years hence. The designer suspects that, within a short period of time, the course content and the teaching methods may change rapidly and radically; that the current model of classroom will or may have become obsolete. He believes that the new school should be capable of accommodating, in pleasant and compatible surroundings, students being subjected to the known curriculum and the current methods of instruction. At the same time he wishes to design his school so that it would be easily adaptable to the suspected future changes.

Such an open-minded, idealistic approach is to be highly commended. But can we really solve such a problem? Can we design when the determinants are, at the best, extremely fluid, and at the worst, unknown? Obviously, until we know what form the school and the curriculum of the future are going to take, we cannot visualize with certainty what the structure will be like. We know it should be flexible — capable of change and of allowing for growth. This, in itself, is a confusing concept which is not thoroughly understood.

It is not merely a problem of flexibility. There is also the problem of understanding design itself. Whatever is planned, designed, or organized must first be described as an idea or a goal. This infers the necessity of having a fixed, concrete, or unique thing in mind, which in turn leads to a very inflexible situation. Thus our first paradox is evident. How can we design for a situation that is fixed, but changeable? How do we organize a pattern of things that will not stay put?

Several ways of getting around this problem have been tried. One, is merely to ignore the presence of change

and growth, and depend upon the adaptability of users to take care of the situation. Just build an inflexible structure and let the occupants be flexible. Another, is to put on the mantle of a prophet and predict the future. This is always a precarious procedure; there are both good and bad seers. If the signs and omens are assessed correctly the designer is honored and declared a wise man. If he has erred he can only hope it will not be noticed. Others — in attempting to cope with the problem — see promise in the use of computers and search for a scientific method of prediction in the hope of justifying their activity.

Perhaps the method with the fewest pitfalls is that taken by those designers who allow themselves a very limited margin of flexibility by incorporating only the capabilities of slight change into an otherwise rigid design. In this way they make it possible to adapt and accommodate within a restricted range, and yet, at the same time, retain the ability to describe or visualize more clearly than would be otherwise possible, what the end-product should be.

The second paradox is that whatever



Top left:

Flexibility implies an equitable choice. The flower bed and lamp standards placed in the walkway are equitable if they are made circular.

Top right:

Room for vertical growth is evident on the left-hand side of the building.



Bottom left:

Two different systems without any fusion. The linking corridor is under the steps.

Bottom right:

Aesthetically complete symmetry such as this almost precludes any further growth or change.

process or method we are using, it is, by its very nature, a choice-finding, decision-making one, progressing toward the ultimate objective. Hence, when we hedge on a choice or decision because its acceptance would make our project less flexible or less adaptable to change, we slow down the process of design. Admittedly a delay may eventually precipitate a more appropriate decision, but, more often than not, it merely stops the process. Should we elect to remain within the area of indecision, we cease to be designers.

The third paradox is contained in the terms "growth" and "change". We express the idea that our buildings should be designed "to grow" and "to change" in such a way as to accommodate future events, as if "growth" and "change" were synonymous, but they are not. When applied to design, growth implies enlargement, or more of the same, whereas change, in essence, something that is different. The two meanings are incompatible.

Once we understand, or appreciate, these paradoxical ideas we will have gone a long way to solving our dilemma.

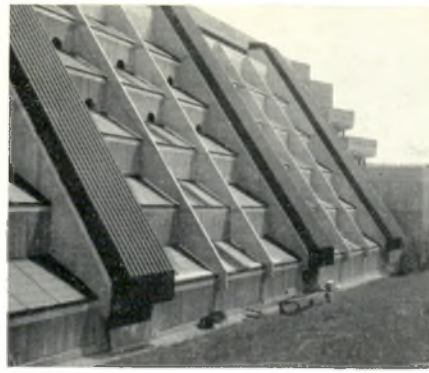
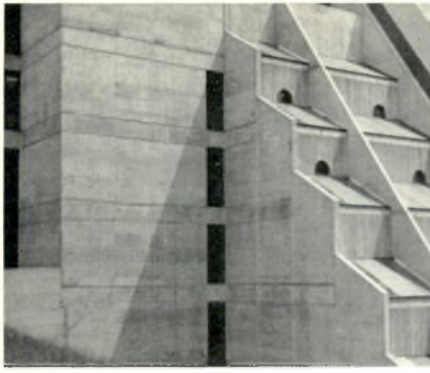
First, we are designing something. The more fixed and definite the concept becomes, the simpler it is to design. But this implies little or no flexibility. Second, if we hesitate to go from choice-finding to decision-making because of too much flexibility the design process stops. And thirdly, the two basic ideas of flexibility, growth and change, are ambivalent. If we can reconcile these three factors we can achieve a degree of flexibility in our design.

In the face of apparently contradictory options we must choose between growth and change by examining and weighing all pertinent factors. This will enable us to determine the permissible limits beyond which we cannot go if our final design is to be acceptable. If the contradiction is real and no conflict between them is acceptable, then we have no option but to choose one over the other.

An accurate appreciation of the nature of the problem makes reasonable solutions relatively easy to find. Consider, for example, a typical floor in a tall office building. Assume that we wish to achieve maximum flexibility through the use of moveable partitions. If the technical problems of sound transmis-

sion when using such partitions are not satisfactorily solved, and we do not know how to resolve them, then certain private offices may not be adequately sound-proofed. The facts are clear. For maximum flexibility we must use moveable partitions but, for the more private areas, they are not acceptable. We face a choice. Does flexibility over-ride privacy, or vice-versa? Can our design include a limited number of fully sound-proofed offices and still retain the required degree of elasticity? If the answer to the last question is negative, then the "private" offices will have to be content with being less private. Regardless of the answer a choice must be made and a decision taken if the design process is to progress toward its completion.

Another approach to the problem, which merits consideration, is to tackle those portions of the project about which we know the most and can understand or visualize most clearly, allowing the unknowns to be dealt with as they are recognized. This implies a structural design in which there are parts, areas or nodes, to which the unknowns can be attached. Certainly there are difficulties in completing a design



Segments of Scarborough College
show very clearly where the system ends at some points and where, at others, the unfinished look seems to indicate the location at which future buildings might be joined up.

that in a way is not complete. But a system where there are logical stopping points and which are also starting or joining points for the unknowns, is quite a reasonable idea, and has been used successfully on a number of occasions.

It follows, therefore, that, when attempting to define flexibility in relation to a given project, we should always try to describe the nature of that flexibility. We should determine whether it is simple growth in the sense of an increase in the same kind of space, or a simple change of the kind that is suggested by the use of such removable items as walls, floors and furniture. Or whether it is of the more complex kind involving both change and growth. This at least has the virtue of giving one a clearer indication of what can be done to resolve the situation. It indicates the choices available and, though none may be entirely satisfactory, we know that one of them must be selected if design is to progress.

The difficulties inherent in achieving flexibility in design will be less frustrating once we recognize the problem for what it is. By realizing the implications of growth and change on both the pro-

cess and form of design they will be less of a stumbling block. By objectively pursuing a choice-finding, decision-making and logical attack on the problem, design will be kept in motion. Though our paradoxical trinity may not be resolved as we would wish, we will find it much easier to live with and to understand.

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