Habitat

Vol. 27, No 1, 1984

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Canada Mortgage and Housing Corporation, Canada's housing agency, is responsible for administering the National Housing Act.

This legislation is designed to aid in the improvement of housing and living conditions in Canada. As a result, the Corporation has interests in all aspects of housing and urban growth and development.

Under Part V of this Act, the Government of Canada provides funds to CMHC to conduct research into the social, economic and technical aspects of housing and related fields, and to undertake the publishing and distribution of the results of this research. CMHC therefore has a statutory responsibility to make information widely available which may be useful in the improvement of housing and living conditions.

This publication is one of the many items of information published by CMHC with the assistance of federal funds.

Honourable Roméo LeBlanc
Minister

La Société canadienne d'hypothèques et de logement, l'organisme du logement du gouvernement du Canada, a pour mandat d'appliquer la Loi nationale sur l'habitation.

Cette loi a pour objet d'aider à améliorer les conditions d'habitation et de vie au Canada. C'est pourquoi la Société s'intéresse à tout ce qui concerne l'habitation, l'expansion et le développement urbains.

Aux termes de la Partie V de la Loi, le gouvernement du Canada autorise la SCHL à affecter des capitaux à des recherches sur les aspects sociologiques, économiques et techniques du logement et des domaines connexes, et à publier et diffuser les résultats de ces recherches. La SCHL a donc une obligation légale de veiller à ce que tout renseignement de nature à améliorer les conditions d'habitation et de vie soit connu du plus grand nombre possible de personnes ou de groupes de personnes.

La présente publication est l'un des nombreux moyens d'information que la SCHL a produits avec l'aide de capitaux du gouvernement fédéral.

L'honorable Roméo LeBlanc
ministre

CMHC
Canada's Housing Agency

la SCHL
l'agence canadienne de l'habitation

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Manuscripts on issues related to housing and urban affairs are welcome. Query first with a one-page outline. Manuscripts should be about 2 000 words in length, typewritten, double spaced and addressed to the Editor. Material accepted is subject to the magazine's editorial requirements. Where possible, any unused material will be returned.

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Vous pouvez soumettre des articles qui traitent du logement et des affaires urbaines. Mais veuillez nous faire parvenir au préalable un résumé d'une page. Les textes soumis à HABITAT doivent avoir environ 2 000 mots, être dactylographiés à double interligne et être adressés au rédacteur en chef. Les articles acceptés seront assujettis à la politique éditoriale de la revue. Dans la mesure du possible, les textes, photos et illustrations non utilisés seront retournés à leur auteur.

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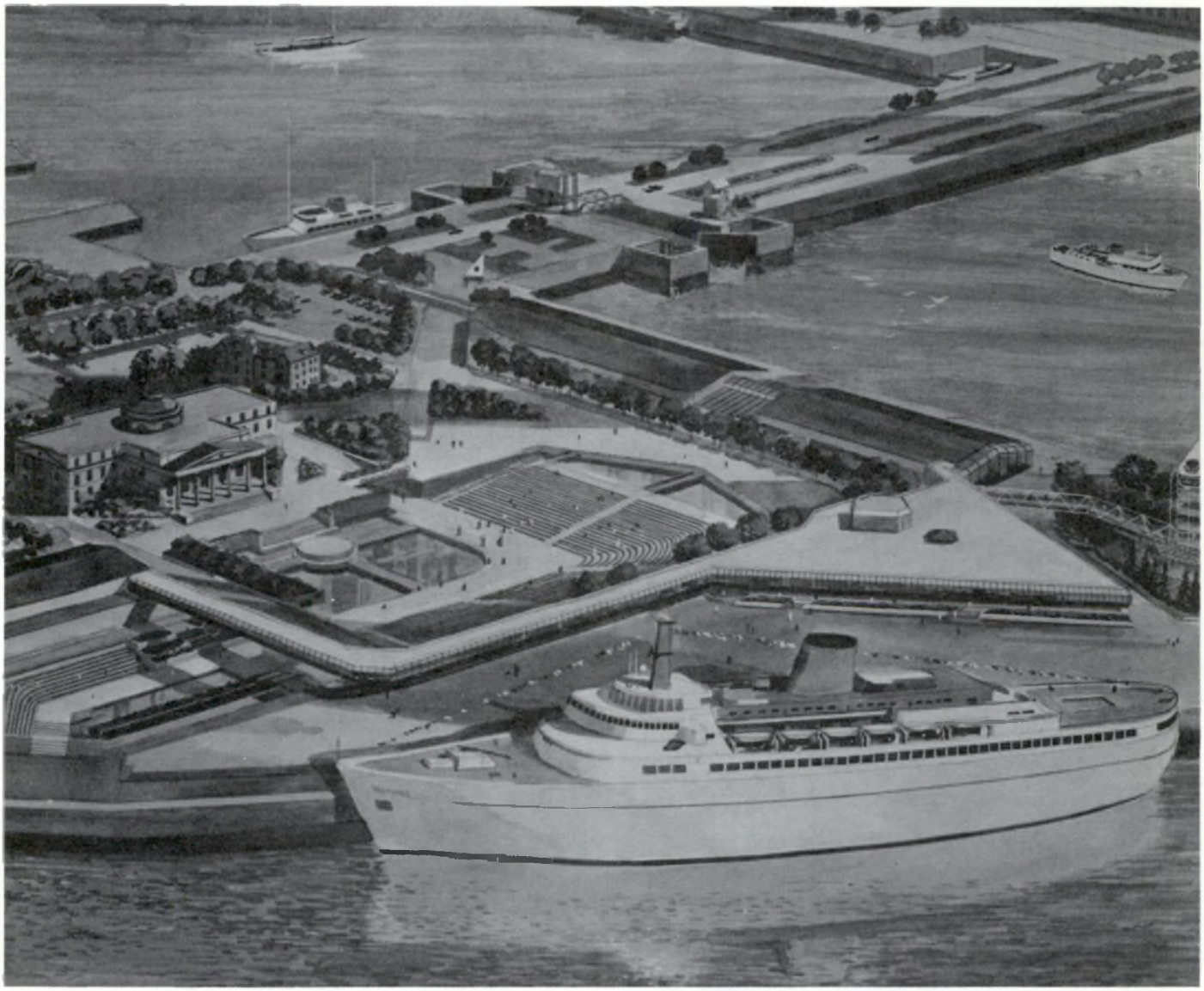
Les sujets traités dans HABITAT sont inscrits dans l'Index des périodiques canadiens. Notre numéro de recommandation du courrier de deuxième classe est le suivant: 1519. ISSN 0017-6370.

Le Vieux-Port de Québec ressuscite pour les fêtes de

Québec 84

par Vianney Duchesne



La Pointe-à-Carcy, comme elle apparaîtra à la fin des travaux avec un paquebot ancré au coeur de la ville.

Fui par l'homme, hier encore, et surtout fréquenté par les rats, le Vieux-Port de Québec a retrouvé sa vocation et les centaines de milliers de visiteurs qu'il accueillera à l'occasion des festivités "Québec 84" seront émerveillés par ce site à nul autre pareil en Amérique du Nord.

En effet, pour le directeur général de la Société immobilière du Canada (Vieux-Port de Québec) Inc., M. Raymond Quirion, il n'y a pas de doute sur la valeur exceptionnelle et unique de cette propriété fédérale en bordure du Saint-Laurent: d'un côté on y admire la vieille ville avec le Château Frontenac au faîte du Cap-Diamant et, de l'autre, la pointe de l'Île d'Orléans. Un site que l'on fuyait malgré tout parce que tellement répugnant, suite à des décennies de dégradation.

Le gouvernement fédéral investit 110 $ millions pour revitaliser ce quartier abandonné. À l'aide d'un concept architectural où s'équilibrent avec harmonie le verre, l'acier et la lumière, on veut prouver que l'ancien et le moderne peuvent faire bon ménage. Si l'approche est résolument orientée vers le modernisme, le futurisme même, on a conservé des éléments anciens importants à l'histoire architecturale de ce secteur contigu à la place Royale où le gouvernement québécois a lui aussi investi près de 100 $ millions dans une restauration exemplaire.

Une Société de la Couronne

C'est à une Société de la Couronne, la Société immobilière du Canada (Vieux-Port de Québec) Inc., que le gouvernement fédéral a confié, dès 1981, la réalisation du projet d'aménagement de ses 30 hectares, au coeur du berceau de la culture française en Amérique du Nord. Du même coup, on lui demandait de ressusciter le vieux port qui s'en allait doucement à la dérive.

Ce choix fut bien accueilli par certains et mal par d'autres. Il faut dire qu'un tel organisme possède des pouvoirs et une liberté d'action identiques à ceux d'un ministère. Ainsi, les gestionnaires n'avaient pas à se soumettre à la législation provinciale ni à la réglementation municipale, deux contraintes qui alourdissent souvent les échéanciers, sinon les plans eux-mêmes. Qu'il suffise, pour l'illustrer, de souligner le fait que le projet de réaménagement soumis par la Société à la ville, avant le début des travaux, est encore à l'étude.

Les responsables du chantier ont donc mené la barque à leur guise ("en bons citoyens", précise M. Quirion) et on peut dire que, publiquement, le projet n'a pas soulevé de désapprobation générale. Bien sûr, au Service d'urbanisme de la ville de Québec, on aimerait bien qu'il y ait un processus constant de consultation; qu'il y ait la possibilité d'intervenir avant la prise de décision quand les intérêts et les vues de la ville ne concordent pas avec ceux du plan de réaménagement. À titre d'exemple, le conseil municipal de Québec a dû intervenir auprès de la Société du Vieux-Port pour exposer son opposition au site choisi pour la relocalisation des Halles du Palais (marché public) parce que cet emplacement ne répondait pas au désir des horticulteurs.

Un chantier fébrile

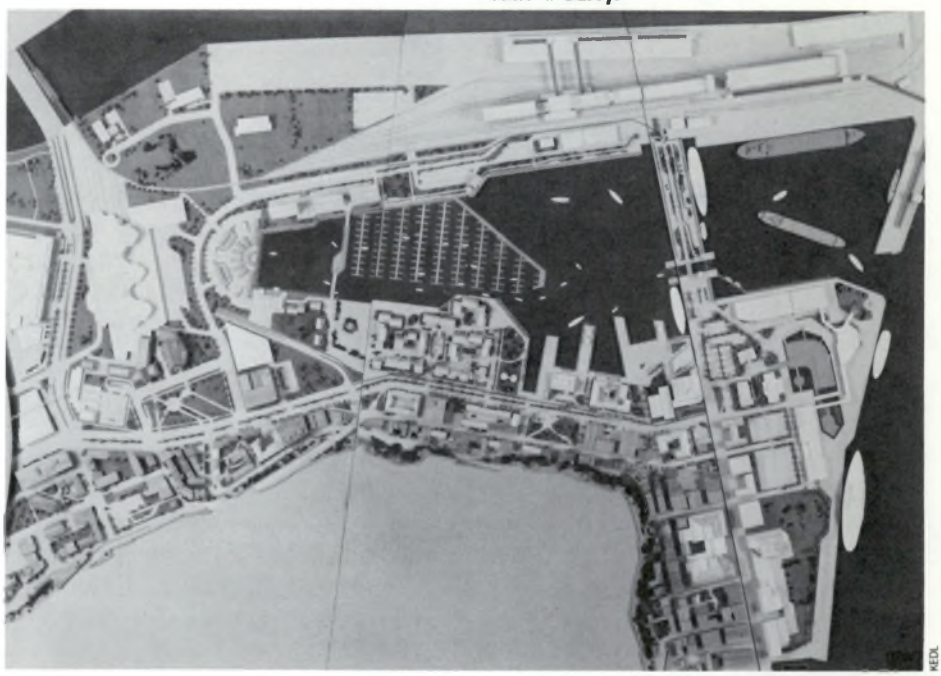
Les 110 $ millions et la nécessité de hâter les travaux en font un chantier immense qui crée 3 000 emplois annuels. En fait, c'est le plus important investissement fédéral jamais consacré à Québec.

Toutes les infrastructures et les édifices qui serviront aux fêtes de "Québec 84" seront terminés pour le mois de juin. Une bonne partie des installations est déjà complétée ou en voie de l'être: la réfection des quais Renaud, 21 et 22, de l'édifice des Douanes, des entrepôts Miller, Ideal, Emond & Côté, des hangars 8 et 19, des ateliers du Vieux-Port (de façon temporaire), l'aménagement du Bassin Louise, de la marina et des promenades ceinturant la propriété, la construction d'une écluse, d'un centre d'interprétation de la vie maritime, de l'édifice du Havre et la mise en place du mobilier urbain. Viendront s'y ajouter la Tour de l'Horloge et des parcs-autos.

Tout ça fait que le Vieux-Port de Québec représente le plus important chantier portuaire du genre pour le gouvernement fédéral, du moins pour le moment.

Lors de l'annonce du projet, en 1978, on parlait de dépenses de 42 $ millions. La facture a grimpé avec le raffinement des premiers plans. Cette augmentation des coûts et l'accélération des travaux furent fort bien accueillis, au creux de la vague de la crise économique, par les entreprises et les travailleurs de la région de Québec.

Maquette du plan directeur d'aménagement du Vieux-Port avec, à droite, cette partie qui s'avance dans le fleuve et qu'on appelle la Pointe-à-Carcy.



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Point de départ

Une des premières tâches des administrateurs fut de redonner au Bassin Louise, pour y aménager la marina, ses dimensions originales. Depuis des années, des camions venaient régulièrement y déverser leur cargaison de vieux matériaux, de sable, de pierre et de béton.

Du même coup, on a rénové les vieux Quais Renaud encore en si bon état qu'ils ont pu servir de base à la construction des nouveaux. C'est là qu'est né le négoce en Nouvelle-France; de là que s'est étendue la fonction financière vers la rue Saint-Pierre et commerciale vers la rue Saint-Paul.

"L'un des principaux objectifs de la Société étant de redonner aux citoyens le coeur de leur ville", explique M. Quirion, "on a rapidement aménagé une promenade (5 m de largeur) en bordure des quais au bout de la Pointe-à-Carcy. Dès l'été dernier, elle fut prise d'assaut par des milliers de promeneurs qui ont pris plaisir à y déambuler comme nos ancêtres devaient le faire jadis."

On a déplacé aussi de la Gare maritime Champlain aux quais 21 et 22 de cette pointe le site d'accostage des paquebots. Québécois et visiteurs de partout sont impressionnés par le spectacle de ces mastodontes de la mer ancrés devant les maisons de la place Royale, au pied du Château Frontenac. Un spectacle si féerique qu'ils sont de plus en plus nombreux à faire escale à Québec et que, cet été, le Queen Elizabeth II y séjournera même un jour et une nuit. L'activité maritime a retrouvé sa place.

La marina

Et cela est aussi vrai de la navigation de plaisance. Le Bassin Louise agonisait. Il a renoué avec l'activité nautique: plus de 400 embarcations peuvent maintenant s'y amarrer et trouver sur place toutes les commodités et services nécessaires grâce à la Capitainerie et à un atelier de 3 000 m^2.

Une écluse, seule construction du genre dans l'Est du Canada, à partir de Montréal, assure maintenant un niveau d'eau constant dans le bassin. Ses dimensions (56 m par 16) et sa forme unique en font un véritable attrait touristique. On a donc prévu un point d'observation pour admirer le spectacle inusité et impressionnant des manoeuvres d'éclusage.

Un lieu de culture

Une agora, conçue à l'image des antiques places grecques pour mieux rappeler le paysage historique du site, a été construite devant l'édifice des Douanes. Sa base étant aménagée à trois mètres sous le niveau du fleuve, on a fait face à un sérieux problème d'infiltration d'eau solutionné par le déversement de 1 000 mètres cubes de béton et l'utilisation de panneaux Volcray (argile volcanique) pour en assurer l'étanchéité.

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Vue aérienne de la Pointe-à-Carcy durant les travaux avec le hangar qui sera transformé en boutiques.

Ce théâtre, qui pourra accueillir 12 000 spectateurs en plein air dont 5 500 assis, constitue le coeur du Vieux-Port. Après avoir servi à l'ouverture officielle des fêtes de cet été, il sera le site privilégié des manifestations populaires.

L'agora est dotée de jeux d'eau qui permettront d'imaginer comment était autrefois le havre des douanes.

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L'agora vue du haut des airs durant les travaux.

Ils encercleront son périmètre, tomberont en cascades et inonderont le contrebas de la place pour donner ainsi à la scène l'impression de flotter sur l'eau. Le plateau s'ouvre comme une huître, grâce à des vérins hydrauliques.

Ainsi, la scène évoquera la vocation maritime de l'édifice des Douanes, deuxième bâtiment civil en importance à Québec, après le Parlement, et qui a retrouvé sa vocation et sa fière allure d'autrefois.

On a construit, près de l'agora, l'édifice du Havre, un bâtiment triangulaire de deux étages et d'une superficie de 2 700 m^2, intégré au complexe commercial. Sa situation géographique devrait créer un microclimat autour de l'agora en détournant les vents frais du nord et en faisant gagner quelque cinq degrés, ce qui sera fort apprécié des spectateurs.

Un centre d'interprétation de la vie maritime

Le patrimoine y aura aussi une place de choix puisque Parcs-Canada a reçu le mandat d'aménager un centre d'interprétation pour rappeler les activités à l'origine économiques du port: la construction navale et le commerce du bois. Cet immeuble a pris la place de celui de Ciment Canada, en bordure des quais Renaud.

Les visiteurs y découvriront les manières de faire des constructeurs de bateaux d'hier, les techniques employées jadis et les outils d'époque. La diffusion de ces connaissances est axée sur la participation des gens. Des expositions et divers témoignages visuels feront aussi revivre l'industrie majeure d'antan, soit le commerce du bois.

René St-Pierre

Pour assurer l'étanchéité de l'agora il a fallu d'abord déverser le contenu de 100 bétonnières dans l'excavation. À l'arrière-plan, on aperçoit l'édifice des Douanes, le deuxième plus important immeuble civil de Québec, après le Parlement.

Une autre structure, qu'on appelle la Tour de l'horloge, ne manquera pas d'attirer l'attention avec ses 21 m de hauteur: elle renfermera outre une horloge binaire sophistiquée, des écrans multiples pour permettre aux visiteurs de voir ce qui se passe aux quatre coins du site.

Commerces et bureaux

De plus, le Vieux-Port retrouve aussi ses fonctions administratives et commerciales. Trois entrepôts (Emond & Côté, Ideal et Miller) abriteront des bureaux gouvernementaux comme la Garde côtière ou ceux de l'entreprise privée. Rebaptisés des noms d'anciens constructeurs de navires, John Munn, Louis-Prat et René-Nicolas-Levasseur, ces édifices offriront, avant la fin de

L'édifice René-Nicolas-Levasseur, l'entrepôt Emond & Côté devenu un immeuble à bureaux.

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l'année, 8 430 m^2 de surface disponible. On procède, en général, à la reconstruction complète car peu d'éléments méritent d'être conservés à cause de leur dépérissement ou de leur peu d'intérêt historique et architectural.

L'immeuble Gauvreau-Beaudry, en bordure de la rue Dalhousie, immense avec ses 13 400 m^2 de surface brute, est réservé à une vocation hôtelière avec bureaux et boutiques. En tout cas, on le souhaite et, déjà, des spécialistes de ce milieu ont laissé entrevoir leur intérêt.

Les hangars 8 et 19, qui porteront les noms de Hangar du Grand Marché et Hangar des boutiques, constitueront avec l'édifice du Havre, un complexe commercial de 18 500 m^2 appelé les Terrasses de la Pointe-à-Carcy. On y trouvera plus d'une centaine de boutiques spécialisées en alimentation

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La Garde côtière logera à l'édifice Louis-Prat, l'ancien entrepôt Ideal.

dans l'un et en marchandise sèche dans l'autre. Ces trois bâtiments reliés entre eux et aux stationnements par des passerelles vitrées valent en superficie un centre commercial moyen de banlieue.

De l'opposition

Tout le monde n'apprécie pas les visées commerciales expansionnistes de la Société immobilière du Vieux-Port. En effet, les commerçants du Vieux-Québec et du Mail Saint-Roch craignent pour leurs propres affaires.

M. Rodrigue Bédard, président des gens d'affaires du Vieux-Québec accuse même le gouvernement fédéral de se servir de l'argent des contribuables pour leur faire une concurrence déloyale tout en y récoltant du capital politique.

À la Chambre de commerce de Québec, on s'inquiète aussi de la mise en marché de 4 300 nouveaux mètres carrés d'espace à bureaux alors que la Capitale dispose déjà de 11 300 m^2 sans locataires. D'autant plus que le marché déjà saturé voit le gouvernement provincial réduire ses prévisions.

Au Vieux-Port, on repousse ces arguments pessimistes. "Nous attirerons une clientèle régionale dont profiteront au contraire les autres commerçants", de dire M. Quirion. "Notre intention est de créer un achalandage qui aidera tous les autres commerçants du secteur."

Il se dit convaincu d'atteindre ce but puisque, dès l'été dernier, les boutiques du Petit-Champlain ont pu bénéficier des centaines de milliers de visiteurs que le Vieux-Port a attirés. D'ailleurs, il fait remarquer à ce sujet que les artisans du Petit-Champlain se montrent peu inquiets de la concurrence des Terrasses alors qu'ils en sont les plus près en termes de distance et de clientèle visée.

Un autre problème soulevé est celui du stationnement. Là, M. Quirion admet que les 600 à 800 places disponibles pour cet été ne suffiront pas à cause du grand nombre de visiteurs attendus. Mais, d'ici la fin des travaux (en 1987), le nombre d'espaces sera porté à 1 200 ou 1 300, capacité qui, complétée par un réaménagement du transport en commun, devrait répondre à la demande. Il faut dire aussi qu'à cause du niveau de l'eau il faut opter pour des parc-autos au-dessus du sol, autrement, les coûts seraient astronomiques.

Cette photo sur laquelle on aperçoit en bas une partie des nouveaux quais pour les paquebots nous montre la vue magnifique qu'ont les visiteurs qui arrivent à Québec en bateau de croisière.

Yvon Mongrain

Un port habité

On prévoit la construction de 750 à 900 unités d'habitation autour du Bassin Louise. M. Quirion souhaite qu'on atteigne au moins le nombre de 800.

Un concours national d'architecture offrant 200 000 $ en bourses a été lancé pour la création de concepts inédits et percutants. Au début du mois de janvier, on avait déjà reçu des demandes d'information de la part de 350 architectes intéressés à soumettre des propositions. Une fois en possession des suggestions retenues, la Société procèdera à un appel d'offres. Constructeurs et promoteurs auront alors la possibilité de s'impliquer à leur tour, en obtenant une part du terrain par biais de location ou de bail emphytéotique.

Au départ, on ne préconise aucune architecture particulière et les contraintes se résument pratiquement au gabarit et à l'intégration à l'environnement. "Nous laissons libre cours à l'imagination et à l'esprit créatif de ceux qu'un tel site peut inspirer", de dire M. Mercier, directeur des communications de la Société. Cependant, on veut privilégier des modes de tenure différents et à des prix "moyens-élevés" pour ne pas s'adresser qu'à une catégorie privilégiée de la population.

Une première phase devrait être mise en chantier avant la fin de l'année et les autres, suivre au rythme de la demande. On s'attend à ce que celle-ci tourne autour de 150 à 200 unités par année à cause de la qualité du site, de la proximité du nouveau Palais de Justice et de la future gare intermodale.

"Québec 84"

Le Vieux-Port connaîtra un départ fulgurant avec "Québec 84", cette grande fête exceptionnelle qui aura lieu à Québec pour souligner le 450e anniversaire de l'arrivée de Jacques Cartier au Canada. Durant 63 jours, du 23 juin au 24 août, la Vieille Capitale vivra un événement grandiose que l'on qualifie de véritables olympiques de la mer.

Deux manifestations d'envergure constitueront l'épine dorsale du pro-

gramme des festivités. D'abord le rassemblement des grands voiliers du monde à la fin du mois de juin qui se terminera en apothéose, le 30, par un défilé de 4 heures sur le fleuve, de Québec à Sainte-Pétronille de l'Île-d'Orléans. Ce rassemblement de cinq jours amènera à Québec la gloire maritime d'une cinquantaine de pays, tant d'Europe que d'Amérique en passant par l'Asie, un ralliement qui dépassera en importance ceux de Lisbonne, d'Amsterdam, d'Osaka et peut-être de New York.

Au mois d'août se déroulera la fameuse course Transat TAG, Québec-Saint-Malo, limitée à 50 voiliers monocoques et multicoques. Les meilleurs équipages du monde s'affronteront sur la route empruntée par le navigateur maloin, il ya 450 ans, mais à bord d'embarcations beaucoup plus rapides.

Un programme complet d'activités sélectionnées parmi pas moins de 500 projets complèteront le programme des festivités. Le gouvernement fédéral consacre 20$ millions au financement de cette célébration alors que l'Armée canadienne apportera son concours en fournissant 5 000 hommes pour la sécurité. La ville de Québec a prévu dépenser 2 6$ millions pour la sécurité, la circulation, le transport, l'animation et la décoration des voies publiques.

Comme ces fêtes amèneront des centaines de milliers de visiteurs, que plus d'un demi-million de personnes se sont rendues au Vieux-Port en deux mois, à l'été 1983, et que d'autres manifestations, comme un salon nautique qui disposera de la plus grande superficie d'eau au Canada et des Choralies internationales avec 1 500 participants d'ici et d'Europe en 1985, on peut dire que le coeur de la ville a repris sa place.

Des contraintes

Mais, comme il y a toujours deux côtés à une médaille, il en va de même avec les festivités de "Québec 84". S'il a fallu d'une part accélérer certains travaux, d'autres sont retardés. On ne veut pas de chantier sur les voies publiques qu'emprunteront les visiteurs.

Ainsi, comme l'a précisé l'adjoint au gérant de la ville de Québec, M. Jacques Elmiras, des travaux de réfection de chaussées et de trottoirs ont été accélérés, comme ce fut le cas pour les rues Dalhousie et Saint-André. "De plus", de préciser l'ingénieur, "la ville ne tolérera aucun chantier de construction dans le secteur à proximité du Vieux-Port, du premier juin à la mi-septembre, i.e. dans le Vieux-Québec et dans la partie de la Basse-Ville comprise entre l'autoroute Dufferin et la paroisse Notre-Dame-de-la-Garde en passant par la place Royale. Il n'y aura exception que pour la construction d'un tunnel à la gare du Palais en prévision du retour des trains au centre-ville, à la future gare intermodale."

Dans les autres municipalités, on a tenu compte de la fête en préparant le calendrier des travaux publics pour l'été 1984. Ainsi, à Sillery, on a reporté d'un an la réfection de la rue Magloire. Il en va de même à Sainte-Foy avec l'élargissement du boulevard Laurier, entre autres.

Les idées expansionnistes du distributeur de gaz naturel subissent plus que tout autre les contraintes des fêtes. La compagnie Gaz Inter-Cité Québec a réussi à décrocher un contrat avec l'importante compagnie de papier Reed, en plein dans ce secteur. On a donc dû se contenter de garantir l'installation du réseau-maître avant le 15 juin. Les travaux ne pourront reprendre qu'après la visite du Pape.

Le directeur régional de la firme, M. Laurent Langevin, s'est dit prêt à se plier aux exigences de la ville. Cependant, il espère bien qu'on permettra l'extension du réseau de gaz dans les quartiers de la ville où de tels travaux ne gèneront pas le surplus de circulation.

L'histoire a aussi écopé. Un anthropologue, M. Bernard Duchesne, a reproché aux responsables des travaux municipaux d'avoir saccagé des vestiges archéologiques. On a, entre autres, partiellement ou totalement détruit des canalisations du 19^{e} siècle, un mur du 18^{e} siècle qui identifiait le tracé original de la Côte-de-la-Montagne, des caissons de quais et une rampe de lancement de bâteaux dont la construction remontait à 1740, tout cela parce qu'il fallait faire vite.

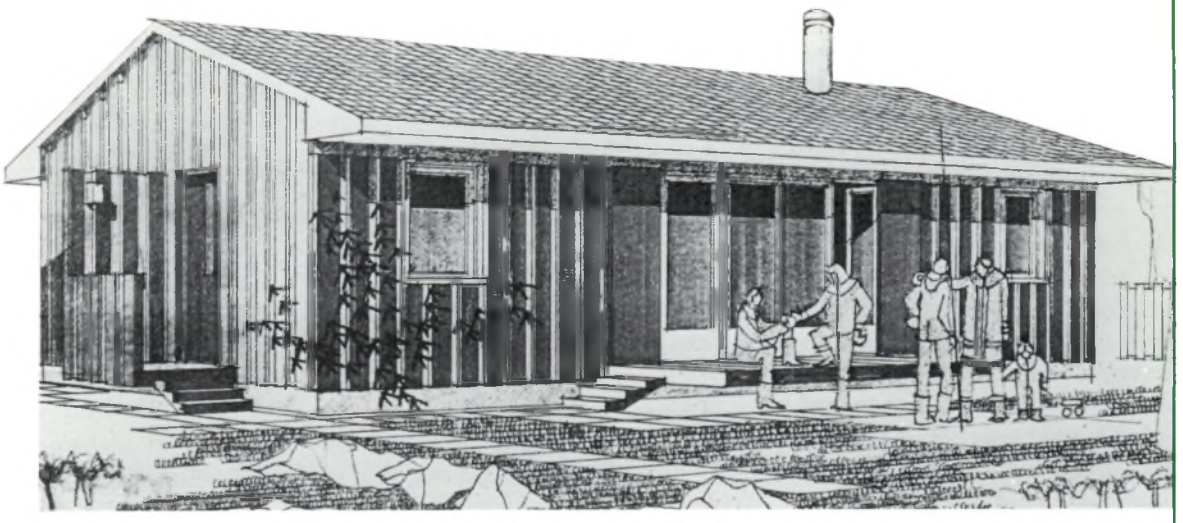
L'archéologue Marcel Moussette, professeur à l'Université Laval, soutient que l'étude des canalisations découvertes aurait été utile à la compréhension de l'évolution des services et des techniques d'aqueduc de la ville. Il a déploré aussi le fait qu'au Vieux-Port des antiquaires ont profité de l'absence totale de surveillance archéologique pour s'approprier des bouteilles, des vases et des encriers pour ensuite aller les vendre jusqu'à Toronto. ■

Vianney Duchesne est journaliste au quotidien *Le Soleil*

The CMHC CROFTER:

the more Efficient Rural and Native House

by Alina Popp



The CMHC CROFTER is an efficient housing design adaptable to rural and native family needs in most Canadian climates.

Developed by Canada Mortgage and Housing, the CROFTER was designed for the following purposes:

- to suit difficult sites and climatic conditions
- to eliminate building deterioration associated with condensation by controlling humidity
- to cut heating costs by up to 50 per cent in comparison to traditional housing of equivalent size
- to provide flexibility in interior layout without affecting the exterior dimensions or structure
- to be economical to build and to maintain.

The CMHC CROFTER is based on the most commonly used design in Canada–the three-bedroom bungalow. It has a living area of 89 m^2, suitable for a family ranging in size from four to ten people. The foundations, the walls, floors and roofing, heating and ventilation systems have been redesigned from basic well-known building techniques in an innovative way to improve performance.

The Adaptable Foundation

Away from urban areas appropriate well-drained building sites and subsoils are difficult to find and costly to prepare. As a result, basement or crawl space walls for housing in rural and remote locations often require more reinforcement, extensive underbuilding and drainage works at greatly increased costs to prevent future cracking or failure. Unfortunately the need for these measures is often not identified during construction resulting in major repairs which are much costlier to correct.

Minimum building lot size is not normally a problem in rural or native communities. Storage space usually provided by the basement in a city house is more effectively met in non-urban areas by building surface storage sheds for specific needs adjacent to the dwellings. Basement living accommodation, acceptable and often desirable in the city, is unpopular elsewhere and not essential to rural or native lifestyles.

The CMHC CROFTER is set on ten concrete piers, tapered from the top to a base 30 cm in width. Each pier, which can be conveniently poured in a sono tube, is protected to full height by a double wrapping of polyethylene film to release frozen soil uplift pressure. The advantages of this type of foundation are the following:

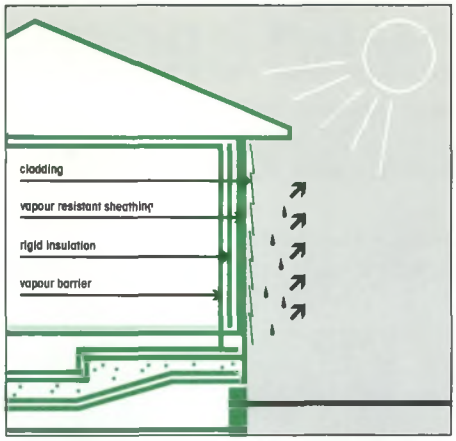
- no heat or drainage is required to protect the piers from frost heaving
- except for general surface site clearance, tree grubbing and boulder removal is confined to two foundation trenches at the front and back walls
- formwork is reduced to ten piers and footings which require only ten per cent of the concrete used for a traditional basement
- piers can have varying heights to accommodate differences in site steepness and levels of subsoil support
- on-site backfill excavation material can be re-used regardless of quality
- radon gas pollution, where present from natural radioactive minerals in the subsoil, is eliminated from the interior living accommodation without the costly corrective alterations required for conventional foundations.
- potential savings in construction costs and labour can be achieved at the time the CMHC CROFTER is built and heating costs are substantially lower every winter compared with those of a home with a basement.

Condensation Control

Humidity levels generated by everyday living can create condensation build-up in the walls and roof of an air-tight, energy-efficient house which does not have a 100 per cent effective air and vapour barrier. Such trapped moisture reduces the thermal benefits of insulation and eventually causes serious structural deterioration of wood members. Modern exterior wall sheathing and siding methods prevent the evaporation of moisture in the long, hot days of summer.

To prevent wall condensation problems in the CMHC CROFTER, a breathable wall to the exterior was designed around an air-tight interior shell. The exterior walls consist of exterior cladding, building paper, non-panel type sheathing, 38 × 89 mm studs, fibreglass bat insulation (RSI 2.1), rigid insulation from 25 to 50 mm in thickness depending on climatic conditions, 9.5 mm panel type sheathing which functions as a vapour and air barrier, polyethylene film to give maximum protection at the panel joints before drywall is applied. By placing the panel sheathing on the interior of the insulation, the humidity is prevented from penetrating into the structural wall members. The exterior wall cladding is then selected to promote the evaporation during the summer of any minimal moisture existing in the wall components. The same principle has been applied to the ceiling and floor design to complete the air-tight interior shell.

The serviced floor in the CMHC CROFTER is supported on a structural floor filled with RSI 4.7 cellulose insulation. Lumber joists with dimensions of 38 × 89 mm run at right angles to five joists which span the width of the house and support it on the ten-pier foundation. In this way, a main service space was created, 1200 mm wide within the floor in the centre of the house and running its full length. All electrical, telephone and heating distribution systems are located in the upper serviced floor



Improved wall, ceiling and floor assemblies ensure continuous moisture evaporation. Telephone wiring, plumbing, heating and electrical systems are confined to the floor service space and interior walls to avoid unnecessary breaching of the dwelling moisture seal. Insulation protects the services from frost and keeps the floor warm and comfortable.

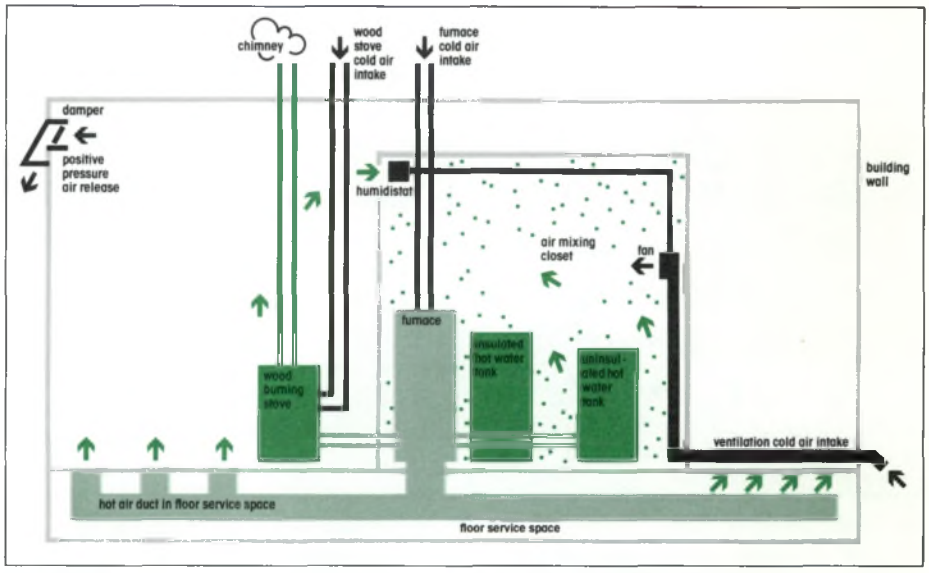
space. The advantages of this imaginative feature are the following:

- penetration of the vapour barrier wall component is kept to a minimum because electrical wiring can be run in the floor to any desired outlet in the house without using the exterior walls and roof space
- the distribution of heat through ducts and a warm air supply under the floor keeps the flooring warm for maximum comfort. Branch ducts supply heat under windows to reduce cold drafts at those vulnerable locations
- installation of electrical, plumbing and heating distribution systems has been simplified.

The CMHC CROFTER is an air-tight structure where ventilation is introduced into the dwelling using simple methods to control temperature and volume. The intake rate can be increased by a fan as required to lower interior humidity to specified levels. Excessive positive air pressure is eliminated by means of a one-way weighted dampered air release duct to the exterior in the storage room.

Energy Efficiency from Multiple Heating Sources

The CMHC CROFTER is designed for energy efficiency. Depending on location, wood may be used as the main fuel for space heating, hot water and cooking, with the oil and/or gas and electricity functioning as back-up. If the wood supply is scarce, the oil or gas or electricity may serve as the main heat source.

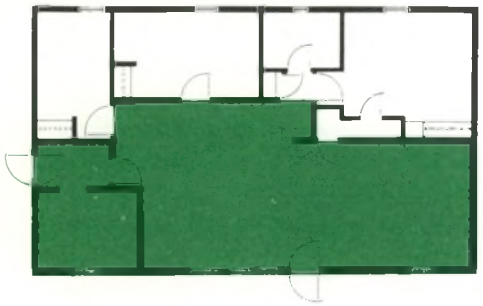


This diagram shows the engineering design features of the CROFTER heating and ventilation system.

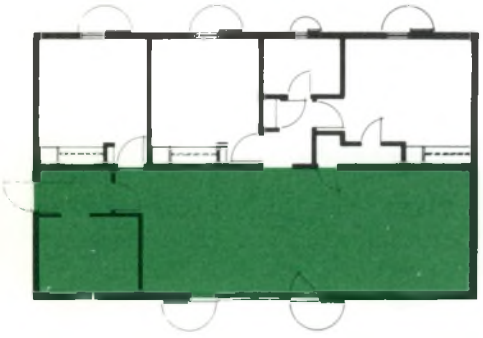
The CMHC CROFTER heating system consists of a wood stove located in the kitchen, a small oil, gas or electric furnace, insulated electric water heater and hot water storage tank enclosed in a service closet nearby.

The wood stove selected by CMHC is a small efficient unit which has a cooking surface and water coils running through it in a closed circuit to the hot water storage tank. The storage tank serves as a large hot water radiator in the return air system. Heat from its uninsulated surface warms the walls of the closet and outside air from the duct which enters near the floor of the closet and discharges at the ceiling.

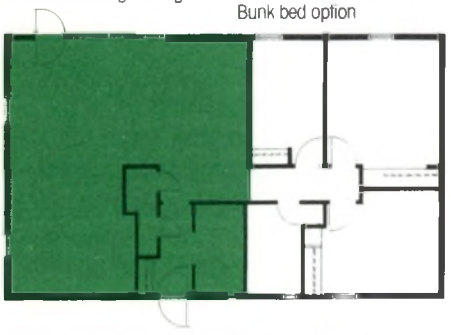
Model A-1 Larger living area Smaller bedroom/ Bunk bed option



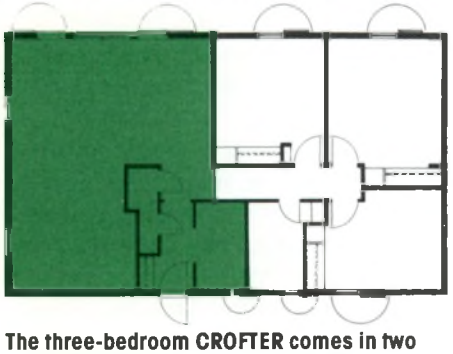
Model A-2 Smaller living area Larger bedroom



Model B-1 Larger living area Smaller bedroom/ Bunk bed option



Model B-2 Smaller living area Larger bedroom



The three-bedroom CROFTER comes in two models. Either plan may be more suitable depending on site orientation and the particular needs of the residents. The interior layout of each model can be varied according to family preference without changing the exterior design.
Type A has a middle partition running the length of the house allowing living/dining room, kitchen/utility room and work room a southern exposure for daytime activities, maximizing passive solar gain in winter, a particularly important attribute in the north at that time of the year when the sun is low. Type B separates the living and work areas at one end of the house from the bathroom and bedrooms at the other end.

The amount of fresh incoming air can be increased by a fan located on the feed-in duct. The air is regulated by a humidistat installed on the ceiling of the closet which accelerates, slows down or shuts off the incoming dry cold air according to the humidity reading. The heated air and the warmed fresh air mix are propelled by the furnace fan (which operates whether the furnace heater is on or off) through the main warm air distribution system.

The wood stove is equipped with a thermostat which automatically adjusts a damper to control combustion air supplied by a duct from the exterior. A fusible link on the damper shuts off combustion air in the unlikely event the stove should overheat. This safety feature is especially reassuring during the night when the family is asleep.

The burning efficiency of the stove is increased by having both a primary and a secondary combustion. A low burning rate has a small, high temperature, clean fire instead of a large, smouldering, creosote-generating burn.

With the CROFTER in mind, CMHC, in cooperation with the prefabricated metal chimney industry, developed a chimney assembly with a one-piece metal flue pipe capable of sustaining creosote fires without damage. This ensures long service life and eliminates the need for regular cleaning which is almost impossible to carry out in sub-zero weather. A field installation of the new chimney has already shown the assembly to be cost-effective and combustion laboratory tests have confirmed its predicted reliable performance.

Additional energy-saving features incorporated into the CROFTER design include:

- a fully developed air-lock entrance hall and storage workroom for winter use
- external shutters containing very small windows which fit over all window openings to reduce heavy heat losses at those locations during the cold Canadian winters
- extended roof overhangs to keep firewood, stacked along the walls for immediate access, protected and dry.

The Flexible Layout

The serviced floor construction of the CROFTER, with joists running the full length of the house, makes it possible to relocate interior walls without carrying out major service changes. A large family, for example, may prefer to reduce the living room area and increase the bedroom space or, alternatively, convert two bedrooms into a children's dorm. Such layout options increase the usefulness of the CROFTER in rural and native communities.

The CROFTER forms part of the house plans service provided by the housing design group at CMHC's National Office Support Centre. The first pilot project has been constructed at Davidson Lake near Fredericton, New Brunswick, in cooperation with the Fredericton Office of CMHC and is currently undergoing detailed monitoring and evaluation. Plans will be made available through selected CMHC offices for the 1984 building season.

The CROFTER was designed by Gordon Scott, senior consultant architect with the National Office Support Centre, and the Davidson Lake project was coordinated by Jake Belanger, program manager, Rural and Native Housing, Fredericton Office.

In terms of comfort, convenience and adaptability the CROFTER is setting a new high standard for rural and native housing. ■

Alina Popp is a freelance writer who specializes in technical subjects.

Hors de l'institution, enfin le salut!

par Jean-Pierre Dagenais

Depuis l'Année internationale des personnes handicapées, en 1978, une sensibilité nouvelle s'est développée en regard des besoins et aspirations de ce groupe social. Mais comment répondre à ces attentes? Dans le domaine du logement, en particulier, quelles sont les options de résidence qui s'offrent à ce groupe? Après l'institution, ces personnes iront-elles se réfugier dans les HLM, reproduisant alors d'autres formes de ghettos? Par ailleurs, l'intégration sociale de la personne handicapée se limite-t-elle à lui trouver un logement accessible? Ou, au contraire, doit-on insérer cette démarche dans un cadre plus large, englobant le transport, l'aide à domicile?

A ces questions, les intervenants sociaux et les personnes handicapées elles-mêmes ont commencé à apporter un début de réponse. A preuve, des expériences diverses et originales d'intégration ont été récemment tentées dans la région de Montréal par le biais de coopératives d'habitation, de petites unités résidentielles, d'un projet d'habitation communautaire qui prône de nouvelles normes de construction universelles et de l'îlot de service, une formule inédite de réinsertion sociale.

Si encourageante soit-elle, l'amélioration des conditions de vie de la personne handicapée ne s'est produite que tout récemment. Ce n'est qu'au cours des années 70, avec les préparatifs entourant l'Année internationale de la personne handicapée, qu'on voit s'opérer un changement dans les mentalités. Cet événement incitera les gouvernements à favoriser et financer de nombreuses recherches qui, invariablement, en arrivent à la même conclusion: la personne handicapée physique est d'abord et avant tout une handicapée sociale. L'affirmation peut surprendre mais elle résume bien la situation dans laquelle vivait et vit encore la majorité des personnes handicapées.

Pour briser et sortir de l'isolement institutionnel, s'intégrer à la société, ces personnes doivent vaincre plusieurs obstacles, notamment aux plans de l'habitat et des revenus.

Jusqu'à preuve du contraire, en effet, le travail demeure l'avenue privilégiée par laquelle l'individu s'intègre à la société. Or, plus souvent qu'autrement, les personnes handicapées s'en trouvent privées. Chez elles, la condition d'assisté social sévit à l'état endémique. C'est là un premier frein à l'intégration sociale.

La recherche d'un logement

Par ailleurs, la personne handicapée est confrontée à cet autre obstacle et non le moindre: le logement. Elle doit s'assurer que l'entrée de la résidence est accessible, c'est-à-dire pourvue d'une rampe d'accès, que le logement est convenablement adapté à ses besoins et qu'il ne comporte aucune barrière architecturale insurmontable.

Or, ces exigences particulières soulèvent un problème évident. "La majorité des maisons unifamiliales, des logements et des appartements ne sont pas conçus pour répondre aux besoins particuliers des personnes handicapées. Les accès et les pièces de l'habitat sont construits en fonction d'une population nord-américaine ambulante, de poids moyen et de taille médiane. Aussi, cette norme ne répond-t-elle aucunement aux besoins des personnes handicapées".[1] Bref, les logements accessibles et adaptés sont rares et leur loyer coûte cher.

Pour la personne handicapée, la recherche d'un logement pose un problème additionnel. Vous êtes en chaise roulante, vos revenus proviennent de l'assistance publique et vous êtes en quête d'un logement. Alors que faire? Effectuer la tournée des logements offerts dans les petites annonces? Immanquablement, vous serez confronté au problème du déplacement. Le taxi étant trop cher, il vous reste le transport adapté. Encore faut-il que vous demeuriez dans un grand centre urbain. Ailleurs, le transport pour personnes handicapées n'existe tout simplement pas. Mais si vous avez la possibilité d'y recourir, vous ne serez pas pour autant parvenu au bout de vos peines.

Règle générale, le transport adapté est mal organisé, insuffisant et astreint l'usager à de longues périodes d'attente. Dans ce cas, vos chances de trouver le logement rêvé sont moindres, en fait, infiniment moindres que celles des citoyens ambulants. Ce n'est là, qu'une des nombreuses facettes de la situation d'inégalité vécue par la personne handicapée.

Outre des revenus déficients, la pénurie de logements accessibles et un transport inadéquat, les personnes handicapées doivent composer avec une autre difficulté: la carence des soins à domicile. Puisqu'elles ne peuvent assumer toutes les tâches ména-

Alain Lafrest

Esplanade II, une ancienne petite école recyclée, réservée aux personnes handicapées. Comme on le voit à gauche, au lieu de l'habituelle rampe d'accès à l'entrée de l'édifice, une pente légèrement inclinée.

gères, en particulier celles qui exigent un effort physique soutenu ou considérable, un service d'aide à domicile s'avère indispensable. Certaines d'entre elles ont même besoin d'une aide au lever ou au coucher, pour les soins d'hygiène.

Les alternatives

Au Québec, l'année 1978 fut déterminante: adoption de la Loi sur l'exercice des droits de la personne handicapée, création de l'Office des personnes handicapées et introduction dans le domaine du logement de premières mesures concrètes par la Société d'habitation du Québec. Dorénavant, les HLM que finance la SHQ devront comporter une proportion de 5% de logements réservés aux personnes handicapées. A Montréal, des quelque 10 000 logements sociaux que possède la ville, 325 sont répertoriés accessibles et adaptés[2] alors que la demande, elle, se chiffre à 500.[3]

Malgré son intérêt, la formule HLM n'est pas nécessairement la meilleure ni la seule solution possible. Selon un intervenant de l'Office des personnes handicapées du Québec, M. Pierre Montreuil, "ce serait une erreur d'axer toute une politique d'intégration sur cette seule ressource. Par exemple, dans un HLM où la moyenne d'âge des résidents est de 60 ans, on comprendra qu'on peut difficilement intégrer un jeune homme de 30 ans". Or, la population paraplégique est très jeune: 80% de ses membres sont âgés de 18 à 25 ans.[3]

Face aux limites de la formule HLM, intervenants sociaux et personnes handicapées ont donc recherché de nouvelles formes d'intégration résidentielle. A Montréal, quatre projets innovateurs ont été récemment réalisés: Esplanade II, une résidence exclusivement destinée aux personnes handicapées, un immeuble d'habitation communautaire où vit une population des plus hétérogènes, la coopérative Prince-Arthur et l'îlot de services du Pont, une formule expérimentée par le Centre de réadaptation Lucie-Bruneau.

La résidence Esplanade II

La résidence Esplanade II est située tout près du boulevard Métropolitain. Vue de l'extérieur, cette ancienne école de deux étages ne présente pas le signe distinctif des habitations conçues pour les personnes handicapées. Au lieu de la rampe d'accès habituelle, formée d'une double pente assortie d'un palier, le passage qui mène du trottoir à la porte d'entrée principale comporte tout juste une légère inclinaison.

Aménagé au coût de 520 000$ dans l'école John Cabotto, le projet est le résultat d'une collaboration entre plusieurs intervenants. L'Office municipal d'habitation de Montréal a assumé le réaménagement de l'édifice scolaire, la SCHL et la SHQ ont participé au financement et le Centre Lucie-Bruneau s'est engagé à trouver le personnel requis pour assurer les soins aux locataires dont la mobilité est très restreinte.

L'originalité du projet Esplanade II réside dans le fait que ce sont des détenus provenant des institutions carcérales avoisinantes (Bordeaux, Tanguay, etc.) qui assurent les soins aux locataires. L'expérience semble unique en Amérique du nord et serait peut-être la première de ce genre au monde.[4] Jusqu'à maintenant, plus de 120 détenus ont participé volontairement à ce programme. Les équipes de travail se relaient toutes les huit heures avec, bien entendu, retour obligatoire au bercail. A ce jour, nous dit-on, un seul volontaire se serait égaré sur le chemin du retour...

Alain Lafrest

À la résidence Esplanade II, ce sont des détenus ou ex-détenus qui assurent les soins aux locataires.

Pour éviter ce genre de surprise, on procède à une sélection sévère des candidats. Seuls sont éligibles les détenus condamnés à moins de deux ans de prison et qui, de surcroit, ont purgé au moins le sixième de leur peine.

Pour la majorité des bénévoles, sinon tous, l'expérience s'avère éminemment valorisante. L'un deux, Michel, confiait pour sa part: "J'ai découvert des êtres humains que j'ignorais.

C'est du monde comme nous autres qui a besoin de nous autres. On s'attache à eux. S'ils ne nous avaient pas, ils seraient dans une chambre d'hôpital. C'est bon de les voir vivre leur vie à leur guise".[5]

L'enthousiasme des détenus pour ce programme n'est pas tout à fait désintéressé. Pour les candidats sélectionnés, l'opportunité "de prendre l'air" et la perspective d'obtenir une réduction de peine sont certainement des attraits non-négligeables. Par ailleurs, depuis le début du projet, la sélection des candidates se bute à une réalité sociale. Le nombre des femmes en prison étant de beaucoup inférieur à celui des hommes (dans une proportion d'une femme contre dix hommes), il en résulte quelque difficulté à recruter des candidates bénévoles. Alors, pour combler les postes laissés vacants et, aussi, pour empêcher un roulement trop intense des bénévoles, les responsables ont dû embaucher du personnel salarié, notamment, d'anciennes détenues ayant travaillé sur place.

Pour leur part, les personnes handicapées se disent ravies de leur situation. Élue récemment présidente par les autres locataires, Mme Lorraine Arial corrobore ce sentiment de quiétude qui règne à la résidence. "Avant d'arriver ici, je ne savais pas que des prisonniers travaillaient à la résidence. Vous savez, ce sont des bons gars qui prennent soin de nous. Souvent, ils nous disent qu'on leur rapporte quelque chose, que le travail leur fait plaisir. Et puis, on ne leur pose jamais de questions. C'est eux qui s'ouvrent à nous, qui nous racontent leur passé. Quand ils partent après deux ou trois mois, on trouve ça très difficile, même que certains pleurent. On s'attache beaucoup, vous savez."

Le logement de Mme Arial—un trois pièces—témoigne de l'atmosphère générale. Les baies et les fenêtres sont très larges, ajoutant à l'impression de propreté et de grandeur qu'on retrouve dans les appartements aménagés dans les vieilles écoles recyclées.

Alain Lafoest

Fête de Noël dans une habitation communautaire logée dans une ancienne école recyclée et où vivent au milieu d'une population hétérogène des personnes handicapées.

En quittant la résidence Esplanade II, malgré la belle humeur de ses habitants, on ne peut s'empêcher de ressentir un malaise: tous les locataires, sauf un, sont victimes de maladies évolutives.

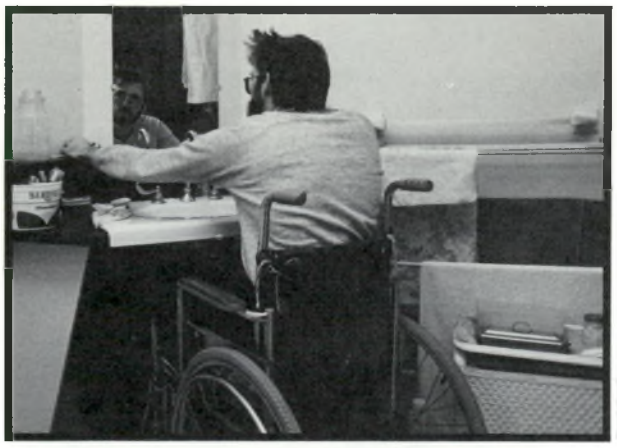
L'école recyclée St-Anthony's

Dans le quartier de la Petite Bourgogne, un autre bâtiment scolaire a été recyclé mais celui-là pour accueillir une population hétérogène: ménages à faibles revenus ou d'un niveau moyen, personnes handicapées, familles monoparentales, couples âgés, célibataires. C'est à la société d'habitation communautaire Logique qu'on en doit l'initiative. Selon l'architecte Pierre Richard, vice-président et directeur de cet organisme sans but lucratif, "le but est de concevoir, réaliser et gérer des immeubles dont les logements sont accessibles à tous".[6] Bien cambré dans son fauteuil roulant, M. Richard précise: "Les logements universellement accessibles peuvent être habités autant par les personnes handicapées qu'ambulantes. Ils sont conçus sans distinction, c'est-à-dire qu'il n'existe aucune différence architecturale entre les logements".[7] Voilà précisément en quoi se distingue la philosophie de l'organisme.

En somme, Logique prône de nouvelles normes de construction. Contrairement à ce qui s'est fait au cours des dernières années, c'est-à-dire des logements spécifiques strictement réservés aux personnes handicapées et intégrés dans des bâtiments où la majorité des logis ne sont pas accessibles, on devrait plutôt concevoir l'habitat en termes d'accessibilité universelle. Par exemple, les commutateurs, les boutons d'ascenseur et de sonnerie seraient abaissés légèrement, accommodant non seulement les personnes en chaise roulante mais aussi les enfants et les individus de petite taille.

En réglant ainsi la question de l'accessibilité des logements, les administrateurs de Logique croient qu'on aura moins à se préoccuper de l'intégration sociale de la personne handicapée. En offrant un large choix

À la coopérative Prince-Arthur, au centre de Montréal, une salle de bain aménagée pour répondre aux besoins des personnes en chaise roulante.



Alain Lafontaine

À la coopérative Prince-Arthur, les dessous des comptoirs de la cuisine sont libres de toute entrave. Aménagement encore imparfait... des armoires à hauteur habituelle.

Alain Lafontaine

de différents types de logements, on risque moins aussi de créer des ghettos.

Pour mettre en application son double objectif d'intégration sociale et résidentielle, en 1981, la société Logique s'est porté acquéreur de l'école St-Anthony's, à Montréal, via la signature d'un bail emphytéotique de 52 ans avec la Ville, et grâce à l'obtention d'une importante subvention municipale (204 000$) et l'appui financier de la SCHL.

Sous plusieurs aspects, le bâtiment témoigne de l'orginalité architecturale de ses concepteurs. Sur les boutons d'ascenseur, par exemple, les indications habituelles sont traduites en braille. Pour les semi-voyants, les panneaux lumineux de sortie ne sont plus fixés au-dessus des portes mais près du cadrage, à la hauteur d'épaule. Dans les escaliers, la main courante se relève légèrement à l'approche du palier, prévenant ainsi la personne aveugle. Notons aussi la présence du double judas dans les portes, l'un installé à l'endroit usuel et l'autre fixé à un mètre du sol.

Actuellement, des 17 logements aménagés dans l'ancienne école, six sont occupés par des personnes en fauteuil roulant qui forment 10% de la population occupante.

Outre l'accessibilité physique des lieux, Logique s'est également préoccupé de l'accessibilité financière des logements. En effet, le coût des loyers varie de 215$ à 270$. Ces loyers directement payés à Logique couvrent le tiers des frais hypothécaires et d'entretien. L'autre deux-tiers provient d'une subvention annuelle accordée par la SCHL. En plus, certains locataires bénéficient d'un supplément au loyer octroyé par la SHQ.[8]

Un autre aspect mérite d'être souligné. Sans que Logique n'intervienne auprès des résidents, ceux-ci ont créé une association de locataires. Depuis, une vie communautaire se développe avec la complicité active de Mme Massie, animatrice dans l'âme et concierge de l'immeuble. Sans doute, les promoteurs du projet avaient-ils souhaité l'éclosion de cette vie communautaire puisqu'un local avait été aménagé au rez-de-chaussée.

Les coopératives d'habitation

"Cà, c'est un secteur dans lequel il y a moyen de faire quelque chose de particulièrement intéressant, ne serait-ce que, parce que par définition, les gens qui s'occupent de coopératives d'habitation ont des horizons sociaux plus larges que la moyenne des autres."

Pierre Montreuil, de l'Office des personnes handicapées du Québec.

Au nombre des premières expériences d'intégration résidentielle, notons l'apport remarquable des coopératives d'habitation. Près du centre-ville de Montréal, notamment dans le quartier de Milton Park, on dénombre plusieurs coopératives ayant réservé des unités de logements pour les personnes handicapées. Pour n'en nommer que quelques-unes, mentionnons l'Arche de Noé, la coopérative Prince-Arthur et celle du Nordet.

Du seul point de vue architectural, les logements adaptés qu'on retrouve à l'intérieur des coopératives ne diffèrent en rien des logements aménagés ailleurs pour les personnes handicapées. De fait, le visiteur y décèle tous les éléments caractéristiques des logements adaptés: barres d'appui dans la salle de bain, poignées de porte en bec-de-canne, fenêtres munies de poignées-manivelles, comptoirs de cuisine équipés d'une plaque chauffante, etc. De plus, en-dessous des éviers et des lavabos, l'espace est libre de toute entrave. La chaise roulante ne se heurtant plus au comptoir, la personne handicapée peut alors s'approcher plus avant et mieux atteindre les robinets.

Cependant, une différence existe. Les promoteurs des coopératives ne sont pas encore acquis au concept d'accessibilité universelle, celui-là même que défend la société Logique et qu'elle a appliqué dans le recyclage de l'école St-Anthony's. A la coopérative Prince-Arthur, par exemple, seulement neuf des dix-huit logements ont été aménagés pour les personnes se déplaçant en chaise roulante. Toutefois, dans le cas d'une démarche achat-rénovation, la formule coopérative a ceci d'intéressant qu'elle permet aux personnes handicapées de s'impliquer activement dans la démarche coopérative et de préciser leurs besoins au moment de l'élaboration des plans d'aménagement. C'est ainsi que d'un projet coopératif à l'autre, et l'expérience aidant, on s'approche d'un modèle idéal en matière de logement accessible et adapté.

Par ailleurs, même à l'intérieur de la coopérative, l'intégration de la personne handicapée peut soulever cer-

Entrée d'un édifice d'appartements où une douzaine de locataires sont des personnes lourdement handicapées physiquement. Une initiative inédite du Centre Lucie-Bruneau permet de leur assurer des soins 24 heures sur 24.

Alain Lefebvre

tains problèmes, en particulier au sujet du partage des tâches d'entretien. Cette question s'est posée à la coopérative Prince-Arthur. "A l'origine", fait remarquer M. Dave Gaucher, un jeune handicapé, président de la coop, "seules les personnes ambulantes assumaient l'entretien des escaliers et des corridors. Cela a fini par créer des insatisfactions. Présentement, on a mis à l'essai un nouveau partage des responsabilités entre tous les résidents. Quand vient le tour des personnes handicapées, celles-ci doivent trouver le moyen de s'acquitter de leurs obligations, par exemple, en trouvant un volontaire de l'extérieur de la coop pour les remplacer." On le voit, la formule coopérative a ses limites. Pour les personnes lourdement handicapées dont les ressources sont moins étendues, il reste une autre option possible: l'îlot de services.

L'îlot du Pont

Mise au point par le Centre de réadaptation Lucie-Bruneau, la formule de l'îlot de services se veut une ressource de vie intégrée pour les personnes handicapées. Elle est destinée aux individus qui ne requièrent plus aucun suivi au niveau psycho-social mais qui, par ailleurs, demeurent dépendants physiquement.

"L'îlot est un édifice d'une centaine d'appartements où vivent une douzaine de personnes handicapées physiques, chacune ayant son logement personnel. Se relayant à tour de rôle selon un horaire qui permet la présence d'au moins deux préposés aux heures importantes (le matin, au lever et le soir, pour le souper et le coucher), une équipe de dix personnes procurent les services d'assistance physique nécessaires et relatifs à chacun pour vivre en appartement. Les logements sont répartis sur différents étages, et le personnel utilise un appartement supplémentaire comme local.[9] Maintenant une présence de 24 heures par jour, le personnel assure l'aide physique uniquement pour les besoins qui ne peuvent être assumés par les locataires.

A l'îlot du Pont, le personnel et les locataires ont convenu ensemble des "heures de la maison". Ainsi, l'heure du lever est libre, cependant, les repas devront se prendre à l'intérieur de limites raisonnables (le repas du midi, par exemple, se prend entre 11 hres et 14 hres). Par ailleurs, dans une perspective axée sur l'autonomie maximale, les individus doivent pourvoir à certains de leurs besoins: effectuer eux-mêmes leurs emplettes, transiger avec la banque, tenir leur budget.

Si, d'un point de vue social et personnel, l'expérience satisfait les locataires de l'îlot du Pont, qu'en est-il de son aspect économique? Selon Mme Inès Gonzalez, du Centre Lucie-Bruneau, il en coûterait en moyenne 90$ par jour pour garder en institution chacun des résidents de l'îlot du Pont. Par contre, l'expérience de l'îlot de services a permis d'abaisser ce coût à $64 par jour seulement.

Si une telle initiative a vue le jour, tout le mérite en revient aux intervenants du Centre Lucie-Bruneau. Au départ, l'expérience de l'îlot du Pont, la première de ce genre, fut menée à l'insu et à l'encontre de la haute direction du ministère des Affaires sociales du Québec qui jugeait le projet humainement et financièrement irréalisable. Ce n'est qu'après une expérimentation de six mois que les technocrates du MAS en furent informés. Depuis son ouverture, le 1er mars 1979, l'îlot du Pont a donné naissance à d'autres projets semblables.

La preuve est faite, des alternatives viables à l'institution existent. Comme en témoigne un rapport, le bilan humain de ces expériences s'avère extrêmement positif: "plus de 80% des bénéficiaires intégrés se disent plus heureux, se sentent plus responsables de leur vie et plus libres qu'avant leur intégration. Un peu plus de la moitié se sentent moins seuls et plus en sécurité, la moitié affirment que leurs relations avec leur famille et amis se sont améliorées depuis leur arrivée en appartement. 60% considèrent que leurs activités ont augmenté. Les pourcentages des gens aux études et au travail ont passé respectivement de 5,8% à 14% et de 11,5% à 28%".[10]

Toutefois, l'intégration complète des personnes handicapées sera lente à réaliser. En effet, le Québec compte 100 000 personnes atteintes d'un handicap loco-moteur, de ce nombre les deux tiers vivent dans la grande région montréalaise où l'offre en logements adaptés ne s'accroit que de 100 unités par année. Afin d'accélérer les choses, l'Office des personnes handicapées du Québec s'est employé à établir une banque de logements et, à ce jour, 19 000 logements ont été répertoriés accessibles, des logements qui ne sont pas nécessairement adaptés mais qui pourraient le devenir en leur apportant des modifications mineures. Néanmoins, ces logements ne sont pas disponibles. Il reste encore à trouver un mécanisme permettant aux personnes handicapées de s'y loger.■

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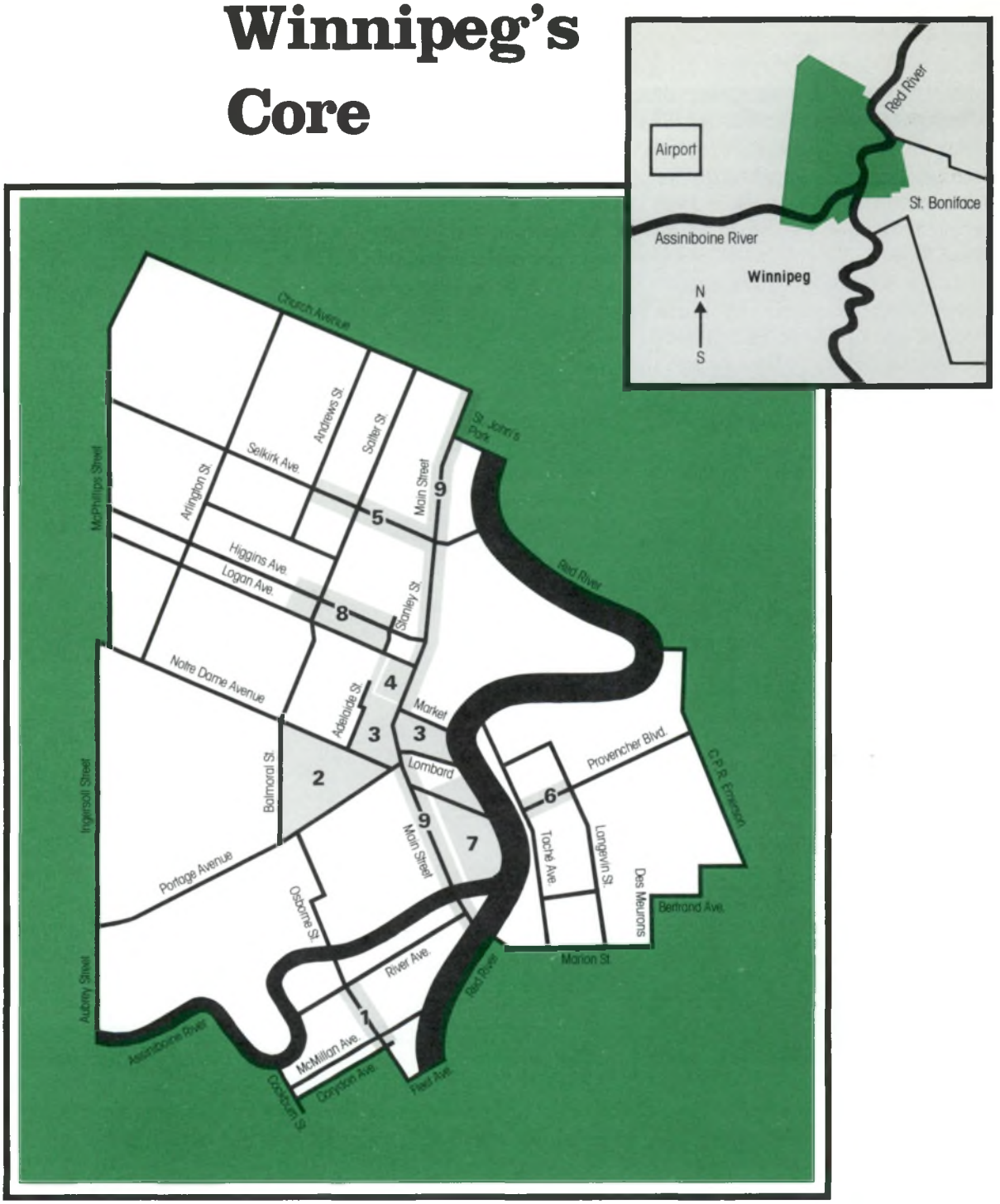
Revitalizing Winnipeg's Core

by Kip Park



Boundaries and Key Site Areas of the Winnipeg Core Area Initiative

Key site areas
1. Osborne Street
2. North Portage Avenue
3. Historic Winnipeg Area
4. Chinatown (King Street)
5. Selkirk Avenue
6. Provencher Boulevard
7. C.N. East Yards
8. Logan Avenue
9. Main Street

From earliest times Winnipeg has been known as a centre of trade and commerce. The confluence of the Red and Assiniboine Rivers was an important crossroads and trading area for the Assiniboine, the western Cree, the Ojibwa and the Sioux for centuries. The site was confirmed in its importance when the Earl of Selkirk sent settlers to what is now Winnipeg in 1812; by 1873, the year Winnipeg was incorporated, a burgeoning trading community had developed.

Winnipeg has continued to play a dynamic role in the development of Manitoba and the entire West, linking western development with growth in central and eastern parts of Canada. During the time of the country's most rapid expansion in the late nineteenth century, Winnipeg recorded a higher value of building permits than any other city of comparable size in North America.

Core area problems

But Winnipeg's downtown core and surrounding older neighbourhoods are currently in trouble. Since 1941, people have been leaving the 26 km^2 in the heart of the city, lured by more attractive housing in outlying regions. The development of suburbs in the post-war period accelerated this movement. By the 1970s migration from the core had left behind an increasing number of single-parent households, fewer children and a significantly larger proportion of the elderly.

The physical environment of a large part of the core has been characterized by neighbourhood deterioration, poor-quality housing stock, deteriorating commercial facilities and a shortage of community and recreational amenities. About 70 per cent of the core's housing stock was built before 1946 and only 14 per cent of the existing stock was built after 1960.

Winnipeg's core area housing stock was found to rank among the poorest in Canada, and this contributed significantly to neighbourhood erosion and loss of family households.

A view of part of the Core Area from the top of the Richardson building.

At the same time, the core area experienced a growing economic disparity with the rest of the city. In 1951 there was an 11 per cent income differential between core area and suburban households; by 1978, the average income from employment was 32 per cent lower in the core. Since 1972, there has been a rapid decline in employment in this area although employment in the entire Winnipeg metropolitan area increased by 48 per cent from 1962.

These trends were accelerating in impact. If left unchecked, planners predicted more loss of population, particularly families, resulting in a larger concentration of the elderly and single-parent households. Housing would become increasingly scarce for lower-income groups because of demolition of existing housing and the lack of replacements. Employment opportunities would continue to decline, the planners warned, and all these factors would have a depressing effect on the general environment. In other words, Winnipeg's core would die, and with it the economic centre of the city.

By the late 1970s, planners, politicians and Winnipeggers themselves realized that some special effort had to be made to reverse the trends. A comprehensive package of social, economic and physical initiatives was required to re-inject vitality into the core area and give residents a chance to take full advantage of economic opportunities.

Redevelopment approved

On 29 May 1980, representatives of Canada, Manitoba and the City of Winnipeg met and agreed to cooperate in the preparation of a common development strategy–the Winnipeg Core Area Initiative–and to identify and implement specific programs and projects to be undertaken either independently or jointly in support of the common strategy for the core. On 22 September 1980, a Memorandum of Understanding was signed outlining the objectives, strategy, potential programs and financial arrangements which were to guide the three levels of government in the development of a formal Winnipeg Core Area Agreement. Each level of government would contribute one-third of the cost of a $96 million package of programs during the five-year period from 1981 to 1986. On 4 September 1981, the formal agreement was signed establishing the Winnipeg Core Area Initiative.

Now, nearly three years later, optimism runs high that a turn-around of social, economic and physical conditions can be achieved in Winnipeg's core area and the intersection of Portage Avenue and Main Street will once more be the "heart of the continent". The planning stage is complete; now implementation begins.

The overall purpose of the Core Area Initiative strategy is to improve job opportunities and standards of living for residents of the core by providing increased employment opportunities, and encouraging industrial, commercial and residential development in the core area. Ten programs concerned with employment, housing, improvement to community services and facilities, and the redevelopment of "key areas"* have been devised to achieve this, and by the end of 1983, about $90 million of the total $96 million budget had been allocated. Now the problems that took years to develop can be addressed.

"One of the difficulties is that when a project like this gets announced, people expect things to happen the next day," says Core Initiative general manager Larry Boland. "But it takes between 18 months and two years of active planning before you know how to spend the money and how people will be affected by it."

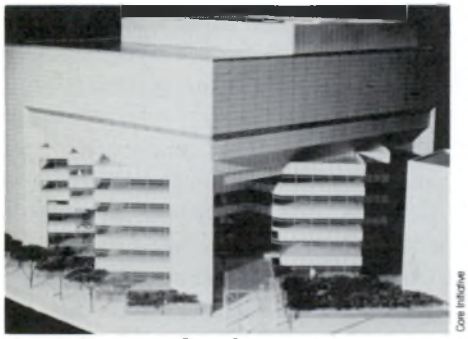
To the end of 1983, there was little physical evidence that the Core Area Initiative had been at work. Some small businesses on Portage Avenue had been expropriated and buildings razed to create EnCore park. Air Canada had started construction of its $31 million western computer centre on Hargrave Street. The National Research Council had announced a $40 million science centre. An eight-hectare industrial park development containing small manufacturing and light industries in the Logan Avenue area had been whittled down to three hectares after local residents protested the destruction of their neighbourhood.

But Winnipeggers were finally taking a hard and serious look at the centre of their city. One of the results was the formation of a North of Portage Task Force, chaired by University of Manitoba President Dr. Arnold Naimark, whose mandate is to approve plans for a $76 million redevelopment of the north side of Portage Avenue. New commercial and cultural facilities are among plans being considered: a report is expected in April 1984. The redevelopment is hoped to trigger between $100 and $150 million in private sector investment. Although this is not directly a Core Initiative program, experts generally agree that the Initiative acted as a catalyst.

*Special areas that offer economic, social and cultural development opportunities.

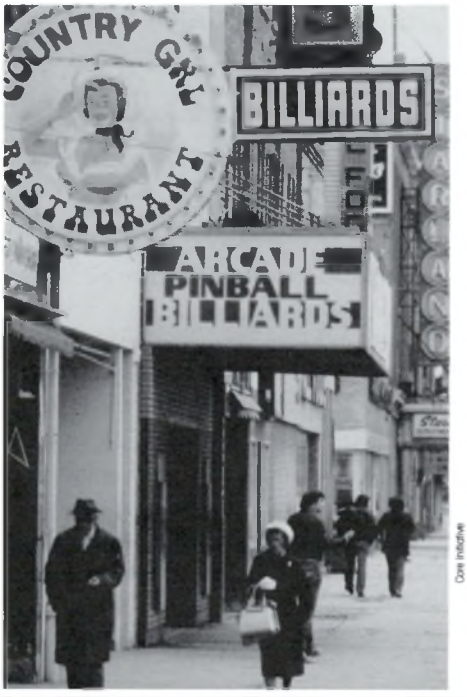
Core Initiative

EnCore Park is a lively place even on a winter evening.



Core Initiative

A model of the Air Canada computer centre currently under construction.



Core Initiative

Some small businesses, like these, on Portage Avenue were razed to create EnCore Park.

Great impact on housing

Perhaps the Core Area Initiative has had its greatest impact on housing. The objective of the housing program is to rehabilitate about 4 000 existing housing units and build about 400 privately owned infill units; to the end of 1983 some 1 639 existing units had received Residential Rehabilitation Assistance Program (RRAP) grants, 31 new homes had been built and 228 existing units had been purchased with the assistance of a $5 000 Core Initiative grant for each unit.

"We will hit the 4 000-mark in renovations if there are 4 000 people out there who want to take advantage of the program–and we think there are at least 4 000," says John Little,

Accueil Colombien, an apartment block for senior citizens, under construction in St-Boniface.

project manager for development. "I'm very pleased with the way the program has been going–the work that's been done is crucial to the continued existence of these units."

One of the reasons for the success of the housing program was that Core funding piggy-backed on other government funding–like the Manitoba government's Homes in Manitoba program (HIMP), or the federal government's Canadian Home Ownership Stimulation Plan (CHOSP). For example, families whose income is less than $9 000 annually can receive up to $6 250 of forgiveable loans through RRAP and Core Area "hardship assistance". Or families whose "adjusted income" is less than $16 500 can received interest-free HIMP loans for home renovations.

Non-profit housing has also received a boost. Kinew Housing Corporation, a successful Native organization based in Winnipeg with a portfolio in excess of 200 units, has received $800 000 to acquire and rehabilitate houses for Natives in the core area. About 20 houses will be purchased and a further 60 renovated. The Winnipeg Housing Rehabilitation Corporation also provides non-profit housing in the core area. With the assistance of $500 000 of Initiative seed money and with CMHC financing, the WHRC has purchased and rehabilitated a 27-unit apartment block and is building a 36-unit block; a further 12 units of ground-oriented housing has been purchased and renovated. The WHRC is undertaking a feasibility study, also funded by the Core Initiative, on the conversion of the historic provincial Normal School on William Avenue into residential units.

An apartment block being renovated by the Winnipeg Housing Rehabilitation Corporation.

Homes were relocated in the North Logan neighbourhood by moving them from old to new foundations.

For seniors, a 147-unit apartment block is now being built by the Knights of Columbus in St. Boniface, at a cost of $8 million, with the assistance of $450 000 in Core Initiative funding.

Another project which has the green light is a $7.4 million, 111-unit family housing project in Chinatown, being built under CMHC's non-profit housing program. The Core Initiative is contributing approximately $1.8

Core Initiative

Family housing planned for Chinatown adjacent to a cultural centre and Chinese garden.

Kip Park

The Criterion Hotel is being converted to condominiums.

million toward the development of an adjoining cultural centre, Chinese garden and underground parking complex as well as streetscaping.

But a project which has assumed somewhat higher prominence–in the eyes of planners, at least–is a 145-unit block north of Ellice Avenue, in an area which was residential but which has been declining steadily in recent years. To be built with assistance from the Canada Rental Supply Program (CRSP), the block–a joint proposal of the Core Initiative and Canada Mortgage and Housing Corporation–will test the concept that living in the downtown core is an attractive and viable alternative.

To date, downtown living has been sold on the basis of high-rise living, notes Boland. "But there seems to be a niche for a medium-rise block, about six to eight storeys," he says. And if enough architectural appeal is built into the project, the rental market may be attracted to the area and that is hoped to draw developers as well. "We're not going after the family market," says Roy Nichol, CMHC provincial director. "We're hoping to attract working couples, singles or older people."

And that may impact on plans for the redevelopment of the north of Portage, proposals which have suggested up to 300 senior citizen units and 1 000 other units in low- and high-rise buildings. The success of the Ellice Avenue project could lure the private sector back to the core, Nichol says.

Recycling the warehouses

While housing is important, what to do with Winnipeg's unique stock of warehouses is another thorny question. During the boom years between 1880 and 1914, agriculture and a powerful grain industry developed in the West. To serve the needs of farmers and settlers, Winnipeg became a massive distribution centre. In the early years, the requirements of transportation necessitated storing a year's supply of goods in one centre, thus 75 massive warehouses were built by local pioneer families. These huge warehouses, some a block long and six storeys high, now dot the core area of Winnipeg, forming what Toronto architectural historian Robert Hill describes as "the largest collection of cut stone and terra cotta buildings in North America".

Most of these buildings are currently only 25 per cent occupied–by

Kip Park

The Albert Block, typical of buildings in the warehouse district.

boutiques and low-rent office space. The Core Initiative is offering 50-50 cost-sharing grants of up to $25 000 to owners of "heritage" buildings for renovations, and up to $15 000 to tenants. As well, the report of the Arts Accommodation Study is expected in April and will recommend housing various performing and visual artists and arts groups in buildings in the warehouse district–with appropriate government grants.

Ken Kelly, Core Initiative heritage manager, has said that in five years warehouses which have not been completely renovated and rejuvenated will stand out in much the same way that renovated buildings now stand out. The plans for the heritage area are major capital-intensive programs and are in the detailed "participatory planning" stage, says Boland.

Programs dovetail

Plans also call for the rejuvenation of Main Street by improving the streetscape with new sidewalks, cleaning building facades and encouraging new commercial enterprises. A $600 000 streetscaping and clean-up of Selkirk Avenue will also improve its appeal.

"The beauty of this clean-up of Selkirk and Main is that it dovetails nicely with our small business program," says Boland. The program offers 50-50 cost-sharing grants of up to $25 000 to small businesses to establish themselves in nine "key sites" in the core area. And that, Boland points out, reinforces other Initiative efforts, like job creation.

Kip Park

Townsite, a vertical shopping centre.

The beauty of the entire Core Initiative is that it does dovetail, both with its own programs and with those

Activities in Old Market Square are part of the rejuvenation of the warehouse district.

Thanks to Core funding, Rossbrook House neighbourhood centre has been able to add staff and expand services.

offered by other levels of government. Core Initiative staff works closely with the Canada Employment and Immigration Commission to establish linkages with Core Initiative projects. "Then we can have the mechanisms set up to plug in training programs teaching skills in construction, light manufacturing, office work and the service industry," Boland says. "And we will see some pretty dramatic results." Boland says 400 full-time jobs have been identified so far, and people are in various stages of training to fill them. As well, 700 to 800 construction jobs have been created, and "I think over the next year we will add another 1 000 jobs, of which 400 will be full-time."

The Gas Station Theatre was acquired and renovated with funds from the Core Initiative.

But jobs and buildings are nothing without a supporting infrastructure, and a great deal of effort has been expended on improving community facilities and services, ranging from increasing staff at day-care centres to renovations of senior citizens' meeting places. Of the total $10 million budget, about $4 million has been committed, Boland says. "These programs are a little less visible because in many instances the physical work has consisted of upgrading facilities which are often in small buildings," Boland says. "And they are not concentrated but dispersed throughout the community."

Turning point

Some observers have suggested the Core Area Initiative is "the ultimate in trilevel cooperation". In many respects it is. It is an equal partnership between three levels of government, each with equal veto power, working towards a common goal. And there have been unforeseen side benefits. "The organization of the Initiative gives each participant a window into how the other levels of government operate, windows they didn't have before," Boland points out. "I see the Core Initiative as the first step in implementing a political shift in Winnipeg's development patterns. The Core Initiative is really a prototype for future (urban renewal) policies."

Nichol doesn't see the Initiative as being the be-all and end-all of urban renewal. He points out that many of the houses now being renovated are within 20 years of the end of their life span, "So we've going to have to get into urban renewal– not the bulldozer concept, but a version of it, where there is a balance between the old and the new."

"What's happening here is something that most cities would dearly love to have," Nichol continues. "It's working in Winnipeg because everyone's on side and trying to make it happen."

Twenty years from now, people will look at the Core Area Initiative as the turning point, giving a new focus on the downtown," Boland says. The relatively small amounts of money being spent on business assistance won't turn the core area around, "but it demonstrates that if governments are serious about shifting the locational emphasis of business opportunities from suburb to city centre it is possible to do it, and this will be the kind of thing that continues after the Core Initiative itself has gone." ■

Kip Park is a freelance writer living in Winnipeg

Residential Indoor Air Quality:

Defining the Problems, Searching for Solutions

by Rosemary Wales

Pollution of our indoor living space began when fire was first lit inside a cave. However, it is only in recent years, as fuel prices have soared, that making our houses increasingly airtight in order to conserve heat has led to an accompanying increase in indoor air pollution. This is particularly true in Canada where our climate, with its severe winters, forces us to spend much of our time indoors.

In older, unrenovated houses air is able to enter and leave through cracks in the structure and around windows and doors, and this natural ventilation is sufficient to "flush out" pollutants and keep levels down. Today's builder, however, has access to newer, synthetic materials which he uses as barriers and seals, reducing this passage of air. To ensure that there is sufficient replacement of stale air with outside air, any house with such an airtight "envelope" needs a controlled ventilation system using mechanical means.

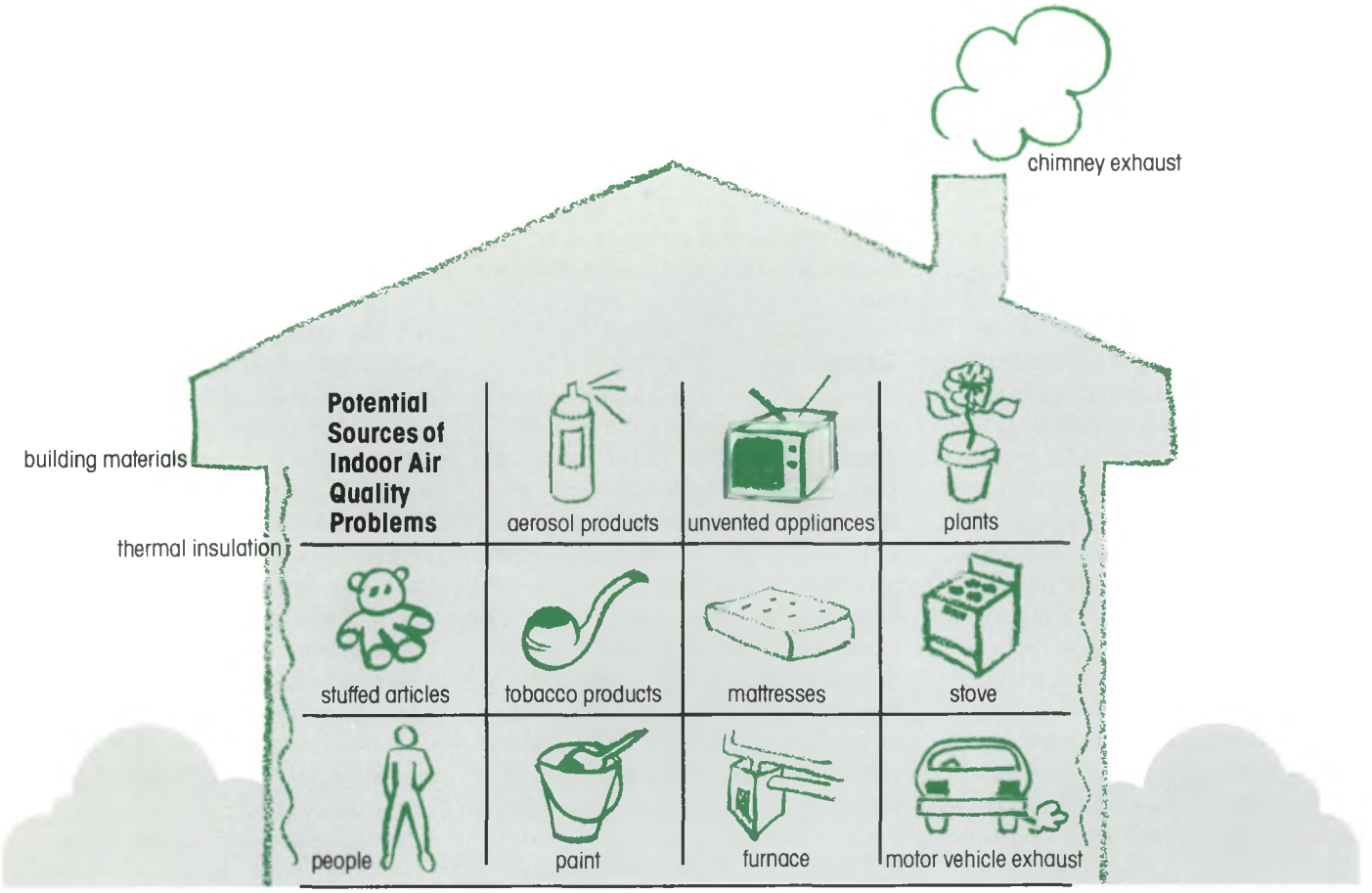
Major indoor air pollutants

Constant exchange of air between inside and outside, whether by intended routes such as windows and ventilation ducts or unintended ones such as cracks can, of course, bring in pollutants from the surrounding atmosphere. But, in general, because outside levels are less concentrated and therefore lower, these have far less impact on health than those pollutants produced inside the house. The latter fall into two categories:

- substances entering the air from materials used in the construction and furnishing of the house. Some of these materials are prone to a slow disintegration at the surface, known as "outgassing" or "offgassing". They are mainly synthetic products, including plastics, adhesives and insulation materials, which are less chemically stable than natural materials. Outgassing is greater at higher temperatures and humidity and can continue indefinitely, though in some materials it diminishes with time. Emissions can also be in the form of fibres—asbestos, for example, is known to be particularly harmful and there are increasing restrictions on its use in living and working areas.
- substances put into the air by the occupants of the house in the course of their activities, such as tobacco-smoking or the use of pesticides and volatile cleaning products that vaporize easily. In multiple dwellings such as apartment blocks and townhouses, the air quality in each unit may be affected by the activities of the occupants of neighbouring units.

Of the many pollutants which can find their way into domestic air, five of the most common and troublesome are:

- tobacco smoke. This is not a single pollutant but contains a great variety of gases and particles, many of which cause adverse health effects, including respiratory disease, headache and eye irritation. So-called "sidestream" smoke puts more contaminants into the surrounding air than "mainstream" smoke because it is not first filtered through the cigarette and the smoker's lungs. Pollution caused by tobacco-smoking can be significantly reduced only by using very high ventilation rates, providing independently ventilated smoking areas or, better still, by not smoking at all.
- carbon monoxide. This is a colourless, odourless gas produced by combustion appliances, such as heaters, cooking stoves and furnaces. It is a particular hazard when this equipment is poorly vented or maintained, or when there is a "backdrafting" effect—when air pressure is lower within the house than outside, causing air to be drawn inwards. The main effect of carbon monoxide on health is to interfere with the oxygen-carrying function of the blood. Symptoms of sensitivity include headache, dizziness and nausea. High concentrations, which occur when a chimney becomes blocked, can be, and indeed have been, fatal. Problems can be minimized by providing adequate ventilation, including venting of individual appliances (a range hood over a gas stove, for example), or by avoiding the use of oil and gas.
- formaldehyde. This is used in the manufacture of particleboard, plywood, plastic products, fire-retardant chemicals and many other products, and is subject to outgassing. Mobile homes are particularly prone to this problem, owing to the large amount of particleboard used in their construction. Other sources include



synthetic adhesives and dyes, vehicle exhaust and cigarette smoke. As a constituent of urea formaldehyde foam insulation (UFFI), it has gained considerable notoriety in recent years. The product was banned by the federal government in 1980 because of reported adverse health effects, including skin, eye and throat irritation and aggravation of respiratory allergies. It is unclear, however, whether these ill-effects are caused by the formaldehyde itself or by airborne particulates resulting from the chemical breakdown of the foam.

■ radon. This is a radioactive gas formed from radium during its natural decay process. Nearly all soils contain trace amounts, but in some areas of the country radon levels are high enough to be a threat if the gas is able to seep into a house through cracks or drains in the basement. The radon itself decays into microscopic particles known as radon "daughters" which, if inhaled, can be a cause of lung cancer. Where there is a problem, sealing of basement cracks and proper ventilation can minimize the hazard.

■ particles of biological origin. These can cause disease (bacteria, viruses) and allergies (moulds, dust mites, animal dander) and tend to be spread by heating and air-conditioning systems. High humidity can aggravate the problem. Moulds flourish, for instance, where condensation and frost form on poorly insulated ceilings and walls. This can be prevented by increasing ventilation, improving insulation and by reducing the amount of water vapour entering the air as a result of kitchen, laundry and bathroom use.

Effect of pollutants on health

It is only in the latter half of this century that we have begun to recognize the health problems caused by the burning of fossil fuels and wood and the use of products derived from gas and oil. Chemical susceptibility within the population varies considerably, not only from individual to individual, but in the same individual according to age (the very young and very old being particularly at risk) and physical condition. The hypersensitive person must avoid all exposure to sensitizing substances (if necessary by relocating) and receive appropriate treatment (e.g. allergy shots) whereas a less susceptible person may simply need to avoid exposure to specific contaminants.

Chemical sensitivity problems related to housing, while sometimes acute, are more commonly the result of continuous, cumulative exposure, and often affect more than one bodily system at the same time. A new breed of physician, the clinical ecologist, has appeared on the scene to help this growing segment of the population suffering toxic reactions to substances ingested, or inhaled from the environment. Also needed, though, is a study to determine the safe limits of exposure to most contaminants. In general, the only indoor air quality standards in use at present apply to the industrial environment, where safe levels are assessed according to exposure during working hours only. There is an almost complete absence of standards for living accommodation, where exposure is continuous. More sensitive instruments need to be developed for measuring the lower concentrations found in homes.

Preventing or removing pollution

We can reduce indoor pollution in two ways—remove pollutants or, preferably, prevent their occurrence in the first place. The latter can be achieved by careful choice of building materials (stone, high-temperature fired brick and hardwoods) and furnishings (natural fibres, like wool and cotton, which have not been treated with chemical fire-retardants or fungicides). Where some degree of outgassing cannot be avoided, as with some paints and varnishes, sealing and heating the affected area for several days and then ventilating it reduces the problem considerably. Proper maintenance of the house and its equipment is of prime importance, particularly where chimneys are concerned—a non-existent or faulty liner can lead to products of combustion entering the indoor air, with potentially serious consequences. In choosing cleaning products we can resist sales pressure to buy the latest, more contaminating cleaner and stick to the less volatile ones used by our grandmothers, like washing soda and borax.

Removing pollutants is most efficiently done by ventilation, either simply by opening windows in mild weather, or by mechanical means. An increasingly popular device is the air-to-air heat exchanger which blows air into and out of the house, while conserving heat in winter by transferring it from the outgoing to the incoming air and preventing heat from entering in summer by the reverse process. The conventional furnace air-filter does little to improve air quality, since it does not remove smaller particles, which are more likely to be inhaled. High efficiency filters, including the electrostatic type, can remove a significant proportion of these particles. Where outgassing is a problem, sealants such as paints, veneers and plastic barriers can be used but, if not chosen carefully, may themselves be a source of contamination.

Sunnyhill

The growing concern about indoor air pollution and the incidence of chemical sensitivity in the Canadian population has led to the construction of a small number of low-pollution homes. One of these is an experimental building, known as Sunnyhill Low-Pollution Research Centre, being constructed in Goodwood, Ontario, 80 km north-east of Toronto, by Bruce Small, a professional engineer with a personal interest as well as expertise in the field of indoor air pollution. Though essentially a residence for his chemically susceptible family, the building will also serve as an experimental facility and educational centre for low-pollution design. Materials were carefully evaluated before use; the building is designed to allow control of air flow and, when necessary, isolation of areas likely to be a source of contamination. Considerable use was made of steel and concrete in its construction rather than wood, and the use of passive solar heating combined with electricity will mean that the use of polluting sources of heat can be minimized. In addition, visitors to the facility are asked not to smoke or wear perfumed products.

Jurisdictional problems

The role of government with respect to indoor air quality remains largely to be determined. Its responsibilities include evaluating materials and products before they are put on the market and establishing and enforcing safety standards. Up to now these standards have tended to emphasize long-term engineering considerations, such as strength and durability, rather than health effects. According to a recent CMHC report on indoor air quality, some of the jurisdictional questions which need to be addressed are:

- Should existing environmental legislation be broadened to include indoor air quality as a separate issue?
- Is government action needed to help the building industry develop non-polluting construction techniques and materials?
- Should the manufacturer of a product which emits hazardous substances during normal usage be required to indicate this on the label? In other words, to what extent is it the consumer's responsibility to himself and his dependents to educate himself about the potential hazards of a product, rather than that of a regulator to protect him?
- Should manufacturers be held responsible for health damage caused by their products?
- How can the individual's right to privacy be made compatible with the responsibility of government to promote health and reduce hazards? Is it possible for government to undertake the major responsibility for indoor air quality when the individual, through his habits, such as smoking, and choice of products, is responsible for so much of the contamination?

Jurisdictional responsibilities

Responsibility for legislation relevant to air quality is spread over several government departments and agencies.

- CMHC, under the National Housing Act, investigates housing conditions in Canada and promotes research into all aspects of construction methods, materials and standards. Its Materials Evaluation Division is responsible for testing new products for the building industry at the manufacturers' request. Information resulting from these activities is made available to the building industry and the public. However some of the issues relating

to indoor air quality require input from other sources, and so liaison is maintained with:

- Energy, Mines and Resources Canada to ensure that the encouragement of energy conservation (in particular by increasing the air-tightness of dwellings) does not lead to air quality problems.
- Consumer and Corporate Affairs Canada, which regulates standards relating to consumer goods, including products used by the building industry and in the home. In addition, the department is empowered under the Hazardous Products Act to regulate the importation and sale of potentially toxic products.
- Health and Welfare Canada, which has as one of its aims "to encourage and assist Canadians to adopt a way of life which enhances their physical and mental well-being". To this end it draws attention to tobacco-smoking as a significant, preventable hazard.
- The National Research Council, which undertakes research into a number of issues related to indoor air quality. The Division of Building Research is currently giving priority to studies relating to UFFI.

CMHC's review of the regulatory powers of the federal and provincial governments and agencies, concludes that "there are few regulations, codes and standards that have much to say directly about indoor air quality in Canadian homes".

Canadian research into indoor air quality issues is proceeding on three main fronts:

- investigating the levels of pollution occurring in Canadian homes
- determining the proportion of the population which is adversely affected, and the groups which are most at risk
- determining maximum acceptable concentrations of pollutants found in the home,

thereby providing a basis for informed, healthy lifestyle choices.■

Rosemary Wales is a biologist with an interest in environmental issues.

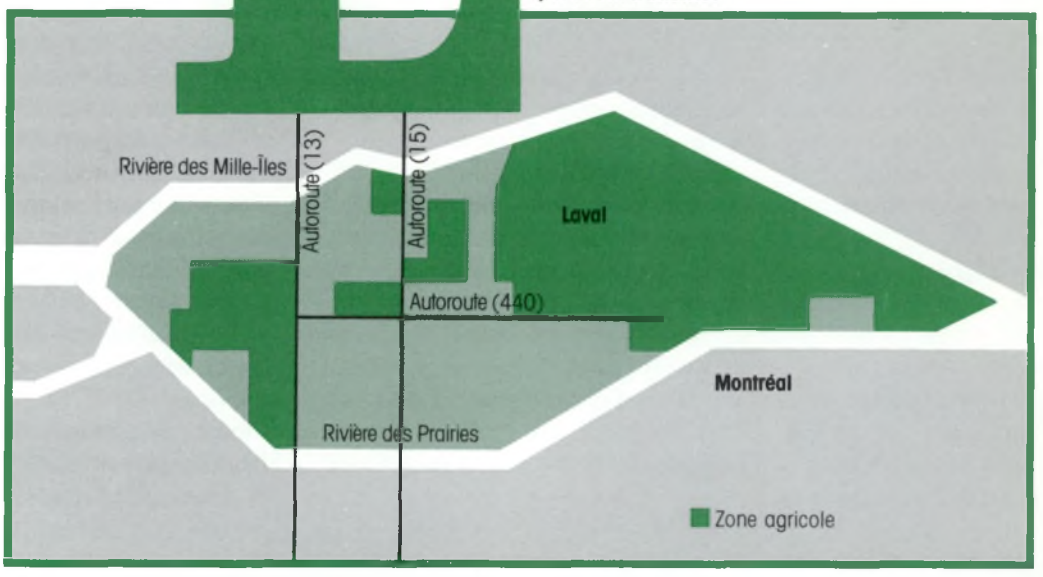
The Sunnyhill low-pollution research centre

enamelled steel roofing being applied over the steel frame

interior framing, ductwork and fan for the south solar roof

Laval, ville campagne!

par Alain Duhamel



En élevant au rang de ses priorités d'aménagement le développement de sa zone agricole, ville de Laval se place dans une situation unique au pays et engage son avenir dans un pari inouï.

Peut-on réconcilier dans un développement harmonieux et cohérent une zone urbaine en expansion et une zone agricole inaliénable? Le cadre dans une entreprise de service et le producteur maraîcher peuvent-ils se réclamer de l'identité lavalloise dans un même sentiment d'appartenance?

Ville de Laval, constituée en 1965 du regroupement des 14 municipalités de l'île Jésus, se trouve au centre de la région la plus urbanisée du Québec. Sa population (270 000 habitants) la situe au second rang des villes québécoises, derrière Montréal dont elle n'est séparée que par la rivière des Prairies. La zone agricole couvre près de la moitié de son territoire, ce qui en fait la plus grande municipalité agricole de la province, voire du Canada.

Au début de la décennie des années 70, Laval rêvait pour la fin du siècle d'une ville d'un million d'habitants. Elle ouvre des fronts d'urbanisation dans toutes les directions à la fois, aménage des parcs industriels, s'équipe d'autoroutes, favorise l'établissement de grands centres de commerce. Il n'est évidemment plus question d'une vie rurale et l'agriculture, qui valait à l'île sa réputation de "jardin de Montréal" n'a, dans ces perspectives, aucun avenir.

Un changement de cap

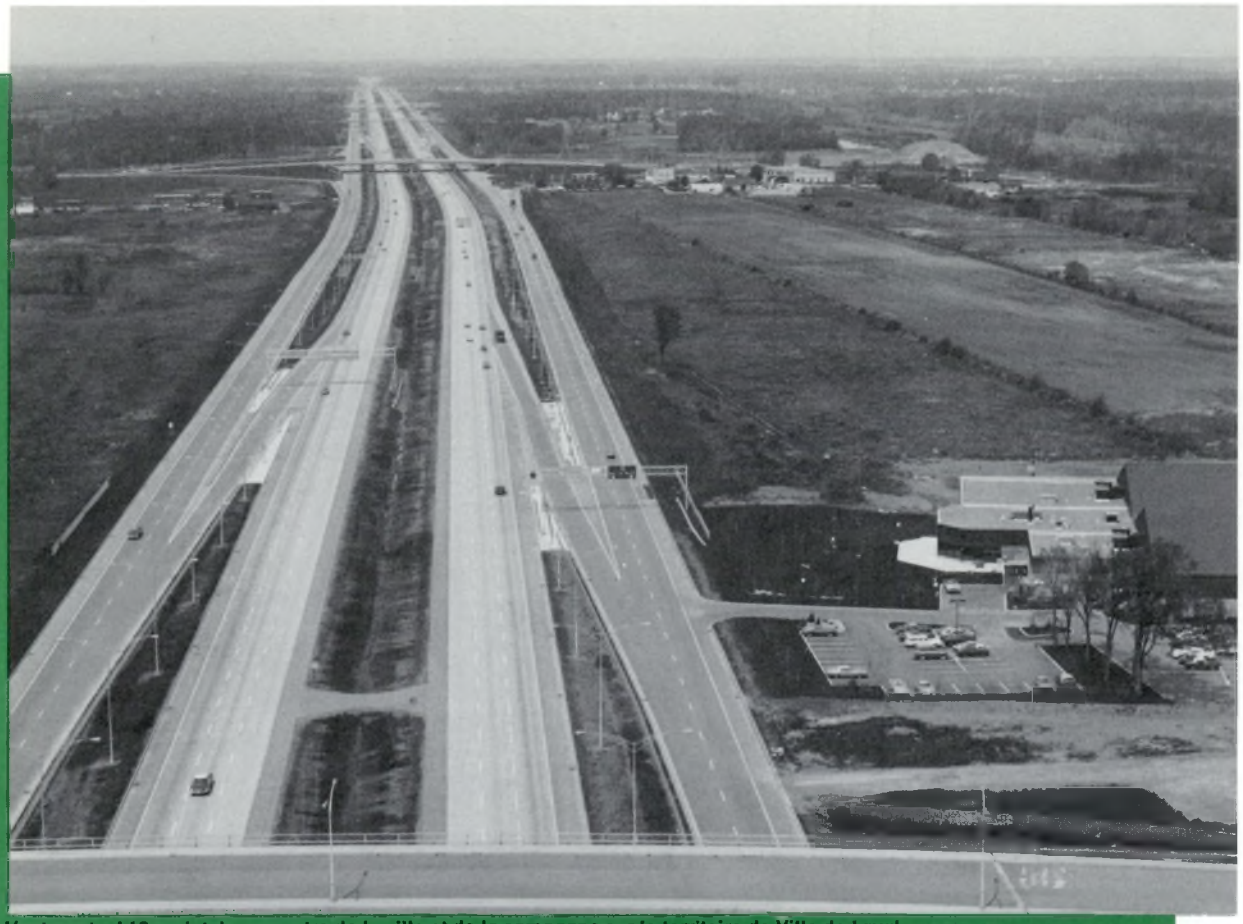
Dans le projet de schéma d'aménagement qu'elle vient de présenter aux Lavallois, l'administration municipale propose "la ville-campagne"—une orientation qui, pour l'heure, se laisse plus deviner qu'elle ne parvient à se définir—et affirme que "l'agriculture doit maintenant être considérée au même titre que les fonctions urbaines' La mise en valeur de la zone agricole s'inscrit désormais dans ses priorités économiques.

"Le conseil de la ville de Laval a déjà reconnu le bienfondé d'une protection des zones agricoles à Laval. Il devient donc possible de bien concilier un des objectifs recherchés par la population, soit de vivre dans une ville-campagne qui, tout en offrant les services dont sa population a besoin, reflétera le climat que les Lavallois ont recherché lorsqu'ils ont décidé de s'installer à Laval" lit-on dans le pro et de schéma d'aménagement.

Entre les perspectives de développement définies au début des années 70 et les orientations d'aménagement, il y a un tel changement de cap qu'il faut, désormais, voir Laval sous un jour tout à fait nouveau: l'expression banlieue dortoir ne lui convient pas même si ses citoyens travaillent en grand nombre dans l'île de Montréal.

Les prévisions de croissance démographique les plus récentes concluent à une population d'un peu plus de 300 000 personnes au début de la prochaine décennie. Le rythme de croissance atteindra à peine 1 pour cent, attribuable surtout "à l'accroissement naturel de la population lavalloise puisque l'immigration venant de l'île de Montréal est en bonne partie annulée par un mouvement inverse d'émigration vers l'île de Montréal et la banlieue nord de Laval".

Laval prend acte d'une tendance qui se confirme de plus en plus dans la région métropolitaine de Montréal. Le retour à la ville, dont Montréal se réclame dans son Opération 20 000 logements, a ses attraits auprès des ménages sans enfant (ou n'ayant plus d'enfants à la maison). Ceux pour qui Laval a trop emprunté aux caractéris-



Ville de Laval

L'autoroute 440, point de rencontre de la ville et de la campagne sur le territoire de Ville de Laval.

tiques de la banlieue dortoir poussent plus au nord leur quête d'espace, même au prix d'une dépendance accrue envers l'automobile.

Les 300 000 Lavallois pourront-ils tenir dans l'espace urbanisable de leur île, compte tenu qu'il habitent, en grande majorité, des maisons unifamiliales, grandes consommatrices d'espace?

L'habitation occupe 5 350 hectares sur les 7 280 hectares urbanisés hors de la zone agricole. L'inventaire comprend 61 934 bâtiments résidentiels répartis en 53 140 maisons unifamiliales, 6 538 duplex ou triplex et 2 256 immeubles multifamiliaux. La maison unifamiale lavalloise vaut en moyenne, aux fins de la taxation municipale, 61 500 $. Le développement de cette fonction urbaine doit occuper une superficie supplémentaire d'un peu plus de 1 000 hectares en dix ans, prévoit-on.

La ville couvre une superficie de 24 300 hectares. La loi sur la protection du territoire agricole, adoptée en 1978, en a soustrait 47 pour cent (11 300 hectares) à l'urbanisation.

La zone verte ne poserait pas d'importants problèmes de planification urbaine si elle se concentrait aux extrémités de l'île Jésus ou si, comme à Ottawa, elle ceinturait la ville. Il n'en est rien.

Dans l'est de l'île Jésus, dans le secteur Saint-François, la zone agricole domine bien qu'on y trouve, au sud, de petites enclaves urbanisées; au centre, la zone urbaine encercle un vaste territoire agricole; au nord, plusieurs terres agricoles ne sont plus utilisées à cette fin au point où l'activité paraît irrémédiablement compromise; à l'ouest, de grandes exploitations, horticoles surtout, traversent presque toute l'île du nord au sud, séparant la pointe ouest de l'île du reste de la zone urbanisée.

A proprement parler, on ne peut affirmer que la zone verte définit un périmètre urbain; il faut plutôt parler d'espaces inaliénables entre lesquels le mouvement d'urbanisation, bien que ralenti, se frayera boulevards et grands chemins.

L'agriculture, une fonction urbaine

En traitant l'agriculture comme une fonction urbaine, au même titre que le sont l'industrie, le commerce et l'habitation, Laval tente la réconciliation de deux mondes qui, historiquement, ne se voisinent qu'à distance. Les répercussions d'un tel plan d'aménagement surgiront dans tous les aspects de la vie municipale et dans la qualité de vie même des Lavallois, urbains et ruraux.

Sur le plan de la promotion du développement économique, par exemple, l'administration municipale a institué un commissariat au développement agricole (budget en 1984: 161 300 $) qui vient de s'intégrer au Commissariat au développement industriel, domiciliaire et commercial de la ville, celui-là même qui, il y a quelques années encore, était le fer de lance de l'urbanisation!

Le commissaire au développement agricole a pour mission de constituer une banque de données, de préparer un programme de pro-

La zone agricole couvre près de la moitié du territoire de 24 300 hectares de Ville de Laval, la deuxième ville la plus populeuse du Québec.

Ville de Laval

motion et de mise en valeur et d'assurer une liaison constante et suivie entre les agriculteurs et l'administration municipale.

La tâche demeure considérable puisque seulement 4 050 hectares, moins de la moitié de la zone verte, sont en culture. Le reste de la zone agricole est inexploité, soit parce que des spéculateurs n'ont pas encore renoncé à leurs desseins, soit parce que la relève agricole ne s'est pas encore suffisamment développée pour les prendre en charge.

La réconciliation des deux mondes mettra sans doute des années à se réaliser. En attendant, elle soulève de nombreux problèmes de cohabitation. Ainsi, l'été dernier, le conseil municipal, après en avoir longuement débattu avec les agriculteurs, a adopté un règlement prescrivant l'usage des canons à maïs, à certaines heures. Ces appareils bruyants tiennent lieu d'épouvantails à moineaux chez les producteurs de blé d'Inde, mais son usage, la nuit, incommodait les citadins.

Les agriculteurs se plaignent eux, de la destruction des récoltes par les motocyclistes qui prennent leurs champs pour des pistes de motocross.

"Il faut que les citadins se rendent compte que les agriculteurs y étaient avant eux", affirme M. Jacques Boutin, commissaire au développement agricole, qui agit aussi à titre d'inspecteur municipal chargé de l'application de la loi sur les abus préjudiciables à l'agriculture. Cette loi protège les exploitations agricoles contre l'envahissement des mauvaises herbes provenant des terres voisines.

L'agriculture lavalloise comporte peu d'élevage d'animaux. Les quelques 350 fermes, surtout horticoles et maraîchères, ont employé en 1981 plus de 1 600 personnes. Plusieurs d'entre elles font de la culture en serre et approvisionnent le marché métropolitain toute l'année. Ces données donnent une indication de l'importance économique de l'agriculture, mais elles ne rendent pas compte des répercussions fiscales.

Ainsi, sur un rôle des valeurs imposables d'un peu plus de 4.7 $ milliards, la zone verte compte pour 200 $ millions. Les citadins paient, en 1984, un taux de 2.20 $ le 100 $ d'évaluation, les agriculteurs 2 $ seulement. La différence de traitement fiscal provient des mesures de plafonnement de la loi sur la fiscalité municipale et de la loi sur la protection du territoire agricole qui agissent à la fois sur la valeur imposable et sur le taux d'imposition. Le gouvernement québécois verse à l'administration municipale, en guise de compensation tenant lieu de taxes, une somme d'un peu plus d'un million de dollars.

Dans les faits, ville de Laval a deux régimes de taxation sans commune mesure entre eux bien que les deux zones aient également accès à certains grands services municipaux tels la police et les incendies.

Réconcilier agriculteurs et citadins

Plus elle progressera dans l'intégration de la zone agricole à ses objectifs d'aménagement, plus l'administration municipale, qui constitue aussi une municipalité régionale de comté aux fins de la loi sur l'aménagement et

Vue aérienne de la zone urbaine de Ville de Laval.

l'urbanisme, devra arbitrer les choix inévitables entre les intérêts des deux zones.

D'ici à 1986, ville de Laval dépensera 131 $ millions dans la construction de son système d'épuration et d'assainissement des eaux usées. La dépollution de la rivière des Mille-Îles, au nord, et de la rivière Des Prairies, au sud, laissent entrevoir la restauration des plages de l'île Jésus. La zone urbaine pourra-t-elle alors tolérer que l'activité agricole compromette ses efforts de dépollution en la laissant pratiquer des cultures requerrant une grande quantité de produits chimiques et d'engrais? Le cas échéant, faudra-t-il envisager l'interdiction, par règlement municipal, de certaines cultures, voire de certains élevages réputés polluants?

Du point de vue des agriculteurs, le développement industriel peut aussi comporter ses effets polluants dangereux pour les terres en culture. Faudrait-il, en contrepartie, interdire certaines occupations industrielles afin de protéger la zone agricole?

Près de 66 pour cent des espaces boisés (1 200 hectares environ dans toute l'île) se trouvent en zone agricole. Les arbres n'y sont pas menacés par l'urbanisation mais, dans certains cas, la coupe du bois est reconnue comme une activité agricole. "Il apparaît difficile", lit-on dans le schéma d'aménagement, "de concilier les lois sur la fiscalité municipale et sur la protection du territoire agricole avec les lois sur l'aménagement et l'urbanisme, sur la qualité de l'environnement et sur la protection des arbres: en effet, les buts poursuivis diffèrent totalement d'une loi à l'autre".

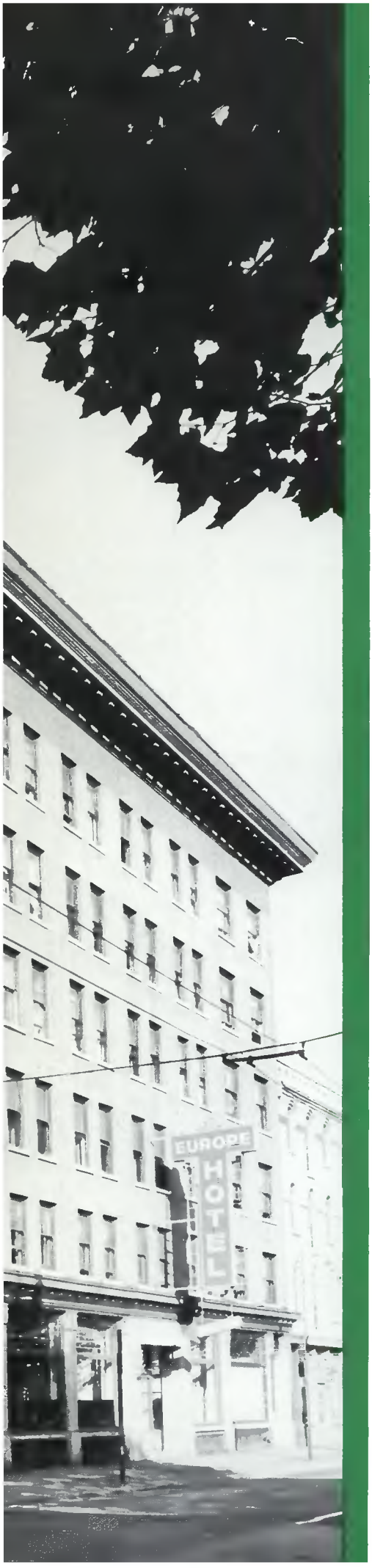
Laval n'a pas défini les moyens par lesquels elle se propose de réconcilier les intérêts des uns et des autres à l'égard des boisés. Le schéma les énumère (règlementation sur l'abattage des arbres, constitution de réserves foncières, protocole d'entente avec les propriétaires, acquisitions, etc.) en soulignant au législateur la nécessité d'harmoniser les lois dans un contexte aussi particulier que celui de l'île Jésus.

Le processus de consultation publique sur le schéma d'aménagement et sur les orientations du développement économique devrait permettre d'amorcer une tradition de dialogue et de concertation entre les deux zones. Pour la première fois, sans doute, des organismes aussi différents que l'Union des producteurs agricoles et la Chambre de commerce de Laval participeront et contribueront à la définition d'un avenir commun.

Le devenir de la ville-campagne dépend en bonne part de la cohabitation, voire de l'association, des citadins et des agriculteurs. L'un et l'autre groupe devront indiquer leur volonté de réussir ce pari original.

La ville-campagne, si son idée même s'impose dans les esprits, définira alors l'identité d'un cadre de vie unique suffisamment distinctif et attrayant pour ne pas se confondre dans la grande agglomération montréalaise aux autres villes de la banlieue dortoir.■

Alain Duhamel est journaliste au quotidien *Le Devoir*



The Europe Hotel:

New Role for a Turn-of-the-Century Vancouver Landmark

by Helen Carkner

In the soft light of a Vancouver morning, not much imagination is required to hear a brass-tipped ebony walking stick tapping the small, elegant terrazzo tiles in the lobby of the Europe Hotel or to catch a breath of smoke from the pipe of some long-ago traveller to Vancouver's Gastown.

Gastown, in the city's downtown eastside, lies along the waterfront in the Main Street and Cordova area. In 1867, Captain John 'Gassy Jack' Deighton, a hotel keeper and former steamboat pilot, built a saloon in the middle of the present five-way intersection. A village, named Gastown after its first citizen, grew up around the saloon. By early 1870, six blocks of the village had been surveyed and named Granville Townsite.

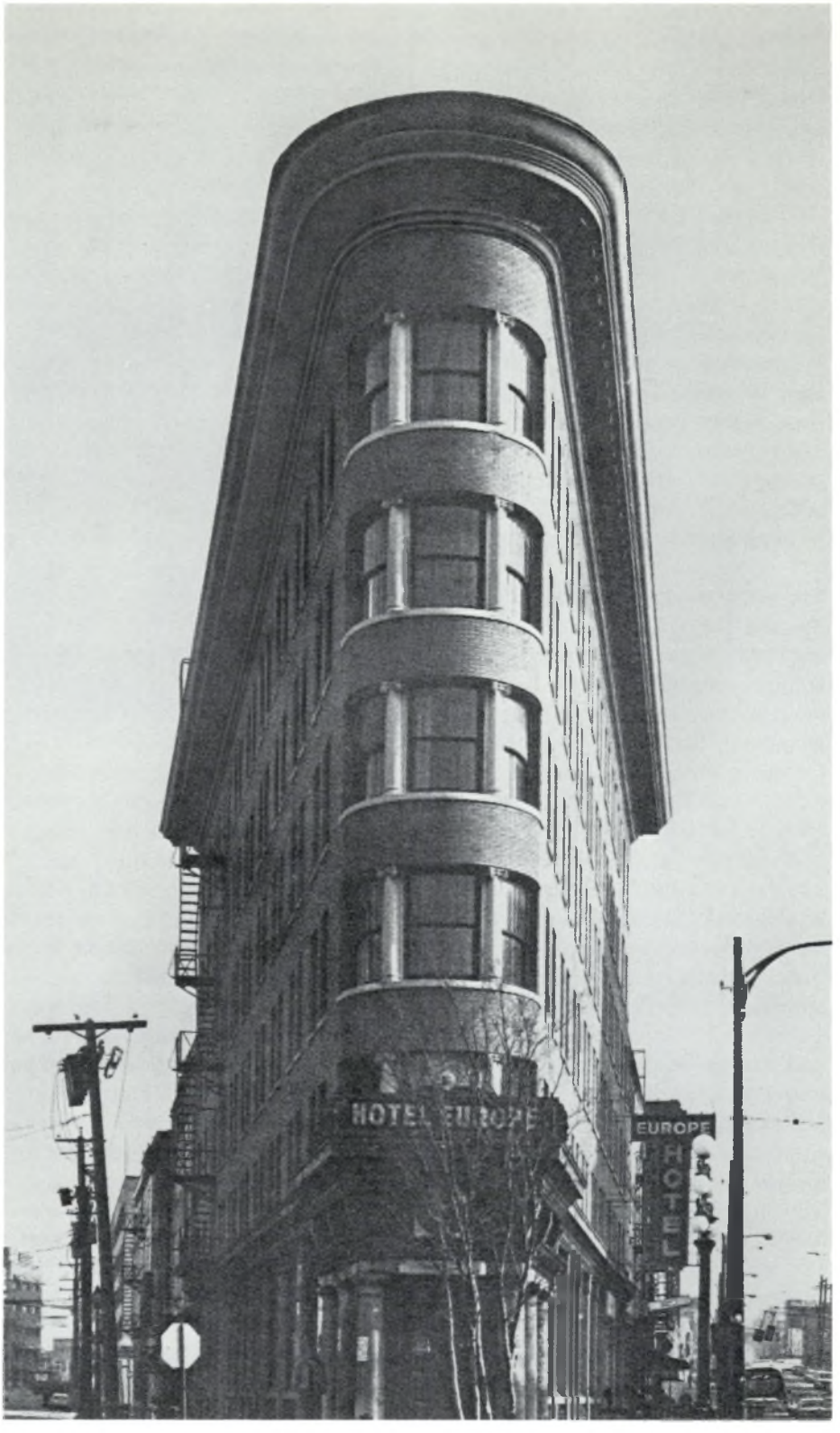
For some years after the fire of 1886 destroyed most of Vancouver, Gastown functioned as the business centre of the city. In 1887, reconstruction in the Gastown area saw brick warehouses and wholesale and retail establishments erected. The early 1900s brought a shift of business westward towards Granville Street and warehouses gradually came to predominate in Gastown. During the 1960s, a transformation began as warehouses gave way to retail shops, and such picturesque locales as Maple Tree Square and Blood Alley were refurbished. The completion of the Sears Tower in 1977 forged a link between Gastown and the downtown area, further increasing Gastown's pedestrian traffic. Tourists and retail shoppers were attracted to its shady, brick-paved streets and its restaurants and shops. In this picturesque area, one of the most eye-catching buildings was the Europe Hotel built by Angelo Calori to the converging lines of Alexander and Powell Streets.

A history of the Europe

Angelo Calori was born in Genoa in 1892. He worked as a miner and railway section foreman before building the Europe Hotel. The exquisite craftsmanship Calori lavished on the hotel is still evident in the hand-set terrazzo tiles, leaded glass and solid brass banisters. In Calori's dreams, Gastown appeared certain to become the heart of Vancouver, and thus he believed the brick flat-iron building would host the cream of travellers in the early twentieth century. But even before the Europe had opened for business in 1909, Vancouver's business centre had taken root closer to Granville Street. Rather than the travelling elite, the Europe's patrons were working-class travellers seeking affordable lodgings.

The Calori family owned the Europe until 1949 and maintained a clean, middle-class hotel with a reputation for a 'good table'. Nick Sorich, next owner of the Europe, continued to run it in the same fashion for nearly twenty years. By 1967, when the rebuilding of Gastown began, the Europe remained an 'eye-catcher', and Sorich restored it to some extent, but it was already beginning its fall from grace. The first step in its decline into a skid-row boardinghouse seems, in retrospect, to have been the conversion of the Europe's dining room into a neighbourhood pub.

Sorich tried unsuccessfully to interest developers in investing in the Europe and, in 1979, the building was sold to Suzanne Van Egmond. Van Egmond talked of refurbishing the hotel, with an eye to Vancouver's birthday celebration and its attendant influx of tourists due in 1986, but she was unable to obtain the necessary financial backing. During Van Egmond's ownership, Vancouver's Permits and Licenses Department waged an ongoing battle to have the building's health and fire safety upgraded. Ultimately, in 1982, the Europe's operating license was revoked, the remaining tenants moved out and the doors were locked.



The role of Affordable Housing

However 75 years after its initial opening, the Europe is once again a clean, affordable place to live. In 1982, it was purchased by the Affordable Housing Association of Vancouver to house people of minimal income. Affordable Housing is a non-profit society, which, in association with various non-profit sponsor organizations, has developed housing projects for senior citizens, intermediate care facilities and family housing units. As its name suggests, this advisory association is committed to the development of affordable housing for those of low to moderate income. The location of the Europe in an area with a strong need and a short supply of such housing made it a suitable project for rehabilitation under

the expertise of Affordable Housing.

"We thought of the Europe in terms of rehabilitating what we knew to be an excellent heritage building, to make it available to people in need of low-cost accommodation, some of whom are themselves, in a sense, in need of rehabilitation," said John Gordon, coordinator of Affordable Housing, in a recent interview. Gordon added that the success of the Europe Hotel project has helped to inspire another such project in the area, "to continue to rehabilitate buildings for people who want to stay in their neighbourhoods". This current project is the Ford Hotel, which will provide 85 units of low-cost housing at Main and Hastings Streets.

Central City Mission as managers

The Europe is managed by the Central City Mission, which has operated at its present address on Abbott Street in downtown Vancouver since 1910, giving it invaluable experience with the downtown eastside residents for whom the Europe was intended. The Mission was started by a group of concerned people who recognized the need for a facility in old downtown Vancouver to accommodate the needy and to provide a meeting place for community activities. Over the years, the Mission has served tens of thousands of people from all walks of life and with a wide variety of needs. During both world wars, the Mission was used to house military personnel awaiting departure from the Port of Vancouver. In the Depression of the 1930s, the Mission offered soup lines, bed and breakfast, clothing and job placement for those in need.

Board members of the Mission were among the first to identify a need in the province for support services for children: as long as 32 years ago they initiated one of the earliest group home concepts in British Columbia, offering shelter to orphans and children in difficulty. In 1976, the provincial government became involved in supplying funding and expertise for therapeutic group homes for children. In cooperation with the province, Central City Mission now operates residential group homes throughout Vancouver and the suburbs of Richmond, White Rock and Maple Ridge, a 117-bed long-term health care service at its Abbott Street location, and a residential alcohol recovery program.

The Mission also employs a nurse who works in the Gastown community, providing assistance with health needs and daily living to men and women who live in hotels and rooming houses. The opportunity to participate in the management of the Europe gave the Mission yet another way of meeting the needs of residents in this downtown area.

CMHC funding

Canada Mortgage and Housing Corporation insured the $3.1 million mortgage for the Europe from Credit Foncier Trust and also contributed a $287 750 grant for the Europe's renovation under the CMHC Residential Rehabilitation Assistance Program. In addition, under Section 56.1 of the National Housing Act, CMHC provides annual assistance of up to $312 677 in order to reduce the effective interest rate on the mortgage loan, thus helping to keep occupancy costs low for residents of the Europe.

Improvements inside and out

The Europe has a six-storey main area and a four-storey annex. The ground floor of both main building and annex will be leased as self-supporting commercial space. Each floor of the annex has windows topped with semi-circular arches, and is encircled with an ornamental 'dog-tooth' frieze. A roof-top patio garden has been developed over the annex portion, so the residents can have a private place to 'take the air'. There are 83 units, of which 33 are self-contained bachelor and one-bedroom units, and 50 are

housekeeping units. The housekeeping units share washroom facilities and a communal lounge area, but all units are equipped with a small refrigerator, sink and two-burner stove. The one-bedroom units, located at the 'point' of the wedge-shaped building, are flooded with light through the newly repaired leaded glass windows and indeed all units are bright with natural light. Furnishings consisting of a dinette set, hide-a-bed couch and reading lamp are practical, attractive and comfortable.

External improvements included cornice and fascia restoration, repair of wrought-iron railings, reroofing, and the restoration, cleaning, and sealing of the brick and granite exterior of the building. Renovations such as additional fire exit stairways and upgraded plumbing and wiring have once again made the Europe a safe, clean place to live.

Best of all, the character of the building has been retained during its renovation. Angelo Calori's shining tiles and gleaming brass have been restored to their original beauty with sensitivity and skill, bringing an elegant ambience to life again.

Managers and tenants

A manager and an assistant manager employed by Central City Mission are on site at all times. The manager handles the administrative side of the Europe's affairs, such as rental matters, and the assistant manager coordinates maintenance and general repairs.

Although it was officially opened as recently as November 30, 1983, the Europe is already virtually rented. Tenants range in age from 19 to 89: they are low-income and unemployed people, students, seniors, seasonal workers and employees of businesses located in the Gastown area. As Assistant Manager Steve Garrett said recently, "Everyone who has moved in is quite happy with their accommodation—to them, it's a palace!"

So perhaps Angelo Calori's dream of a successful future for his Europe Hotel has come true, after all.■

Helen Carkner was an information officer at the Vancouver Office of CMHC.

Reviews

An Economic Analysis of the Impact of Oil Prices on Urban Structure
by James R. Melvin and David T. Scheffman for the Ontario Economic Council, University of Toronto Press, Toronto. 1983
pp. 145, $10.50

The impact of escalating oil prices during the past decade on the Canadian and world economy has been dramatic. Urban policy makers, however, have lacked the knowledge of how increased oil prices will affect urban form. This study, by the Ontario Economic Council, addresses both the short but principally the long term structural effects on Canadian urban centres.

It is indeed a challenging undertaking. Externalities which form the economic basis for urban agglomeration are among the most poorly understood forces in economics. Urban environments are themselves varied and complex. In addressing this area the authors, James Melvin and David Scheffman, lead the reader through an excellent exercise in applied economics.

This book is written for both the layman and the practitioner to understand. The highly technical and mathematical material is placed in appendices. In discussing theory the authors have wisely explained the conceptual issues before delving into the modelling details. They also survey the relevant literature and provide a comprehensive bibliography.

Evaluating the impact of oil prices on urban structure creates a number of challenges. The central problem is to meld economic theory, empirical studies and the complexities of the actual urban fabric into a coherent whole.

The economic models available have been developed to explain urban structure more generally, rather than to answer the specific question of the effects of oil prices. The models then must be adapted to incorporate oil price effects, or their implications interpreted in a more general way. Models themselves deal in aggregates as if every actor acts in the same way, while in fact cities exhibit great diversity in the behaviour of their inhabitants. The specific history and geography of a city play a significant role as well.

While most models of urban structure assume that the only way to reduce travel costs is to reduce distance, i.e. to change location, the authors point out that consumers and firms can substitute for high gasoline prices in a number of ways:

- switch to a more energy-efficient automobile
- switch to a different travel mode
- substitution of different factors (labour, gasoline and equipment) within a given transportation mode (e.g. trucking).

The empirical literature indicates that consumers adjust primarily by switching to smaller more energy-efficient cars rather than reducing the number of miles driven. Because of the much higher time cost of travel, switching to public transport is less attractive to the consumer.

The long-term structural changes are likely to be less than dramatic because consumers and firms adjust to higher oil prices primarily by making substitutions rather than by changing location.

The authors did identify a number of possible structural changes. The rent gradient would increase as central locations became more highly valued. Densities would also increase towards the centre. On the other hand some firms which use truck transport could move to the suburbs. The movement of employment towards the periphery will tend to offset the pressures for centralization. The variety of responses is clearly complex.

Structural changes will be slow due to the inertia of the existing urban mass. Higher oil costs will influence the pattern of new development through infilling, renovations and suburban development. Higher oil heating costs are not sufficient to justify tearing down most existing structures, and other measures such as insulation can be taken to reduce these costs.

Because of the variety of possible effects and the diversity of urban areas, the authors do not find it possible to make blanket recommendations. The study is important however for focussing attention on the key questions and relationships needed to address a specific case.

The authors do mention some policies which could impede the process of structural adjustment. Rent control, certain zoning restrictions, and oil price subsidies are some examples.

This unpretentious study avoids the temptation to make dramatic sweeping statements in an area of recent controversy. It makes its mark through a thoughtful integration of theory and empirical analysis with the complexities of the real urban environment. Rather than provide a definitive answer as to the impact of oil prices on urban structure, the authors assist the reader in gaining a better understanding of the question.

Fred Brown

Fred Brown is an Ottawa-based economic consultant

Attacking Housing Costs: Foreign Policies and Strategies
by E. Jay Howenstine
Center for Urban Policy and Research
New Brunswick, New Jersey,
1983, pp. 133

The goal of this book is to provide an overview of the policies and strategies by non-U.S. governments to combat housing cost problems. To do this, the author first examines world trends in housing costs and rents, and then examines the particular policies used in several countries to deal with housing costs. In the final section, the author focuses on the private rental housing sector.

This book is useful for several reasons. First, data on housing and land costs from around the world are presented which clearly would require a time-consuming exercise to collect. Further, it references several sources of material on foreign housing policies and data thereby facilitating future work in the area. Finally, it provides a broad overview of the types of policies and strategies that are used in several countries around the world to deal with high and increasing housing costs.

Unfortunately, there are several weaknesses that limit the usefulness of the book. One major problem is that the book lacks a central theme or framework to help the reader digest all the information presented. Nor is a broad context for housing policy provided (except in a very brief discussion in the section on private rental housing). The absence of any discussion of these topics makes it difficult to draw any policy recommendations from the discussion.

Another serious shortcoming stems from the author's ambitious attempt to discuss a wide variety of policies from a large number of countries. Given this approach, it is virtually impossible (without writing an opus) to do any more than briefly and superficially review the basic nature of the various programs. Not enough information is generally provided about the nature of the housing and land markets in each country, and very little is even presented in terms of the effectiveness of the policies. For example, programs such as RRAP and MURB barely receive more than one sentence each, despite their importance to Canadian housing markets.

Also troublesome for the Canadian reader is that, by and large, Canadian policies and housing markets do not receive much attention (the Greenspan Report being a possible exception). In fact there are virtually no comparisons to U.S. housing policy. This is despite the fact that the U.S. and Canada are obviously important to each other and that people are, on average, very well-housed in both countries. More attention would be particularly interesting given the greater "federalization" of housing policy in the United States compared to the more decentralized approach in Canada.

In summary, while the book is useful in that it provides a brief overview of policies, it does not do so in a way that is as thorough, probing and relevant as it could be.

Jonathan Mark

Jonathan Mark is assistant professor of Urban Land Economics, Faculty of Commerce and Business Administration, University of British Columbia.

Vandalism: the not-so-senseless crime
rev. ed.,
by Arnold Madison
Houghton Mifflin/Clarion, New York
1981, 148 pp.

Vandalism continues to be a pervasive problem with high financial and socio-psychological costs. In 1979, the Commission on Crime and Delinquency concluded that vandalism in the U.S. costs $1 billion annually. In an earlier report, the U.S. Senate Judiciary Subcommittee estimated the costs from damage to schools, parks, recreation areas, public housing, and transit systems to be between $1 and $5 billion. In addition to enormous economic losses, vandalism also results in less tangible socio-psychological costs and suffering.

Much of the early literature described vandalism as meaningless and wanton–willful damage and destruction. However, it is now increasingly recognized that vandalism is a "not-so-senseless crime". Madison's book reflects this growing awareness. Its central theme is that in order to eliminate or reduce vandalism we have to focus on the underlying causes and understand the motivations for such behaviour.

The author defines vandalism as "any willful act that lowers the esthetic or economic value of an object or area" (p.9). Using this broad definition, Madison contends that vandalism is not something new in history, but that its forms have changed. Today, the phenomenon includes the trampling of flowerbeds by teenagers as well as industrial pollution, although the book is almost exclusively concerned with the former category.

After separate chapters on erosive vandalism (tiny acts of destruction that in themselves are not very damaging or costly, but cumulatively wear away our resources), fun vandalism (done "for kicks") and angry vandalism (motivated by revenge), the book continues with short chapters on community reactions, vigilance, peer interactions and the judicial aspects of the problem. The final chapter considers various possible answers to vandalism centred on ways to increase public awareness. In this discussion, Madison suggests different approaches for different age groups.

While *Vandalism...* is a revised edition, there is little in the book to reflect more recent developments in the field since the time of its original publication in 1970. The author's insights are derived, for the most part, from personal experiences and selected interviews, supplemented by information gleaned from the press. The writing is highly anecdotal and does not incorporate relevant publications printed during the past decade. However, the book does point out useful directions for remedial strategies and its thrust is in keeping with recent literature that views vandalism as often being a latent attempt at communication and requiring attention as such.

Willem vanVliet

Willem vanVliet is assistant professor, College of Human Development, The Pennsylvania State University, University Park, Pa.

Montréal, une esquisse du futur,
Marsan, Jean-Claude:
Institut québécois de recherche
sur la culture, Montréal, 1983,
325 pages, 15$.

Montréal reste, même auprès de ses familiers, une ville à la personnalité attachante certes, mais complexe, plus facile à apprivoiser par le coeur que par la raison. Rome s'identifie par la "Ville éternelle"; Paris ne renie pas son identité de "Ville lumière". Et Montréal?

Il y a plusieurs années, un candidat, adversaire du maire Jean Drapeau, eût recours à une formule inspirée d'une continuité populaire à la télévision: "Montréal des petites patries". La formule n'a pas mené son auteur à la mairie de la ville, mais elle a fait image, se substituant sans peine dans les esprits à la "Ville aux milles clochers".

Dans *Montréal, une esquisse du futur,* qu'il vient de publier avec le concours de l'Institut québécois de recherche sur la culture, Jean-Claude Marsan reprend cette image pour esquisser l'avenir de cette ville en sa qualité de milieu de vie. Le quartier, le milieu d'appartenance, la petite patrie constituent les lieux où pourront s'épanouir les citadins pour peu que la démarche de réappropriation du milieu urbain progresse et s'impose comme voie d'avenir.

"L'analyse de la réalité physico-culturelle montréalaise confirme bien que ces genres de vie s'enracinent et s'expriment dans des milieux concrets correspondant à des municipalités, à des quartiers, à des parties de quartier. Évidemment, le quartier n'est pas le seul élément à servir de support au genre de vie. Celui-ci profite également de la société dont il est une manifestation et de l'ensemble de l'agglomération urbaine dont le quartier fait partie. Mais c'est ce dernier ou la cellule urbaine ou même un bloc de rues à l'occasion qui constitue le havre d'ancrage où le genre de vie, à l'exemple des Portugais, peut se former, se développer et évoluer."

Dans l'esprit de Jean-Claude Marsan, le quartier, dans la mesure où il peut réunir les fonctions urbaines essentielles (habiter, travailler, se récréer, etc.) redevient la cellule de base par laquelle la ville prend un sens, constitue une appartenance.

Cette conception du développement de la ville s'oppose à celle qui a prévalu depuis la seconde guerre mondiale, fondée sur la ségrégation des fonctions et encouragée par la facilité des déplacements individuels grâce à l'automobile. En réaction à cette conception et à l'architecture moderne, fonctionnelle jusqu'à l'anonymat, des citoyens, des mouvements et des comités locaux ont parlé de conservation, de réhabilitation, de rénovation du bâti existant. Peu à peu s'est constituée ce que Marsan appelle "l'idéologie de la réappropriation", par opposition à l'idéologie de la croissance et du rattrapage, caractéristique des années 60.

"Nous l'appelons idéologie de la réappropriation parce que, dans le cas de Montréal, elle dépasse la quête d'une simple qualité de la vie pour se traduire par une appropriation nouvelle d'un milieu et de valeurs auparavant rejetés ou désertés. La redécouverte de la vie de quartier, la ferveur nouvelle pour ce milieu traditionnel, manifestée notamment par la même classe sociale qui a mis auparavant les technocrates au pouvoir, la prise de conscience des valeurs écologiques comme l'intérêt pour le patrimoine, tous ces phénomènes constituent les signes tangibles d'un profond changement de mentalité."

Tout comme son *Montréal en évolution* (Fides 1974), qui, presque dix ans après sa publication, demeure un indispensable ouvrage de référence et de connaissance de la ville, *Montréal, une esquisse du futur* s'inscrit dans la liste, hélas trop courte, des ouvrages essentiels à la compréhension de Montréal.

Jean-Claude Marsan a non seulement une connaissance approfondie de l'histoire et de l'évolution de Montréal, mais il en a aussi une connaissance sensible, attentive à des signes et à des manifestations qui, pour modestes qu'ils ont pu paraître, n'en témoignent pas moins de la volonté d'un nombre croissant de Montréalais de ne pas renoncer à vivre cette ville, de ne pas la laisser se perdre dans un quelconque rêve d'avenir auquel ils ne seraient pas partie.

"Le projet d'aménager Montréal ne sera jamais terminé ni définitif" conclut Marsan. "La présente génération, celle qui a commencé depuis la fin des années 60 à se réapproprier l'urbain en privilégiant les valeurs de l'être sur celles de l'avoir, a encore beaucoup à accomplir pour laisser sa marque." Un peu moins, depuis qu'elle a son esquisse du futur.

Alain Duhamel

Alain Duhamel est journaliste au quotidien *Le Devoir*.

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Canada Mortgage and Housing Corporation

Honourable Roméo LeBlanc
Minister

Société canadienne d'hypothèques et de logement

L'honorable Roméo LeBlanc
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Vol. 27, N° 2, 1984

CANADA MORTGAGE
AND HOUSING CORPORATION
SOCIÉTÉ CANADIENNE
D'HYPOTHÈQUES
ET DE LOGEMENT

Canada Mortgage and Housing Corporation, Canada's housing agency, is responsible for administering the National Housing Act.

This legislation is designed to aid in the improvement of housing and living conditions in Canada. As a result, the Corporation has interests in all aspects of housing and urban growth and development.

Under Part V of this Act, the Government of Canada provides funds to CMHC to conduct research into the social, economic and technical aspects of housing and related fields, and to undertake the publishing and distribution of the results of this research. CMHC therefore has a statutory responsibility to make information widely available which may be useful in the improvement of housing and living conditions.

This publication is one of the many items of information published by CMHC with the assistance of federal funds.

Honourable Roméo LeBlanc
Minister

La Société canadienne d'hypothèques et de logement, l'organisme du logement du gouvernement du Canada, a pour mandat d'appliquer la Loi nationale sur l'habitation.

Cette loi a pour objet d'aider à améliorer les conditions d'habitation et de vie au Canada. C'est pourquoi la Société s'intéresse à tout ce qui concerne l'habitation, l'expansion et le développement urbains.

Aux termes de la Partie V de la Loi, le gouvernement du Canada autorise la SCHL à affecter des capitaux à des recherches sur les aspects sociologiques, économiques et techniques du logement et des domaines connexes, et à publier et diffuser les résultats de ces recherches. La SCHL a donc une obligation légale de veiller à ce que tout renseignement de nature à améliorer les conditions d'habitation et de vie soit connu du plus grand nombre possible de personnes ou de groupes de personnes.

La présente publication est l'un des nombreux moyens d'information que la SCHL a produits avec l'aide de capitaux du gouvernement fédéral.

L'honorable Roméo LeBlanc
ministre

CMHC Canada's Housing Agency

la SCHL l'agence canadienne de l'habitation

Habitat

Vol. 27, N° 2, 1984

Canada Mortgage and Housing Corporation
Société canadienne d'hypothèques et de logement

Canadian Housing Information Centre
Centre canadien de documentation sur l'habitation

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HABITAT is published quarterly free of charge as a public service by Canada Mortgage and Housing Corporation. Author's opinions do not necessarily reflect those of CMHC. Articles may be reprinted with permission. Address correspondence to the Editor, Cecylia Podoski, at CMHC, Montreal Road, Ottawa K1A 0P7.

Manuscripts on issues related to housing and urban affairs are welcome. Query first with a one-page outline. Manuscripts should be about 2 000 words in length, typewritten, double spaced and addressed to the Editor. Material accepted is subject to the magazine's editorial requirements. Where possible, any unused material will be returned.

Note: The Corporation is not responsible in event of loss of or damage to any material submitted.

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Vous pouvez soumettre des articles qui traitent du logement et des affaires urbaines. Mais veuillez nous faire parvenir au préalable un résumé d'une page. Les textes soumis à HABITAT doivent avoir environ 2 000 mots, être dactylographiés à double interligne et être adressés au rédacteur en chef. Les articles acceptés seront assujettis à la politique éditoriale de la revue. Dans la mesure du possible, les textes, photos et illustrations non utilisés seront retournés à leur auteur.

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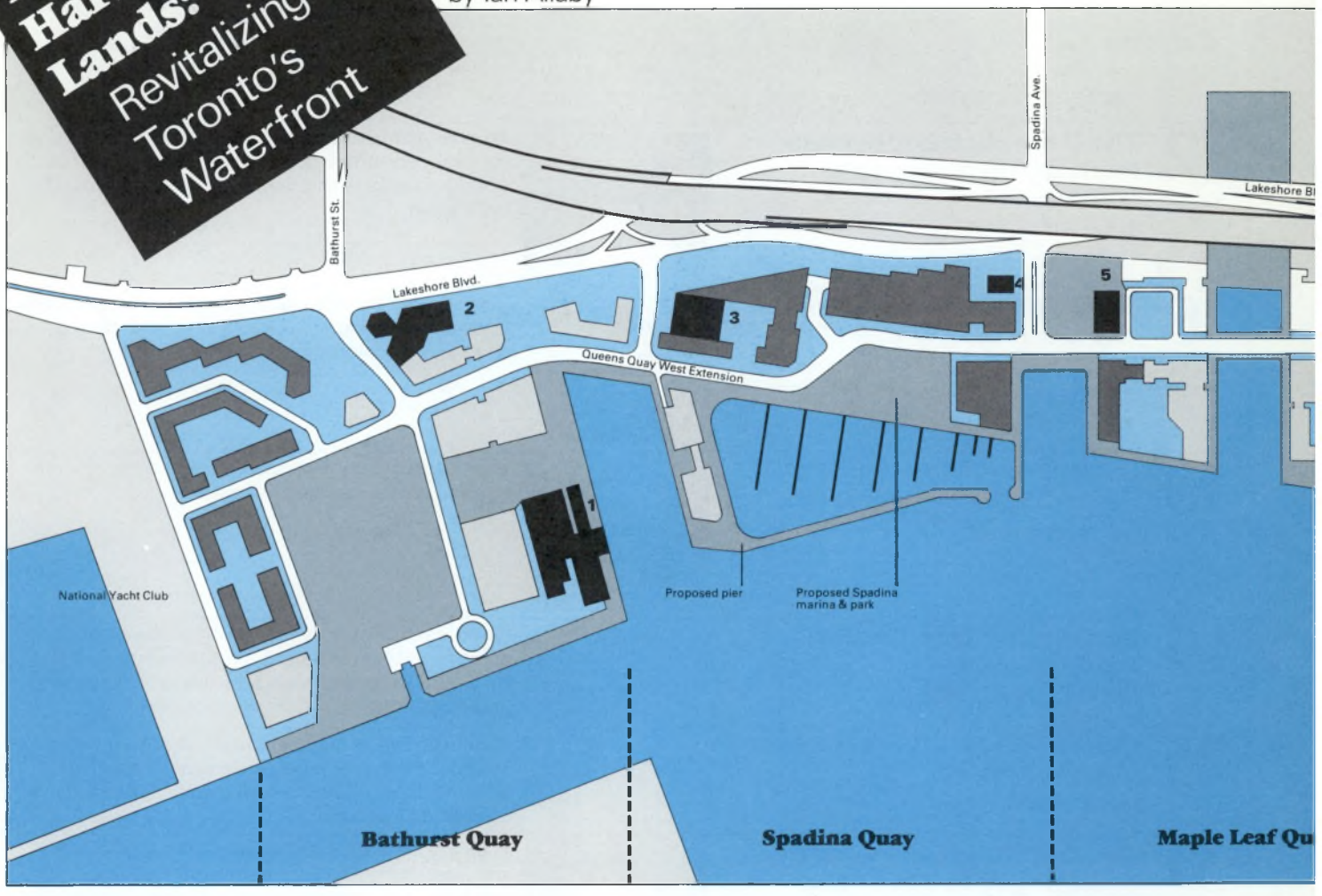
Les sujets traités dans HABITAT sont inscrits dans l'Index des périodiques canadiens. Notre numéro de recommandation du courrier de deuxième classe est le suivant: 1519. ISSN 0017-6370.

The Harbourfront Lands: Revitalizing Toronto's Waterfront

by Ian Allaby



Existing Buildings
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6 Pier 4
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Promenade & Parks
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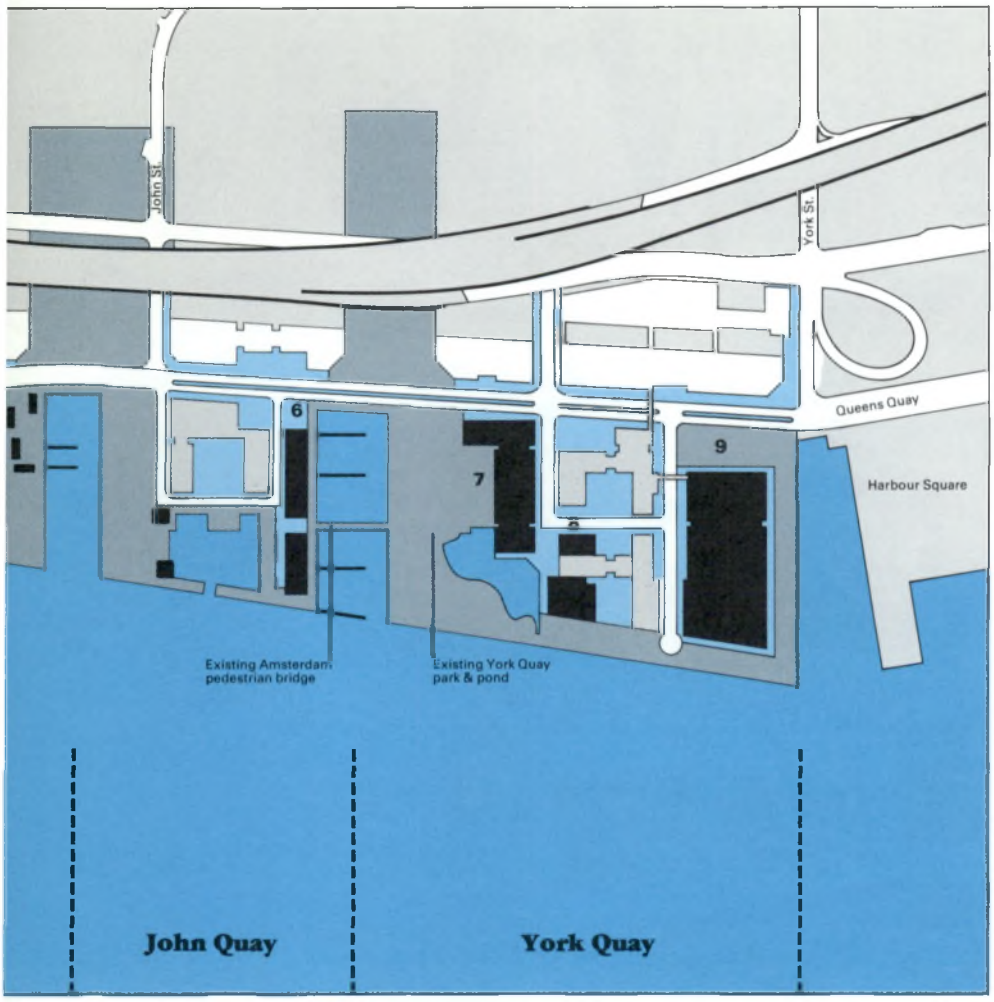
Not so long ago, Toronto was a landlocked city. Landlocked not physically, to be sure, but psychologically. It had been otherwise in the early years, but a dogged policy of land reclamation had altered the city's close relationship with its harbour over the course of a century. By 1960 Front Street, which in 1850 had hugged the shoreline, was almost a kilometre inland, cut off by an immense no man's land of railway tracks, industrial buildings and high-speed traffic arteries. By the mid-60s the situation worsened as commercial shipping moved eastward to newer quays, leaving behind a strip of decaying port facilities. It is understandable that citizens could forget that Toronto had once been a city built on its waterfront.

In October 1972, the federal government announced its intention to assemble land along a 1.6 km stretch of central waterfront, from York Street in the east to Stadium Road in the west, and bounded on the north by Lakeshore Boulevard and the Gardiner Expressway. Comprising 29 ha of terrain and 8 ha of waterlots, the Harbourfront Lands were to be transformed into a public park as a gift to the people of Toronto.

However, the precise character of this park-to-be was not at first spelled out. Who could have foreseen that what would evolve would be a unique urban renewal venture relying on both public and private sector initiative? Briefly put, by 1987 Harbourfront will be a hive of cultural, recreational, residential and commercial activity. The change is already underway, and the formula is proving popular.

In 1972, many Torontonians doubtless had envisioned a park in the traditional style, a grassy refuge with picnic tables. But as community



groups and local levels of government became involved, it grew clear that matters were not so simple. Would a bucolic expanse of parkland actually *revitalize* the waterfront? Might it not rather remain deserted in the harsh winter months? The site had assets too valuable to be squandered – the interesting pattern of quays and waterslips, the southern exposure, the view of Toronto Bay abustle with pleasure craft and ferryboats. All this so close to downtown and under one ownership demanded an avant-garde redevelopment concept.

It was established nevertheless that the park would have a strong cultural orientation. Federally sponsored events such as art exhibits and poetry readings had helped to lodge Harbourfront in the civic consciousness. It would also be natural to provide facilities for the growing number of pleasure boaters in and around Toronto. But beyond this, the notion of converting the site into an "urbanized park" was already taking form. Says Frank Mills, currently Director of Development at Harbourfront, "We needed something that declared: 'Toronto is a waterfront city'".

Harbourfront Corporation

To ensure that decision-making would conform to local needs, the Harbourfront Corporation, 100 per cent owned by the Crown, was set up in 1976 with a locally based board of directors appointed by the Minister of Public Works. Headquartered in a renovated office building on the site, the Corporation manages the lands and is responsible for planning and development. In 1978, Howard Cohen, a former Toronto city planner and a proponent of the urbanized park concept, was appointed general manager. That same year, consultants Michael Kirkland and Anthony Coombes produced the Development Framework document which has guided the subsequent progress of Harbourfront. The document redefined Harbourfront as a mixed-use development where government investment in infrastructure would attract extensive private investment. Side by side with attractive public open space, hotels, offices, shops and homes would spring up, guaranteeing that the waterfront would be frequented by a wide variety of people for a wide variety of purposes.

Frank Mills notes that two influential models for the concept were Copenhagen, with its small shops and residences along a waterfront promenade, and Barcelona with its shore distinguished by institutional buildings and classic public plazas. "But Harbourfront will be special in that it will combine features that other cities have pursued single-mindedly. Their waterfronts don't have the variety and complexity that ours will have."

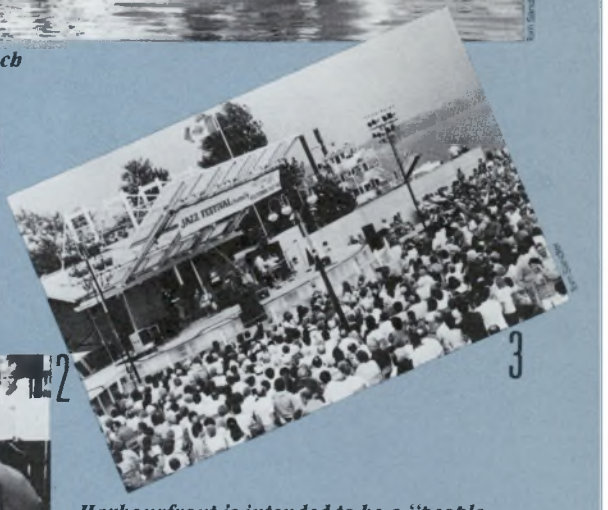
City and Metro governments rapidly endorsed the Framework, and in June 1980 Ottawa approved a seven-year plan for Harbourfront entailing expenses of $27.5 million, of which $20 million was designated for infrastructure such as roads and sewers. In December of 1981, the Ontario Municipal Board gave final approval to the plan.

It is anticipated that revenues generated by 60-year leases to private developers will enable the Corporation to attain financial self-sufficiency by 1987, the end of the plan term. The original capital investment, including $59 million in expropriation costs, will not likely be recovered, but the growing rental income will mean that Harbourfront will be able to maintain its range of cultural and recreational activities without drawing on the federal treasury. Though the plan was formulated in a more buoyant economic era, Harbourfront appears to be on target. Says Mills, "The recession has cost us

one-and-a-half years of development, but other things have gone well, such as revenues from concessions and parking. Corporate donations to help fund special events have also grown. They reached a total of $750 000 in 1983."

Presumably it's a good omen when businesses are anxious to have their names associated with Harbourfront.

Harbourfront's five sailing schools teach skills that can be adapted to any craft.



Harbourfront is intended to be a "people place" offering a wide range of cultural and recreational amenities...

1 shopping at antique markets
2 sailing model boats
3 listening to dixieland at a jazz concert
4 strolling along the water's edge promenade
5 eating in restaurants

Planning Context

Development at Harbourfront does not occur in a vacuum. Toronto's Official Plan for the central area places an emphasis on mixed-use and housing, with limitations on office space. Always a worry is that excessive development will draw increased numbers of commuters that the road and transit systems cannot handle comfortably.

Though the Corporation originally bid for somewhat higher levels of development, negotiations with the city and Metro resulted in approval for about 3200 residential units, both condominium and rental, to serve a spectrum of income groups. This will be accompanied by 250 000 m^2 of non-residential occupancy, which may include up to 115 000 m^2 of office space. Furthermore, the city has imposed a human-scale height restriction of 25 m for most construction along the water's edge with the exception of two buildings which are or will be 50 m high.

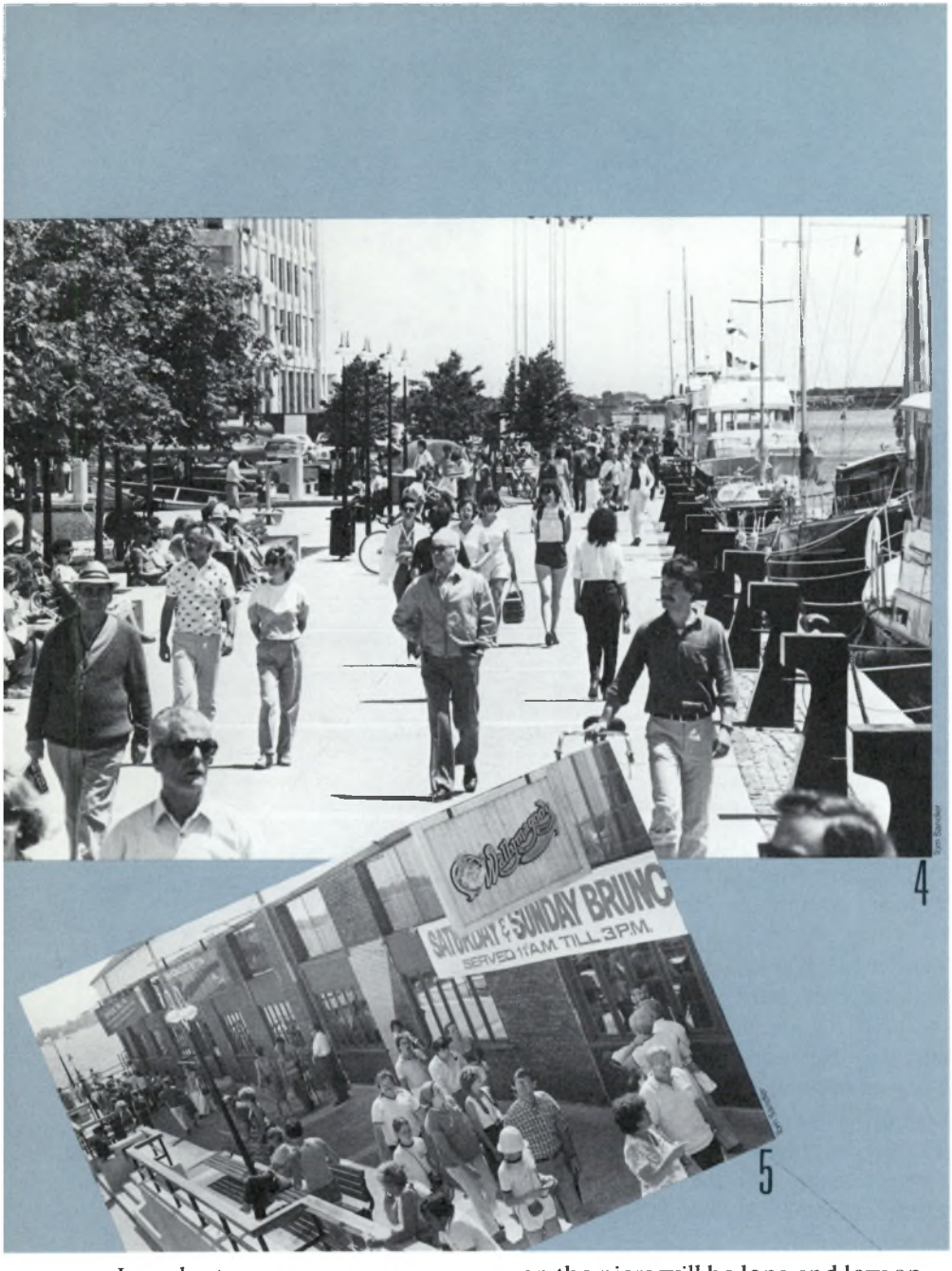
The Harbourfront Lands are surrounded by other important planning areas, chief of which is the 80 ha region to the immediate north known as the Railway Lands, at present scarcely more than a sprawl of marshalling yards around the base of the CN Tower. A plan now advancing through the political process will, if successful, see the area turned into an extension of the downtown financial district, though with a 5000-unit housing component. The Railway Lands may host a million m^2 of office space within 20 years, attracting 40 000 new workers to the central area.

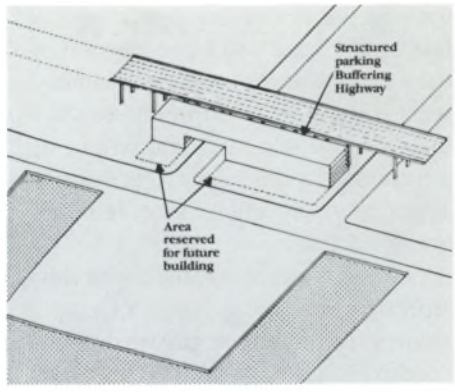
Harbourfront planners worked closely with the city in order to harmonize their plan with the Railway Lands scheme. A major concern was that new road connections be provided across the Railway Lands to the waterfront. However, the elevated Gardiner Expressway and its ramps pose a severe obstacle to north-south passage. Though often cursed and wished buried, the expressway is accepted as a fixed constraint on planning for the foreseeable future.

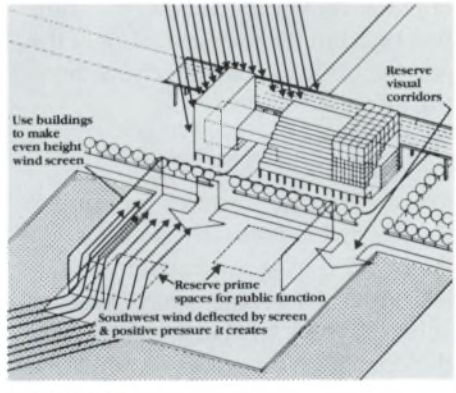
Elements of the Plan

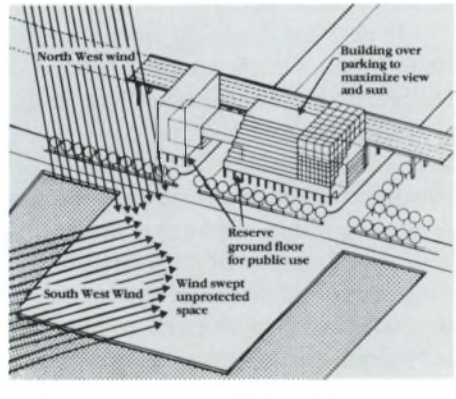
It has been said that the public realm at Harbourfront is the ground level. Except for housing on Bathurst Quay, the ground floor of buildings will be occupied by shops, restaurants and offices. To further ensure freedom of pedestrian movement, virtually all parking will be confined within structures. More than 50 per cent of the Lands (16 ha) will consist of open space, from intimate courtyards to large parkland, dispersed throughout the site and linked by four kilometres of shoreline promenade.

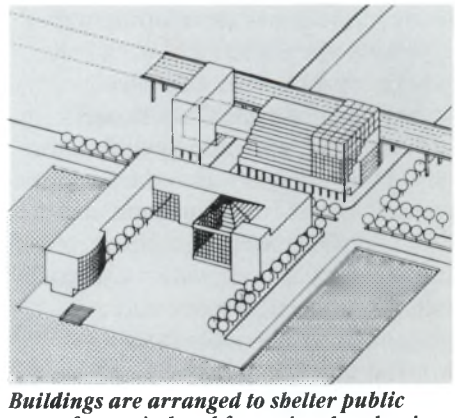
The promenade will vary in width and mood as it wends along the water's edge. Boats will be berthed along the dockwall. In places the land side will be lined with shops and cafés. Harbourfront's custom-designed outdoor furniture will contribute to a sense of continuity. Benches, lamp standards and mooring bollards will be made of cast-iron, a traditional waterfront material. The easternmost sections of the promenade are already in place, and the whole is expected to be completed by 1986.











Buildings are arranged to shelter public areas from wind and from visual and noise pollution.

In order to preserve – or more often, improve – the lines of sight from the city to the lake, Harbourfront will leave open spaces at the head of slips between quays. While a number of massive view-blocking structures – a grain elevator, an old foundry and a cold storage building – have already been demolished, those buildings that are of historic interest, such as the produce building, will be renovated and put to use.

Since winter on the waterfront can be a bitter and biting experience, Harbourfront will not only make plentiful use of indoor public space but will also align buildings to shelter the local environment. The plan calls for two basic types of siting. Buildings on the piers will be long and low on a north-south axis, defending open spaces against the predominant westerly winds. On the north edge of the site, however, structures will extend east-west, masking the visual and noise pollution of the expressway at the same time as they block north-west winds.

Given the intention to animate the waterfront, access to and within the site is crucial. The problem will become pressing as more people come to live and work here. The opening-up of the Railway Lands should eventually permit three new roads from the city core to join up with Harbourfront's rejuvenated Queen's Quay Boulevard. Originally laid out to service the docks, Queen's Quay currently traps parcels of land

too narrow to develop profitably. Hence the road will be re-aligned to the south, where it will act as an east-west spine for development. It will be lined with shade trees and will bridge a waterslip at one point. Occasional sidestreets will suit service vehicles and local traffic.

The city currently favours a new streetcar line along Queen's Quay Boulevard turning northward on Spadina Avenue. Work on this may begin in two years. This scenic route will be a highly visible symbol of the reintegration of the waterfront with the city.

The Quays

For planning purposes the Lands are divided into five sections divided by slips of water. As Harbourfront evolves quay by quay, sub-area plans will be reviewed by the city, allowing an opportunity for more public input.

York Quay has so far been the main point of entry for visitors to Harbourfront. To its immediate east is a high-density hotel and condominium complex that effectively blocks off the waterfront and presents a desolate street-level environment. This gargantuan civic mistake is however partly redeemed in summertime when festive crowds emerge regularly from ferry docks at the base of the complex. York Quay too will host some high density development, but it will also be – it already is – a place where lots of people can have fun.

At present York Quay boasts around 3000 scheduled events annually, from film festivals and ice canoe races to a year-round antique market. York Quay Centre, a converted truck terminal, contains art and crafts exhibits, theatrical space and a restaurant. Nearby is a bandstand for outdoor concerts, as well as a large canoeing pond which in winter becomes an ice rink. Special events such as Canada Day celebrations draw tens of thousands of Torontonians to this area.

Tom Sandler

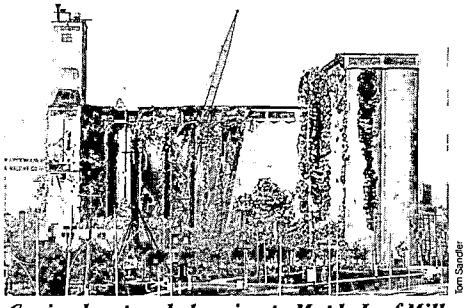
Queen's Quay Terminal, a former warehouse, has been renovated to feature shops, restaurants and condominium housing.

But the main attraction since its opening last summer is undoubtedly Queen's Quay Terminal. Developer Olympia & York sank $60 million into the renovation of this eight-storey structure which, when built in 1926, was one of the largest warehouses in North America. Its clock tower was a landmark on the Toronto waterfront. The renovation by renowned architect Eberhard Zeidler has, if anything, made the building even more important.

With trendy atria and fountains and glass elevators, Queen's Quay Terminal now holds about 9300 m^2 of shops and eateries plus about 37 000 m^2 of offices and a 450-seat dance theatre. Atop the structure Zeidler placed four floors of condominiums for a total of 72 units, representing the first residential accommodation at Harbourfront.

The popularity of the Terminal, especially for weekend shopping, helps Harbourfront prove its point that development actually entices more people to the waterfront. Moreover, the Corporation receives a base rent of $250 000 from the project, added to a percentage of revenues. The need for parking is being met by a new 1200-car garage flush against a nearby expressway ramp. The garage will eventually be screened by a mixed-use building, conceivably a 30-storey hotel complex, fronting on Queen's Quay Boulevard.

A pair of minor buildings on this quay will be renovated for art and theatre uses, freeing up space inside York Quay Centre. Remaining parcels



Tom Sandler

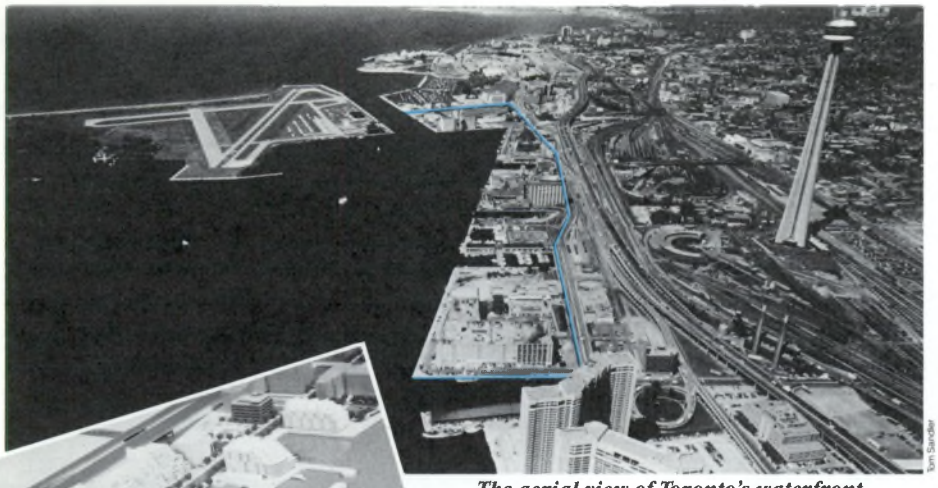
Grain elevators belonging to Maple Leaf Mills were demolished in 1983 to make way for residential development.

will be occupied by a mix of commercial and residential uses.

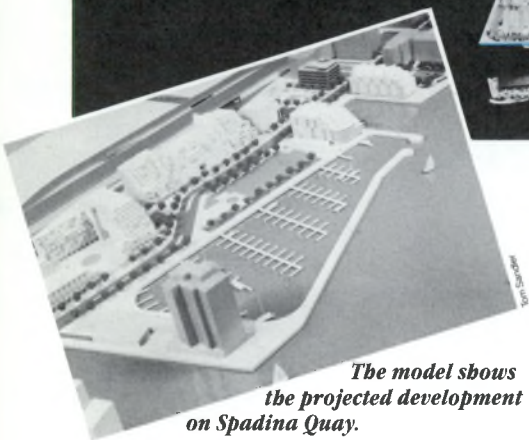
As one moves westward, Harbourfront takes on an increasingly residential character and densities become lower. John Quay is noted so far for a popular dining spot along with several nautical stores in a renovated post office dockshed beside a 100-berth marina. Harbourfront has called for proposals for a low-price condominium project to the north, while another parcel of land close to the water is thought suitable for a small, but probably pricey, hotel.

In the centre of the Lands are the twin Maple Leaf Quays, named for the company whose formidable grain elevators here were demolished last year at a cost of $1 million. These quays are designated mainly for residential development. At the edge of Spadina Slip, work is starting on a luxury condominium of about 74 units, with 800 m^2 of ground floor commercial space.

Spadina Quay, with its large water frontage, is perhaps the most picturesque section. It'll certainly be the



The aerial view of Toronto's waterfront shows the location of Harbourfront, the Island Airport, the Gardiner Expressway, the railway lands and the CN Tower.



The model shows the projected development on Spadina Quay.

most posh. Work is beginning on King's Landing Residence I, a luxury condo designed by Arthur Erickson as part of a $100 million mixed-use development. When completed, King's Landing will comprise three residential and one office building arranged in U-shape around a waterfront park. There will be 9300 m^2 of retail space and an additional 4650 m^2 will be devoted to cultural uses, including a textile museum. An historic produce warehouse will be incorporated in the complex and ground floors will be lined with pedestrian arcades – the sheltered walkways called for in Harbourfront's design guidelines. To complete the setting, a marina will be built at the foot of the quay and a new pier will be topped with a residential highrise.

Bathurst Quay, the west end of the Lands, borders on an expanse of recreational grounds that includes Ontario Place and the Canadian National Exhibition Park. Development on this quay will go a long way to meeting Harbourfront's commitment to family and assisted housing. The city has approved a sub-area plan for 500 units on 2.6 ha in the northwest portion of the quay, adjacent to a new two-hectare park. Three of the five parcels involved will be occupied by co-ops, including one designed specifically for the physically disabled. The largest chunk (250 units) has been allotted to Cityhome, Toronto's non-profit housing agency, whose medium-rise slab towers on the northern flank will buffer the stacked townhousing to the south against noise from Lakeshore Boulevard.

Harbourfront's studies found that the nearby Island Airport, though among the busiest small-craft fields in Canada, contributes negligibly to noise levels. However, the airport may be used for STOL (Short Take-off and Landing) commercial flights in the future, which will draw increased vehicular traffic. On the other hand, a ferry plying between the quay and the airport adds interest to the area, as do a handful of local, non-polluting, light industrial uses.

The 500 housing units represent about half the projected residential total for this quay. Although public transit connections will be improved, initially the development will be remote from schools and shopping facilities.

Criticism

Harbourfront's critics have argued that the mixture of private with public space must inevitably work to the detriment of the latter. In this view, the waterfront threatens to become just another real estate development – but subsidized by $100 million in public funding to date – with the choicest sites reserved for the wealthiest buyers. While in principle Harbourfront will be accessible to all, in practice the luxury condos may intimidate outsiders and the retail areas might cater exclusively to an upscale clientele.

But the Corporation supposes that the pains taken to lure a cross-section of the community and to promote liberty of movement will pay off. Moreover, low- and moderate-income housing will be distributed across the Lands. Project Manager Malcolm Leibel cites as an example the proposed low-price condominiums on John Quay, in the heart of Harbourfront. He takes further comfort from research that indicates a strong demand for this type of accommodation. "Harbourfront," says Leibel, "is pursuing a combination of lofty philosophic goals which fortunately the market reinforces."

Harbourfront is not to be judged as parkland but rather as broad-scale urban renewal, where private space is carefully ordered to enhance and define the surrounding public space. The intention is to turn an abandoned waterfront into a year-round hub of activity. The prognosis is good. One is tempted to say that two million visitors per year can't be wrong. Says Frank Mills: "Harbourfront is a microcosm of the best things that are happening in Toronto, with a mix of cultural and recreational activities as well as urban development".

Is it better than what was there before? Does the plan offer a coherent vision? These questions have to be answered in Harbourfront's favour. Beyond that, it is legitimate to challenge the idealism embodied in any vision. But, as is natural for such plans, a future generation will make the final judgement. ■

Ian Allaby is a freelance writer living in Toronto.

Une écologie de la vieillesse

par Jean Stafford

SCHL

Le vieillissement de la population québécoise dans les vingt prochaines années aura des conséquences importantes sur la façon de percevoir l'environnement urbain. L'habitat des personnes âgées, c'est-à-dire l'ensemble de leurs conditions d'habitation, devra être perçu d'une façon spécifique. Cette perception particulière (cette écologie de la vieillesse) intégrera les principales dimensions du vieillissement.

La première conséquence du vieillissement de la population est l'accroissement de l'importance relative des besoins en logement pour les personnes âgées. Les besoins en logement dépendent en majeure partie de la formation des ménages et en partie également de l'ajustement du stock de logement. Ce dernier comprend les démolitions et les conversions. Le tableau I nous permet de voir l'évolution du nombre de ménages. En 1981, il y avait 2 122 000 ménages dont 77,5% étaient des ménages familiaux contre 22,5% pour les ménages non-familiaux. On prévoit qu'en 2001, le nombre total de ménages québécois atteindra 2 690 800 dont 76,1% seront des ménages familiaux contre 23,9% pour l'autre type de ménage. L'évolution de l'importance relative des ménages âgés de plus de 65 ans est indiquée dans la troisième partie du tableau. On y constate qu'en 1981, ces ménages représentaient 15,1% du nombre total de ménages. Mais en 2001, ils compteront pour 18,5%. Quand on examine l'évolution de l'importance des ménages âgés par type de ménage, on voit que ce sera surtout des ménages non-familiaux âgés qui prendront de

l'ampleur. En effet, en 1981, ils représentaient 27,6% du nombre total de ménages non-familiaux. Mais en 2001, ils seront plus du tiers (34,5%). Autrement dit, plus du tiers de logements destinés aux ménages non-familiaux seront occupés par les personnes âgées.

L'impact du vieillissement de la population sur l'habitation est encore plus dramatique quand on examine

D'après la troisième partie du même tableau, 32% des besoins en nouveaux logements seront pour les personnes âgées. Cependant, en ce qui concerne les besoins en logements pour les ménages non-familiaux, 55% seront pour les personnes âgées.

Bref, d'ici l'an 2001, environ un cinquième du stock de logements sera occupé par les personnes âgées.

Évolution du nombre de ménages (en milliers)

	Âge du chef de ménage			
	1981		**2001**	
Ménages	Tous	65 ans et plus	Tous	65 ans et plus
1. Nombre de ménages				
Familiaux	1 645,0	188,9	2 047,2	276,7
Non-familiaux	474,4	131,1	643,6	222,2
Total	2 122,4	320,0	2 690,8	498,9
2. Proportion (%)				
Familiaux	77,5	59,0	76,1	55,4
Non-familiaux	22,5	41,0	23,9	44,6
Total	100,0	100,0	100,0	100,0
3. Proportion (%)				
Familiaux	100,0	11,4	100,0	13,5
Non-familiaux	100,0	27,6	100,0	34,5
Total	100,0	15,1	100,0	18,5

Source: Mathews, G.,
La situation résidentielle des ménages au Québec de 1970 à l'an 2000,
I.N.R.S. - Ubanisation, Montréal, 1982.

les besoins en nouveaux logements qui correspondent grosso modo à la formation des nouveaux ménages. D'après le tableau II, entre 1981 et 2001, il y aura 568 400 nouveaux ménages, soit 28 000 par an. De ce nombre, 70,8% seront de nouveaux ménages familiaux et 29,2% des ménages non-familiaux. Pour les nouveaux ménages âgés, la moitié sera des ménages familiaux et l'autre moitié sera des ménages non-familiaux.

Accroissement du nombre de ménages, 1981-2001

Ménages	Tous les ménages	Ménages dont le chef est âgé de plus de 65 ans
1. Nombre (en milliers)		
Familiaux	402,2	87,8
Non-familiaux	166,2	91,1
Total	568,4	178,9
2. Proportion (%)		
Familiaux	70,8	49,1
Non-familiaux	29,2	51,9
Total	100,0	100,0
3. Proportion (%)		
Familiaux	100,0	21,8
Non-familiaux	100,0	54,8
Total	100,0	31,5

Source: Mathews, G., op.cit.

Environ 35% des logements pour les ménages non-familiaux devront être occupés par les personnes âgées. Quand on examine l'évolution de la construction de nouveaux logements, le tiers de la nouvelle construction sera probablement destiné aux personnes âgées. Environ 55% des nouveaux logements pour les ménages non-familiaux seront probablement destinés aux personnes âgées.

Les ruptures...

Le vieillissement et son corollaire "la mise à la retraite" entraînent pour les personnes âgées des ruptures importantes avec la vie antérieure. L'ensemble du cycle de vie est fait lui-même de cassure et de discontinuité; les ruptures propres à la vieillesse sont relativement plus nombreuses et plus importantes; elles sont aussi multiplicatives!

La première coupure est économique: on sait qu'une bonne partie des personnes âgées au Québec vivent dans une situation financière très précaire. Ainsi, le comité d'étude Cofirentes constatait, en 1976, que 63% des personnes âgées de 65 ans et plus recevaient des prestations à titre de supplément de revenu garanti et 20% d'entre elles en touchaient le maximum(1).

En 1980, le Bureau fédéral de la sécurité de la vieillesse évaluait à 375 000 le nombre de personnes âgées de 65 ans et plus touchant le supplément de revenu garanti, ce qui signifie donc que les proportions indiquées plus haut n'ont guère changées. En bref, selon les données de Cofirentes:

- 79% des personnes âgées vivant seules (76% sont des femmes) disposeraient d'un revenu inférieur au seuil de pauvreté;
- 30% des familles de personnes âgées, c'est-à-dire dont le responsable est âgé de 65 ans et plus, se retrouveraient dans la même situation.

Dans l'avenir, la probabilité d'accroître les prestations du secteur public sera faible à cause de l'intensification des contraintes budgétaires des gouvernements. Pour une bonne tranche de la population âgée, il y a donc peu d'espoir de voir une augmentation substantielle de revenus à court ou à moyen terme; aussi, cette coupure économique en provoquant une modification brutale de la structure de consommation entraînera des conséquences inévitables sur les habitudes et les comportements des personnes âgées au niveau de l'habitat(2).

La rupture économique amène un rétrécissement du niveau de vie qui entraînera lui-même un changement important du statut social de la personne retraitée. Aux impacts économiques négatifs provoqués par la brisure avec le monde de la production s'ajoutent des conséquences psychosociales fortement dévalorisantes; selon Anne-Marie Guillemard: "Dans une société où le travail est au centre du champ social de chaque individu, c'est tout le statut social et l'ensemble des fonctions sociales des sujets qui sont profondément bouleversés".(3) La mise à l'écart propre à la retraite est accompagnée d'un sentiment de dépréciation personnelle et de rejet social.

La fêlure sociale de la retraite se traduit donc par un chambardement des relations humaines de la personne âgée. Les relations intenses reliées au travail et à la vie active font place à un repliement vers la sphère du privé. Cette privatisation des relations sociales exige une adaptation des attitudes et des comportements souvent

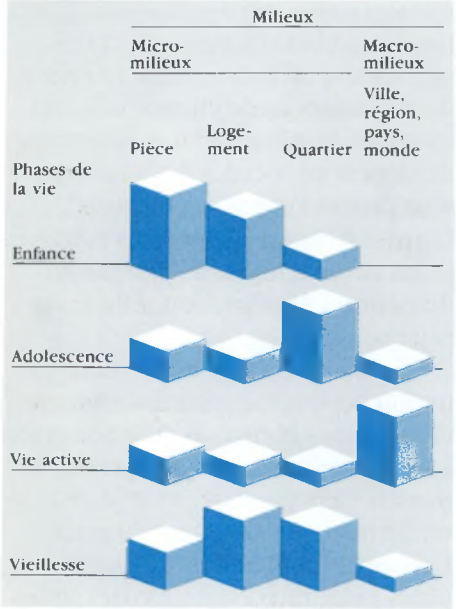
difficiles à réaliser. Le rétrécissement des contacts sociaux est un facteur important de la marginalisation sociale; Edgard Andréani définit celle-ci comme étant: "...des comportements atypiques, des conditions de vie subnormales, l'étroitesse des relations sociales".(4)

Les ruptures économiques et sociales ne sont pas subies avec la même intensité par les personnes âgées; comme le signale Léopold Rosenmayr: il faut distinguer "...entre un désavantage économique général des personnes âgées comme effet de la retraite et les formes spécifiques de pauvreté".(5) Le sexe, la scolarité, la classe sociale et la profession antérieure à la retraite vont moduler différemment ces différentes brisures liées au vieillissement; il y a donc "une privation cumulative".

La troisième rupture provoquée par le vieillissement est environnementale; elle est liée au resserrement de l'espace. En passant de la vie active à la retraite, la personne âgée va accorder une importance majeure à son environnement physico-social immédiat (soit le logement, le quartier et la communauté restreinte).

Dans l'ensemble du cycle de vie, une personne passe des périodes de temps variables dans les micro ou macro milieux qui constituent le cadre de vie. Le tableau III illustre bien cette évolution(6):

Évolution du temps passé dans les différents milieux le long du cycle de vie



L'enfance se passe presque entièrement dans les trois premiers micro-milieux: la pièce, le logement et le quartier (surtout les parcs pour enfants). L'adolescent passe moins de temps dans la pièce et le logement; pendant cette période, il vit surtout à l'école et dans le quartier. La période de la vie active accorde une plus grande importance aux macro-milieux (ville, région, pays, monde).

Au plan de l'espace, les deux éléments importants pour les personnes âgées ce sont surtout le logement et le quartier. Ces poids différentiels accordés aux différents milieux vont exiger de grands efforts d'adaptation pour les personnes retraitées. Au plan du logement, celui-ci sera de plus en plus perçu comme "un Lieu d'intimité, d'appartenance et de personnalisation".(7) Le quartier comprendra l'aspect physique mais sera surtout perçu et vécu à travers le filtre des dimensions communautaires.(8)

L'autonomie, le logement et le quartier: une analyse factorielle

Les principales dimensions d'une écologie de la vieillesse, l'autonomie, le logement, le quartier, peuvent être appréhendées d'une façon empirique.(9) L'analyse par facteurs permet de faire une synthèse des principales composantes de chacun des éléments.

Cette démarche permet de mesurer le poids des indicateurs dans l'analyse de chacun des micro-milieux. Cette hiérarchie des variables montre les aspects prioritaires d'un niveau à un autre.

Dans notre recherche, la dimension *autonomie* des personnes âgées regroupait six indicateurs:

- la capacité de sortir;
- la possibilité de faire des courses;
- la capacité d'effectuer des déplacements;
- de faire le ménage;
- de satisfaire les besoins personnels;
- la possibilité de se nourrir soi-même.

L'analyse factorielle nous a permis de déceler 2 facteurs:

Facteur I

l'autonomie externe (qui compte pour 74,01% des problèmes reliés à l'autonomie)

- sortir
- courses
- déplacements
- ménages

Facteur II

l'autonomie interne (qui compte pour 25,99%)

- besoins personnels
- nourriture

Le premier facteur suppose l'autonomie extérieure de la personne, sa capacité d'agir et de se déplacer dans un environnement donné. Les indicateurs regroupés sous ce facteur définissent la majorité des problèmes reliés à l'autonomie (74%) des personnes âgées. Le deuxième facteur fait référence aux besoins vitaux de la personne âgée, soit se nourrir et pouvoir s'occuper de soi-même; ce facteur "explique" 25% de la dimension autonomie. Les services de maintien à domicile doivent porter plus particulièrement sur ces deux facteurs.

La deuxième dimension touche *la qualité des logements* des personnes âgées et l'importance accordée aux principaux indicateurs de la qualité du logement. Cette dimension compte quatorze variables:

- l'état de la salle de bain;
- l'état de la peinture;
- l'état des fenêtres;
- l'état du parquet;
- l'insonorisation;
- la température;
- l'état des escaliers et/ou ascenseurs;
- l'état général de l'immeuble;
- l'éclairage des escaliers;
- l'espace disponible au sous-sol;

- la quantité des armoires et garde-robes;
- la quantité des appareils ménagers;
- la qualité de la vue;
- la "clarté" de l'appartement.

L'analyse factorielle de la dimension qualité du logement nous donne les cinq facteurs suivants:

Facteur I
aspects pratiques et esthétiques (qui comptent pour 45,24% problèmes reliés à la qualité du logement)
- l'état de la salle de bain;
- l'état de la peinture;
- la clarté de l'appartement.

Facteur II
éléments extérieurs (qui comptent pour 15,46%)
- l'état des escaliers;
- l'état général de l'immeuble;
- l'éclairage des escaliers.

Facteur III
aspects pratiques de 2e niveau (qui comptent pour 14,5%)
- l'état du parquet;
- le nombre des armoires et garde-robes;
- la qualité de la vue.

Facteur IV
confort (qui compte pour 13,91%)
- l'insonorisation;
- la température;
- le nombre des appareils ménagers.

Facteur V
éléments pratiques extérieurs (qui comptent pour 10,89%)
- l'état des fenêtres;
- l'espace au sous-sol.

Le premier facteur de la qualité du logement des personnes âgées regroupe des indicateurs élémentaires de cette dimension, ce sont des éléments internes à cet environnement particulier que constitue le logement. Le deuxième facteur touche surout les éléments externes de cet environnement. Ces deux premiers facteurs contribuent à près de 61% de la dimension qualité de vie du logement.

Les autres facteurs sont beaucoup plus difficiles à distinguer et à analyser; ce sont des éléments internes qui constituent des catégories qui se touchent de très près. Seule une étude plus approfondie pourrait dégager des éléments rationnels permettant d'identifier et d'interpréter correctement le "sens" de ces facteurs.

La troisième dimension porte sur *la qualité de la vie dans le quartier* où habitent les personnes âgées. Cette qualité de la vie du quartier est mesurée par douze indicateurs:
- l'état des logements dans le quartier;
- l'état des parcs;
- le transport;
- la pollution par le bruit;
- la pollution de l'air;
- la quantité des établissements commerciaux et des services;
- la qualité des établissements commerciaux et des services;
- le degré de sécurité publique;
- le nombre de parcs;
- le voisinage;
- la possibilité de faire des activités dans le quartier;
- la qualité de la vie du quartier.

L'analyse factorielle de cette dimension réduit les douze indicateurs à cinq facteurs; ces facteurs sont:

Facteur I
aspects écologiques (qui comptent pour 29,23% des problèmes reliés à la qualité de vie du quartier)
- la pollution de l'air;
- la pollution par le bruit;
- l'état des logements dans le quartier;
- la qualité de la vie dans le quartier.

Facteur II
commerce/services (qui compte pour 20,83%)
- la qualité des établissements commerciaux et de services;
- la qualité des établissements commerciaux et de services.

Facteur III
sécurité (qui compte pour 18,94%)
- la sécurité publique;
- le voisinage.

Facteur IV
loisirs (qui comptent pour 16%)
- la possibilité de faire certaines activités dans le quartier.

Facteur V
parcs/transport (qui comptent pour 15%)
- le nombre des parcs;
- l'état des parcs;
- le transport.

Le premier facteur regroupe les aspects que l'on pourrait qualifier "d'écologiques"; il résume près de 30% de la dimension de la qualité de vie du quartier. Le deuxième facteur concerne la quantité et la qualité des établissements commerciaux et des services; il "explique" près de 21% de ce micro-milieu.

Un troisième facteur tente de cerner les aspects affectifs du quartier soit la sécurité que procure un bon voisinage et celle qui est plus spécifiquement reliée à la violence: jeux, accidents et crimes divers. Le quatrième facteur touche la possibilité de faire certaines activités dans le quartier; c'est un aspect qui semble surtout récréatif; c'est une fonction qui compte pour 16% de l'ensemble.

Le dernier facteur, le cinquième est plus éclectique; il comprend les variables: le nombre et l'état des parcs et le système de transport public. Il exprime lui aussi 15% de la dimension qualité de vie du quartier.

Dimensions politiques

Une écologie de la vieillesse doit déboucher sur une critique des politiques touchant les personnes âgées.

Il est certain que la retraite signifie, dans la majorité des cas, une chute dramatique des revenus pour les personnes âgées. Dans la plupart des cas, cette coupure va entraîner une baisse de revenu variant de 30% à 50%. Le changement brutal du ni-

veau de vie a des conséquences immédiates sur le genre de vie et la qualité de vie des personnes âgées.

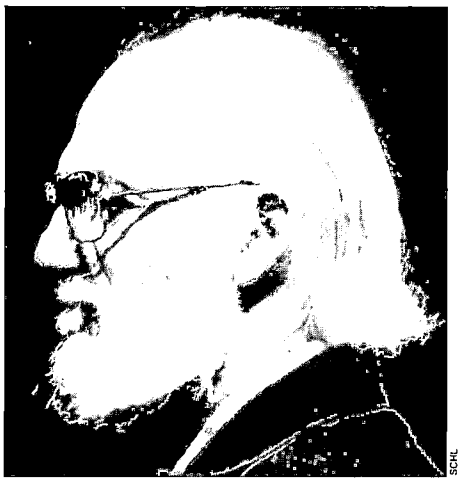
Ce choc financier va modifier assez radicalement la structure de consommation des personnes âgées et limiter d'une façon irréversible l'autonomie économique des personnes retraitées. Elles devront ajuster leurs besoins à leurs moyens financiers. Au plan du logement, par exemple, elles auront des difficultés à accéder à des quartiers et à des logements adéquats.

Les perspectives de revenu pour les personnes âgées dépendent soit de l'accroissement du montant des prestations ou soit de l'augmentation du revenu provenant des sources privées. La probabilité de l'augmentation de revenu privé peut s'améliorer grâce aux programmes du type REER et au développement des pensions de retraites privées. Cependant, la probabilité d'accroître les prestations du secteur public est faible à cause de l'intensification des contraintes budgétaires des gouvernements.

Donc, la rupture économique majeure provoquée par la retraite se maintiendra pour les personnes âgées; elle aura un impact différentiel selon la classe sociale d'origine du retraité mais pour la majorité des personnes âgées "la mort sociale" débutera par une "maladie" économique,

L'aspect social

Il semble évident, à partir de notre analyse factorielle, que l'autonomie sociale des personnes âgées repose sur des éléments très simples: la possibilité de sortir, de faire des courses et des déplacements "utiles", de faire le ménage. La majorité des personnes âgées qui dispose d'une certaine autonomie physique tient à habiter son propre logement, sa maison plutôt que des habitations "réservées" aux retraités; cette attitude est commune à la plupart des pays européens[10] et aux États-Unis. Seule une aide à domicile pourrait favoriser le maintien sur place des personnes retraitées qui sont en perte d'autonomie. Il faut, aussi, par l'intégration communautaire réinsérer les personnes âgées dans le tissu social. Il faudrait mettre au point des techniques sociales favorisant cette participation; c'est la seule façon de faire éclater l'étroitesse des relations sociales qui handicape les personnes retraitées.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La revalorisation des personnes âgées pourra se faire aussi par le biais d'activités de support à la communauté (le service civil de la vieillesse), par les loisirs et les voyages. Dans une société où nous serons tous, à un degré ou un autre, minoritaires, la marginalisation de la vieillesse (comme statut social) va lentement s'estomper.

L'aspect environnemental

Dans la mesure où "l'espace construit est le reflet des structures sociales",[11] le quartier et le logement devront tenir compte de la nouvelle situation démographique; les personnes âgées vont occuper une place de plus en plus grande dans l'acquisition de nouveaux logements et dans l'appropriation de l'espace physico-social qu'est le quartier.

Au plan du logement, des mesures simples et peu coûteuses[12] peuvent rendre plus facile l'ajustement qu'entraîne un certain rétrécissement de l'espace. Il faut surtout éviter "l'illusion urbanistique" qui valorise "l'aide à la pierre" au détriment des besoins physico-sociaux exprimés par les personnes âgées.

En rendant les micro-milieux attrayants pour les personnes retraitées on facilite leur autonomie physique et sociale et on réduit d'autant leur marginalisation et les coûts qu'elle entraîne. Une meilleure insertion sociale pour les personnes âgées est une solution moins coûteuse à long terme et plus humaine que la construction d'équipements qui ne ferait qu'accroître l'isolement et l'enfermement des personnes retraitées.

Une écologie de la vieillesse doit pouvoir intégrer les aspects souvent contradictoires et hétérogènes qu'amène le vieillissement. Des trois grandes ruptures analysées dans ce texte la rupture économique est la plus préoccupante; à court terme, ce problème restera entier; les ruptures psycho-sociales et environnementales sont les plus faciles à réduire et à adoucir, il faut actuellement porter l'effort sur ce plan.■

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EMERGENCY PLANNING:

the Key to Crisis Management

by Christine Tausig

Herve Tremblay spends his time at work planning for events he hopes will never happen. Floods, toxic chemical spills, earthquakes, even nuclear attack–preparing for such disasters is all part of the job for Tremblay, coordinator of the Emergency Measures Organization for the regional municipality of Ottawa-Carleton. "We're always planning for the worst possible eventuality," says Tremblay.

Preparing for potential disasters, whether natural or man-made, is the daily responsibility of municipal, provincial and federal government officials across Canada.

The federal government has prepared a list of 60 potential emergencies that could hit Canada. They range from epidemics, forest fires, floods and blizzards to nuclear reactor accidents, satellite crashes, strikes and assassinations. Developing such a list is more than a purely theoretical exercise: the federal government suggests that any Canadian mayor who serves two four-year terms of office has a one in three chance of facing an emergency.

(An emergency is defined by the federal government as "an abnormal situation that requires prompt action beyond normal procedures to prevent or limit injury to persons or damage to property or the environment". Disasters, according to government emergency planning officials, are simply emergencies on a larger scale.)

Mayors and municipal officials such as Herve Tremblay are the "front-line troops" in case of an emergency or disaster.

Emergency Jurisdictions

Most emergencies are handled by the municipalities in which they occur, with the assistance of municipal services such as firefighters, police and hospitals. If the emergency is too large for a municipality to deal with, it can call on provincial resources for help. The province, in turn, can ask for federal assistance. The federal government also steps in if the emergency clearly falls under its jurisdiction. Such emergencies would include an oil spill at sea or a flood affecting more than one province.

Each level of government has established its own legislation to direct action in times of emergency.

Under the federal government's Emergency Planning Order, approved in May 1981, individual government departments have been assigned responsibility for creating a "national emergency agency" that would take over in case of a serious crisis. Thus, for example, the Minister of Agriculture is responsible for setting up a National Emergency Agency for Food that would control farm production, processing and food rationing after the food leaves the farm; the Minister of Health and Welfare would be put in charge of coordinating emergency medical, clothing and lodging services; and the Minister responsible for Canada Mortgage and Housing Corporation would be in charge of the National Emergency Agency for Housing and Accommodation, which would requisition property if needed, control rents and sales and oversee new construction.

Emergency Planning Canada, which reports to the President of the Privy Council and has a staff of about 80 across the country, is the arm of the federal government that coordinates efforts and ensures that its own emergency plans are up-to-date.

EPC has regional directors in each provincial capital to act as a liaison between federal agencies and provincial governments. As Dave Francis, EPC regional director for Ontario, puts it, "My job is basically to act as a facilitator. I run around with a lot of telephone numbers in my head and know a lot of people. I know where to get things in an emergency."

The federal government also operates emergency government facilities for senior government officials to ensure that the country can

function in case of war. These facilities, built during the Cold War in the early 1960s, provide a safe base of operations for selected politicians, high-level civil servants and military personnel. Their families, however, would not be allowed in and would have to find shelter elsewhere.

The shelters, according to Francis, are a place for "duly elected government (to) function during an attack and to direct survival operations and, hopefully, supervise the country's return to normal". The central government's facility is in Carp, just west of Ottawa, with smaller shelters located in British Columbia, Alberta, Manitoba, Ontario, Quebec, Nova Scotia and most major municipalities. Francis notes that, although the shelter facilities are being maintained, there have been no capital expenditures on them in recent years.

The provincial governments have put in place their own systems of dealing with emergencies. In Alberta, for example, the Alberta Disaster Services employs about 70 people to respond to municipal requests for help. Quebec's Bureau de la protection civile du Québec has almost 100 people responsible for developing the province's emergency plans. In Ontario, similar to the federal government system, each provincial minister is in charge of developing an emergency plan that could be activated in case of an emergency in his or her jurisdiction. Thus, the Minister of Natural Resources is responsible for operations during floods or forest fires and the Minister of Environment oversees toxic spills.

The first emergency response in all provinces comes from the municipality affected unless the emergency occurs on Crown land. Many municipalities and regional municipalities have enacted "emergency by-laws" that provide funding for an emergency measures organization to develop a disaster blueprint for the municipality.

Developing such a plan is a complex process. City officials must first complete a "hazard inventory", examining potential dangers in the area such as nuclear reactors, dams, flood-prone sectors and transportation routes through the community for hazardous materials. A local emergency operations centre should be designated and communications systems (as well as back-up arrangements in case of a power failure) be put in place. In addition, officials must plan evacuation and temporary shelter arrangements before a crisis happens.

The provinces have legislation to force municipalities to have plans but, so far they haven't done so and not all municipalities are ready for an emergency. The coordinator of Emergency Planning Ontario, Ken Reeves, estimates that all major cities have emergency plans. However, a number of smaller municipalities have no plan and some have plans that are 10 to 15 years old. "Then you might as well not have a plan," asserts Reeves. Emergency plans should be reviewed almost as soon as they are written, he says, suggesting that a review at least once a year is a necessity.

Wartime Roots

Emergency planning in Canada has its roots in wartime. According to Joe Scanlon, a journalism professor at Carleton University who has been involved in disaster research since 1970, the threat of air attacks shortly before World War II moved the federal government to set up an Air Raid Precautions subcommittee in 1938. During the war the organization provided clothing, gas masks and helmets for civilian volunteers along with air-raid sirens for communities.

Since that time, says Scanlon, civil defence planning in Canada has been on a "roller coaster", depending on the government and public's perception of the threat of war.

Many municipal emergency measures organizations, such as that in Ottawa-Carleton, for example, began during the late 1950s as a response to growing world tensions and the threat of nuclear war.

During the 1960s and 1970s, as tensions lessened, the emphasis "switched from nuclear to natural emergencies", points out Ottawa-Carleton's regional coordinator Herve Tremblay. Today, emergency planners across the country prepare for a range of disasters, both natural

and man-made. "If you have good peacetime plans," says Tremblay, "you also have good plans for wartime."

Peacetime Emergencies

Peacetime emergencies can strike any municipality in Canada, whether large or small.

In 1982 alone, for example, a series of earthquakes shook the province of New Brunswick; the Ocean Ranger drilling rig collapsed in stormy seas off the Newfoundland coast; two Quebec rivers flooded; about 1 200 residents of Orillia, Ontario, were evacuated after a train carrying toxic chemicals derailed nearby; rain and hailstorms caused heavy property damage in Saskatchewan; and an exploratory gas well in Alberta blew out, releasing enormous quantities of dangerous gases.

Some emergencies are more likely to happen in certain areas of the country. The northern sections of most provinces, for example, are particularly susceptible to forest fires. Floods can be a problem almost anywhere, but British Columbia and Manitoba suffer particularly hazardous and frequent flooding. In southern Ontario, with its large industrial base, the possibility of a toxic chemical spill worries emergency planning officials.

However, emergencies can and do happen anywhere. As Saskatchewan's EPC regional director Larry French notes, even smaller communities are not free from such industrialized threats as chemical spills. More than 1 400 rail-car loads of deadly chlorine gas, an industry by-product, travel through the town of Prince Albert, Saskatchewan every year, he points out.

Mississauga

Chlorine gas, which killed thousands on the battlefields in World War I and is now used in swimming pools and bleach, was responsible for one of Canada's most serious emergencies in recent years – the Mississauga train derailment.

Shortly before midnight on November 10, 1979, a train 2.5 km long, loaded with lethal chemicals including 82 t (metric tons) of chlorine and 11 tanks of propane gas, hurtled through the town of Mississauga, a community of 260 000 on the shores of Lake Ontario just west of Toronto.

When an overheated axle caused the train to jump the tracks, chlorine mixed with the volatile propane to cause an explosion that could be seen and heard more than 50 miles away.

"No one had to tell the police or fire departments about the accident," says Superintendent Des Rowland of the Peel Regional Police Force, which patrols Mississauga. "They could see it happen". It was, according to Rowland, the biggest peacetime emergency in North America.

Training

Police, elected officials and firefighters from other communities across the country learn what to do – and what to avoid – if they are faced with a similar emergency, when they attend classes at the EPC-sponsored Federal Study Centre in Arnprior, Ontario.

The centre, located 65 km west of Ottawa, offers almost 100 one-week training courses every year to municipal, provincial and federal offi-

cials, according to Sandy McNab, who recently retired as senior education officer. Courses include a seminar aimed at training police and firefighters who would deal with accidents involving the transportation of dangerous goods and a course for mayors and other elected municipal officials on developing emergency plans.

Classes began at the centre in 1954, when it was known as the Canadian Civil Defence College. Each province is allocated a number of spots in every course and can send either provincial or municipal representatives. Courses are funded by EPC and all participants' expenses are paid by the federal government. New courses are chosen each year at a federal-provincial conference on training.

At a recent Arnprior course which drew heavily on lessons learned from the Mississauga derailment, officials from towns including Inuvik, N.W.T., Kahnawake, Quebec and Quesnel, B.C. listened to lectures about transporting goods such as radioactive materials, toxic chemicals, infectious substances and flammable liquids.

"You know that (accidents) are going to happen," Rowland told the group as he described the Mississauga derailment. "That's why you're here today: to prepare for them".

Rowland passed along tips that were learned by the Peel police force through experience. One of the major problems during the derailment, he noted, was the number of reporters and curious on-lookers, including children, who rushed to the accident in order to watch the explosions. This added to the "utter confusion" that reigned shortly after the accident. Rowland warned his listeners to ensure that adequate security precautions are taken in the future to keep curious spectators far away from potentially dangerous situations.

Simulations

In addition to courses at the Arnprior centre, many municipal emergency planners also prepare for a crisis by staging mock disasters.

In Ottawa-Carleton, one such recent exercise consisted of a mock airplane crash – a "disaster simulation as close to the real thing as possible", according to Tremblay.

About 100 volunteers from a local nursing school acted as "casualties" during the exercise, and experienced "simulators" used make-up and synthetic materials to make the volunteers' injuries look realistic. "If you look at a severe (simulated) back burn," explains Tremblay, "you can't tell the difference between it and the real thing." (In fact, he notes, "victims" receive an identifying mark on their foreheads or the palms of their hands so that doctors at local hospitals know the injury is not real.)

Numerous municipal and volunteer agencies rushed to the "crash" site on the morning of the simulation, including ambulances, area fire and police departments, the RCMP and the Ontario Provincial Police. The Salvation Army supplied food, comforted "victims" and provided pastoral services. Amateur radio operators supplied support communications at the site. Atomic Energy Canada was called in and informed that radioactive cargo was on the flight that "crashed" and Canada Employment and Immigration arrived in an attempt to find an illegal alien who was supposedly on the downed plane.

All these agencies thus had a chance to try out their emergency plans in a situation as close as possible to a true crisis, explains Tremblay. Some problems were spotted immediately through the exercise. Communications, for example, broke down because the simulated crash occurred just outside police radio range. (Local police are now buying new equipment to solve this problem.)

Such a disaster simulation, which directly and indirectly costs the region about $150 000, including overtime pay for personnel involved, is "absolutely necessary", maintains Tremblay. "We can sit around and develop plans all we want, but we never have any idea if the plan is practical until it is tested.

"Every dollar spent on an exercise is well worth it... every time we have a simulation, we change the plan".

Major simulations are held every two to three years and ten "limited" ones, such as the evacuation of hospitals, every year.

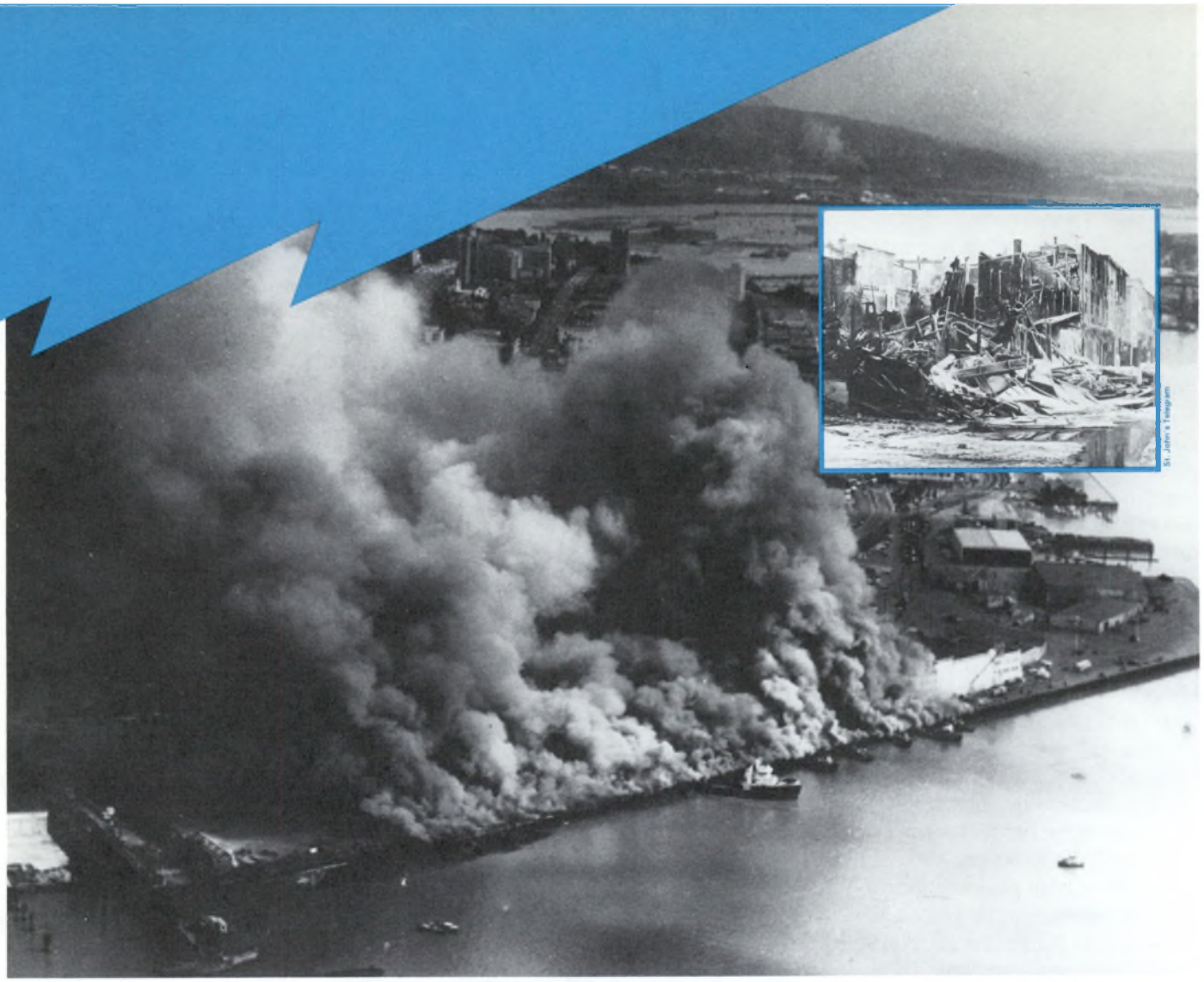
Disasters cost money

True disasters, even more than simulations, cost money. It is estimated that the Mississauga derailment cost about $68 million to households, public institutions and businesses.

Under the federal government's Disaster Financial Assistance Arrangements, the cost of major emergencies is split between the provincial and federal governments.

The province is expected to pay for the first dollar per capita of its population, with a sliding scale for any money spent after that. Thus, points out Ontario's Dave Francis, it would take an $8 million disaster before the province of Ontario could receive federal funding. Smaller provinces, however, receive money more often.

The federal government also provides approximately $6 million annually through its Joint Emergency Planning Program (JEPP) to contribute to or undertake joint emergency planning projects with the provinces. JEPP projects are usually submitted for funding by a province or territory. Funds are used, for example, to develop regional emergency plans or to purchase emergency equipment such as standby generators.



St. John's Telegram

The Citizen

Increased Awareness

In fact, funding at all government levels for emergency planning has improved "substantially" in recent years, says journalism professor Joe Scanlon. The Mississauga train derailment provided a "national awakening", he states. "It had a real effect on Canadians. They saw the possibility that disaster can happen here".

Recent publicity surrounding the threat of nuclear war, too, has significantly increased Canadian awareness of the need to prepare for emergencies. Says Larry French in Saskatchewan, "I've given so many interviews (since the airing of *The Day After*, which dealt with the aftermath of nuclear war) that I've lost track". Since the Soviet Union's troops invaded Afghanistan in 1980, French adds, he has had at least one call a day from Saskatchewan residents concerned about planning for the ultimate emergency of nuclear war.

Sandy McNab at the Federal Study Centre in Arnprior, too, has seen an increased interest in emergency planning. During the 1970s, says McNab, enrolment in EPC courses at the centre had dropped to about 1 000 students annually. In 1983, more than 2 690 attended sessions and new courses are being developed every year.

Planning for nuclear disaster may seem a bit gruesome to some, admits McNab. "We hope we'll never have to use some of the plans we're making," he confesses.

But, he adds, in a phrase that could be the motto of emergency planners across the country, "It's good to be prepared – just in case". ■

Christine Tausig is a freelance writer living in Ottawa.

Watch for more on disaster research in the next issue of HABITAT.

Claire Beaugrand-Champagne

Your Personal Checklist for Emergency Survival

Would you know what to do if your house were flooded? Or how to survive if trapped in your car during a severe winter storm?

If not, Emergency Planning Canada can help. EPC publishes a number of booklets and fact sheets designed to teach Canadians how to cope with a number of disasters that could strike at any time. In case of flood, for example, EPC suggests turning off the power (unless the main switch has already been flooded), boiling or otherwise purifying drinking water, and moving furniture and electrical appliances to upper floors.

If a winter storm forces your car off the road, the agency advises drivers to stay in the car, open a window, run the motor sparingly (making sure that the exhaust pipe is not blocked by snow), and, above all, keep moving and do not fall asleep.

Ken Reeves, coordinator of Emergency Planning Ontario, adds the following tips for emergency survival. Keep flares, extra warm clothing and boots, and a blanket in your car during winter. At home, store such emergency supplies as candles, a Coleman camping stove, a battery radio, and a two-week supply of canned food.

EPC's advice booklets include such subjects as winter and severe storms, earthquakes, floods and winter power failures. The agency also publishes a brochure outlining "11 steps to survival" in case of nuclear war, another on building a basement fallout shelter, fact sheets on home preparation for long-term crisis and cold weather survival and information on how to store, disinfect and remove radioactive material from water. All publications are available free from Emergency Planning Canada, Ottawa, Ontario K1A 0W6. ■

Renovating

Residential Landscape

A combination of fencing and planting provides two partial barriers that define the private outdoor living area and the parking space while allowing views to the street. Raised and ground-level beds were built and filled with colourful plants.

by Roberta Lynch-Tresch

The renovation of older homes is a trend which is fuelling the increased renovation of older sites. From historically accurate period gardens to elevated outdoor living areas, residential grounds are being used more intensively to accommodate a number of different activities within limited space. Renovation, whether motivated by "white-painting", the need for income from rental units or correction of basic structural problems, results in changes in the dwelling unit which directly affect the site.

Fortunately, residential sites tend to be very plastic and amenable to alteration, and as a family's needs change the site can be changed. However, as when one changes the way in which the home functions when a new room is added, so the exterior spaces of the home shift when new uses are introduced. These changes, on a limited, existing site, offer unique constraints and opportunities.

Site upgrading during renovation can improve aesthetics. The incomplete site development during the original construction which is shown here can be remedied by clear separation between parking and the outdoor living area and the provision of hard and plant materials.

Constraints and Opportunities

Constraints usually involve limited space for parking, snow and garbage storage, outdoor living areas and barrier-free access. For example, the addition of a basement apartment or conversion of a home to a duplex will automatically generate the need for an extra parking space, separate access to a separate entrance and, preferably, a separate outdoor living area. This could require expansion of the original driveway and splitting of a rear yard or the provision of an elevated outdoor living area.

When spaces formerly used for storage of assorted items such as tools and garbage are incorporated into an outdoor living area, the storage function may have to be transferred to, and incorporated with, a parking or garage space or located under decks, benches and stairs. An outdoor living area may be reduced to a sitting garden if other space requirements impose. Barrier-free access to a home will usually require a ramp of a sufficiently gradual slope that a significant portion of the drive or front yard will be involved.

However, opportunities can often be found for improving drainage, employing energy conservation techniques, using existing materials and incorporating low-maintenance design. For example, incorrect drainage which results in nuisance ponding or even flooding in the home can easily be corrected with drainage tiles or surface diversion during reconstruction. A picture window with a southern exposure can be shaded from summer heat by a loggia overhang accompanying a deck addition. Reduction of lawn space by its conversion to parking or a paved outdoor living area automatically reduces maintenance time and expense.

The aesthetics of the site can also be improved during renovation. Wooden or plant screens can be used to hide unpleasant views or separate functional areas such as parking and the outdoor living area.

Upgrading of a site is often done to incorporate new user needs. This is especially important in the conversion of properties from one use or tenancy to another.

From Single-Family to Multiple

Conversion of a single-family dwelling to a duplex or multiple dwelling is once again becoming an attractive home renovation activity. For homeowners, it is a means of generating income; municipal planners support the infilling of existing spaces and use of existing infrastructure as an alternative to expanding fringe developments and a growing number of small, often single person households find it a good alternative to highrise rental.

The impacts and opportunities of such conversions vary, depending on whether an addition is urban or suburban and therefore vertical or horizontal. A vertical addition of a second storey on a bungalow will require separate access, perhaps to exterior stairs, as well as extra parking. Exterior stairs can be provided in the form of exposed spiral metal stairs which are common in Montreal or as an enclosed stairway attached to and clad in similar materials to the house. Conversion of a garage into a housing unit results in the loss of parking and storage space and new spaces are then required for the additional occupants.

The infill of the rear of lots with an additional unit also results in the loss of formerly generous spaces as well as the creation of new demands which can sometimes be met by constructing a second-storey outdoor living area or balcony over the parking space. Infilling of open spaces around high-rise apartments can increase parking pressure and create the need for individual outdoor living

areas – a solution to this problem is the construction of landscaped areas over underground parking and the addition of rooftop or top-level garage gardens.

From Rental to Condominium

Conversion of properties from rental to condominium ownership typically requires the addition of individual, private outdoor living areas, as well as communal, recreational and storage areas. Divisions between individual outdoor living areas can be provided by plantings, wooden screens or masonry walls and storage structures.

The infill housing unit (at left in the photo) results in the loss of space for outdoor activities at both houses as well as the creation of new demands on the remaining space.

Exterior materials can often be upgraded to emphasize the increased value of the property and define new, potentially larger spaces. For example, chain-link fencing can be upgraded to solid wooden fencing or screened with planting. Concrete block patio or sidewalk stones can be upgraded with interlocking stone. The change from gravel to asphalt parking surfaces makes a drastic improvement in site appearance and maintenance. And multiple parking sheds, carports or garages not only provide greater service to residents but upgrade the value of the property.

From Commercial to Residential

A unique conversion trend requiring special site development is the adaptation of commercial or industrial buildings such as schools or warehouses to residential units. In these cases, the provision of parking and outdoor living areas often requires particularly creative design. When a Montreal warehouse with no at-grade space was converted to condominium apartments, parking was provided by a special lease arrangement on a parcel of land within walking distance and outdoor living areas were created through removal

When this Montreal warehouse was converted to condominium apartments, a large courtyard was cut out of the top two floors to create a roof garden and give residents access to private outdoor space.

of the central interior of the top two floors of the building, creating a protected roof garden.

In other situations, the key is often to make site additions which emphasize the human scale of a residential environment as opposed to the monumental scale of public or commercial buildings. This can often be accomplished through the use of small-scale materials, such as paving stones rather then large expanses of concrete and more intimate plantings – individual sitting gardens instead of park-like expanses of lawn and tree groupings.

Low vs. Medium Density

The solutions to low- as opposed to medium-density site renovations differ in several respects. Low density usually refers to detached, single-family dwellings, on urban or suburban lots which can accommodate off-street parking. Medium-density refers to attached units, often with remote group parking or on-street parking. The main difference is in the amount of land available for competing uses.

Single-family homes in the suburbs often have generous spaces for parking, entrances and private rear yards, whereas urban or row situations may be limited to on-street parking and front yard or balcony outdoor living space. In these cases, parking and outdoor living areas are sometimes provided by a deck structure over the parking space. This creates shelter for the vehicle and covered access for the occupants, along with a private, elevated, sunlit outdoor space.

Higher densities also often require underground rather than surface drainage, grade changes made in steps not slopes and planting areas which are elevated or potted as opposed to being at-grade. Surface drainage in grass-lined swales requires space for the width and draining slope of the swale when the use of storm-sewer pipes and strategically placed catch basins can accommodate storm water run-off in very confined areas. This solution is necessary where impervious surfaces such as asphalt parking lots cover most of the ground surface, preventing natural infiltration of water into the ground thereby creating excess run-off. Planting areas may also have to be confined to protected, elevated areas to shield them from damage and provide a larger walking surface.

Increased traffic requires higher-capacity surface materials. Frequent traffic can quickly displace loose material such as wood chips or pea grav-

el, so solid paving such as asphalt or concrete is required. Planting materials will have to withstand being brushed against, stepped upon or carrying heavy deposits of snow for many months.

Reduced space requires more solid screening to create audio-visual privacy. Wooden, concrete or brick walls are common solutions as is separated grade.

Changing Needs, Changing Site

The changing needs of a family or the move of a new family to an older home also dictate changes in the site. New user needs may include additional or fewer parking spaces, barrier-free access for a handicapped family member, more hard surface area for entertaining, more gardening space for vegetables or specialty planting, play areas for children, or storage space for recreational vehicles or firewood.

More parking spaces can often be provided in front yards or side yards, sometimes combining a sitting or reception area, separated by a step which defines vehicular and pedestrian space. Parking space which is no longer required can serve as space for an addition to the house or, with screening, become an outdoor living area.

Barrier-free access to a home is best provided in a sheltered space as part of the carport, porch or garage. However, if major grade changes can be introduced in the soil elevation, this may be a good alternative. An elevated ramp appears less obtrusive and serves more functions when incorporated with a patio or deck structure. If carefully planned, it need not take up extra space.

Hard surfaces for entertainment can be expanded in a rear, front or side yard, over a carport or on an unneeded driveway. This expansion often provides an opportunity for incorporating above- or in-ground pools, cooking areas, storage structures, overhead shade and creative planting. Lighting for evening use and sound equipment can also be incorporated.

These ground-floor dwelling units were designed to provide barrier-free access to front doors. Steps have been replaced by ramps and handrails provided along the entrance sidewalk.

Planting space can be found in small pockets eliminating the need for large vegetable plots. Strawberries can be hung from baskets, eggplants and tomatoes grown in metal or wooden tubs and radish and lettuce plants can line sidewalks, property screens and fences or be interspersed with foundation planting, depending on the sun exposure available.

Play areas for children can be incorporated in the sheltered spaces of a carport or garage where the hard surface can accommodate ball play and wheeled vehicles. An elevated sand pit can later accommodate a cooking pit or decorative pool. A play shed can store lawn equipment, strollers and bicycles. A soft swing area can eventually accommodate a lawn, deck, patio or planting space. Alternatively, swings can be incorporated into the overhead deck structure.

Storage space for recreational vehicles such as campers, snowmobiles, boats or motorcycles requires parking space, shelter and screening. While the optimum solution is connection with a garage, the extra space is often not required for a long period of time: off-site rental storage is a solution. During the heating season large amounts of firewood can be stored on the hard surface of a patio instead of using driveway or garage space.

The actual activity of renovating an older home can have direct impacts on the site. Insulation and improved drainage around an old basement require excavation and disturb plants and sidewalks near the foundation. As these are replaced, improvement opportunities present themselves. Additions, doorways, entrances or accessibility ramps require replacement materials, revised treatment and sidewalk routes. New walks, steps, planters and retaining walls can be integrated using new materials such as interlocking blocks and railway ties.

Main Renovation Problems

One of the main problems in site renovation is parking. On-site parking for single-family housing should be visible from the home for security reasons and easily accessible from the nearest building entrance. Sufficient space for snow removal is important also and the vehicle should be screened from outdoor living areas.

On-site parking at this semi-detached residence fulfills the following criteria: accessibility, screening from the outdoor living area and visibility from the home for security reasons.

The light, the sign and the contrast of plant sizes help to accent this building's entrance and identity. The doorway is partially screened from the street but is still visible from the walkway. The combination of handrail and lighting provides safe and secure access along the steps at night. The flagstone steps are durable, relatively maintenance free and compatible with the house. The low ground cover provides sufficient space for winter snow storage.

Front- and side-yard parking solutions must be particularly well-placed and screened because of the obvious visibility.

Front-yard parking should be a last resort as it is particularly obtrusive and may be contrary to municipal restrictions which limit parking to behind the front wall of the building. This type of parking can involve drastic elevation changes because older homes were often sited much higher than curb or driveway levels to convey a clear sense of separation. The construction of steps, a landing area and elevated planting to retain coverage of the foundation are solutions.

Entrances to older single-family houses offer a very visible means of improving a home's appearance but restricted space requires careful placement of access walks, steps and planting. The entrance should be clearly separated from the driveway and at least partially visible from the street. Short ramps may help in eliminating some steps which can make access dangerous. The entrance materials such as pavement, retaining walls and plants should be compatible with the house itself and the streetscape surrounding it.

Entrances to units are not always at the front or street side of a house, but may be at the side, or above or below grade. They can be highlighted by more elaborate structures such as lighted overhangs or stairs.

Entrances to older row dwellings can be difficult to endow with an appearance of individuality and spaciousness. A change in elevation can help create a separation from the public or parking area at the front of the dwelling. Colours or overhangs can also differentiate the entrance. Where stairs to an upper unit must be accommodated on the exterior, special emphasis of the lower entrance may be required to make it equally visible and attractive.

Because of large lot sizes there is a broad range of choices for location of an outdoor living area in a detached dwelling. However when minimum setbacks have reduced private rear yard space, side yards, front yards or even balconies and roof decks may be the only alternatives. They may even be better alternatives if they offer more space, privacy or more pleasant climatic conditions.

In many urban situations the hard surface required for tables and chairs takes up most of the available outdoor space and large lawn or planting areas are not possible or desirable. Solid screening from adjacent properties is usually necessary then. In larger suburban lots, less impervious screens such as plants may be satisfactory and, where there is room for lawns and planting beds, this screen can be very effective.

Because of lack of space, the problems of parking, entrances and outdoor living areas in row housing are more complex than in detached dwellings. The best solution is often to combine them at the rear of the buildings. Where there is no rear access to the property, an elevated outdoor balcony at the front can provide protection for both vehicles and pedestrians. It is a less visible entrance however. Another solution is group parking but the remoteness of the dwelling makes this a less attractive option.

Fashions in Site Design

Fashions in site design are reflected in renovation trends today. Strict adherence to historically accurate period features is often impractical, both from the point of view of use and materials acquisition. Often, a decidedly contemporary approach can be successfully integrated into an existing site by repeating materials or colours from the house itself.

As long as sympathetic proportions are maintained, features which were not part of a period can be successful. The use of wrought-iron fencing can be historically correct for a turn-of-the-century urban home but will not provide the privacy screening a solid wooden fence or wall could give. Also, the homes being renovated are often less than 30 years old and therefore appear dated, not historic, and don't present an obvious style or fashion to follow in site design and materials.

Certain materials such as angelstone, concrete block, narrow wooden siding and single-pane sliding windows are all somewhat dated features today, whereas lath-cut bargeboard, twelve-pane double-cased windows and relief brick work are more obvious historic features. Home renovation may involve replacement of several of these features so that the style of the home can be entirely updated along with site design. Dated site design such as strongly linear or curvilinear planting beds or modernist free-standing structures can be updated or made more appropriate by repeating the basic classic style of the home.

The long-popular English lawn is no longer the most copied home site treatment. Instead, the Spanish or California patio, Japanese deck and Italian loggia are rapidly ending lawn-mower maintenance, particularly in higher-density urban areas. Wooden retaining walls and steps often provide a more economical grading material than masonry. Durable concrete slabs or interlocking blocks are replacing cast-in-place paving, except in sidewalks. Solid screening of outdoor living areas with wooden or masonry walls is also replacing sample property demarcation by picket or chain-link fence.

Landplan Collaborative Limited

The careful selection of contemporary materials used in the stone wall and interlocking pavers in the driveway blend well with the existing old stone dwelling.

The renovation of an older home can present unique opportunities for making the total home environment more liveable. However, it also presents unique constraints due to space restrictions. The keys to successful alterations involve careful considerations of the basic functions of the site particularly parking, entrance and outdoor living areas.

CMHC Publication on Site Improvement

Over the years, a number of publications have touched on the topic of renovating older residential sites. Now CMHC has published a book devoted entirely to this special type of landscape treatment which contains some unique advice. *Site Improvement of Older Housing* (NHA 5602) provides detailed explanations of the numerous site design considerations which have been noted: parking, space limitations, barrier-free access, energy conservation, grading, surface drainage, snow and garbage storage, hard surfacing and building materials, plants and low-maintenance design. It also explains and provides actual examples of the site-design process, from client interviews and site analysis, through schematic planning, construction detailing, grading, construction, planting and maintenance.

This publication also provides design guidelines for site improvement of different housing densities such as single-family or row, including such aspects as parking; rear, side, and front yards; entrances and outdoor living areas. Perhaps most helpful are the case studies of actual renovations which have been carried out in Vancouver, Toronto and Montreal.■

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Qui a accès au logement neuf et à quel prix?

par Jacques Godbout

L'intérêt pour les dépenses de logement s'est manifesté très tôt chez les observateurs de la société industrielle. Dès le 19e siècle, des enquêtes analysant le budget des ménages, principalement des ménages ouvriers, ont été réalisées dans une perspective de réforme sociale. Rapidement, on a tenté de formuler des lois sur la consommation des ménages, en matière de logement. La plus célèbre est la "Loi d'Engel", qui affirme que la proportion des dépenses de logement est constante quel que soit le revenu. Au début du siècle, Halbwachs analyse le budget des ouvriers et considère les dépenses de logement comme un indicateur de modes de vie, différents selon les classes sociales et presque déterminés par elles. Il fait des dépenses de logement un indicateur du faible degré d'intégration de la classe ouvrière à la société. À l'autre extrême, pour les "classes hautes" le logement est "le centre de gravité de tout le budget".(1)

Cette loi a cessé d'être valide aujourd'hui en Amérique du Nord et s'est même inversée. De façon générale, le taux d'effort (proportion du revenu consacré aux dépenses de logement) actuel diminue avec le revenu, comme l'indique le tableau I qui montre son évolution en milieu urbain (au Canada, au Québec ou à Montréal, selon les données disponibles). On constate que non seulement le taux d'effort diminue avec l'augmentation du revenu, mais qu'il accuse, entre les revenus faibles et les revenus élevés, un écart qui semble s'accroître avec les années, passant de 13,4 points en 1969 à 15,2 points en 1976. En termes économiques, l'élasticité de la demande par rapport au revenu est devenue inférieure à 1.

Édifice d'appartements neuf.

L'accessibilité au logement neuf

Compte tenu de cette évolution générale des dépenses de logement et de sa signification en termes de tendance à l'homogénéisation des modes de vie dans la société industrielle, comment se situe le logement neuf? Qui peut y accéder? Quelles sont les conséquences de l'accès au logement neuf pour le budget des diverses catégories de ménages?

Avant de répondre à ces questions, il faut réviser certains lieux communs concernant à la fois la nature du stock nouveau de logements et, surtout, son accessibilité, telle qu'elle a existé historiquement. Ainsi, contrairement à l'image courante, il importe de ne pas assimiler les logements neufs à la maison unifamiliale; cette dernière ne s'est largement répandue et n'est devenue accessible aux ménages à revenu moyen que depuis la deuxième guerre mondiale.(2) D'ailleurs, même si la proportion de maisons unifamiliales a beaucoup augmenté, on a tendance à oublier que, par exemple, de 1946 à 1970, environ deux tiers des loge-

ments construits à Montréal n'étaient *pas* des maisons unifamiliales. Selon nos données d'enquêtes, avant la guerre, la proportion des maisons unifamiliales construites était d'environ 10%.

En ce qui concerne l'accessibilité des différentes catégories de ménages au parc neuf, il est faux d'affirmer que le logement neuf a été traditionnellement réservé aux ménages à revenu très élevé. Sans parler des cités-jardins, ni des différentes expériences, publiques ou soutenues activement par les gouvernements, de logements neufs pour les ouvriers qui obéissaient à des motifs hygiéniques autant qu'humanitaires et même à des motifs idéologiques.(3) Au Québec, le logement neuf, sauf dans les périodes de très faible construction, a toujours été accessible aux ménages de différentes catégories de revenu.(4) Des programmes publics et des programmes privés (par exemple à Maisonneuve) étaient destinés aux ouvriers. Seuls faisaient exception les ménages à très faible revenu et les immigrants de première génération. Certes, le type et la qualité du logement variaient selon le revenu de l'occupant. Notamment, l'unifamiliale isolée était beaucoup plus rare chez les ouvriers. Mais il existait certaines exceptions, telles le programme des coopératives d'habitation qui, de 1948 à 1968, a permis à environ 10 000 familles d'accéder à la propriété unifamiliale en milieu urbain.(5) D'autres formes d'auto-construction ont aussi existé, mais nous n'avons pas de données précises sur ce sujet.

On peut cependant faire l'hypothèse que la possibilité d'auto-construction était une condition indispensable d'accession à la propriété du logement neuf pour les ouvriers. Traditionnellement, l'auto-construction était le mode habituel d'accession à la propriété d'une maison neuve, et c'est encore partiellement le cas dans les milieux ruraux et pour une grande partie des ménages à travers le monde. Les règlements ont rendu l'auto-construction de plus en plus difficile et pratiquement impossible depuis le début du siècle à Montréal (les premiers règlements ont été édictés à la suite du grand incendie de 1852).(6) Le versement initial a remplacé l'auto-construction, limitant l'accession à la propriété à ceux qui pouvaient épargner, au détenteur d'un capital, sauf lorsque des programmes gouvernementaux ou coopératifs d'accession à la propriété étaient mis sur pied. Ils ont été nombreux au Québec.(7)

Bref, historiquement, l'accession au logement neuf était possible pour la plupart des strates de revenus, mais supposait un taux d'effort supérieur pour les ouvriers et correspondait à des types de logements différents selon les classes sociales puisque, en milieu urbanisé, la propriété d'une maison unifamiliale neuve était réservée aux couches supérieures du fait que l'auto-construction, devenue pratiquement impossible, avait été remplacée par un versement initial auquel la majorité des ouvriers ne pouvaient faire face. Quant aux immigrants de première génération et aux ménages à faible revenu ils étaient confinés à la location dans le parc existant de logements.

Aujourd'hui

Cette situation est-elle encore conforme à la réalité? Qui accède aujourd'hui au nouveau développement résidentiel? Au prix de quel effort financier? Avec quelles conséquences pour les dépenses de logement du ménage et la structure de son budget?

L'établissement précis des dépenses de logement n'est pas simple. Il pose de multiples problèmes de mesure et de comparaison entre les différents ménages (locataires et propriétaires, par exemple); il oblige aussi à tenir compte, dans l'élaboration de la mesure, de différents éléments non inclus dans le loyer lui-même: ensemble des dépenses obligatoires d'entretien, mais aussi certaines dépenses induites par l'occupation du logement. On peut en effet penser que ces dépenses en arrivent à annuler des avantages financiers apparents. Par exemple, les dépenses de transport au travail peuvent avoir pour effet d'annuler l'avantage financier du prix inférieur d'une maison localisée loin du lieu de travail; plus directement encore, les dépenses de réparation et d'amélioration peuvent en partie annuler un faible prix d'achat. Le ménage peut se retrouver avec une proportion de son revenu consacrée au logement très supérieure à celle qu'il prévoyait. Devra-t-on conclure à une "surconsommation d'un logement", comme on l'a fait souvent? (8)

Nous n'utiliserons pas ces concepts subjectifs et qui ne sont pas opérationnels: à partir de quel seuil, montant ou proportion du revenu peut-on considérer qu'un ménage consacre trop d'argent au logement? Un couple âgé qui souhaite maximiser son confort résidentiel et réduire au minimum ses autres dépenses consacre-t-il trop d'argent au logement? Inversement, un jeune couple qui consacre un montant minimum au logement dans le but de voyager ou même dans le but d'épargner pour accroître ultérieurement ses dépenses de logement, doit-il être considéré comme ne comblant pas ses besoins de logement? Les taux d'effort généralement admis comme maximum (25% ou 30% du revenu brut) sont définis de façon purement administrative et relativement arbitraire, sans que l'on sache très bien d'ailleurs l'origine de ces proportions transmutées en normes par l'appareil bureaucratique. En dernière analyse, seul le ménage lui-même est en mesure d'indiquer s'il consacre une part trop importante de son budget au logement. Abstraction faite de tout jugement "moral" sur l'importance du taux d'effort des ménages dans les nouveaux développements résidentiels, il n'en demeure pas moins important de voir comment la proportion du revenu consacré au logement varie selon les différentes caractéristiques des ménages: le revenu, bien entendu, mais aussi l'occupation, le type de ménage, le cycle de vie, etc. Le taux d'effort constitue un indicateur important, d'abord de l'accessibilité au logement neuf, selon les types de ménages mais aussi des caractéristiques du mode de vie qui peuvent être spécifiques aux ménages qui choisissent d'habiter dans un logement neuf.

La mesure des dépenses de logement

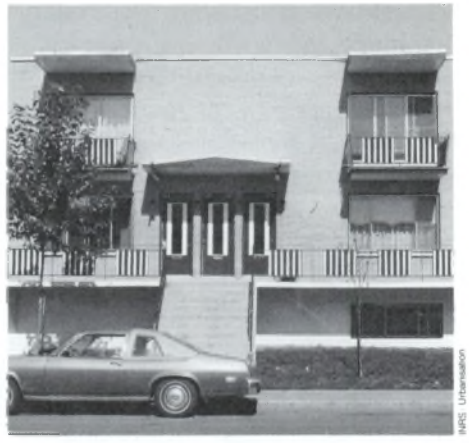
Le choix des composantes des dépenses de logement dépend de l'objectif poursuivi. S'il s'agit, comme c'est souvent le cas dans la littérature sur le sujet, d'évaluer quels revenus sont nécessaires pour accéder à la propriété, le problème de la comparaison avec les dépenses des locataires ne se pose pas. Dans notre étude,[9] qui analyse les conditions et les conséquences financières de l'accessibilité aux nouveaux développements, pour les propriétaires et pour les locataires, il était essentiel de disposer d'une mesure applicable aux deux modes d'occupation. La prise en compte de l'ensemble des dépenses mensuelles réelles, et seulement de celles-là, nous a semblé la solution la plus valable, de préférence à l'utilisation d'un loyer fictif pour les propriétaires, méthode employée dans plusieurs pays, et qui consiste à évaluer le loyer que le propriétaire devrait payer s'il était locataire de la maison qu'il habite. Cette dernière solution est particulièrement mal adaptée à une situation où, comme au Québec, les ménages locataires n'habitent généralement pas le même type de logement que les propriétaires, même dans les nouveaux développements résidentiels. S'il n'existe pratiquement pas de locataires de maisons unifamiliales isolées est-il pertinent d'établir les dépenses de logement des ménages en se demandant combien ils paieraient s'ils étaient locataires de ce type de maison?

Il nous a semblé préférable de prendre comme mesure l'évolution des dépenses réelles, à condition toutefois de pouvoir en arriver à un montant comparable entre les différents ménages. À cette fin, il ne suffit pas de considérer le loyer, pour les locataires, et le capital-intérêt-taxes, pour les propriétaires. D'autres dépenses, obligatoires pour le ménage, font partie des dépenses de logement: chauffage, électricité, eau chaude, etc. Il est nécessaire de les comptabiliser de façon uniforme pour tous. Il y a plus: les ménages doivent faire face à certaines dépenses qui ne sont pas comprises dans le prix d'achat ou dans la location. Ce sont des frais cachés obligatoires qui augmentent les dépenses réelles, puisqu'ils sont nécessaires. C'est ce que nous avons appelé les dépenses induites. Nous avons tenu compte de deux types de dépenses induites: les réparations et améliorations que le ménage est amené à faire après son entrée dans le logement ou la maison, et les dépenses de transport au travail, que nous avons mesurées de la façon la plus exacte possible, par la consommation d'essence correspondant à la distance parcourue et au type de voiture utilisée, pour ceux qui utilisent leur voiture particulière. Selon que l'on tient compte de ces dépenses induites ou non, nous avons défini deux notions: les dépenses de *logement* et les dépenses d'*habitat*. C'est cette mesure, plus précise que la plupart des mesures courantes, qui est présentée ici et mise en relation avec les caractéristiques des ménages habitant les nouveaux espaces résidentiels.[10]

Maison unifamiliale accessible en général à de futurs propriétaires mais non à des locataires.

Les dépenses de logement et d'habitat

Les ménages montréalais consacrent en moyenne 14,7% de leur revenu aux dépenses de *logement*.[11] Dans le cas des ménages habitant les nouveaux développements résidentiels construits entre 1971 et 1976, le taux d'effort moyen est de 19,4% pour les propriétaires et de 21,3% pour les locataires. Certes, il est significativement plus élevé que pour l'ensemble des ménages de la région métropolitaine de Montréal. Mais il est étonnant de constater que ces ménages, qui ont accès à une catégorie de logements dont les qualités sont supérieures à la moyenne, consacrent au logement une proportion de leur revenu bien inférieure aux seuils généralement considérés comme acceptables, soit 25% ou 30% du revenu brut (selon les auteurs). Même ceux qui ne sont pro-



Un triplex, type de bâtiment résidentiel particulier au Québec, où vivent le plus souvent un ménage propriétaire et deux ménages locataires.

Tableau I

Tendance[1]: taux d'effort antérieur et actuel selon l'année d'entrée dans le logement actuel, propriétaires et locataires, nouveaux développements, 1977

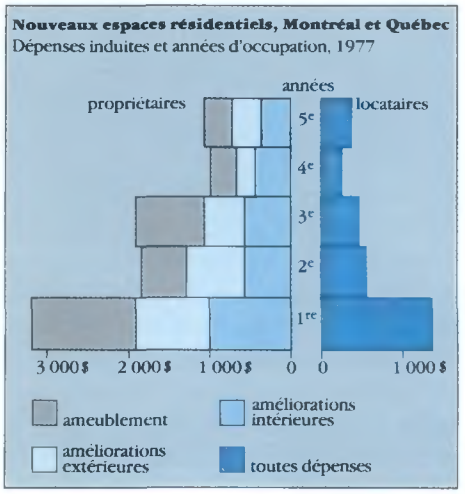
Année d'entrée	Effort, propriétaires (%) Antérieur	Effort, propriétaires (%) Actuel (1977)	Effort, locataires (%) Antérieur	Effort, locataires (%) Actuel (1977)
1971	15,3	11,5		
1972	17,5	14,2	11,3	12,2
1973	17,4	15	14,2	13,1
1974	16,5	17,2	17,9	20,6
1975	17,5	21	17,7	16
1976	17,7	21,5	19,2	18,6
1977	16,7	22,8	25	25,9
Tous	17,1	19,2	21,4	21,6
Nombre de cas	(76)	(74)	(140)	(141)

[1] Vu le faible nombre de cas, notamment pour les propriétaires (inférieur à 10 par catégorie en moyenne), il faut retenir ici la tendance plutôt que le taux d'effort même.

Source: Enquête NER.

priétaires que depuis un an ne consacrent que 21,6% de leur revenu aux dépenses courantes de logement. Toutefois, lorsqu'on ajoute à ces dernières les dépenses induites, le taux d'effort "habitat" moyen atteint 29,4% et, pendant les trois premières années, il dépasse 30%. C'est donc seulement si l'on fait intervenir les dépenses induites (qui comprennent les dépenses de transport au travail) qu'on peut voir apparaître, pour les propriétaires, et pendant les trois premières années seulement un effort financier qui dépasse les seuils généralement considérés comme acceptables dans les différentes politiques gouvernementales de logement. Rien ne permet donc de penser que les ménages résidant dans les nouveaux développements sont surchargés par les dépenses de logement, qu'il s'agisse des dépenses courantes ou des dépenses non prévues, dont nous avons tenu compte dans notre étude. Bien sûr, ces dernières constituent un fardeau non négligeable pour les ménages propriétaires, surtout pendant les deux premières années.

Même si ces dépenses induites sont particulièrement importantes, elles ne permettent pas de confirmer l'hypothèse que l'accession au logement neuf, et notamment l'accession à la propriété, entraîne une surconsommation ou des dépenses inattendues à long terme pour les ménages. En effet, nos données indiquent que



le taux d'effort des ménages qui accèdent aux nouveaux développements est supérieur à celui qu'ils connaissaient dans leur logement antérieur au début. Mais cela constitue un phénomène provisoire, puisque pendant la quatrième armée d'occupation, le taux d'effort ne dépasse pas celui que les ménages avaient atteint avant d'acquérir leur maison. S'il existe une tendance, chez ces ménages, à consacrer plus d'argent au logement que la moyenne des ménages, cette tendance n'est pas apparue avec l'accession au logement neuf; elle existait antérieurement et n'a donc pas été entraînée de façon non voulue par une telle accession. On ne peut pas non plus confirmer l'hypothèse que certains ménages qui ont des dépenses de logement plus faibles que les autres ménages, voient cet avantage neutralisé et nié par des dépenses induites inattendues plus élevées. Cette hypothèse, qui est formulée surtout pour les propriétaires, est infirmée par les résultats de l'enquête qui montrent que les dépenses induites sont proportionnelles aux dépenses de logement. Elles augmentent, avec les dépenses de logement (tableau II), ce qui infirme complètement l'hypothèse que les ménages qui accèdent aux nouvaux développements seraient "étouffés" indirectement par le coût d'accession à ces logements, sauf de façon provisoire, et pour certains propriétaires seulement.

Tableau II

Écart entre le taux d'effort "habitat" et le taux d'effort "logement" selon le niveau des dépenses de logement, locataires, propriétaires et ensemble, nouveaux développements de Montréal et de Québec, 1977

Dépenses de logement ($) ("tous" et loc.)	Taux d'effort (%) (1) Tous	(1) Loc.	(2) Tous	(2) Loc.	Écart (2) Tous	Écart (1) Loc.	Dépenses de logement ($) (propr.)	Taux d'effort (%) (1)	Taux d'effort (%) (2)	Écart (2-1)
≤ 200	19,2	20,1	23,7	25,6	4,5	5,5				
201-250	17,3	17,9	26,6	27,1	9,3	9,2	201-210	14,9	23,9	9,0
251-300	17,4	18,2	24,5	24,1	7,1	5,9	211-300	15,3	25,8	10,5
301-350	18,9	21,7	29,4	32,7	10,5	11,0	301-380	16,7	25,2	8,5
351-400	21,1	21,4	32,1	25,8	11,0	4,4	381-400	21,0	35,5	14,5
401-450	20,6	17,9	32,0	23,1	11,4	5,2	401-450	21,6	35,9	14,3
451-500	22,2		32,8		10,6		451-500	23,0	34,2	11,2
≥ 501	22,4		29,9		7,5		≥ 501	24,3	33,6	9,3
Moyenne	19,0	18,9	28,0	26,5	9,0		Moyenne	19,1	30,2	11,1
Nombre de cas	1070	565	703	419			Nombre de cas	504	284	

Source: Enquête NER. (1) Logement (2) Habitat

À qui s'adresse les nouveaux développements?

Dans les années 70, la majorité des ménages peuvent accéder au parc de logements neufs, à titre de propriétaire pour les ménages familiaux, de locataire pour les ménages non familiaux. Mais, à l'exception des ménages à revenu élevé, l'accession aux nouveaux développements suppose un effort financier accru pendant les premières années; la même constatation s'applique aux locataires à faible revenu, à l'exception des ménages non familiaux principalement, des personnes âgées, dont le taux d'effort est partout semblable. Pour les autres ménages accédant aux nouveaux développements, on constate une orientation "familialiste"; mais il s'agit d'un choix ancien, préalable, même pour les locataires, car leur taux d'effort dans leur logement antérieur est semblable à leur taux d'effort dans les nouveaux développements, et supérieur à l'ensemble des ménages habitant les logements plus anciens.

Mais le revenu n'explique pas tout. Autrement dit, à revenu égal, les dépenses de logement ne sont pas toujours semblables, surtout chez les propriétaires. Cela dépend évidemment de la structure de financement et de l'année d'achat; mais aussi d'autres caractéristiques. Ainsi pour certains ménages, le taux d'effort varie avec l'occupation du ou des responsables de ménage; et, inversement, des ménages dont le ou les responsables ont un emploi similaire, ont une structure de dépenses de logement différente. Ce phénomène est suffisamment prononcé pour permettre de conclure qu'à Montréal, comme dans le reste de l'Amérique du Nord, "les dépenses de logement des familles sont beaucoup trop diversifiées pour qu'on les explique par des principes simples".(12) Cette affirmation

qui s'applique au logement en général est vraie aussi pour les nouveaux développements résidentiels.

Cette situation est fort différente d'un pays comme la France, où "en matière de logement, la péréquation s'effectue largement de manière objective et automatique. Si le niveau de consommation s'aligne régulièrement sur le montant des ressources, c'est

Ainsi, chez les propriétaires, on a établi l'existence d'un groupe de ménages particulièrement familialistes: haut taux d'effort, localisation éloignée du centre, dépenses de transport au travail importantes, même si la femme ne travaille pas, etc. Or, ce groupe (qui comprend 27% des propriétaires) se caractérise par des revenus inférieurs à la moyenne, et il

prononcée. Ce fait renverse donc l'hypothèse historique à propos de l'importance que les différentes classes accordent au logement: on ne peut plus identifier les ouvriers par leurs faibles dépenses de logement; au contraire, et ce renversement est vérifiable autant dans les nouveaux développements que dans l'ensemble du stock.

Nouveau modèle de maisons unifamiliales en rangée à Laval, accessible à de futurs propriétaires mais non à des locataires.

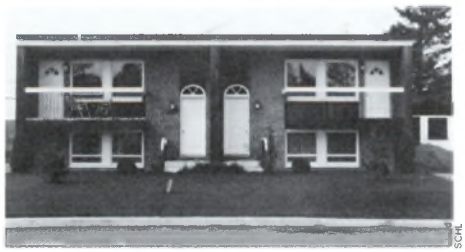
Tableau III

Taux d'effort et revenu selon l'occupation, propriétaires et locataires, nouveaux développements, Montréal, 1977

Occupation	Propriétaires		Locataires		Tous	
	Revenus ($)	Effort (%)	Revenus ($)	Effort (%)	Revenus ($)	Effort (%)
Cadres supérieurs et professions libérales	30 653	19,1	37 773	11,4	35 295	13,9
Commerçants, artisans	29 733	14,4	25 951	15,6	29 040	14,7
Cadres moyens et techniciens	26 814	17,6	22 902	17,5	24 925	17,6
Ouvriers qualifiés, contremaîtres	23 566	20,7	22 690	12,7	23 306	18,2
Cols blancs	21 154	20,1	18 116	21,1	19 554	20,6
Ouvriers spécialisés, manoeuvres	20,430	22,3	17 189	18,9	19 260	21,0
Employés de service	20 517	23,4	15 944	24,1	17 719	23,8

que les deux grandeurs sont fortement correlées indépendamment des volontés des ménages".(13) Selon ces auteurs, en France, les classes sociales ne se distinguent plus par l'effort financier consacré au logement au sens strict, mais par l'importance accordée à d'autres postes liés de près au logement, comme les dépenses d'intérieur; ou encore les différences se concentrent dans d'autres secteurs d'activité, comme les loisirs ou la sociabilité.(14)

À Montréal, on a constaté au contraire une plus grande diversité physique des logements qui va de pair avec une diversité de modèles de consommation de logement à l'intérieur d'une même classe sociale. Le taux d'effort "logement" ne varie pas seulement en fonction du revenu.



Quadruplex, bâtiment de quatre logements accessibles aux locataires comme aux futurs propriétaires.

comporte une proportion d'ouvriers plus importante que les autres groupes qui ont pu être identifiés. De plus, cette caractéristique n'est pas propre aux ménages ayant choisi d'accéder aux nouveaux développements. Elle s'applique aussi à des ménages qui vivent ailleurs mais de façon moins

Type de logement et statut d'occupation

Cette dernière remarque nous amène à réfléchir sur l'importance réelle de la distinction entre le logement neuf et le reste du stock, par rapport à d'autres caractéristiques. Le statut d'occupation et le type de logement occupé rendent compte des principales différences observées dans les dépenses de logement. Mais, dans ces dépenses, il n'est pas facile de distinguer entre ce qui est dû au type de logement et ce qui est dû au statut d'occupation.

Il y a une correspondance très grande entre le type de logement et le statut d'occupation: seuls les plex(15) ont à la fois des locataires et des propriétaires. Mais, même là, surtout dans les logements neufs, la grandeur et les caractéristiques du logement des propriétaires et des locataires sont très différentes. Autrement dit, on ne choisit pas un type de logement indépendamment de son statut d'occupation. C'est pourquoi il est difficile de comparer les dépenses de logement des locataires et des propriétaires pour des conditions de logement équivalentes. Ainsi, nous avons constaté que les dépenses de logement sont plus élevées pour les propriétaires, et surtout pour l'accession à la propriété, à cause des modalités dont le versement initial. Les dépenses de logement sont donc plus élevées pour accéder à la propriété qu'à la location.

Mais de cette constatation (du fait que les dépenses sont plus élevées), on ne peut pas conclure que, dans des conditions équivalentes, par exemple, pour une même superficie (voir

tableau IV), les dépenses sont plus élevées pour les propriétaires car ceux-ci occupent toujours des logements différents de ceux des locataires. Malgré la très grande difficulté de comparer les dépenses des uns et des autres pour des logements à caractéristiques égales, nous en sommes arrivés à la conclusion que, à "consommation égale", les locataires dépensent plus et non pas moins que les propriétaires. En d'autres mots, il coûte plus cher d'être locataire que d'être propriétaire pour un même "niveau" de consommation. Or, comme le revenu des ménages qui sont locataires est plus faible, il s'agit là d'une situation non souhaitable socialement. En fait, la très grande corrélation entre statut d'occupation et type de logement entraîne que quelqu'un qui ne veut pas consentir un effort important pour le logement, soit à cause de son revenu, mais soit pour d'autres raisons aussi (c'est-à-dire peu importe son revenu) n'a d'autres choix que d'être locataire.

Tableau IV

Dépenses de logement au pied carré selon le type de bâtiment et la génération de logements, propriétaires et locataires, Montréal 1977 ($)[1]

	Avant 1945			1946 - 1960			1961 - 1970			1971 - 1977		
	Unif.		Plex	Unif.		Plex	Unif.		Plex	Unif.		Plex
Propriétaires												
Nombre de cas	0,18 (21)		0,17 (24)	0,22 (79)		0,20 (36)	0,22 (51)		0,28 (24)	0,39 (408)		0,25 (19)
Moyenne		0,17			0,21			0,24			0,38[2]	
	Plex	Wu	Tours	Plex	Wu	Tours	Plex	Wu	Tours	Plex	Wu[b]	Tours
Locataires												
Nombre de cas	0,21 (115)	0,27 (30)		0,25 (59)	0,30 (57)	0,40 (4)	0,30 (28)	0,28 (43)	0,41 (11)	0,28 (97)	0,33 (107)	0,53 (202)
Moyenne		0,225			0,28			0,30			0,42	

[1] Il s'agit de la moyenne des dépenses au pied carré pour tous les ménages y compris les cas marginaux, qui n'apparaissent pas (cases vides).
[2] Walk-ups sans ascenseur seulement.
Source: Enquête NER et VER.

À partir de ce raisonnement, on en arrive à conclure qu'il serait souhaitable de faire en sorte que tout ménage puisse choisir d'être propriétaire ou locataire, quel que soit le type et le degré d'importance de sa consommation de logement. Or, c'est ce qui se produit depuis quelques années à Montréal, par la diversification des formules de propriétés qui n'est plus liée seulement à la maison unifamiliale ou à un seul logement d'un duplex ou triplex: coopérative, copropriété divise ou indivise. Cette évolution est théoriquement souhaitable, puisque tout ménage peut être propriétaire de son logement, et que son coût sera moins élevé que ce qu'il paie comme locataire. On peut soulever l'objection évidente du problème du versement initial: tout ménage ne dispose pas d'épargne. Mais une politique gouvernementale pourrait facilement remédier à ce problème (prêt du versement initial, à certaines conditions).

L'autre objection qui est soulevée à une telle diversification du statut de propriété concerne ses effets inflationnistes sur le stock usagé, sur le stock moins cher. Qu'en est-il?

Si les ménages n'accèdent pas au logement neuf, ce danger est tout à fait réel. À cet égard la situation montréalaise de ces dernières années est exemplaire: "pour la première fois depuis longtemps, le loyer moyen des logements a augmenté en 1981 davantage que l'indice des prix à la consommation.(16) Mais cela n'est pas dû à la plus grande variété des formes de propriétés, mais aux taux d'intérêt élevés. En fait, ce qui est important c'est que les ménages qui ont un revenu suffisant accèdent au logement neuf et non pas qu'ils accèdent à la propriété comme tel. Au contraire, si les ménages à revenu moyen-supérieur accèdent à la propriété de formes de logement différentes de la maison unifamiliale, cela va accroître le mécanisme du filtering (processus par lequel les ménages avec l'âge, passent à des catégories de ménages à revenus de moins en moins élevés). Car la maison unifamiliale ne passe pas au marché locatif. C'est grâce aux autres types de logement qui sont construits que le mécanisme du filtering peut vraiment atteindre les couches de ménages à revenu faible.

Donc, s'il était plus facile de devenir propriétaire d'un type de logement différent de la maison unifamiliale cela ne pourrait qu'avoir des conséquences positives sur la situation des ménages locataires dans la mesure où il y aurait des incitations suffisantes pour que les ménages à revenu supérieur accèdent à la propriété des logements neufs.

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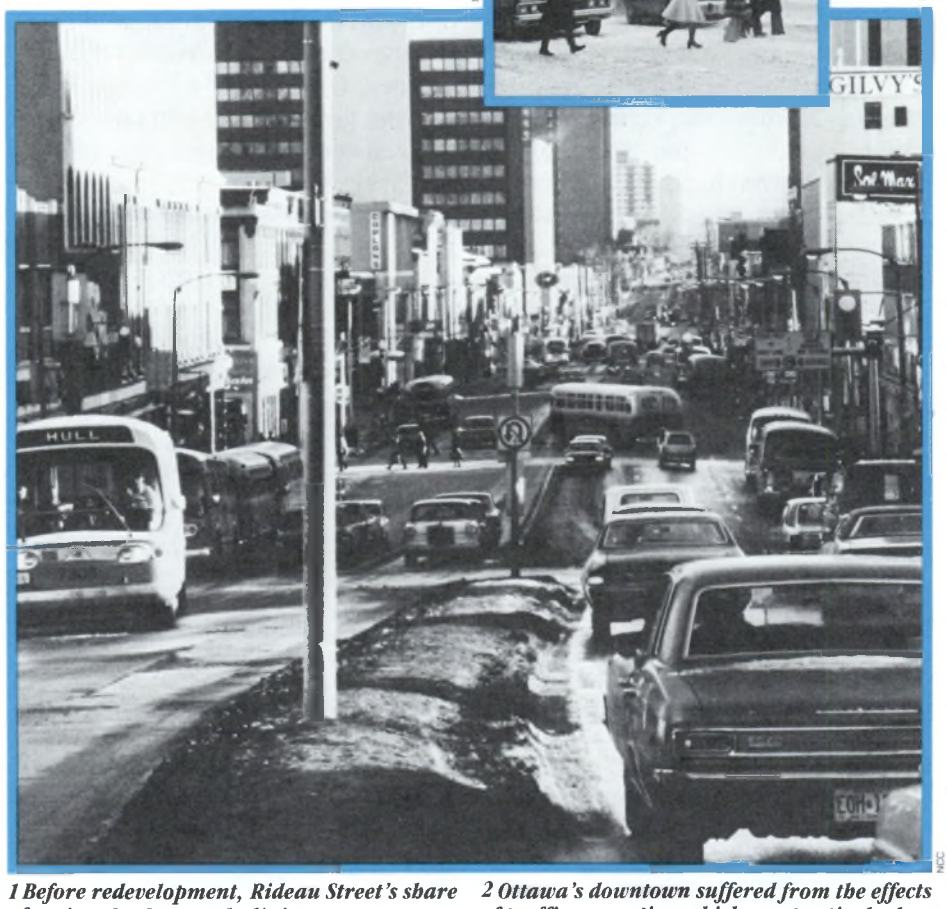
Références

1. Halbwachs, Maurice, *La Classe ouvrière et les niveaux de vie,* Gordon et Breach, 1970 (1ère éd.:1912), p. 451.
2. En milieu urbain et à l'échelle du XX[e] siècle; à une échelle historique plus vaste, la maison individuelle était, au contraire, le mode presque exclusif d'habitat au Canada avant l'industrialisation.
3. Choko, Marc H., *Crises du logement à Montréal (1860-1939),* Montréal, Éditions coopératives Albert Saint-Martin, 1980.
4. Collin, Jean-Pierre, *Histoire de l'urbanisation de la paroisse de Montréal, 1851-1941,* Montréal, INRS-Urbanisation, versions préliminaire, 1981 a. À paraître.
5. Godbout, Jacques, "L'échec récent des coopératives d'habitation au Québec", *L'Habitation et citoyens,* vol. 5, no 4, hiver 1975, pp. 1-7.
6. Collin, op. cit.
7. L'histoire de l'auto-construction et de la réglementation est encore à faire pour le Québec; mais la relation entre la fin de l'auto-construction et l'apparition du versement initial comme principal facteur empêchant l'accession à la propriété a été étudié dans d'autres pays. Ainsi, en Suède, écrit David Pass: "À mesure que les règlements municipaux de construction devinrent plus sévères, (...) les auto-constructeurs furent remplacés par des entrepreneurs en construction. Il s'ensuivit que les constructeurs commencèrent à exiger les versements initiaux de 20 à 25%." (*Vallingsby Farsta. From Idea to Reality: The New Community Development Process in Stockholm,* Cambridge, Mass., MIT Press, 1973, p. 32 (notre traduction).
8. Voir David Harvey: "The urban process under capitalism: A framework for analysis", *International Journal of Urban and Regional Research,* vol 2, no 1, 1978, pp. 101-103.
9. Godbout, Jacques et Serge Blais, *L'accessibilité financière au logement neuf,* Montréal, INRS-urbanisation, Rapport de recherche, no 8, 1983, pp. 11-17.
10. Les données ont été recueillies en 1977 sur un échantillon de ménages habitant les nouveaux ensembles résidentiels construits entre 1971 et 1976 dans l'agglomération de Montréal. Tous les types de logement construits pendant cette période sont représentés dans l'échantillon. Nous pouvons aussi comparer les dépenses des ménages vivant dans les logements neufs avec celles des ménages résidant dans le parc de logements plus ancien, grâce aux données d'une enquête menée en 1979 sur deux échantillons, l'un constitué de ménages habitant des logements construits avant 1972, le second de propriétaires ayant acquis une maison "usagée" entre 1971 et 1976.
11. Statistique Canada, Dépenses des familles urbaines, 1976, Cat. 62-547, tableau 3. Il s'agit des revenus avant impôt, ce qui abaisse le taux d'effort des ménages à revenu plus élevé. Nous indiquons ici le taux d'effort moyen (et non la moyenne des taux d'effort) pour fins de comparaison avec les données de Statistique Canada, qui utilise un taux d'effort moyen.
12. Maisel, Sherman J. et Louis Winnick, "Austerity, shelter and social conflicts in the United States", *International Journal of Urban and Regional Reserach,* vol 5, no 2, 1966, p. 139 (notre traduction).
13. Baudelot, Christian, Roger Establet et Jacques Toiser, avec la collaboration de P.O. Falvigny, *Qui travaille pour qui?,* Paris, Maspero, "Cahiers libres", 354, 1979, p. 76.
14. Paradeise, Catherine, "Sociabilité et culture de classe", *Revue française de sociologie,* XXI-4, 1980, pp. 591-597.
15. Durant cette recherche, nous avons été contraints d'introduire ce néologisme pour désigner un type de bâtiment résidentiel propre au Québec, comprenant de deux à cinq logements (duplex, triplex, etc.), ayant tous une entrée extérieure indépendante, et dont l'un des logements est souvent occupé par le propriétaire.
16. Mathews, "La demande de logement: vers la transition", *Activité immobilière,* vol. 6, no 4, 1983, pp. 64-71.

by Anne Gilmore

The Rideau Area Project:

Changing the Face of the Nation's Capital



1 Before redevelopment, Rideau Street's share of regional sales was declining.

Between 1966 and 1978, the downtown share of the region's sales dropped from 40% to 22%.

2 Ottawa's downtown suffered from the effects of traffic congestion which was particularly bad on Rideau Street during rush hour.

It's a project that many thought would never be built. It took over nine years to plan, three years to build and a quarter of a billion dollars to complete. It's called the Rideau Area Project, and without a doubt it has changed the face of the nation's capital.

Less than half a kilometre from Parliament Hill, there is now an ultra-modern shopping mall, a convention centre and a hotel – all linked to Rideau Street by a one-of-a-kind convertible system of enclosed sidewalks and overhead walkways. Rideau Street itself has been remodeled from a crowded noisy six-lane main street to an efficient three-lane bus-only mall through which pass more than 50 per cent of the city's buses.

It's a startling transformation which its planners hope will spark an economic and social revitalization of Ottawa's entire eastern inner core. It's a hope that some critics of the project think has not been fulfilled, but supporters believe is already becoming a reality.

In the beginning...

As David McRobie, the architect in charge of designing the enclosed sidewalk system, says, "If nothing else, the Rideau Area Project has longevity." Its roots go back to the early 1970s when the merchants and property owners on Rideau Street banded together to seek government funds to help them stop the economic decline of their street brought about by the growth of suburban shopping plazas. At the same time, a major private developer, Citicom Inc., was acquiring lands in the central inner city core for possible office and retail development.

The federal government offered to buy these lands and in exchange gave Citicom the opportunity to build on the undeveloped 5.6 ha piece of federal land south of Rideau Street. In 1972, with the support of the Rideau Street merchants group, the federal government made a public commitment to revitalize the Rideau area. Thus began the long, often stormy, nine years of planning that preceded the development's groundbreaking.

The first phase of the Rideau area planning process (1972-77) was, to say the least, tumultuous. It was a time for grand designs, great public dissatisfaction, few decisions and much bitterness. Between 1972-75, the planners from the National Capital Commission and Public Works Canada along with the regional and municipal governments created what Linda Allen, former project coordinator for the Rideau area project team, calls "a massive development in an exciting and bold design which, because of its lower scale, was in some ways more sympathetic to the site and the Rideau Canal than the present development." Their plans called for a 75 000 m^2 federal office building, many residential units, a department store and a completely enclosed galleria (a la Milan, Italy) which would remove all traffic from Rideau Street. Says Allen,

"Its enormous cost as well as the impact of putting substantial amounts of traffic into the nearby residential communities brought the public into the planning process." A public meeting at which these proposals were presented gave rise to the Public Advisory Committee which represented citizen groups from the nearby communities, and merchants from the downtown retail and open-air farmers' market.

At its own expense, the Public Advisory Committee prepared a report containing some 70 recommendations which expressed their concerns regarding the impact of the proposed development on the surrounding communities. "It was a document received with great suspicion and negative reactions by the planners," says George Wilkes, one of the members of the Public Advisory Committee, "but with the help of the Federation of Community Associations, who lobbied on our behalf, we were finally able to at least get observer status on the planning committee. Later, we were permitted to talk, but not to vote."

By 1977, however, the inefficient and cumbersome structure of the planning group, plagued by unclear reporting relationships and its large size, had brought the planning process to a halt. Says Allen, "It was a structure that resulted in a lot of work, but only a few decisions."

It was at that point that the National Capital Commission called in Harry Lash, a former labour negotiator and chief planner for the City of Vancouver, to devise a new structure wherein the numerous interests in the Rideau area would have an opportunity to contribute their concerns and ideas to the planning process. The result was a streamlined reporting structure and a central advisory committee which became known as PRAG, the Project Review and Advisory Group. Lloyd Sankey, then a Montreal-based architect, was called in to head the group.

"One of the important things that Lloyd addressed," says McRobie, "was the fact that you could not study the Rideau Centre without looking at the much, much larger area, and he defined roughly a twenty-block study area. We realized that within that area was a fantastically diverse population, all of whom would be affected by the project and all of whom would deserve a say." Thus, PRAG represented interests ranging from the local merchant organizations to the developer, Viking Rideau Corporation, and from the federal government to the Public Advisory Committee. "It was quite a change. It was the first time we had talked to or even seen the developers of the site," says Wilkes.

Aerial view shows the project site before redevelopment.

The downtown railway yards east of Colonel By Drive and south of Besserer Street were used as a parking lot until they were purchased by Viking Rideau Corporation on June 5, 1981. Construction of the Rideau Centre started the following morning. The four-hectare site, largely owned by the federal government, provided parking for some 700 cars.

The Rideau Centre shopping mall took 21 months to construct. During the building period, an average of 1 000 construction workers were on-site every day. The site was originally the turning basin for barges at the northern terminus of the Rideau Canal. Some 181 000 t (metric tons) of stone were needed to provide a solid foundation for the Rideau Centre complex.

PRAG systematically debated planning alternatives. In the transportation arena, for example, 23 possible traffic options were identified. These were discussed at workshop sessions where all interested parties could write their comments, positive or negative, on huge wall-sized panels. Only those options acceptable to the majority were forwarded to the coordinating and policy commit-

tees. The policy committee (which consisted of the Major of Ottawa, the Regional Chairman and the Chairman of the National Capital Commission) in turn presented its choice of options to their respective councils or boards for approval.

In fourteen months, PRAG had prepared a comprehensive strategic plan for the development of the Rideau area. Says Allen, "Lloyd Sankey was the right personality in the right structure to make it all work."

This phase of the planning process ended dramatically when Denis Coolican, on his last day as regional chairman, cast the deciding ballot at regional council to accept the strategic plan and sign the May 15, 1979 tripartite agreement which committed the three levels of government to complete the necessary traffic and financial arrangements to complete the project. The City of Ottawa was given responsibility for the implementation of the plan and its five-member project team headed by the City's director of engineering and surveys, David Donaldson, set up their storefront office in the heart of the development area.

It seemed that at last after seven years of planning, the Rideau Area Project was ready to go ahead. But as McRobie puts it, "there's nothing clear cut about the Rideau Area Project. Little did we know that a major element of the project – namely the transit mall – was going to dramatically change."

Transit Mall

When I came in 1979," says McRobie, "I assumed that the Rideau Street mall would be an open mall like the ones in Minneapolis, Chicago or Denver. What we had not counted on was that the merchants on Rideau Street would petition city council and say that they would no longer provide political support for the mall unless something further was done to help them." The Rideau Street merchants and property owners subsequently came forward with their own design for fully enclosed climate-controlled sidewalks which city council rejected as imposing a suburban shopping centre concept on a downtown area to the total detriment of the urban landscape.

According to project manager, David Donaldson, what finally emerged was "the great Canadian compromise" – a convertible sidewalk enclosure with sliding doors which open in the summer and provide a minimal level of heat in the winter. "The project team were open-mall people," says Donaldson, "and reluctant to put hardware on the street. We had to compromise in terms of urban landscaping more than we would have liked, but we had to get on with it."

The convertible sidewalk system had never been done before, and posed some unique technical problems that required innovative design solutions. The enclosure, for example, is a lightweight structure of steel and glass whose foundations would run the risk of frost uplift unless properly designed. "So that the posts could withstand the uplift, we designed a pipe within a pipe so that the frost would grab hold of the outer pipe, but the structure itself bears on the inner stable pipe," says McRobie.

Laying the foundations was in itself a difficult task because of the wide variation in soil conditions along the 305 m of the enclosure. "The land near Sussex Drive was once the turning basin for barges using the Rideau Canal," says McRobie. "It was later landfilled, so that under the soil there's nothing but rubble and debris. To support a five-metre-high column, we had to put the foundation post 27 m deep. At the other end, where the rockbed is near the surface, the foundation is only one metre deep."

On the whole, however, the major construction phase of the project was straightforward. Blessed with short, mild winters, three construction seasons were compressed into two (summer 1981 to spring 1983). "As a result," says Lyall Thompson, general manager of the Rideau Centre shopping plaza, "the Centre was built within its budget and six months early."

McRobie: "I wouldn't have anyone come to Ottawa to look at the project without talking to the merchant community. The enclosures were initiated by the owners and merchants on Rideau Street."
All poles were removed so that the whole curb edge is free of any kind of obstruction. The roadway was sloped to the centre so that gutters stay dry.
The exposed steel structures are painted in muted colours to blend with adjacent buildings. The roof and walls are mostly double-glazed and solar-grey tinted glass.

Information Program

However, downtown streets crowded with equipment and construction workers is hardly conducive to retail trade. "One of the biggest fears of retailers is the loss of business during construction," says Peter Mercer, general manager of the Downtown Rideau Board of Management. To avoid this, to keep the Rideau area an active and lively retail area, numerous activities were planned, such as a time capsule, painting contests, and teenagers on rollerskates directing shoppers to parking spaces. "They may have been hype and a little hokey," says McRobie, "but they provided essential public information to keep people interested during the construction."

The project team's information program extended not only to the public but to the business community as well. And Mercer believes that the almost daily contact between the

business community and the on-site project team helped his members survive during the construction phase of the project. "The cooperation between the project team and the retailers was excellent," says Mercer. "The retailers were always very well informed of construction plans so that they could schedule sales or reduce their inventory. Sometimes, the project team would even stop work and remove machinery so that a store could carry on a sale. This flexible and sensitive attitude on the part of the project team made all the difference to the retailers," says Mercer, "and the result was that not one local business on Rideau Street closed during the construction."

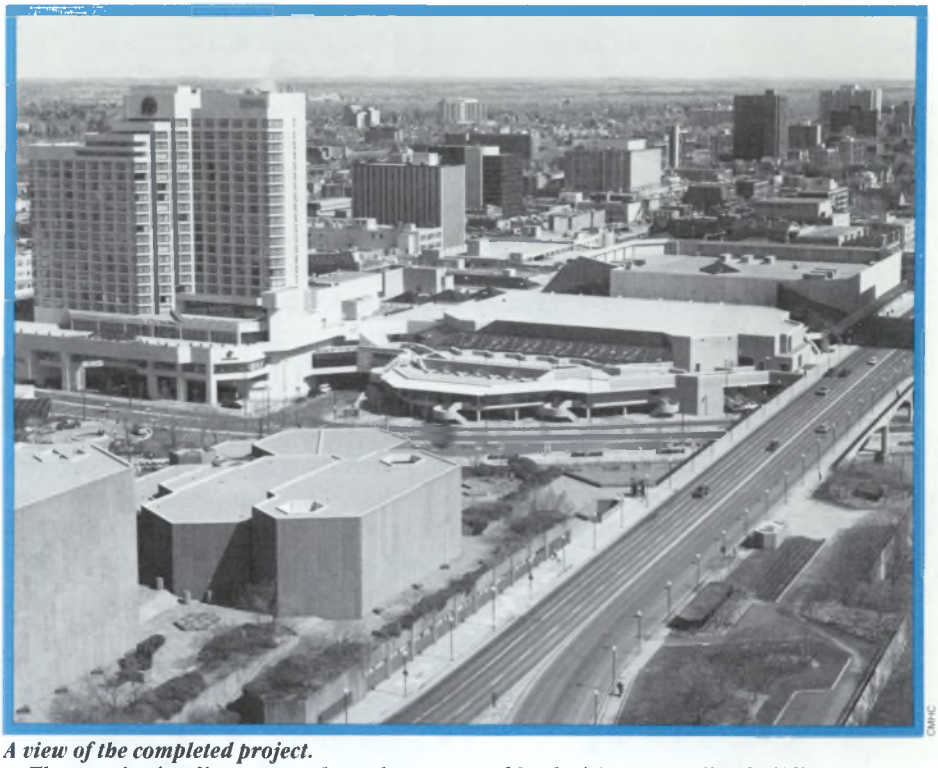
A Social and Economic Success?

The dust from the construction of the Rideau Area Project has settled, but the debate as to the social and economic success of the project carries on.

Social problems of vandalism and vagrancy within the enclosed sidewalks and the subsequent need for security have arisen. "We must approach these problems with sensitivity, but firmness," says Donaldson. "We've been working with the city and the police," says Mercer. "We now have security at night from 7 p.m. to 7 a.m., and some form of daytime patrol is a possibility."

In general, most observers seem to be happy with the economics of the Rideau Centre itself. The shopping plaza, hotel and convention centre have generated revenue and employment over and above expectations. "We've exceeded our first year's goal of average sales of $28 per square metre of retail space," says Lyall Thompson, general manager of the shopping plaza. "And over 95 per cent of the stores were leased by the first anniversary of the centre." (March 16, 1984). Canada's Capital Convention Centre is also ahead of earlier predictions. The convention centre has brought in 42 full-time jobs and up to 300 part-time jobs to the area – almost double its original estimate. General Manager George McCabe says, "For 1985, the Centre's convention space is already over 65 per cent booked – way ahead of the usual industry target of 25 per cent."

The economic health of the business community outside the Rideau Centre is, however, a matter of dispute. Inside the enclosed pedestrian mall on Rideau Street, the store sales are up 30 per cent according to Mercer, but according to Barry Padolsky, an architect and urban planner who represented the community interests on PRAG and who remains the project's most severe critic, the area is in overall economic decline. He likens the enclosed sidewalks to "putting a glass mini-skirt



A view of the completed project.
The exterior is a limestone-coloured concrete to blend with surrounding buildings.
Both the hotel and the convention centre face Colonel By Drive and the Rideau Canal. The National Arts Centre is in the left foreground.

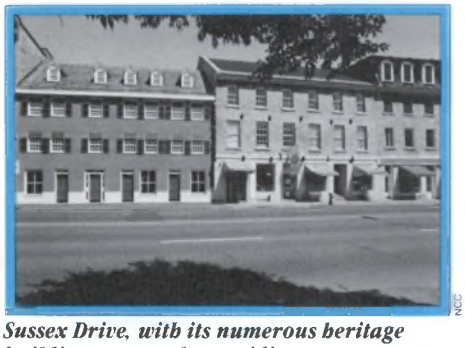
The skylight above the escalators allows the sun to shine down through the centre of the shopping mall.
The various parts of the project are connected by an internal system of pedestrian streets.

The roof garden, landscaped with many varieties of hardy trees, shrubs and flowers, cost approximately $5 million.
It is accessible to the public all year but, when the weather is poor, it can best be enjoyed from the adjacent cafés.

Byward Market is in a state of flux with boutiques and restaurants replacing traditional surplus and discount stores.

Open-air produce vendors are still a major feature of the Market area.

Outdoor restaurants, which patrons may reach on foot, by bicycle or by car, are a feature of the Rideau project area.



Sussex Drive, with its numerous heritage buildings currently providing restaurants, shops and housing, forms the western edge of the redevelopment area.

on an old lady. It might as well be a glass tomb for the economy of the street," says Padolsky. "One of the main goals of the project was to revitalize Rideau Street and it's clear now that it's a total failure; it hasn't retarded the decay. In fact, a large clothing store has gone into receivership; the merchants complain that they can't be seen from outside the enclosure and a number of businesses have moved. What's left on Rideau Street is a minor lower-grade shopping centre."

In response, Mercer points to new businesses moving into the enclosed sidewalk area as ample evidence of the success of the project. Mercer does say, however, that to survive, the present stores must "change their style of merchandising and layouts to accommodate the younger consumers who now come to shop in the area."

Mercer also notes that the holistic planning approach adopted by the project team has prevented the vacuum-cleaner phenomena found in cities such as Toronto and Vancouver from emerging in Ottawa. In those cities, large downtown shopping centres have sucked the retail activity out of the surrounding streets into the shopping centres. The downtown retail shopping area east of the Rideau Centre development is the Sparks Street Mall. "Established retailers on Sparks Street have experienced little or no change in the volume of their sales since the opening of the Rideau Centre," says Peter Fisher, president of the Board of Directors for the Sparks Street Business Improvement Area. "If anything, our area is undergoing a revitalization of its own."

The Byward Market, the open-air farmers' market and retail and restaurant area immediately to the north of Rideau Street, in Padolsky's view, is the major victim of the Rideau Area Project, primarily because of the impact of the new traffic patterns to accommodate the bus-only mall on Rideau Street. In particular, he points to the diversion of westbound traffic off Rideau to George Street which runs through the Market. "The pedestrian used to dominate the street and now it's the car," says Padolsky. "And York Street, the main access point from the west, is so overcrowded that the shoppers' frustration is very high. As a result, there's been a decline in retail sales in the Market. After two years of construction and one year of the new traffic plan, the Market is hurting. A number of established stores have closed or moved out."

The project team leader, David Donaldson, responds that "it's never been easier to get access to the Mar-

ket. We've change George Street from a congested six-lane street chock-a-block with buses, trucks and cars to a three-lane one-way regional road with wider sidewalks, brick paving, trees and signalized crossings which favour the pedestrian." Says project team coordinator Linda Allen, "a lot of sweat and work went into trying to meld the Market with the Mall. Pedestrian counts show that the volumes are up on George Street. We're keeping our fingers crossed."

The Byward Market merchants, however, want changes now. They've revived their merchant association and have made representations to city council about the two biggest problem areas – traffic and shortage of parking. "Both have increased since the opening of the Rideau Centre," says Irving Rivers, president of the Byward Market Merchants Association. "George Street is a real barrier and we need more parking spaces."

East-End Development

Although parking has been a problem from the time the shopping centre opened, Donaldson believes that the situation should ease as the focus moves to developing the east end of the project area.

While at one time the most appropriate anchor for the eastern section of the project was thought to be another large retail development, Donaldson now believes that the east end should be viewed as a place to live, work and park. "At the time of the building," says Donaldson, "20 per cent interest rates made building housing of any kind economically unfeasible. Now with the interest rates lower, our objective is to promote new residential and mixed-use developments in the east end which will include parking." Privately financed condominiums and publicly funded non-profit housing are the kinds of residential developments he believes will emerge in the area.

"Our aim is to change people's perception about the Rideau area so that they see the area as a whole; so that you park your car in the east end and walk through the enclosed sidewalks to the Rideau Centre and the Market," says Donaldson.

The surrounding residential communities of Sandy Hill and Lowertown are happy with the move to add a residential component to the project. George Wilkes: "All during the planning process, we kept reiterating the importance of residential development to increase the vitality of the whole area. It was finally incorporated into policy statements, but it was never implemented. People in the surrounding communities are keeping an eye on it so that the City doesn't forget it. We're happy to see that the merchants on Rideau Street are now saying that residential accommodation must be an important component of future plans. I think we might finally be getting through."

Wilkes and other community leaders feel that on the whole the Rideau Area Project has had a mixed impact on their communities. Residents now have a far greater choice in terms of shopping. Lowertown to the north is currently the focus of increased residential renovation and construction, and property values are rising steadily. Says Padolsky, "The project has been a minor but positive factor for Lowertown."

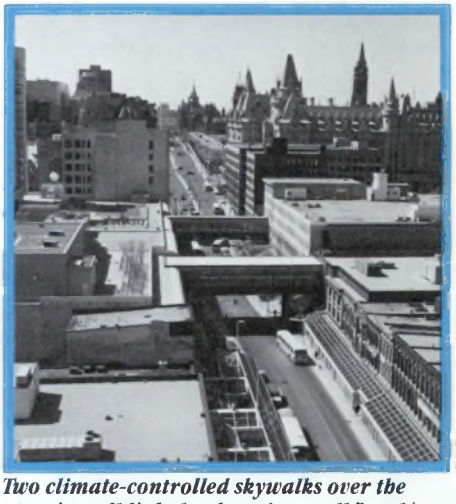
Sandy Hill to the south, on the other hand, has been more directly affected by the rerouting of traffic into the northwest part of the community. "To lessen the impact of the traffic," says Padolsky, "the community association is trying to get the City to reopen Rideau Street to car traffic."

Says Wilkes: "On the whole, given all the powerful interests, the project has been a remarkable compromise. There are no strong negative impacts from the project. The design is good, and we didn't get the huge office complex that the community argued against. It was slated to be a lot worse."

But what of the long term impact of the Rideau Area Project? Here even its most fervent supporters are cautious. "The jury is still out as far as I'm concerned," says Donaldson. "The long-term assessment can't be made until 1986 or 1988. Even though the project team will be gone at the end of the year, the project isn't over. The next step is the development of the east end." ■

CMHC

Parking is a continuing problem in the Byward Market area, adjacent to the Rideau Centre. Market merchants believe their area needs more parking than is currently available on streets such as York Street.



CMHC

Two climate-controlled skywalks over the transit mall link the shopping mall/hotel/convention centre complex with Rideau Street and the Byward Market to the north.

Anne Gilmore is a freelance writer living in Ottawa.

The Facts Behind the Rideau Area Project

The Rideau Area Project is an urban renewal program brought about by the joint efforts of the federal government, the Regional Municipality of Ottawa-Carleton, the City of Ottawa and the private sector. The project area covers twenty blocks in the eastern downtown core of Ottawa and involved the construction of a shopping centre, a hotel and a convention centre as well as a transit mall along Rideau Street.

■ *Rideau Street Transit Mall* is a two-way, bus-only mall costing $10 million, of which $3 million was underwritten by the Rideau Street property owners. One-half of all city bus routes pass through the mall. At peak periods, some 350 buses per hour use the mall – the highest transit volume in North America. The mall is over five blocks long, four blocks of which are lined on each side by convertible glass-enclosed sidewalks. These sidewalks connect the retail premises on Rideau Street with those in the Rideau Centre. The transit waiting areas are part of the convertible sidewalk system. They are heated by electrically powered radiant heaters to 15°C in winter, while in summer 75 per cent of the glass walls can be opened. Two climate-controlled skywalks pass over the east-west transit mall to connect both sides of the mall. There are also three ground level pedestrian crossings. Two north south malls link the retail stores to the Byward Market, an area of outdoor vegetable stalls, specialty stores, restaurants and clothing shops.

■ *Rideau Centre Shopping Mall* is a $150 million, three-level shopping centre which houses three major department stores, 220 shops, plus restaurants and cinemas. The Centre also contains office space in its northwest quadrant in a refurbished heritage building. It has 93 000 m^2 of commercial space, a two-hectare outdoor roof garden and parking facilities for 1 500 cars. The Centre was officially opened on March 16, 1983.

■ *Canada's Capital Convention Centre* was officially opened on November 5, 1983. It is a 5 300 m^2 two-level, multi-purpose convention centre. It cost $40 million – half paid by the province and the other half shared by the federal and regional governments. It was designed to house conventions of between 1 000 to 2 000 delegates and exhibitions and events which draw up to 5 000 people. Ownership of the Centre passed from the region to the province in April 1984.

■ *Westin Hotel* opened on October 12, 1983. Overlooking the Rideau Canal, it cost $60 million to build; has 475 rooms and is 24 storeys high. It is linked to both the convention centre and the shopping plaza. ■

What Did They Learn...

the architect, David McRobie
"Nobody is 100 per cent satisfied with the result; but they're probably satisfied with about 85 per cent. This is something that's tough for an architect to learn because architects are problem solvers. This project was more an urban design exercise. People may have frustrated you during your period of involvement. Through the project, we were constantly having to redesign our drawings and the result I think is a better product than we could have produced in a vacuum. If left to the planners and designers, it would not have happened. There's no question about it."

the city's project manager, David Donaldson
"Aside from learning a lot about planning and retailing, I learned that if you want to get a job like this done, you have to get into the trenches and really slug it out with the people concerned. It takes a lot of patience to tear down the barriers, but it's important to understand people's concerns and perceptions. It doesn't mean that you agree with them, but that you treat their views with respect and let them know you really understand. It's the only way to get a compromise and a good understanding. It's a lot of hard work."

the community representative, Barry Padolsky
"Citizen groups have always worked on the assumption that if they demonstrated their options objectively, that reason would have an impact. And that public pressure and lobbying could be relied on to have an effect if reason failed. These premises, I believe, were found to have limited value. If the citizen groups wanted to ensure that their concerns were respected and included in the final plan, they should have used legal action. They should have objected to the Ontario Municipal Board when the transit mall and the zoning were approved by the city and regional councils. This lesson has already been applied with success by the Sandy Hill citizens in having the regional government move a major east-west transit route away from the centre of their community. Citizen groups have to learn their rights and the process and be unafraid to use the law to gain public ends."

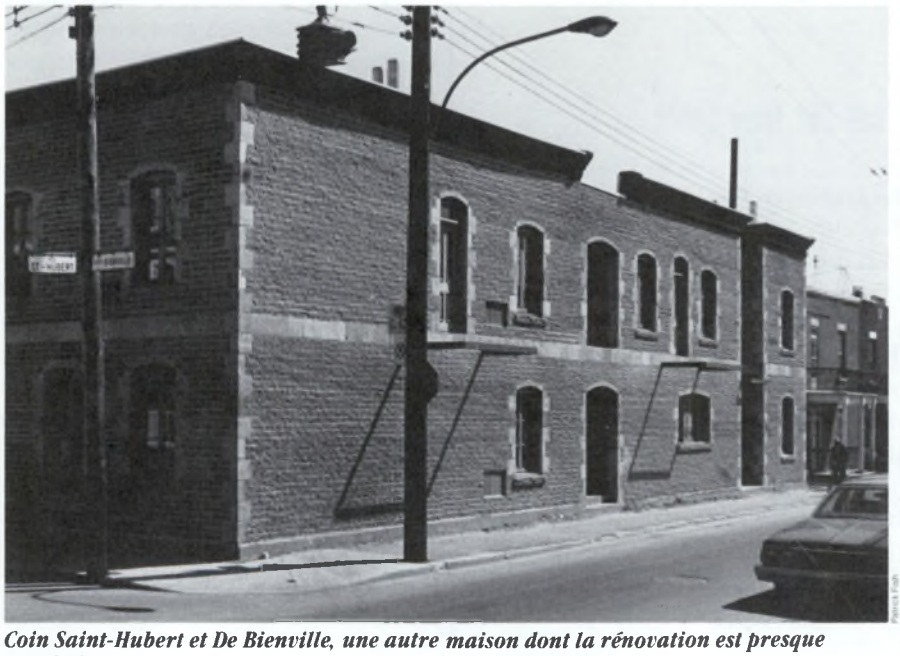
the community representative, George Wilkes
"In the early planning stage, we didn't have a good working process and everything was being frustated until Lash's procedures were devised and adopted. Only then could the positive contributions of the people occur. And for a project like this with so many interests, you had to get good compromise and consensus; otherwise you would have had great dissatisfaction. We all know that when you involve a great number of people and interests, it takes so much longer, but you have a better product in the end. And that's what happened."

the general manager, Downtown Rideau Board of Management, Peter Mercer
"One of my better experiences was seeing the liaison that was established by the Rideau area project team. They moved out of city hall and adopted what I would call a private enterprise attitude. They certainly didn't act like bureaucrats. They knew how to motivate and to talk to the people involved in the project. The retail community was well informed and the project team were flexible and sensitive to the needs of the business community." ■

Les petits propriétaires et l'obligation de rénover

par Jean-Pierre Dagenais

Comme tant d'autres métropoles nord-américaines et, en particulier, celles situées sur la côte Atlantique, Montréal a connu un déclin continuel depuis le tournant des années 50-60. Pour contrer cette tendance, freiner l'exode des citadins vers la banlieue et relancer son économie, Montréal a décidé d'agir.



Coin Saint-Hubert et De Bienville, une autre maison dont la rénovation est presque terminée.

Le 10 septembre 1979, la ville de Montréal lance l'Opération 10 000 logements. Au printemps 81, elle amorce une autre action, le Programme d'interventions dans les quartiers anciens (PIQA). Mais la contre-offensive ne se limite pas au seul secteur résidentiel, elle englobe aussi les fonctions commerciale et industrielle avec le Programme de développement industriel (PDI), et les SIDAC (Société d'initiative et de développement des artères commerciales).

Pour sa part, le PIQA s'applique à divers secteurs que le Service d'urbanisme a circonscrit dans les quartiers les plus anciens de Montréal. Il vise la consolidation de la fonction résidentielle et la mise en valeur du patrimoine immobilier, l'embellissement des rues, le maintien sur les lieux des populations traditionnelles et, de manière plus générale, l'amélioration de la qualité de vie (culturelle, collective, etc.).

Quant à l'appréciation des effets du PIQA, les chercheurs commencent à peine à débrousailler le terrain. Au mieux, les premiers résultats s'apparentent davantage à des pistes de réflexion qu'à des conclusions fermes et sans appel. D'autre part, au plan de la méthodologie employée, certaines des recherches pêchent par manque de rigueur. Une exception est à souligner: l'enquête du Groupe d'interventions urbaines de Montréal portant sur les conditions du logement et du milieu de vie du Grand Plateau Mont-Royal.[1] En voie de publication, l'enquête reprend et développe une étude semblable qu'avait déjà réalisée le GIUM. Cette fois apparaît une photographie plus nette et précise de certains phénomènes urbains, entre autres, le processus de gentrification dans les quartiers anciens et l'impact des interventions municipales.

La ville intervient

De façon implicite, la création du PIQA confirme l'abandon de son prédécesseur, le PAQ (Programme d'amélioration de quartier) qui calibrait sensiblement les mêmes objectifs. Ce dernier provenait d'une initiative fédérale mais en appelait pour sa réalisation aux deux autres paliers gouvernementaux. Le partage à trois des tâches s'établissait de la manière suivante: la Société d'habitation du Québec identifiait les municipalités admissibles au PAQ, les villes précisaient l'intervention qu'elles voulaient mener dans les secteurs de leur choix et, finalement, après étude, la SCHL approuvait les secteurs-cibles désignés par les municipalités. Au terme de ce long processus de préparation, une entente de trois ans était signée pour toute la durée des travaux. Quant à la facture, chaque palier de gouvernement y contribuait.

À l'été 83, la presque totalité des PAQ prévus par Montréal avait été reléguée aux obliettes. "Les seuls qui restent sont le PAQ Terrasse Ontario dans le quartier Centre-Sud et le PAQ Saint-Henri. L'analyse du processus

de planification révèle que les délais administratifs pour la réalisation de ces projets sont très longs (souvent plus de trois ans). La ville de Montréal ne pouvant réaliser ses PAQ dans les délais imposés par la SHQ, plutôt que de perdre les subventions, décidait de réutiliser une partie de l'argent en créant un nouveau programme: le Programme d'interventions dans les quartiers anciens (PIQA).[2]

Afin d'éviter les lourdeurs administratives qui avaient fait échouer les projets PAQ, la Ville décidait d'assurer seule le contrôle du PIQA. Toutefois, son application a soulevé certaines résistances de la population. Dans les secteurs où la Ville est intervenue, les citoyens n'ont pas été consultés. Ce n'est qu'après coup, une fois les plans terminés que les citoyens ont été informés des intentions municipales.

Ce procédé ne semble plus correspondre aux attentes des Montréalais. Selon l'enquête du GIUM, près de neuf citoyens sur dix aimeraient être consultés quand la Ville prévoit entreprendre des travaux d'envergure.[3]

En fait, les populations des quartiers anciens tolèrent de moins en moins d'être tenus à l'écart de décisions qui les concernent et qui peuvent, comportent des nuisances sociales importantes. Qu'on en prenne pour preuve l'indignation populaire devant la commercialisation à outrance de rues telles que Prince-Arthur, Duluth et De Laroche, qui a eu pour conséquence de rompre l'équilibre entre les fonctions résidentielle et commerciale. De chaque côté des rues mentionnées, les restaurants ont proliféré et la circulation de transit s'est accrue considérablement. Résultats: les riverains se plaignent du manque de stationnement, du bruit des autos, ils craignent pour la sécurité de leurs enfants, etc.

L'exemple de Pointe Saint-Charles

L'exécution du PIQA a également souffert d'un manque de souplesse. L'exemple de Pointe Saint-Charles est particulièrement révélateur à cet égard.

Jusqu'à tout récemment, le quartier n'avait pas fait l'objet d'intervention importante. Quelques HLM seulement y avaient été construits par la Ville. Par ailleurs, et, contrairement, à d'autres secteurs anciens, Pointe Saint-Charles n'a pas connu la vague montante des rénovations résidentielles.

Cette exception se comprend à la lumière du portrait de ce quartier: la moitié de la population vivote d'assistance-sociale et le quart vit de prestations d'assurance chômage. Aussi, les propriétaires hésitent-ils à relever trop brusquement le niveau des loyers. La crainte de se retrouver sans locataire y explique le faible coût du logement, en moyenne de 145$ par mois.[4] Conséquence prévisible, le stock de logements s'abime faute d'entretien et de revenus suffisants pour y pourvoir. À l'heure actuelle, un logement sur cinq a besoin de réparations majeures.

Cette situation d'ensemble devait amener la Ville à intervenir dans le quartier de Pointe Saint-Charles. Selon une praticienne sociale de l'endroit, Mme Suzanne Laferrière, les autorités municipales y ont nettement privilégié "une intervention musclée". Le quartier a servi de banc d'essai au PIQA.

Au mois d'avril 81, on assiste au premier blitz d'inspecteurs municipaux. À une semaine d'avis, le secteur Centre du quartier est ratissé, mesuré, fiché et photographié. Un mois plus tard, une avalanche d'avis parviennent aux propriétaires. Mis en demeure de se conformer au code municipal du logement, plusieurs de ceux-ci doivent entreprendre des travaux de réfection. Les montants s'échelonnent de quelques centaines à plusieurs dizaines de milliers de dollars. En outre, dans nombre de cas, les travaux exigés par la Ville requièrent le départ des locataires.

Mécontents ou tout simplement pris de panique, petits propriétaires et locataires interpellent leur conseiller municipal, M. Magnan. Visiblement, ce dernier ignore tout de l'Opération PIQA. De fait, au printemps 81, ni le conseil municipal ni la population ne connaissaient l'existence du PIQA. Ce n'est que le 30 novembre 81, à une assemblée publique particulièrement remuante, tenue à Pointe Saint-Charles, que le Comité exécutif de Montréal divulguera son Programme d'interventions dans les quartiers anciens. L'annonce officielle survient donc quelque huit mois après le début des inspections massives.

En fait, jusqu'à l'assemblée du 30 novembre, le vice-président du Comité exécutif, M. Yvon Lamarre, avait parlé en termes plutôt vagues d'un nouveau programme de réaménagement urbain.[5] Jusque-là, M. Lamarre avait jugé prématuré de dévoiler la teneur du PIQA alléguant l'état embryonnaire du programme. Cependant, dès mai 80, soit près d'un an avant le début des inspections, le Comité exécutif avait déjà en mains le "Programme général d'interventions dans les quartiers anciens", préparé par le Service d'urbanisme, document qui précisait déjà les objectifs, déterminait les moyens à mettre en oeuvre dans le cadre du programme et délimitait clairement les secteurs où la Ville devait intervenir. L'étonnement le cède à la stupéfaction, quand les "expropriés du PIQA" racontent leurs petites histoires. Celle de M. Yvan Dupuis s'avère particulièrement étonnante.

Un cas parmi d'autres

En 1974, M. Dupuis se porte acquéreur de 14 logis à Pointe Saint-Charles, tous situés dans le secteur Centre. Ancien ouvrier devenu petit propriétaire, il administre et entretient lui-même ses logements. Avec ceux de trois autres propriétés dans le Plateau Mont-Royal, ses loyers lui procurent l'essentiel de ses revenus. En avril 81, les inspecteurs de la Ville visitent les bâtiments qu'il possède dans la Pointe Saint-Charles. Avant de partir, les inspecteurs laissent entendre qu'il devra faire d'importants travaux de réfection, à commencer par un bâtiment dont le mur arrière nécessite un nouveau revêtement.

Le mois suivant, M. Dupuis reçoit une mise en demeure. La Ville le somme de réparer son mur sans quoi il risque l'amende (200$) ou deux semaines de prison. Entre temps, un autre inspecteur est venu visiter les mêmes propriétés. L'une d'elles semble peu conforme au code municipal du logement, des rénovations s'imposent. Mécontent et inquiet à la fois, et espérant retarder les échéances l'obligeant à rénover, M. Dupuis entame des procédures judiciaires contre la Ville.

Le temps passe. Finalement, M. Dupuis s'informe des subventions disponibles pour fins de rénovations, évalue ses frais et se trouve confronté au dilemme suivant.

Première option. Il s'engage dans le processus de rénovation subventionné dont les aléas sont multiples: d'abord, et pour une seconde fois, il doit hypothéquer ses propriétés à une époque où, justement, les taux d'intérêt atteignent des sommets inégalés; ensuite, attendre plus d'un an et peut-être davantage le versement des subventions gouvernementales et, au bout du compte, augmenter fortement ses loyers au risque de perdre tous ses locataires.

Dans le secteur De Bienville, l'un des quartiers désignés où s'applique le Programme d'intervention dans les quartiers anciens (PIQA), les trottoirs sont refaits, de nouveaux lampadaires installés et les maisons rénovées.

Moins risquée et, surtout, moins onéreuse, une deuxième option s'avère possible. M. Dupuis entreprend de réparer le mur arrière de l'un des bâtiments tel qu'exigé par la Ville. Il fait démolir le bâtiment qui n'est pas conforme au code municipal et, à plus ou moins court terme, il envisage la vente de ses propriétés. M. Dupuis retient finalement cette dernière option.

Plusieurs semaines passent et voilà que l'histoire connaît un dénouement inattendu. Le 30 novembre 81, M. Dupuis reçoit la visite d'un représentant du Service de la gestion immobilière de la ville de Montréal qui lui propose d'acheter ses propriétés. Tout bien pensé, M. Dupuis vendra à la Ville, heureux d'en terminer avec toutes ses tracasseries des derniers mois, même s'il y perd quelques milliers de dollars.

Le cas n'est pourtant pas isolé. Se disant harrassés par la Ville, confrontés à des rénovations qu'ils devaient et ne pouvaient entreprendre, un certain nombre de petits propriétaires, aussi bien à la Pointe Saint-Charles que dans le Plateau Mont-Royal, n'ont eu d'autre choix que de vendre: à la Ville ou à d'autres propriétaires aux reins plus solides.

En somme, la démarche paraît équivoque. La Ville enclanche en silence l'Opération PIQA. Elle envoie les inspecteurs examiner les bâtiments et les avis de rénovation aux propriétaires. Elle rachète les bâtiments des propriétaires désemparés.

Le PIQA de Bienville

A peu de choses près, le scénario de Pointe Saint-Charles s'est répété dans le Plateau Mont-Royal, un quartier populaire de l'est de Montréal. Ici, trois PIQA sont en voie de réalisation: celui de De Bienville dont les travaux sont les plus avancés, et ceux de Marianne et Guilbeault.

Au cours de l'année 82, des inspecteurs avaient visité le secteur De Bienville. Des avis avaient aussi été envoyés aux propriétaires de l'endroit. Encore là, quelques citoyens – souvent des couples âgés – durent vendre leurs maisons. Ils n'avaient tout simplement pas les ressources financières pour accomplir les travaux exigés par la Ville.

Dans le PIQA De Bienville, toutefois, une décision de la Ville incitera les propriétaires résidents à se regrouper. Cette fois, il s'agissait d'éliminer les poteaux électriques pour les remplacer par des conduites souterraines. L'enfouissement des fils terminé, il ne restait plus qu'à raccorder les systèmes électriques par la cave de chaque maison. C'est ici qu'ont surgi les difficultés. Comme les duplex et les triplex du secteur n'ont pas de sous-sol à proprement parler, la Ville exigeait des propriétaires d'excaver la partie avant de leur maison et d'y relocaliser les compteurs électriques. Ceci entraînait des déboursers de quelques milliers de dollars.

Fort mécontente de cette exigence municipale, une brave dame de 62 ans, Mme Fontaine, remue ses voisins afin de faire pressions auprès des autorités concernées. Ensemble, avec l'aide de leur nouveau conseiller, M. André Cardinal, ils obtiennent de la

Ville que soit en partie défrayé le coût des travaux relatifs à l'enfouissement des fils électriques.

"Initialement, soutient M. Louis-René Gagnon, l'un des petits propriétaires touchés, nous voulions que la Ville assure la totalité des frais inhérents à une décision qu'elle nous avait imposée."[6] Pour les frais admissibles, la nouvelle subvention prévoit couvrir 50% des premiers 2 500$ de travaux et 30% de la deuxième tranche de 2 500$. De plus, en juin 82, suite au mécontentement des propriétaires résidant dans les zones PIQA, la Ville y portait de 50% à 65% le taux des subventions qu'elle accorde pour fins de rénovations générales. Autrement dit, pour les premiers 24 000$ de travaux applicables à chaque unité de logement, l'aide maximale accordée par le Ville passait de 12 000$ à 15 600$.

L'aventure

Malgré l'aide à la restauration, il peut sembler invraisemblable que des petits propriétaires craignent encore de s'engager dans un processus de rénovation. Bien que fictif, l'exemple suivant permettra d'en comprendre mieux les raisons.

En 1983, M. Clément s'est acheté un duplex de 32 000$ dans la Pointe Saint-Charles et, depuis, il occupe le rez-de-chaussée. L'emprunt hypothécaire qu'il assume s'élève à 300$ par mois et son locataire paie un loyer de 150$. Au printemps, quelques semaines seulement après l'achat, M. Clément reçoit la visite d'un inspecteur de la Ville. Un mois plus tard, un avis municipal l'informe qu'il doit entreprendre des travaux de réfection.

Selon l'estimation fournie par M. Dubois, un contracteur du quartier, les travaux exigés par la Ville se chiffrent à 25 000$. Pour effectuer ces réparations, M. Clément envisage de recourir aux subventions gouvernementales. Celles-ci, cependant, ne

Rue Chateauguay dans la Pointe Saint-Charles, d'un côté de la rue, maison en rénovation dans le cadre du programme PIQA, de l'autre, maison que le propriétaire n'a pas eu les moyens de rénover.

sont disponibles que s'il soumet des plans et devis dûment approuvés par la Ville. Une seconde évaluation, cette fois préparée par l'architecte, établit le coût des travaux à 30 000$. Devant l'importance des montants en jeu, M. Clément hésite.

M. Clément pourrait obtenir la subvention maximale de 19 500$, soit 9 750$ pour chacun de ses deux logements. En soustrayant le coût des travaux (30 000$) du montant des subventions (19 500$), M. Clément devra rembourser 10 500$. Au taux d'intérêt actuel, cet emprunt commande des mensualités bancaires d'environ 110$ qui viendront s'ajouter aux frais hypothéciares de 300$ que paie chaque mois M. Clément pour l'achat de sa maison.

A ces 410$, il faut bien ajouter les autres charges qui découlent des taxes foncières, des assurances et de l'entretien. Compte tenu de la valeur nouvelle acquise par le bâtiment, ces charges devraient minimalement se chiffrer à 110$ par mois. Le voici donc avec des paiements mensuels de 520$, auxquels s'ajouteront les frais de chauffage et d'électricité.

De plus, il se peut que M. Clément ne reçoive sa subvention qu'un an après le début des travaux. Pendant cette période, il devra emprunter le plein montant nécessaire à la rénovation et en assumer seul les frais. L'hypothèque de 30 000$ qu'il devra contracter commandera des paiements mensuels de 330$. Pendant cette année, son paiement hypothécaire mensuel sera donc de 630$, auquel s'ajouteront les frais de taxes, d'assurance, d'entretien, de chauffage, d'électricité (quelque 200$). Même en tenant compte de son revenu de loyer de 150$, avec un salaire annuel de 17 000$, ce petit propriétaire ne pourra faire face à ces échéances. Même si son revenu annuel était de 25 000$, (revenu maximal de 72% des ménages montréalais en 1981)[7], ces mensualités demeureraient élevées pour lui.

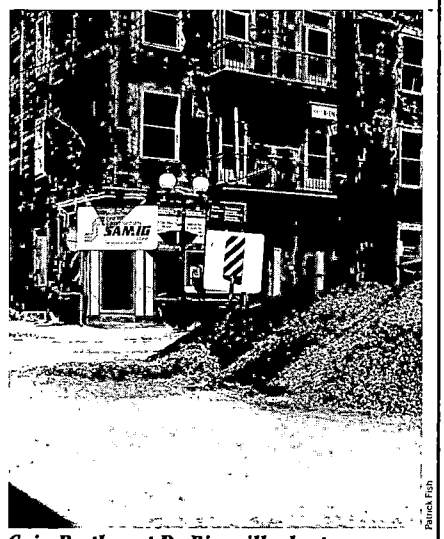
Les règles du jeu

"Dans un quartier comme le nôtre," soutient Mme Suzanne Laferrière, praticienne à la Clinique communautaire de Pointe Saint-Charles, "le tissu social est fragile. Il faut éviter de bousculer les gens en imposant des programmes mal adaptés aux besoins locaux, des programmes qui obligent de petits propriétaires à vendre ou qui entraînent de fortes augmentations de loyer pour les locataires."

Pour sa part, le directeur du Service de la restauration de la Ville de Montréal, M. Guy Legault, affirme que la Ville ne force pas les propriétaires à

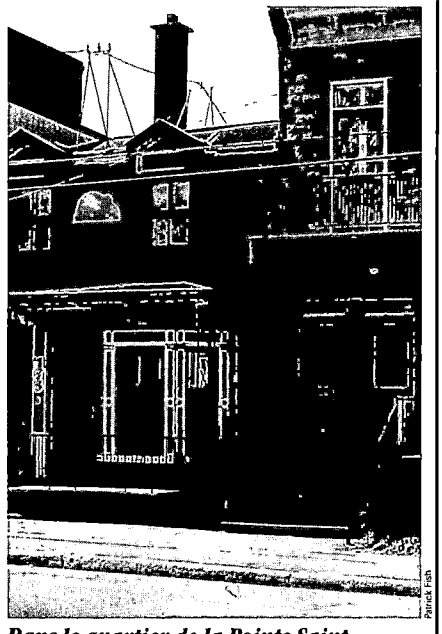
faire des restaurations dispendieuses. "Ce n'est certainement pas notre pratique usuelle, que ce soit des projets PIQA ou toute autre intervention de ce genre. Les subventions moyennes accordées pour la rénovation sont de l'ordre de 11 000$, ce qui indique des coûts moyens de travaux d'environ 22 000$." M. Legault n'a pas de chiffres précis sur le montant des subventions accordées dans le cadre du PIQA mais il l'estime à 20% des budgets généraux alloués par la Ville à la restauration résidentielle; ceux-ci ont été de 80 millions (70%-Montréal, 15%-SHQ, 15%-SCHL) au cours des quinze dernières années. Depuis 1980, 8 000 logements ont été ainsi rénovés. La Ville ne tient pas registre des revenus des demandeurs de subventions mais 1/3 des logements rénovés sont des duplex, 1/3 des quadruplex et un dernier tiers des immeubles de 5 à 8 logements.

"En donnant un mois et demi, deux mois après l'avis de rénovation au propriétaire pour entreprendre les travaux, nous appliquons une procédure normale" poursuit M. Legault. "Avant, on nous critiquait parce qu'on n'obligeait pas les propriétaires à se conformer au code du logement. Maintenant qu'on le fait, on nous critique encore." M. Legault nie que les inspecteurs exercent des pressions sur les propriétaires: "On ne pourrait pas maintenir un service des restauration avec ces méthodes-là." Quant à la difficulté que crée au propriétaire le fait de devoir attendre de longs mois le versement des subventions, M. Legault explique que c'est le type de programme utilisé, selon le montant et la nature des rénovations, qui détermine si la Ville peut ou non verser la subvention en quatre tranches réparties entre le début et la fin des travaux. Par exemple, pour certains types de rénovation dont le coût n'est pas très élevé et qui sont subventionnés par la Ville seule, le montant est accordé en tranches et avec diligence.



Patrick Fish

Coin Resther et De Bienville, les travaux sont en cours.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Dans le quartier de la Pointe Saint-Charles, une coopérative rénovée rue Wellington.

Agent de développement dans un Groupe de resssources techniques en habitation (Infologe), M. Richard Audet, lui, estime que la plupart des programmes de subventions sont d'abord conçus pour les entrepreneurs: "Dans le contexte économique actuel, les gouvernements veulent relancer l'industrie de la construction et, selon eux, la meilleure façon de le faire, est d'encourager la rénovation urbaine. Mais, pour s'engager dans la rénovation subventionnée, il faut avoir beaucoup de courage et les reins drôlement solides, parce qu'il faut tout faire: les démarches auprès de la Ville, la surveillance de chantier, le choix et l'achat des matériaux, le contrôle du coût des travaux. De plus, celui qui rénove doit avancer le plein montant des frais relatifs aux travaux de réfection. Le chantier terminé, il devra attendre parfois plus d'un an avant d'obtenir les subventions promises. Les compagnies sont mieux placées que les individus pour franchir toutes ces étapes. Elles possèdent l'expertise, les équipements et la main-d'oeuvre pour passer à travers de cette aventure. Et, souvent, elles peuvent se financer elles-mêmes.

Pour que les petits propriétaires puissent en faire autant, M. Audet suggère d'assouplir les règles du jeu: primo, en offrant aux propriétaires un véritable service d'information et de consultation en matière de rénovation et de subvention; secundo, en favorisant une restauration dont les travaux et les coûts sont étalés dans le temps et, tertio, en versant, quel que soit le programme utilisé, les subventions par tranches selon l'état des travaux.

Jean-Pierre Dagenais est journaliste à la pige, secteurs de l'habitation et du transport.

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5. Cf. les propos de M. Yvon Lamarre, réunion "Sauvons la Pointe", le 9 juillet 1981. Texte des minutes, p. 12.
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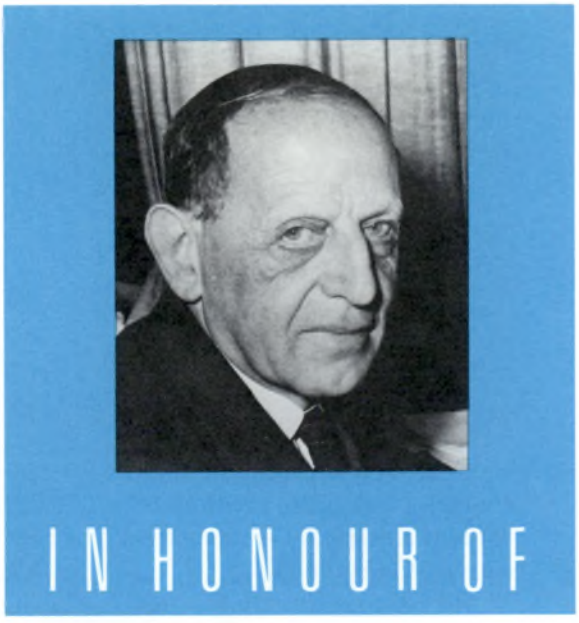


IN HONOUR OF

Hans Blumenfeld

by Norman Pressman

Hans Blumenfeld is considered one of the leading twentieth century personalities on the international planning scene, known for his theoretical contributions and published works. He has also had an on-going, active involvement in the world-wide peace movement. Of his numerous articles and books, *The Modern Metropolis* and *Metropolis – and Beyond* are the best known. His most significant contribution to planning has been his vision and analysis of the metropolis as an urban organism with unique attributes of scale and structure requiring both diagnosis and treatment.

Blumenfeld was born in Osnabrueck, Germany in 1892 and studied architecture and city planning in Karlsruhe and at the Polytechnical Institute in Darmstadt where he received his architectural diploma.

He then worked for various firms in Hamburg and, in 1924, undertook a work study tour of the United States where he was to remain for three years, engaged primarily in residential design. He returned to Europe

The end of 1983 witnessed an important town planning conference to honour the ninety-first birthday of internationally renowned urban planner, Hans Blumenfeld, who currently lives in Toronto.

The two-day "Metropolis Conference" was organized to mark Blumenfeld's important contributions as educator, author, consultant and humanitarian. The format was structured around four themes: 1) The Changing Metropolis, 2) Transportation in the Metropolis, 3) Housing in the Metropolis and 4) The Livable Urban Environment.

The majority of participants were distinguished educators and practitioners in the field of urban planning from Canada and the United States. They presented papers which were discussed and critiqued by panelists selected by the conference organizers.

Speakers in the first session included policy analyst-economic geographer Professor Brian Berry of Carnegie-Mellon University, Professor L.O. Gertler of the University of Waterloo, Professor Gerald Carrothers of York University and others who addressed various aspects and concerns of power politics, economic perspectives and land-market dynamics of the metropolis.

Among their conclusions: high-quality research which identifies trends in socio-economic phenomena, population change and institutional frameworks is essential if appropriate policies are to be formulated to improve urban conditions. The so-called "intuitive" approach is clearly insufficient if effective and scientifically based results are to be expected from planning and policy experts.

Professor Gertler's important paper was about the dilemma of metropolitan government in Canada. On the one hand, economic stress has brought to the fore a set of distributional problems such as social services, affordable housing, social tensions and quality of the inner city. On the other hand, the power structure of the metropolis is inimical to addressing the distributional issues. Business interests have changed in character and focus: from the independent, personal, local firm giving leadership and boosting the prospects of individual cities; to multifunctional national development corporations with a stake in the urbanization process; to conglomerates with financial interests operat-

and worked in Vienna from 1928 to 1930 designing large-scale housing developments.

In 1930, intrigued by the socialist view of the world and the Soviet experiment, Blumenfeld accepted an invitation to Russia and was appointed to the Russian State City Planning Institute where he began his work in urban and regional planning. The Soviets were impressed with the relatively cheap, quickly erected and mass-constructed housing produced in Germany and Blumenfeld worked primarily on expansion plans for existing cities in Russia. He was actively involved in site planning, housing, schools, community centres and sports facilities.

However, it became increasingly difficult for foreigners to work in the Soviet Union and, in 1938, Blumenfeld came to the U.S. where he worked primarily for the City of Philadelphia Planning Commission organizing the research and analysis divisions.

At the height of the McCarthy era, the U.S. State Department refused to renew his passport and Blumenfeld moved to Canada in 1955 to assume the position of assistant director of the newly created Metropolitan Toronto Planning Board. His activities included developing the draft official plan and participating in transportation reviews – activities which were to shape Metro Toronto.

Blumenfeld has been a private consultant since 1961, teaching, writing, lecturing and travelling. ■

ing freely across economic sectors, countries and entire continents without any special identification with particular cities.

He went on to state that governments in the metropolis are constrained by underlying social problems and find themselves between the two poles of provincial paternalism and fragmentation of interests among their constituent municipalities. This situation is further compounded by having to deal with a set of exurban issues, arising from the encounter of city and country.

Eminent authorities such as MIT Professor Ralph Gakenheimer; University of Waterloo Professor Bruce Hutchinson; Juri Pill, executive director of Planning for the Toronto Transit Commission and Josef Kates, management consultant in transit systems were invited to present their views on transportation.

The variables and trade-offs were discussed from both private and public views looking at consumer demand, financing and management, changing technology and rider behaviour.

The most prolific statement about the transportation problem was made in Blumenfeld's summation of the presentations at the end of the second day. To paraphrase: the problem in a nutshell, is how to minimize the necessity of commuting while maximizing the opportunities to do so.

On the morning of the second day, the critical matter of housing was addressed. Professor Larry Bourne, director of the Centre for Urban and Community Studies (University of Toronto) chaired this session whose participants included Professor Jeanne Wolfe (McGill University); Frank Lewinberg, consultant (Toronto) and George Przybylowski of the Ontario Ministry of Municipal Affairs and Housing (Housing Renovation and Energy Conservation). An excellent visual presentation of changing trends and patterns in Ontario and Canadian housing demand and structure was made.

Two case studies were reported: one on "third sector" or cooperative housing in Canada and the other on the potentials and pitfalls of housing rehabilitation, based on a study in the province of Ontario. In both instances the prognosis was generally positive. Some of the conclusions were as follows: the cooperative housing sector, although currently only three per cent of the market, was argued to have a major potential in Canada but almost no support in the United States. The potential for rehabilitation was seen to be limited in areas where housing demand was low or declining and where new construction has continued (even at a low level). In the tight housing markets typical of the larger metropolitan areas, however, rehabilitation (combined with infill and conversion) was deemed to be by far the largest source of new and improved housing. This session contributed toward a more informed perspective of housing needs and the economic and technological measures required to produce a better 'fit' between housing demand and supply.

The final afternoon was devoted to the "Livable Urban Environment". Chaired by Professor Norman Pressman (University of Waterloo),

the featured speakers were Kevin Lynch (consultant Carr, Lynch Associates and Professor Emeritus at MIT), Professor Alan Waterhouse (University of Toronto), Pierre Dansereau (Université du Québec à Montréal), and John Sewell (alderman and former mayor of Toronto). Kevin Lynch made the following points (based on his recent book dealing with a "Theory of Good City Form"):

- physical form matters just as much as social organization.
- it is important to identify the critical "dimensions of performance" if planning is to have a chance at success.
- a "good" environment is one in which the individual is able to grow and develop.
- accessibility to places and activities is essential.
- the environment must have "meaning" and must be "understood". This requires sensitive cultural "fit", historic preservation and continuity.
- the city must be capable of supporting activities which are deemed desirable.
- good control systems in the realm of safety, government and related institutional frameworks are critical and must be user responsive.

He concluded by saying that although the concept of "good" is a relative one, it is necessary to identify the criteria by which one judges "goodness". Without any idea of what constitutes "good", one cannot have a concept of "bad". To Lynch's observation, Professor Alan Waterhouse commented: "The more analytical we seem to become, the less livable our proposals will be".

To culminate the conference events, the honoured "grand old man of planning", Hans Blumenfeld, commented on all the papers presented during the two days of discussion. Hans is a modest person embodying an unusual spirit of civility. He demonstrates great tolerance, compassion and dedication to the well-being of his fellow man. He always speaks of the metropolis as that unique locus which provides the means both for earning one's livelihood and for leading the good life – making a plea for at least a little "joie de vivre" in city planning. He is a man with a super-gestalt of the human condition and understands the means which lie within the scope of planning to resolve problems "of" the city (as opposed to problems "in" the city). Furthermore, he takes the opportunity to remind us that we must, at all costs, avoid the potential nuclear holocaust. We must oppose destruction and war if planning is to have any meaning, he says, indeed, if life is to have meaning. Planning is a futile activity if human actions are not life-enhancing.

Conferences come and go. Some are remembered, others quickly forgotten. But Hans Blumenfeld is ever-present with his ideas and thoughts, concepts and advice, which continue to inspire his students and colleagues around the world. As Professor Waterhouse put it: "He has an instinct for locating essential and enduring aspects of the metropolis and avoiding seduction by superficial or temporary phenomena".[1]

Professor Waterhouse, who has worked with Blumenfeld at the University of Toronto for a decade, has said of this unique person: "In Japan a select number of people are honoured by being designated 'living national treasures'. If Canada were to adopt this custom, we would have a candidate".[2]

Blumenfeld has helped to make us aware of the critical relationship between planning and politics. However, he is the first to recognize that improved economic and social conditions do not automatically bring with them a satisfactory utilization of space – on the contrary, a planned use of space is one method, inseparable from any other, of creating the overall balance.

The conference was a marvellous tribute to an exceptional "master planner" with all the wisdom of his craft that this term implies. But Hans's true greatness lies in his total involvement with those around him and his attempt to build a better world. Happy Birthday, Hans! May you live at least a hundred years so that we can have more conferences like the recent one held in Toronto. ■

Norman E.P. Pressman is a professor in the Faculty of Environmental Studies, School of Urban and Regional Planning, University of Waterloo, Ontario.

1 Alan Waterhouse, "Hans Blumenfeld", CIP Forum, October 1983, pp. 4-5.
2 Ibid.

Francis Rattenbury and British Columbia: Architecture and Challenge in the Imperial Age
by Anthony A. Barrett and Rhodri Windsor Liscombe, University of British Columbia Press, Vancouver, 1983, 405 pp., 227 b/w photographs and drawings, 2 maps, $29.95

It is not at all surprising that the twists and turns in Francis Mawson Rattenbury's personal life have so frequently overshadowed the accomplishments of his professional career: the Yorkshire-born architect was a man who could no more easily avoid a scandal than he could design a bad building. "Ratz", as he was known to his constantly diminishing number of friends, was a figure of controversy from the moment he arrived in Victoria, B.C., in 1892: loud and opinionated, he wasted little energy suppressing opinions of his own great genius; he became involved in a number of vicious arguments and, later, ruinous lawsuits; and, worst of all, he left his wife Florence to live openly with a flapper named Alma. Retirement in England did not staunch the stream of scandals. In 1935, Alma and the family chauffeur murdered the great architect in his living room. The ensuing trial and Alma's suicide, recounted in WAR DECLARED-sized headlines, sold newspapers for more than a year.

Much of what has been written about Rattenbury in the years since his death has followed the newspapers' lead, focussing on details of biography: in the 1960s, Terence Rattigan's play *Cause Célèbre* relived the murder and trial and, in 1978, Victoria author Terry Reksten's book *Rattenbury* also lingered on personal details. What we find in this current work by Barrett and Liscombe is something different. While it reveals new facts about Rattenbury's character (gleaned from more than 40 years of recently discovered personal correspondence) its chief aim is to show how his architecture reflects British Columbia society in a period of unprecedented growth.

Two of Francis Rattenbury's best-known designs: the British Columbia Legislative Buildings and the Empress Hotel in Victoria.

Rattenbury was, without question, one of Canada's most brilliant architects. Within months of his arrival in Victoria, he launched his career by winning an international competition (over 65 other entrants) to design the British Columbia Legislative Buildings. What he produced was an eclectic mixture of heavy romanesque and renaissance forms, American in detail and English in plan and massing. The structure, six years in the making, is a stunning gem bracketing one side of what is, arguably, the country's most enchanting harbour. But Rattenbury did not rest there. It is indicative of his character that at the Legislative Buildings' official opening in 1898 the only dignitary not in attendance was the architect. He was in London, drumming up sponsors for other West Coast projects.

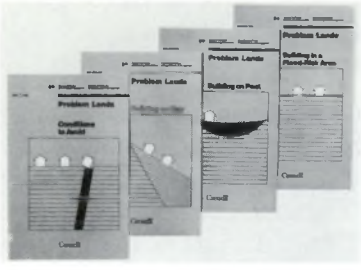
Besides working on a number of government commissions, Rattenbury was named chief architect for the Canadian Pacific Railway. In that capacity, he designed "chateau-like" buildings for the CPR hotels in the Rockies, Vancouver, and Victoria. Many other kinds of buildings were also designed by him: courthouses, banks, private residences, steamship terminals, and schools. No list of great architecture in the West Coast province could fail to include his designs: in addition to the B.C. Legislative Buildings there were the Empress Hotel, the Crystal Garden, the Bank of Montreal in Victoria, the L.P. Duff residence, the CPR station in Vancouver, the CPR Mount Stephen Hotel in Field, and a host of others.

All of these accomplishments have been catalogued before. Where Barrett and Liscombe contribute new perspective is their description of these structures against the backdrop of a province which was growing as rapidly as railway lines could be laid: Rattenbury's was an age in which the government and major corporations were fashioning communities almost overnight out of the B.C. wilderness. The quickest way to anchor these communities – to give them needed symbols of vigour and confidence and probity – was to construct in their midst great public and institutional buildings. The book demonstrates that Rattenbury's contribution was to design buildings which not only drew attention to the growing importance of the province but which also lent dignity and character to its major centres.

This book, with its incisive prose and host of splendid black and white illustrations (many of them rare), is a pioneering work on Western Canadian architecture. It tells the story of the opening of a province and the part played in that saga not only by a great architect but also by the Canadian companies and government agencies that sponsored him. It tells this story while pulling off a nice trick: it manages to be both a valuable source for the specialist and an accessible document for the layman. Most of all, it reminds us that the Rattenbury story is not told in the scandal sheets, but in the host of great buildings the man gave British Columbia. ■

Terry McDougall

Terry McDougall is the editor of *Canadian Heritage* magazine.



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Separate French edition
150 mm x 230 mm
Price: $3.00

Playground Equipment for Integrated Play

This pamphlet outlines the funding received by an Ottawa company from CMHC's Housing Technology Incentives Program (HTIP) to design and manufacture playground equipment to fulfill the following requirements:

- it meets the needs of children with a wide range of physical abilities
- it is safe and convenient
- it can be enjoyed by most children
- it integrates with conventional equipment in the playground to allow disabled children to play naturally with all others.

The company developed working drawings for eight play structures: an accessible playhouse, a wheelchair tipper, a bed swing, a rolling saucer, a "sympathetic" swing, a tube crawl, a roller slide, and a spring swing.

NHA 5686
4 pages
Separate French edition
215 mm x 280 mm
Free

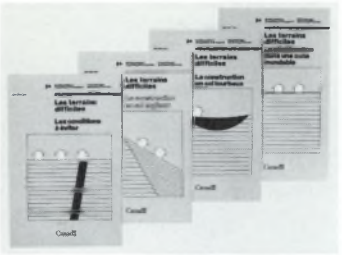
Programming the Home Computer to serve the Quadriplegic Person

An Ottawa firm received HTIP funding to design and evaluate a software program that, used with a home computer, would give quadriplegic persons more integrated and convenient control over their environment. Existing software was to be incorporated into the Springfield program wherever possible.

A suitably programmed computer offers the quadriplegic or paraplegic person the following significant advantages:

- control of devices that carry out essential tasks the person is unable to perform
- convenience of operation and flexibility in the type of device or function that can be controlled
- a wide range of capabilities beyond the scope of mechanical or electrical devices, such as data storage, information retrieval and word processing.

NHA 5690
4 pages
Separate French version
215 mm x 280 mm
Free



Les terrains difficiles – Les conditions à éviter: La construction en sol argileux; la construction en sol tourbeux; la construction dans une zone inondable

Cette série de quatre brochures vise à renseigner l'acheteur éventuel ou le petit constructeur de maison, au sujet des problèmes de construction sur les terrains difficiles comme dans les zones inondables, sur les sols argileux ou tourbeux, les terrains sujets aux éboulements, aux affaissements ou à d'autres déplacements.

LNH 5698 - 12 pages
LNH 5699 - 9 pages
LNH 5700 - 10 pages
LNH 5701 - 13 pages
Bilingue
148 x 227 mm
Prix: 1 $ l'unité

Le choix d'une maison efficace au plan énergétique: guide de l'acheteur

Cette publication contient les plus récents renseignements sur les divers facteurs qui peuvent influencer l'efficacité énergétique d'une maison. Il s'agit d'un guide qui explique les caractéristiques les plus importantes d'une maison efficace au plan énergétique; ainsi, l'acheteur éventuel pourra faire un choix plus éclairé. Il pourra entre autres déterminer si les coûts additionnels inhérents à ce genre de maison se traduiront par des économies d'énergie réalisables dans un délai raisonnable.

LHN 5663
59 pages
Version anglaise distincte
150 mm x 230 mm
Prix: 3,00 $

Équipements de jeu pour enfants handicapés ou non

La société Hilan Creative Playstructures d'Ottawa (Ontario) a reçu une subvention, en vertu du Programme d'encouragement à la technologie du bâtiment résidentiel, pour concevoir et fabriquer des appareils répondant aux exigences suivantes:

- satisfaire les besoins d'enfants non handicapés;
- être pratiques et sans danger;
- amuser la plupart des enfants;
- s'intégrer aux équipements de jeux conventionnels afin de permettre aux enfants handicapés de se mêler *naturellement aux autres enfants.*

La société Hilan a développé huit appareils: une maisonnette accessible, une balançoire à lit, une soucoupe roulante, une balançoire sympathique, un cylindre mobile, une balançoire bascule pour fauteuils roulants, une glissoire à rouleaux et une balançoire à ressort.

LNH 5687
4 pages
Version anglaise distincte
215 mm x 280 mm
Gratuit

Logiciel d'ordinateur individuel à l'usage des quadriplégiques

La société Springfield Environmental Research d'Ottawa a reçu une subvention, dans le cadre du Programme d'encouragement à la technologie du bâtiment résidentiel, pour concevoir et éprouver un logiciel d'ordinateur individuel qui permettrait aux quadriplégiques de maîtriser globalement et plus facilement leur environnement. Dans la mesure du possible, la société devait intégrer dans son logiciel des programmes existants. Un ordinateur bien programmé offre aux quadriplégiques et aux paraplégiques les grands avantages suivants:

- commande de dispositifs qui exécutent les tâches essentielles que la personne ne peut accomplir;
- facilité et souplesse des dispositifs ou fonctions qui peuvent être commandés;
- vaste gamme de possibilités en plus de la commande de dispositifs mécaniques ou électriques, comme ls stockage de données, la consultation de documents et le traitement de textes.

LNH 5691
4 pages
Version anglaise distincte
215 mm x 280 mm
Gratuit

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Canada Mortgage
and Housing Corporation

Honourable Roméo LeBlanc
Minister

Société canadienne
d'hypothèques et de logement

L'honorable Roméo LeBlanc
ministre

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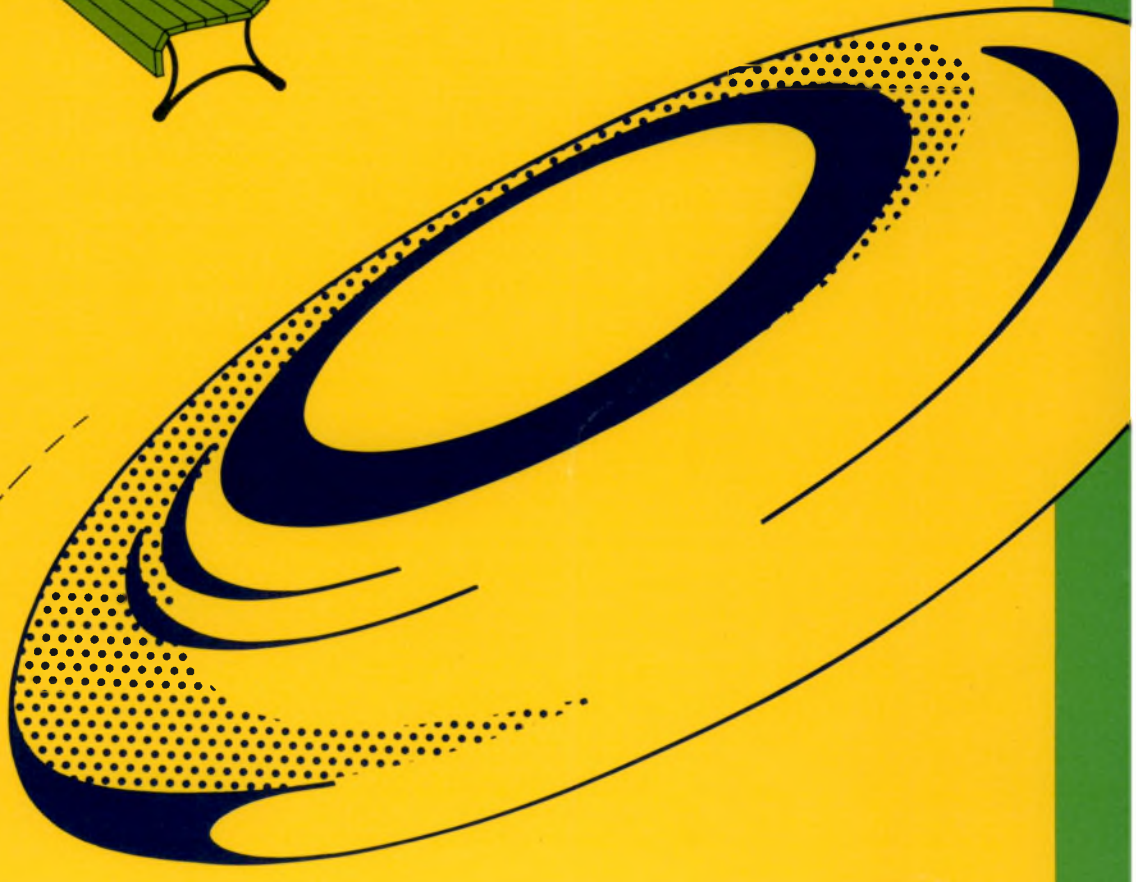
Habitat

Vol. 27, No. 3, 1984

CANADA MORTGAGE
AND HOUSING CORPORATION
SOCIÉTÉ CANADIENNE
D'HYPOTHÈQUES
ET DE LOGEMENT



Canada Mortgage and Housing Corporation, Canada's housing agency, is responsible for administering the National Housing Act.

This legislation is designed to aid in the improvement of housing and living conditions in Canada. As a result, the Corporation has interests in all aspects of housing and urban growth and development.

Under Part V of this Act, the Government of Canada provides funds to CMHC to conduct research into the social, economic and technical aspects of housing and related fields, and to undertake the publishing and distribution of the results of this research. CMHC therefore has a statutory responsibility to make information widely available which may be useful in the improvement of housing and living conditions.

This publication is one of the many items of information published by CMHC with the assistance of federal funds.

La Société canadienne d'hypothèques et de logement, l'organisme du logement du gouvernement du Canada, a pour mandat d'appliquer la Loi nationale sur l'habitation.

Cette loi a pour objet d'aider à améliorer les conditions d'habitation et de vie au Canada. C'est pourquoi la Société s'intéresse à tout ce qui concerne l'habitation, l'expansion et le développement urbains.

Aux termes de la Partie V de la Loi, le gouvernement du Canada autorise la SCHL à affecter des capitaux à des recherches sur les aspects sociologiques, économiques et techniques du logement et des domaines connexes, et à publier et diffuser les résultats de ces recherches. La SCHL a donc une obligation légale de veiller à ce que tout renseignement de nature à améliorer les conditions d'habitation et de vie soit connu du plus grand nombre possible de personnes ou de groupes de personnes.

La présente publication est l'un des nombreux moyens d'information que la SCHL a produits avec l'aide de capitaux du gouvernement fédéral.

CMHC Canada's Housing Agency

la SCHL l'agence canadienne de l'habitation

Habitat

Vol 27, No. 3, 1984

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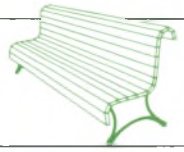

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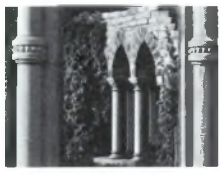

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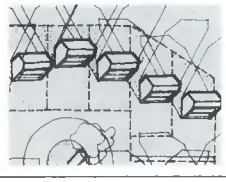

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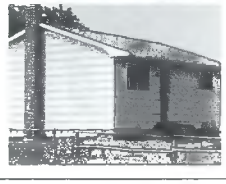

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Manuscripts on issues related to housing and urban affairs are welcome. Query first with a one-page outline. Manuscripts should be about 2 000 words in length, typewritten, double spaced and addressed to the Editor. Material accepted is subject to the magazine's editorial requirements. Where possible, any unused material will be returned.

Note: The Corporation is not responsible in event of loss of or damage to any material submitted.

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HABITAT est une revue trimestrielle publiée par la Société canadienne d'hypothèques et de logement. Ses collaborateurs assument l'entière responsabilité de leurs textes. Le contenu de la revue ne peut être reproduit sans autorisation écrite. La correspondance doit être adressée à la rédactrice en chef, Cecylia Podoski, SCHL, chemin de Montréal, Ottawa K1A 0P7.

Vous pouvez soumettre des articles qui traitent du logement et des affaires urbaines. Mais veuillez nous faire parvenir au préalable un résumé d'une page. Les textes soumis à HABITAT doivent avoir environ 2 000 mots, être dactylographiés à double interligne et être adressés au rédacteur en chef. Les articles acceptés seront assujettis à la politique éditoriale de la revue. Dans la mesure du possible, les textes, photos et illustrations non utilisés seront retournés à leur auteur.

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Les sujets traités dans HABITAT sont inscrits dans l'Index des périodiques canadiens. Notre numéro de recommandation du courrier de deuxième classe est le suivant: 1519. ISSN 0017-6370.

En mai dernier, se tenait à Montréal le colloque *L'architecture de paysage, continuité et évolution* organisé par l'École d'architecture de paysage de l'Université de Montréal en collaboration avec l'Association des architectes paysagistes du Québec. HABITAT vous propose les textes de quatre des communications présentées à ce colloque: un survol historique par Peter Jacobs, l'analyse d'initiatives dans le secteur public par Ulric Couture du Module des parcs de la ville de Montréal et Gérald Lajeunesse de la Commission de la Capitale nationale, et les défis du secteur privé par Jean-Marc Latreille.

CIDEM - Ville de Montréal

Les amateurs de marche et de randonnées à bicyclette empruntent les sentiers du Parc Mont-Royal.

L'histoire du paysage urbain au Québec

Résumé tiré par HABITAT d'une étude de Peter Jacobs et Lucie Fortin.

Étudier l'évolution de l'architecture de paysage au Québec, c'est examiner les différentes formes d'organisation de l'espace que l'homme a conçues et réalisées. Ce texte retrace l'évolution des transformations du paysage urbanisé du Québec aux 19e et 20e siècles. Toutes ces transformations utilisent les ressources naturelles et modifient le paysage naturel en paysage humanisé ou urbanisé.

À la fin du régime français, les villes de Montréal et Québec offrent un visage étonnamment similaire. Ces deux villes fortifiées possèdent des jardins religieux emmurés à l'intérieur des murs de la ville. À Montréal, sur l'artère principale, la rue Notre-Dame où sont situées la plupart des institutions religieuses, les jardins clos des Récollets, des Sulpiciens, des Jésuites, de la Congrégation Notre-Dame et de l'Hôtel-Dieu reflètent l'arrangement propre au jardin des monastères du moyen-âge. À Québec, les Ursulines, les Jésuites, les Récollets, l'Hôtel-Dieu et le Séminaire ont aussi des jardins monastiques qui réunissent plusieurs fonctions: oasis de méditation, cimetière et potager d'auto-suffisance où l'on cultive herbes médicinales, fleurs, légumes et arbres fruitiers. De plus, à Québec, ville capitale, les résidences officielles, la maison du gouverneur et le Palais de l'Intendant, possèdent des jardins formels à la française, jardins d'agrément avec promenades, statues et même chapelle.(1)

Le 19e siècle

Mais l'accroissement démographique que connaissent ces villes au début du régime anglais génère plusieurs transformations urbaines. La ville de l'ancien régime prend un aspect dense et congestionné à mesure que la population s'accroît. Confinée à l'intérieur des murs, la majorité de cette population souffre d'un manque de lumière, d'air et vit dans des conditions hygiéniques pitoyables.(2)

Le début du 19e siècle est marqué par des travaux d'envergure qui visent le développement des villes. Montréal abat ses murs de fortification(3) tandis que Québec donne un caractère permanent aux siennes.(4) Dans le plan initial de Montréal, tracé par Dollier de Casson au début de la colonie, deux places existaient: la Place du Marché (l'actuelle Place Royale) et la Place d'Armes. Le centre d'activité commerciale qu'est le vieux marché devient trop petit et déménage en 1803 sur la place du Marché neuf (Place Jacques-Cartier) qui, par la suite, constituera l'annexe du Marché Bonsecours. Quant à la Place d'Armes, son aménagement met en valeur un monument en en faisant le point terminal d'une perspective visuelle. Mais après la démolition de la vieille église Notre-Dame, cette place publique deviendra en 1850 un square à l'anglaise. Son nouvel aménagement reflète un espace intime, fermé sur lui-même, conçu pour donner confort et satisfaction à ceux qui habitent aux alentours.

Le square Dominion. En toile de fond moderne, l'hôtel Château Champlain et la Place du Canada.

Suite à une résolution gouvernementale, les squares se multiplient: le square Dalhousie, le square Victoria, le square Papineau et par la suite plusieurs autres.(5) Les squares ont une forme spatiale et une fonction sociale différentes des places. Ce sont des espaces de délassement, de rencontre et de récréation.

Par contre, le Champ de Mars s'identifie plutôt à une place publique qu'à un square. Cette esplanade artificielle, tournant le dos à la vieille ville, est un terrain de parades militaires et le lieu des fonctions civiques de la ville.(6) Le square Viger, lui, est le premier espace récréatif consciemment planifié comme tel, dans la ville. Fontaines, promenades, jardins et kiosques invitent la population à se divertir au son de la musique jouée par un orchestre et à la lumière de feux d'artifices.(7)

Exode

En ce début de siècle, l'accroissement de la population britannique et l'attrait de la ville pour la population francophone de milieu rural amène un éclatement urbain. La ville déborde de son ancien cadre et favorise un développement hors des murs.(8) À Montréal, ce mouvement se traduit chez les plus démunis par la création de faubourgs (Faubourgs Saint-Jean, Saint-Roch, Saint-Louis) et de quartiers (Griffintown, Pointe Saint-Charles) où les conditions de vie sont misérables.(9) Pour les privilégiés, il en va autrement. Des institutions fuient la ville pour la campagne. Dès 1850, les messieurs de Saint-Sulpice installent le grand séminaire sur le flanc de la montagne dans ce château autrefois réservé aux pauvres seigneurs fatigués. Quatre ans plus tard, la Congrégation des Soeurs de Notre-Dame acquiert la propriété Monklands, sur le flanc de la montagne dominant l'ouest du pays. Elle transforme l'ancienne demeure en maison d'enseignement, couvent et ferme. Le domaine Villa-Maria est constitué de 170 acres de terrain. L'aménagement et les plantations reproduisent le style classique de l'époque: allées, statues centrales et arbres alignés. De plus, une allée plantée d'érables reprend le

principe des grands axes utilisés par le baron Haussman, à Paris. En 1860, on déménage l'Hôtel-Dieu au pied du Mont-Royal. Son jardin possède une chapelle isolée, reliée au bâtiment par une allée centrale. Il est à la fois utilitaire et ornemental; ainsi, la culture de fleurs disposées en parterres fournit l'ornementation de l'autel.

De riches privilégiés se lancent également à l'assaut de la montagne. À Québec, les villas se multiplient sur les rives du fleuve Saint-Laurent au sommet des falaises du Cap Rouge à l'ouest jusqu'aux chutes Montmorency à l'est.

Horticulture

À Montréal, en 1847, est créée la *Montreal Horticultural Society* qui réunit l'élite de la société montréalaise. En plus de promouvoir l'étude et la recherche scientifique, cette association joue un rôle prépondérant dans la diffusion de cette science auprès de la population par le biais d'expositions horticoles, de publications, de concours et l'ouverture d'une bibliothèque. Sur les terrains de l'Université McGill, rue Côte-des-Neiges, à la limite de Westmount, elle aménage un jardin botanique où elle peut réunir activités scientifiques et sociales.

Le cimetière: un parc public

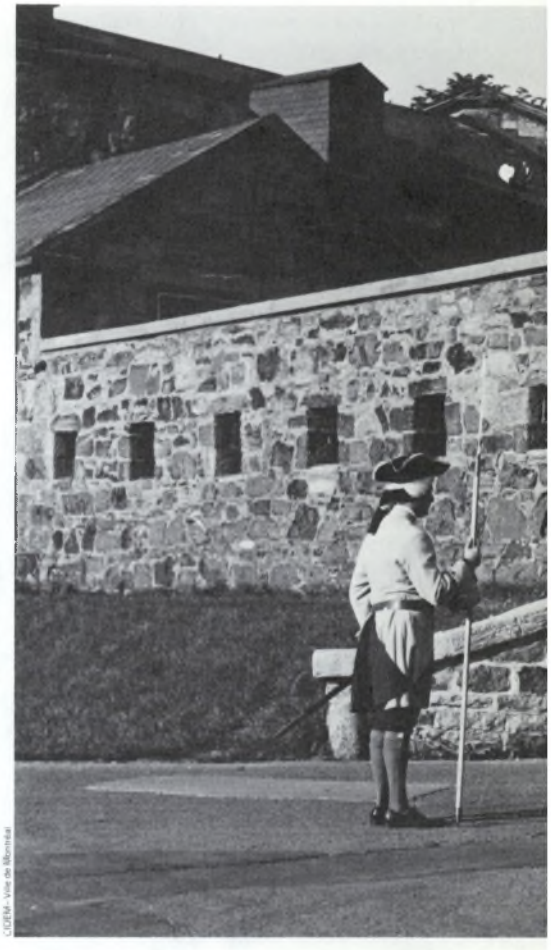
Le concept de parc anglais est d'abord appliqué en Amérique du Nord dans les cimetières. C'est à Cambridge, Massachusetts qu'est aménagé, à partir de 1831, le premier des grands cimetières américains, le Mount Auburn Cemetery. L'influence de ce cimetière est considérable. Montréal n'échappe pas au mouvement. L'aménagement des cimetières catholiques et protestants, en 1852 et 1855, témoigne d'un intérêt pour les aménagements romantiques et du besoin de parcs publics.[10]

La ville de Montréal pré-industrielle ne possède pas de parc urbain pour la simple raison qu'immédiatement à l'extérieur des ramparts, la nature déploie sa beauté en permanence. Cent ans après, la situation est renversée, le développement urbain envahit le paysage naturel à un rythme frénétique.[11] Pour la majorité des citoyens, le paysage naturel n'est plus visible.

En 1857, la ville de New York lance un concours pour le design de Central Park. Les gagnants, Calvert Vaux et Frederick Law Olmsted, s'inspirent de l'école anglaise, en font revivre le style et amorcent un grand mouvement de parcs publics aux États-Unis ainsi qu'au Québec.

Le premier architecte paysagiste

En 1874, la ville de Montréal embauche Frederick Law Olmsted pour préparer le plan d'un parc public sur le Mont-Royal. Olmsted sera le premier professionnel à employer le titre d'architecte paysagiste et introduira ainsi officiellement l'architecture de paysage au Québec comme partout ailleurs. Il divise son plan en huit entités distinctes suivant les caractéristiques topographiques du Mont-Royal. Pour chacun des secteurs identifiés, Olmsted suggère des aménagements qui renforcent la qualité naturelle des sites existants. Par exemple, il recommande que les sommets du parc soient plantés d'essences d'arbres à haut port; que les flancs de la montagne soient plantés de façon à amplifier sa dimension verticale et, en contraste, que le caractère pastoral et ouvert du piedmont et de la côte Placide soit respecté. Il conserve aux clairières leur caractère de douce dépression. De son respect scrupuleux de la topographie, de sa capacité à concevoir l'ensemble sans négliger les détails, résulte un aménagement simple, qui met la nature en relief, dégage des vues splendides tout en assurant l'isolement, l'illusion d'un paysage "hors du monde".[12]

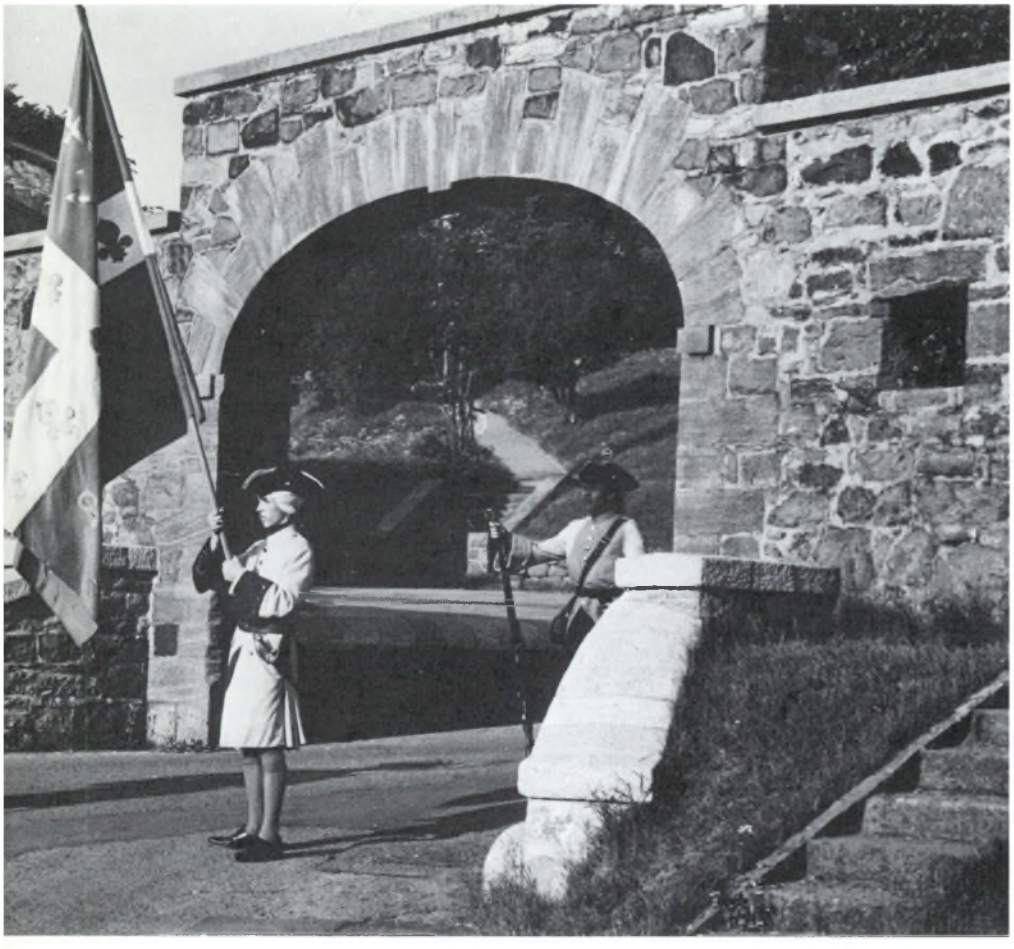


CIDEM - Ville de Montréal

"City Beautiful"

The *City Improvement League,* formée en 1909 à la suite d'une épidémie de tuberculose et de typhus, contribuera à faire progresser l'embellissement de la ville. Elle cherche à éveiller l'attention du public face aux problèmes inhérents au développement de Montréal. Son but ultime: concevoir un plan directeur qui régirait la croissance de la ville.[13] Elle propose à l'administration municipale des solutions aux problèmes d'aménagement. Mais, comme elle n'intervient qu'à titre consultatif, ses propositions restent sans lendemain.

Même si elle n'a pu mené son projet à terme, La Ligue du progrès civique représente une des nouvelles voies prises à partir du 20^{e} siècle et qu'on appelle le mouvement "City Beautiful". Dès la fin de la première guerre, presque tous les défenseurs de ce mouvement cessent de s'intéresser aux solutions des problèmes de la ville pour se tourner vers l'extérieur:



Dans les années 30, le premier architecte paysagiste canadien, Frederick G. Todd, aménage l'Île Sainte-Hélène. Il y restaure les installations militaires datant du 17e siècle: la "Poudrière" devenue théâtre d'été, la tour d'observation Martello et le vieux fort où, aujourd'hui, la Compagnie Franche de la Marine présente aux visiteurs les manoeuvres militaires.

la planification préventive des banlieues qui donnera le concept de cité-jardin.

C'est en Angleterre qu'apparaît le concept de cité-jardin synthétisé par Ebenezer Howard. À Montréal, l'architecte paysagiste, Frederick G. Todd, travaille avec plusieurs groupes de citoyens à titre d'administrateur de la *Montreal Parks and Playground Association* et de la *Community Garden League.* Todd conçoit une "Ville nouvelle", "The Model City", Ville Mont-Royal, en banlieue de Montréal.

La compagnie ferroviaire avait besoin d'un accès au centre-ville pour établir son terminus de l'est. Todd propose de rejoindre le coeur de la ville en creusant à travers la montagne un tunnel qui aboutirait à ce qui est aujourd'hui la gare centrale en-dessous de l'hôtel Reine Elizabeth.[14] Pour subventionner le projet, on décide de développer une ville modèle au nord du Mont-Royal, reliée au centre-ville. On confie le design de Ville Mont-Royal à Todd. Son schéma d'aménagement propose deux axes diagonaux de boulevards divisés par la ligne de chemin de fer et situe la gare au point de convergence central; la distribution des rues et des lots respecte la géométrie formelle. Sa contribution la plus significative est la façon ingénieuse avec laquelle il tricote un système de parcs autour et à travers cette géométrie axiale.

La cité-jardin du Tricentenaire, située dans le quartier Rosemont, avait une préoccupation sociale et morale basée sur la vie familiale et communautaire et l'accession à la propriété pour les classes moyennes. Son plan d'ensemble, conçu par un jeune architecte inconnu d'Ottawa, s'inspire de l'aménagement de Radburn au New-Jersey: ségrégation des circulations piétons et automobiles, réseau d'espaces verts continu, utilisation de cul-de-sac pour maximiser la tranquillité.[15]

Cette idée vient d'Europe où, après la deuxième guerre mondiale, la situation de l'habitation pour la classe moyenne est un grave problème. Se servant de leur expérience européenne, J. Auguste Gosselin et le Rév. J. D'Auteuil Richard initient une action collective et créent des organismes pour promouvoir ce concept. Mais ils doivent abandonner leur solution de cité-jardin à la suite de conflits de régie interne et avec les gouvernements. La ville de Montréal prend la charge du projet et l'adapte à ses propres critères, ce qui entraînera des modifications radicales quant à l'approche sociale de cette cité centrée sur la famille et la religion, dans un milieu de vie organisé.

Dépression et travaux publics

Frederick G. Todd est le premier véritable architecte paysagiste canadien et québécois. Il planifie, conçoit et réalise plusieurs projets d'envergure pendant près d'un demi-siècle. En 1908, la Commission nationale des champs de bataille le charge d'élaborer un plan d'aménagement des Champs de bataille et des Plaines d'Abraham de la ville de Québec. Todd divise le parc en entités géographiques et topographiques. Il propose pour chacune des 5 composantes, de renforcer leur caractère par la mise en valeur de la dominante historique ou naturelle. Pour rendre l'intérêt historique, des plaques et petits monuments bas sont placés de façon à ne pas rompre le paysage naturel du parc. Il recommande, en outre, la restauration des vieilles redoutes et des fortifications du Cap-Diamant, ainsi que la préservation des deux tours Martello. Quant au caractère naturel du parc, Todd propose de laisser les terrains en

pentes très fortement escarpées dans des conditions naturelles et sauvages en y aménageant quelques sentiers et clôtures sécuritaires.[16]

Le projet le plus ambitieux de Todd et à portée sociale directe est le résultat de la grande dépression des années 30 qui sévit au Québec. Les projets d'envergure comme la restauration de l'île Sainte-Hélène et l'implantation du Lac des Castors sur le Mont-Royal ont permis la création de milliers d'emplois pour la main-d'oeuvre en chômage tout en n'entraînant que des coûts minimaux pour les matériaux et les équipements.

La proposition d'aménagement de Todd inclut la restauration des installations militaires datant du 17e siècle. Celles-ci servent aujourd'hui de musée, la Poudrière, de théâtre d'été et la tour Martello de point d'observation dominant l'île. Todd trace des sentiers pour relier ces points historiques; il aménage un lac et un ruisseau pour canaliser l'eau et créer un terrain de jeux ainsi qu'un design élaboré de plage et lagune qui, malheureusement, sera le seul élément non réalisé de son plan.

En cette période de chômage aigu, cette initiative entraînera la création d'autres parcs, véritables poumons d'oxygène, un peu partout au Québec (à Granby, Longueuil, Châteauguay, Valleyfield, etc.). Ces importants projets de conservation de la nature soulageront la misère tout en n'exigeant que de légers investissements de capitaux.

Le jardin botanique

Le jardin botanique de la Montreal Horticultural Society disparaît parce qu'il ne répond pas à une vocation sociale prioritaire. En 1926, le Frère Marie-Victorin, président de la Société d'histoire naturelle fait campagne en faveur de la création d'un nouveau jardin botanique. Le 4 mars 1932, grâce à l'appui de plusieurs de ses amis dont le maire Camillien Houde, le comité exécutif de la ville de Montréal accorde un budget de 100 000$ à ce projet. Des travaux préliminaires se font pendant l'été 1932. Mais l'administration de Camillien Houde est défaite, Montréal passe sous le contrôle de la Commission municipale du gouvernement du Québec et les travaux sont arrêtés. En 1936, les travaux reprennent sous la responsabilité d'un horticulteur new yorkais d'origine allemande, Henry Teuscher.

En canot sur l'un des étangs du Parc Lafontaine au coeur de Montréal.

La revitalisation du centre-ville

Dès la fin de la première guerre, l'essor économique permet aux Montréalais de se tourner vers le centre-ville pour transformer leur ville en une grande cité débordante d'activités. De 1920 à 1930, Montréal voit surgir ses premiers gratte-ciel: la Banque Royale du Canada, édifice de 21 étages dominant la rue Saint-Jacques, celui de Bell Téléphone sur Beaver Hall ainsi que le Sun Life Building. Cependant, la crise économique qui surgit dans les années 30 freine cette accélération jusque vers les années 50.

Dans ce premier élan, on décide de revitaliser le coeur de Montréal par l'élaboration d'un projet d'envergure qui rehausserait le prestige de la capitale commerciale du Canada. Lancé en 1912, le projet de la Place Ville-Marie sera bloqué mais enfin repris pour s'achever en 1962. Les piétons ont accès à cette tour cruciforme de la rue Sainte-Catherine par une allée bordée d'arbres prolongeant l'axe de la rue McGill. Cet axe, partant de la Place Ville-Marie, emprunte la rue McGill et le campus de l'Université McGill pour aboutir à la montagne. La place extérieure du complexe devait constituer le point de départ de cette longue perspective.

Le concept de complexe à multiples fonctions est bientôt repris dans l'élaboration de la Place Bonaventure. Celle-ci, comprenant un centre commercial et un hall d'exposition, sert de base à un complexe hôtelier, un volume cubique massif de béton. L'aménagement du toit terrasse de l'hôtel Bonaventure, par la firme Sasaki, Dawson, Demay Ass., en 1967; fait revivre l'ancien art des jardins suspendus de Babylone. L'illusion d'un paysage naturel grimpé sur un gratte-ciel dans la ville est créée.

L'aménagement du toit terrasse de l'hôtel Bonaventure crée l'illusion d'un paysage naturel grimpé sur un gratte-ciel.

L'exposition universelle de 1967 suscite des interventions de plusieurs architectes paysagistes américains. On l'aménage selon deux principes de base: unifier l'ensemble des îles (Sainte-Hélène, Notre-Dame, La Ronde, Montréal) à l'aide d'une hiérarchie de systèmes de circulation (Expo-express, train sur rails, minirail, barques, balade–véhicule motorisé–, système piétonnier) et unifier la thématique sous un thème central distribué en sous-thèmes selon les secteurs d'exposition.

Si on considère l'influence qu'a exercé la revitalisation du centre-ville par la Place Ville-Marie, la Place Bonaventure et l'Expo 67 sur l'architecture de paysage au Québec, on constate qu'elle est le point de départ d'une sensibilisation à cette discipline. Coïncidence heureuse, en 1968, le congrès de la Fédération internationale des architectes paysagistes (IFLA) se tient à l'hôtel Bonaventure, lieu qui attire par ses jardins terrasses l'attention des 354 architectes paysagistes et collègues de disciplines connexes invités. La publicité faite à l'Expo 67 et à ce congrès ainsi que l'aménagement même de l'Exposition internationale de 1967 contribuent à faire connaître la valeur et la diversité de l'architecture de paysage. La même année, est créé un programme de formation dans cette discipline à la Faculté d'aménagement de l'Université de Montréal. Ainsi naît la troisième École d'architecture de paysage au Canada, deux ans seulement après les deux premières.

La revitalisation du centre-ville se perpétue par la destruction des anciennes structures urbaines du 19e siècle. La destruction de plusieurs bâtiments anciens provoque des réactions chez certains groupes de citoyens. En effet, depuis la démolition de la maison Van Horne, en septembre 1973, le problème de la protection et de la mise en valeur du patrimoine en milieu urbain a fait l'objet d'une prise de conscience grandissante dans la population et a donné naissance à des groupes de préservation comme *Sauvons Montréal* et *Espaces verts.* Ce dernier organisme tente sans succès dans plusieurs cas d'empêcher la disparition progressive de notre héritage. Sa tâche en est une de repêchage des sites historiques menacés alors que la prévention n'est possible qu'avec la collaboration des gouvernements fédéral et provincial. *Espaces verts* réussit cependant à préserver la maison-mère des Soeurs grises.

Héritage Montréal prend plus tard la relève de *Espaces verts.* Mais les règlements de zonage existants n'ont malheureusement pas bloqué la construction de nouveaux condominiums sur le domaine Saint-Sulpice. Peut-on empêcher un propriétaire de vendre une partie de son terrain? Comment établir la valeur historique d'un boisé faisant partie intégrante du paysage historique d'un domaine?

Des propositions d'aménagement de sites historiques existent. Il n'y a qu'à penser aux travaux de F.G. Todd qui a conçu l'aménagement de l'Île Sainte-Hélène. De son côté, l'École d'architecture de paysage de l'Université de Montréal sensibilise ses étudiants à ce type d'aménagement. Certains étudiants ont ainsi élaboré des propositions d'aménagement du jardin du Séminaire, du Domaine Saint-Sulpice et de la Villa-Maria. Il reste à souhaiter que ces propositions puissent servir comme nouveaux modèles de préservation du patrimoine des paysages et des jardins du Québec. ■

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L'architecture du paysage dans la zone de la capitale nationale

par Gérald Lajeunesse

Ruines architecturales uniques au domaine Kingsmere, ancienne résidence d'été du Premier ministre Mackenzie King

Le domaine Kingsmere.

CCN

Ottawa est devenue la capitale du Canada en 1858. La planification de cette capitale très récente dans l'histoire des villes nord-américaines débuta en 1899 avec la création de la Commission d'embellissement d'Ottawa. Même sans la compétence de professionnels de l'aménagement paysager, la Commission entreprit plusieurs aménagements dont celui du Parc Rockcliffe. À cette époque, l'organisme responsable jouissait d'un maigre budget de 60 000,00$.

En 1903, Fréderick Todd, architecte paysagiste de Montréal, prépara le premier rapport d'embellissement et proposa l'établissement d'un réseau de parcs et d'espaces verts à Ottawa et Hull. En 1909, le budget fut porté à 100 000,00$. Entre autres propositions intéressantes, le rapport suggérait la création d'une réserve forestière à proximité de la ville, connue aujourd'hui sous le nom de Parc de la Gatineau.

Quelques autres rapports importants (dont le rapport Holt de 1913 et le rapport Cauchon de 1921) identifièrent plus particulièrement le besoin de développer le système routier et d'améliorer le réseau de voies ferrées. (M. Cauchon fut le premier urbaniste embauché par la ville d'Ottawa et ce, en 1921.) En 1919, le budget annuel était de 150 000,00$ et en 1927 il passa à 250 000,00$.

1934 fut une autre date importante. La Commission embaucha son premier architecte paysagiste, à temps plein, M. E.I. Wood. Celui-ci demeura à l'emploi de la Commission pendant 31 ans et fut responsable pendant cette période de la réalisation de presque tous les aménagements. Deux autres architectes paysagistes furent embauchés pour le seconder.

En 1937, à l'invitation du Premier Ministre Mackenzie King, M. Jacques Gréber commença des études d'aménagement du territoire qui aboutirent en 1950 à un rapport qui devint l'outil guide du développement et de l'aménagement de la région, telle qu'on la connaît aujourd'hui. C'est grâce à cet urbaniste français que nous pouvons maintenant jouir d'une capitale digne de ce titre. Le plan directeur, connu sous le nom de "Plan Gréber" inspira les travaux d'urbanisme et les aménagements d'architecture de paysage effectués d'abord par la Commission du district fédéral et ensuite par la Commission de la Capitale nationale.

L'excellence du design

En 1959, la CDF céda sa place à la CCN en vertu d'une loi fédérale. Cette loi sur la Capitale nationale constitua une étape marquante. Ainsi, la CCN avait le droit légal, sous protection de cette loi, de réaliser ses buts et objectifs. Chose unique, cette loi assurait un niveau élevé d'excellence en design de l'environnement et associait à la réalisation des projets des personnes formées en architecture de paysage. C'était toute une initiative! Les articles 10 et 11 de cette loi expriment bien l'importance donnée à la profession. La superficie de la région de la Capitale nationale fut agrandie à 2 880 km à raison de 1 400 km de chaque côté de la rivière des Outaouais et engloba 70 petites municipalités. Cette nouvelle définition de la région de la Capitale nationale permit à la CCN d'acquérir de nombreux terrains dans l'Outaouais, tels le Parc de la Gatineau, la zone riveraine de la rivière des Outaouais, celle de la rivière de la Gatineau, des zones inondables (Lac Leamy, Lac des Fées, Parc Fontaine), ainsi que des corridors identifiés pour le transport futur et des emprises d'anciennes voies ferrées.

Même si la ville de Hull faisait partie de la région de la Capitale nationale à cette époque, elle n'était reconnue que comme ville industrielle et commerciale. Vers 1956, environ 5 500 fonctionnaires vivaient à Hull et 50% des citoyens travaillaient pour le gouvernement fédéral. Alors, en 1969, lors de la conférence fédérale-provinciale, il fut convenu que les villes de Hull et d'Ottawa constitueraient la zone urbaine de la Capitale nationale. Suite à cette entente, de 1968 à 1979, la CCN initia et coordonna le réaménagement du centre-ville de Hull.

Celui-ci comprenait entre autres le complexe de la Place du Portage, La Place du Centre, un complexe du gouvernement du Québec, la Maison du Citoyen de la ville de Hull, l'édifice Jos Monferrand du gouvernement du Québec, Les Terrasses de la Chaudière et le Pont Portage, reliant les deux centre-villes. Le nombre de fonctionnaires travaillant à Hull atteignit en 1981 environ 18 000, soit 18% des effectifs de la fonction publique de la région.

Piste cyclable en pleine nature

Sentiers de ski de fond dans le Parc de la Gatineau

La plage du Lac Philippe dans le Parc de la Gatineau

Impact d'une loi sur la profession

La loi sur la Capitale nationale a eu un impact *important* sur la profession d'architecte paysagiste telle qu'elle est pratiquée dans la région. Afin d'assurer et de renforcer le mandat de la CCN, cette même loi autorisa la formation de comités de surveillance qui avaient comme mandat l'application de cette loi. Un comité d'aménagement, un comité consultatif d'architecture et un comité des arts furent ainsi formés. Ils ont pour tâche de faire au comité exécutif de la CCN toutes recommandations utiles et nécessaires sur toutes les propositions d'aménagement des terrains publics de la région de la Capitale nationale. Ces comités formés de professionnels existent afin d'assurer une intégrité de design, une uniformité du concept proposé à l'ensemble du territoire de la région de la Capitale nationale, en d'autres mots, une homogénéité qui permette de maintenir le niveau d'excellence voulu. Ils sont à toute fin pratique le point de contrôle majeur du processus.

À travers les décennies, la CCN a pu développer une excellence qui se réflète dans le design des parcs, des promenades, des sentiers, du mobilier, de l'éclairage etc... Il suffit de se promener dans les parcs de la CCN pour le constater. Je ne dis pas que le design est parfait et ne peut être modifié ou amélioré puisque les normes sont constamment réétudiées et que la qualité de l'entretien qui relève de l'architecte paysagiste est un concept lui aussi en évolution constante.

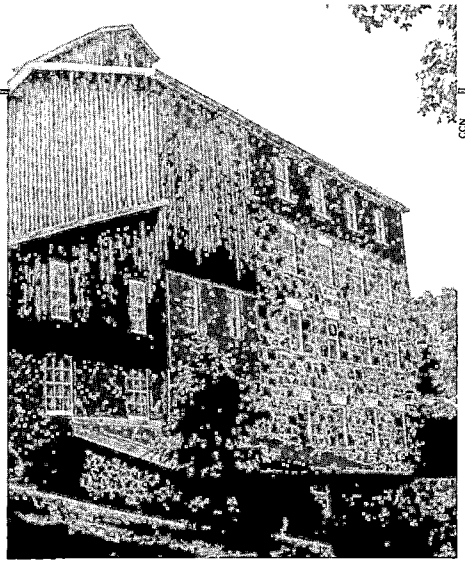
Tout au long de son histoire, la CCN a eu à son service des architectes paysagistes professionnels. Néanmoins, ce n'est qu'à la fin des années 60 que leur nombre devint important. Mais comme à ce moment là, il n'y avait pas au Canada d'écoles d'architecture de paysage, il a fallu aller chercher ces professionnels ailleurs, aux États-Unis et en Europe.

Aujourd'hui, la Commission compte neuf architectes paysagistes dans la section d'architecture de paysage et espère augmenter ce nombre dans un avenir rapproché. Au service de planification, trois architectes paysagistes y occupent des postes clés. Pendant plusieurs années, le directeur sortant des études techniques de la Commission, M. D.W. Pettit, responsable des services d'architecture, de génie et d'architecture de paysage était un architecte paysagiste de profession. Depuis déjà plusieurs années, la CCN embauche deux étudiant-e-s en architecture de paysage pendant la période estivale.

De plus en plus, la CCN fait appel à une ressource disponible et prête à prendre la relève; les bureaux privés. Aujourd'hui, après 25 ans d'existence, on pourrait croire que le nombre de projets serait à la baisse: au contraire, la demande ne cesse d'augmenter et d'une façon exponentielle. C'est pourquoi nous avons de plus en plus recours à cette expertise extérieure. Nous avons même loué les services professionnels d'un architecte paysagiste d'un bureau privé pour travailler exclusivement à l'intérieur du Parc de la Gatineau. 17 projets majeurs de développement seront donnés à contrat, cette année, à des bureaux privés. Ceci ne tient pas compte de nombreuses propositions d'études que commande le service de planification de la CCN. Le budget de la section d'architecture de paysage pour les cinq prochaines années atteindra 30 000 000$.

L'architecture de paysage et les parcs

La Commission de la Capitale nationale a réalisé un nombre imposant de projets particulièrement intéressants. En voici quelques exemples. Le Parc de la Gatineau comprend une magnifique promenade de plus de 40 km, la première du genre au Canada; des haltes d'auto et des belvédères aux endroits stratégiques; les lacs Philippe, la Pêche, Meach, Mousseau; des aires de camping, de pique-nique, de baignade, de canotage, de pêche; divers types de sentiers: un sentier récréatif de 12 km aménagé récemment, plus de 96 km de sentiers d'interprétation de la nature, des sentiers de ski de fond dont l'emplacement est décidé par une équipe comprenant un architecte paysagiste; le domaine de Kingsmere, la résidence d'été du Premier ministre Mackenzie King qui deviendra un site historique de première importance lorsque son réaménagement sera terminé. Le Parc du Lac Leamy, un parc écologique de 182 ha, comprend une promenade intéressante qui se rend au lac et à la plage; un réseau de sentiers récréatifs reliant le Parc de la Gatineau au centre-ville; des aires de pique-nique, de baignade. La Place du Portage et les Terrasses de la Chaudière font partie du réaménagement paysager du centre-ville de Hull et leur réalisation a coûté de plus de 6 millions de dollars. Le Parc Taché–



Un édifice historique restauré: le vieux moulin de Wakefield

Le Théâtre de l'Île à Hull

Montcalm est un parc intérimaire riverain qui accueillera le futur Musée des sciences et de la technologie. Il comprend un sentier récréatif et le plus grand essai de fleurs sauvages en milieu urbain de la région. la CCN a aussi créé le réseau de sentiers récréatifs de l'Outaouais; commencé il y a déjà treize ans, ce réseau aura d'ici deux ans une longueur de 47 km et dépassera 120 km dans la RCN.

Sur l'île de Hull

Seule ou en collaboration avec la ville de Hull, la CCN a de plus réalisé un certain nombre de parcs sur l'île de Hull: le Parc Fontaine, le Parc Gamelin, le Parc des "chars de combat", un parc intérimaire avec terrain de soccer, équipement de jeu, sentier, pelouse et quelque 300 arbres matures de 18 à 25 cm de diamètre, transplantés d'un ancien parc, le Parc "Linéaire", auquel on a donné ce nom parce qu'il suit l'ancienne emprise de voie ferrée qui traverse l'île de Hull, le Parc Jacques-Cartier, un parc riverain en évolution continuelle à cause de ses nombreuses fonctions et dont l'aménagement est un défi de taille pour l'architecte paysagiste et le Parc Brébeuf, le plus vieux des parcs de la CCN dans l'Outaouais, particulièrement intéressant par son importance historique et à cause de sa formation géologique.

La CCN prévoit d'autres projets d'envergure tant du point de vue de l'aménagement du territoire que du point de vue financier: l'aménagement du Ruisseau de la Brasserie dont le budget global sera de 12 500 000,00$ dont 2 500 000,00$ cette année; la retransformation de l'ancien Parc Laurier, situé sur un terrain qui appartenait autrefois à la firme E.B. Eddy, en musée spectaculaire et l'aménagement des terrains adjacents; l'aménagement de la Promenade des voyageurs; celui du port de plaisance du Parc Jacques-Cartier à Hull qui sera réalisé au cours des cinq prochaines années, et le projet La Baie à Gatineau, projet de collaboration entre la municipalité de Gatineau et la CCN afin de transformer un ancien dépotoire en parc régional doté de tous les équipements imaginables.

La CCN a aussi participé à des restaurations importantes d'édifices historiques, seule ou en collaboration avec les villes. Mentionnons, par exemple, la Ferme Columbia (maison Thomas Brigham), ancienne demeure qui a maintenant une vocation commerciale et abrite un restaurant; le vieux moulin de Wakefield; le Théâtre de l'Île de Hull; Kingsmere, ce domaine de 245 ha qui fut la résidence d'été du Premier ministre Mackenzie King et qui offre déjà un musée et une collection unique de ruines architecturales des alentours.

Le rôle traditionnel de l'architecte paysagiste "designer" assis à sa table à dessin en train de concevoir un plan existe toujours mais il s'est modifié et diversifié.

Ainsi, au sein de la CCN le rôle d'architecte paysagiste semble, de plus en plus, en devenir un de gérance de projets faisant appel aux services des bureaux privés, un rôle de gestionnaire ou d'administrateur de projet. L'architecte paysagiste doit être prêt à accepter ce défi s'il espère s'intégrer à la fonction publique.

Néanmoins, nos connaissances professionnelles sont en demande–et non seulement pour ranger les arbres de rue ou pour choisir les espèces d'arbustes pour le terre-plein. On a constamment recours à nos services dans les équipes interdisciplinaires. Par exemple, on veut nous intégrer à l'équipe d'un festival afin de régler les questions de définition d'espace et d'esthétique, ou nous confier la responsabilité d'une activité importante d'un festival à cause de notre formation, de notre connaissance du processus de design.

On requiert aussi nos services en planification dans des équipes comprenant des urbanistes en planification urbaine et rurale. Il n'est pas rare de voir un architecte paysagiste et un forestier urbain ou un écologiste ou des spécialistes en interprétation, conservation ou même des employés du service d'entretien en train de résoudre ensemble un problème quelconque sur un site ou autour d'une table à dessin. Souvent, nous travaillons sur un projet de génie ou d'architecture comme membre de l'équipe; souvent, ausssi, des ingénieurs ou des architectes participent à un projet d'architecture de paysage.

Toutes les agences ou municipalités n'organisent pas des festivals à gros budgets mais souvent, là où le besoin de réaliser un projet de qualité est identifié, nos services professionnels seront demandés. Espérons tout de même que les clients auront la clairvoyance de faire appel à nous au début du processus.■

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L'évolution des parcs à Montréal

par Ulric Couture

Même, si j'ai été au service de la Ville de Montréal pendant 30 ans comme architecte paysagiste, je ne suis pas ici pour vanter les mérites du travail fait, mais pour analyser l'oeuvre, voire même les efforts consentis pour répondre aux attentes de la population dans le temps et, c'est le cas de le dire, dans l'espace.

Au tournant du siècle, les historiens retiennent trois grands parcs– Le Parc du Mont-Royal, le Parc Lafontaine et l'Île Ste-Hélène. Cette interprétation s'inscrit alors dans la philosophie nouvellement introduite en Amérique du Nord par l'architecte paysagiste Fréderick Law Olmsted, cette idée du paysage créateur et naturel où il est possible d'oublier que nous sommes dans une métropole, avoir peine à croire qu'à un kilomètre de nous il y a la rue Sainte-Catherine.

Avant cette période du début du siècle, Montréal avait quand même ses parcs, mais à la mesure de son patrimoine c'est-à-dire du génotype de ses habitants.

Cet héritage victorien, nous a laissé de nombreux "Square" de type anglais, "un petit jardin public, généralement entouré d'une grille". (On voit même à Paris, le square du Port-Royal). Nous comptions au début du siècle, une vingtaine de ces petits parcs. Le Square Phillips remonte à 1842, les Square Viger et Richmond à 1844, le Square Dominion à 1869; le Carré St-Louis fut acheté en 1848, afin d'y établir un réservoir d'eau pour les gens de la Haute-Ville. Ce site fut transformé en jardin public 30 ans plus tard, en 1878. Au début du siècle, la ville pré-industrielle ne possédait pas de parc urbain pour une raison bien simple, elle n'en avait pas besoin. Une marche de vingt à trente minutes vous déposait dans la grande nature ou dans un rang où les fermes proliféraient. Pas surprenant qu'en 1912, l'ensemble des parcs de Montréal totalisaient une surface de 325 ha (superficie inférieure à celle du Central Park de New York).

Arrive la période industrielle, c'est le grand chambardement. Les usines poussent comme des champignons, les quartiers de Saint-Henri, de Pointe St-Charles, de l'est deviennent méconnaissables, les gens des campagnes entrent en ville, la population augmente d'une façon drastique. Les besoins de la population montréalaise changent. En est-on bien conscient...

La guerre (1914-1919), le temps d'un "respire" et la dépression. En cette période difficile, la Ville construit dans le cadre du programme "Secours direct" créé pour les chômeurs, des Vespasiennes (les Camilliennes). Elle entreprend d'importants travaux d'aménagement de l'Île Sainte-Hélène–les travailleurs y sont payés 10 cents l'heure–et le projet du Jardin botanique démarre. Ce fut une période relativement calme en aménagement mais au moins on a eu la sagesse de réserver des espaces pour des parcs. À preuve, de 1926 à 1944, la superficie totale des parcs passait de 670 à 740 ha, la superficie d'une grosse ferme rentable.

Dans les années 50

En 1952, la création du service des parcs, sous la direction de Claude Robillard, va multiplier les efforts pour répondre à un besoin nouveau. La population veut des parcs mais surtout des espaces de jeux. La Ville construit dans la plupart des grands quartiers des parcs à vocation sportive. On veut de tout, le plus souvent dans des espaces restreints, baseball, football, aires de jeux pour les enfants–petits, moyens et grands–, et même pour les adultes mais rien pour la verdure romantique. Naissent ainsi les parcs Henri-Julien, Ignace Bourget, Beaubien, Ahuntsic, De la Louisianne, Saint-Émile, Trenholme, Saint-Donat et deux autres où on a fait une meilleure part à l'aménagement paysager, le Parc Angrignon et le Parc Raimbault, situé à Cartierville.

Au même moment, nous voyons s'instaurer la politique des clôtures. Pressions de la part du contentieux de la Ville, des parents et de personnalités politiques: "il faut protéger nos enfants". Et voilà qu'on retourne à l'étymologie du mot parc (parricus de parra qui signifie perche): clôture faite de claies à l'intérieur de laquelle on enferme les moutons (claie de cletra, mot gaulois de 1090 qui signifie treillis d'osier). À ce moment, ce fut une question de mentalité; elle fera son temps. Nous sommes d'ailleurs à recycler ces parcs et à essayer de les adapter à une nouvelle philosophie.

Depuis 1980

De nos jours, depuis quelques années, que fait la Ville? L'administration municipale s'est bien rendue compte de cet exode vers les banlieues– habitations de plus en plus vétustes, qualité de vie bien discutable, etc... Que faire pour garder et surtout ramener cette population? Améliorer la qualité de la vie. Il ne suffisait pas de restaurer les logements mais aussi de créer un nouveau climat, de transposer ou de muter le parc dans la rue (utiliser les plus petits espaces pour

en faire des mini-parcs), voire même dans la ruelle.

La Ville opta pour la création de plusieurs programmes d'intervention. L'un de ces programmes s'applique à divers secteurs de la ville et a pour nom PIQA c'est-à-dire programme d'intervention dans les quartiers anciens. Les objectifs généraux des PIQA sont la préservation du caractère distinctif du quartier, l'amélioration de la qualité du milieu de vie, l'enrichissement de la vie collective et culturelle, la consolidation de la fonction résidentielle, la préservation de la population actuelle, la mise en valeur du patrimoine immobilier, l'embellissement du cadre de la rue. Nous comptons actuellement 15 secteurs touchés par ce programme.

CIDEM - Ville de Montréal

Un des coins touristiques les plus connus de Montréal, le Carré Saint-Louis, fut d'abord un réservoir d'eau pour les gens de la Haute-Ville au milieu du siècle dernier. 30 ans plus tard, il fut transformé en jardin public.

CIDEM

La "nouvelle" ruelle Lusignant entre les rues Saint-Antoine et Saint-Jacques.

Les RAC, programmes de revitalisation des artères commerciales, touchent 25 rues. Ils ont pour objectifs de cerner et d'accentuer les caractéristiques de chaque artère ainsi que de renforcer leur rôle comme centre civique et noyau-moteur du quartier desservi. L'aménagement paysager de l'artère étant l'objectif ressource, nous croyons qu'il sera plus agréable et invitant d'y circuler, d'y faire ses emplettes et ainsi d'accroître l'achalandage dans les commerces.

Un troisième programme *Place au soleil* vise l'aménagement des ruelles et des cours arrière. Pour en avoir été le responsable pendant plusieurs années, c'est une initiative qui m'a beaucoup plu et que je considère particulièrement importante, valable et efficace. L'état de certaines ruelles de Montréal pourtant patrimoine social distinctif de la ville était déplorable. Ces étroits couloirs gris, sans lumière, sans verdure, encombrés de vieilles voitures, de déchets, bordés de propriétés souvent dégradées dont les vieux hangars étaient de vrais nids à feu, avaient bien mauvaise réputation... Le programme *Place au soleil* a donc pour but, dans un premier temps, la démolition des bâtiments accessoires vétustes (hangars, garages) et, dans un deuxième temps, l'aménagement de la ruelle et des cours arrière. L'opération inclut l'aménagement paysager (plantation de gazon, d'arbustes et d'arbres de petite dimension), le remplacement des vieilles clôtures et l'éclairage de la ruelle. Ce programme est très efficace sur le plan social puisqu'il a considérablement amélioré la vie de quartier, a diminué sensiblement le vandalisme et incité les résidents à rénover les maisons, et ce, à un point et à un rythme qui ont dépassé toutes les prévisons.

Je me souviens de cette vieille dame de 80 ans qui n'avait pas de lumière dans sa cuisine depuis 47 ans et qui, après l'intervention *Place au soleil,* me montra ses fleurs avec un sourire qui me fit monter les larmes aux yeux et je me suis dit que l'architecture de paysage était la plus belle profession au monde.■

Ulric Couture est architecte paysagiste.

Les défis du secteur privé

par Jean-Marc Latreille

M. Latreille fit son exposé à partir de notes. HABITAT vous présente un résumé de ses propos.

L'image de l'architecte paysagiste dans le public est souvent floue, sinon inexistante. On le voit davantage comme un spécialiste du traitement végétal, qui s'occupe de la verdure, que comme un designer et un professionnel de l'aménagement de l'espace. On l'associe à l'entrepreneur paysagiste, au jardinier-fleuriste alors que la "verdure" dans un projet d'aménagement paysager même celui d'un parc ne représente que 15 à 20% des dépenses, le reste étant affecté aux équipements, à l'aménagement de sentiers, par exemple. Dans un parc, l'architecte paysagiste est le maître d'oeuvre et l'architecte, l'ingénieur travaillent sous sa coordination. Et pourtant, les autres professionnels de disciplines connexes tentent souvent de contrôler l'aménagement paysager d'un projet sous le couvert de la responsabilité professionnelle. Ici, l'architecture de paysage est encore mal connue mais, ailleurs, on y a recours dans tous les projets d'aménagement. Aux États-Unis, les autoroutes ne sont pas des plaies dans le paysage parce que la première équipe à travailler sur un projet d'autoroute en est une d'architectes paysagistes qui établissent les corridors où sera implantée l'infrastructure. En Allemagne, rien ne se fait sans l'architecte paysagiste. Toute modification d'ingénierie à des bâtis de 300 ans nécessite l'approbation de l'architecte paysagiste.

L'histoire

Depuis le début du 20e siècle, au Québec quelques individus, comme Frederick G. Todd, le premier architecte paysagiste canadien, ont pu gagner leur vie en tant que professionnels de l'architecture de paysage. Mais, ce n'est véritablement qu'à compter des années 60 et, en particulier, grâce à la tenue de l'Exposition universelle de 1967 à Montréal, que se sont ouverts des bureaux privés, les premiers, réunissant, à l'occasion de l'Expo 67, des praticiens d'ici et des États-Unis. Les premiers diplômés de l'École d'architecture de paysage de l'Université de Montréal graduèrent en 1972. Déjà en 1979, on comptait 14 bureaux privés–11 à Montréal et 3 à Québec–mais, en 1984, on n'en compte qu'un seul de plus. La plupart de ces bureaux sont dirigés par deux associés.

Quels sont les défis de l'architecte paysagiste conseil? La variété, la complexité et l'envergure des projets sur lesquels il est appelé à travailler exigent de lui qu'il soit spécialiste en tout: musées, édifices à bureaux, écoles, campus, habitations résidentielles, parcs, terrains sportifs, mails piétonniers, places publiques–et ce, d'autant plus que l'équipe d'un bureau privé est forcément réduite. L'architecte paysagiste conseil doit aussi maîtriser toutes les étapes de préparation d'un projet: l'inventaire physique, le traitement des données socio-économiques, l'analyse, la programmation et la conception. Il doit aussi préparer les documents d'exécution, les appels d'offre, contrôler la qualité de l'exécution, faire l'administration des contrats, échéanciers, paiements. La complexité du travail vient de la diversité des projets. Les contraintes du marché dans un milieu compétitif font que c'est un défi de rendre des services professionnels à des coûts bas. L'envergure des projets est aussi très variable: elle peut aller de quelques millions à des centaines de millions. Pour survivre, un bureau privé doit tout accepter, petits et gros contrats.

Les bons et les mauvais rôles

Dans les projets importants, il nous arrive d'avoir de mauvais rôles, par exemple, avec Travaux publics Canada qui nous embauche mais avec qui, par la suite, nous n'avons plus de relation directe puisque nous travaillons pour l'architecte responsable. Pour Transport Canada et la Société d'habitation du Québec, l'aménagement paysager est synonyme de traitement végétal. Quant à la Société d'énergie de la Baie James, elle a demandé aux bureaux d'architectes paysagistes de faire de la chirurgie plastique pour réparer les plaies vives laissées dans le paysage après les travaux.

En général, à l'échelle municipale, on nous propose de meilleurs rôles. Les projets y sont intéressants et variés: parcs, mini-parcs, places, mails piétonniers, terrains sportifs. De plus, les administrations municipales reconnaissent notre compétence et notre expertise professionnelles. Parcs Canada et la Commission de la Capitale nationale nous permettent aussi d'assumer pleinement notre rôle professionnel.

Les effets de la récente crise économique.

La roue s'est arrêtée de tourner. Les gouvernements ont stoppé les subventions; ils ont arrêté de s'équiper d'installations importantes. Les gouvernements ont axé leurs subventions sur les rénovations résidentielles.

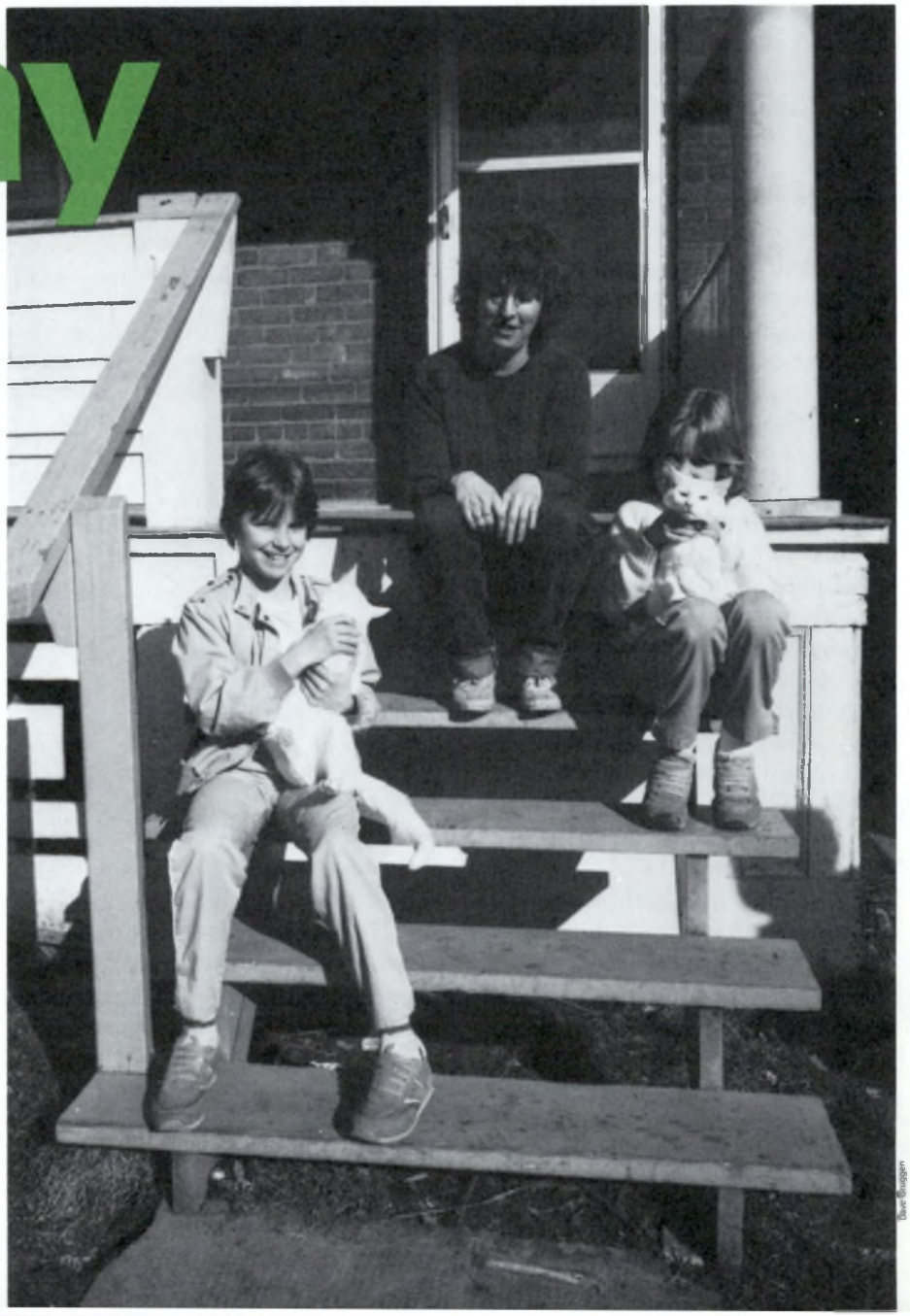
La crise ayant réduit la quantité de travail, tout le monde est devenu spécialiste en tout, les architectes, les ingénieurs, les urbanistes... et des habitudes se sont ainsi créées. Des firmes de différentes disciplines décrochent des contrats d'architecture de paysage et embauchent des architectes paysagistes pour exécuter le travail. Notre profession n'est plus visible et ces firmes se construisent une image de compétence dans notre discipline. Nous voyons ce travail nous échapper.

Si mon exposé brosse un tableau pessimiste de la situation dans la pratique privée, c'est qu'on m'a demandé de parler des défis... Dans le quotidien, la pratique privée exige beaucoup d'énergie, de disponibilité et d'imagination et une bonne organisation du temps. Mais cette façon de pratiquer l'architecture de paysage est stimulante. Elle donne un sentiment d'indépendance, permet de toucher à une grande variété de projets et assure une plus grande liberté d'expression. C'est sûrement pour ces raisons que quelques-uns y tentent leur chance.■

Jean-Marc Latreille est architecte paysagiste conseil de la firme Parent Latreille et Associés, architectes paysagistes de Montréal.

Affordable Housing the Kiwanis Way

by Carla Mastromattei
as told to HABITAT



By their effective and innovative use of CMHC social housing programs and funding, an imaginative community action group in Hamilton is revitalizing the city's north-end neighbourhood. Since 1981, the Hamilton East Kiwanis Non-Profit Homes Inc. has refurbished over 200 houses.

The group's purpose is to provide housing for low-income families and to stabilize inner-city neighbourhoods. It does so by providing affordable rental housing and home ownership opportunities to families who would not otherwise be able to obtain decent housing. At the same time, it is upgrading the quality of existing housing stock and thus improving the quality of life in the whole north-end area. Initially Kiwanis confined its operations to East Hamilton, however it is currently acquiring rundown houses throughout the central area of the city as far west as Dundurn Street.

The problem of housing low-income families is intertwined with the decay of inner-city neighbour-

hoods and the deterioration of residential and commercial property. At the turn of the century the northern area of the city offered needed water transportation links to Canadian and American centres on the Great Lakes. The resulting heavy concentration of industrial enterprises in this part of Hamilton was a key reason for its later decline as a residential area.

As changing consumer preferences in residential environments emerged in the more affluent period following the Second World War, the great attraction of suburban residential living overcame the desire to be close to places of employment and a gradual exodus to the suburbs began. With the provision of suburban shopping and community services, the commercial and retail operations serving the northern area of Hamilton also changed.

Dilapidated and vacant houses in this part of town have been a common sight for years. Over the past four or five years a combination of high mortgage rates and high levels of unemployment have worsened the problem of deterioration and abandonment and the problem has begun to spread from the traditional inner-city problem areas into the more stable middle-income areas. At the same time there has been a marked increase in vacant commercial space throughout the central and eastern parts of the city where many mainly retail buildings have been empty for a long time and are in very bad condition.

In renovating over 200 houses in Hamilton's north end, the local Kiwanis has housed more people in a shorter period of time than any other non-profit group in the area. Kiwanis feels one of the most important criteria for a successful housing project is tenant satisfaction.

How it All Began

Although he modestly denies it, Jim Rice, a professor in the School of Social Work at Hamilton's McMaster University, is lauded by his peers as the man whose brainchild has housed 214 families since the Kiwanis housing projects began in 1981. For his efforts, Rice won Hamilton's Citizen of the Year award in 1983.

The way he tells the story, it all began when he and "a bunch of the guys" got together to rehash matters relating to the Kiwanis Boys and Girls Club, which Rice had joined as a six-year-old.

"The discussion finally got around to the fact that many of the club members' families were in the

process of losing their homes because of soaring interest rates. Making matters worse, some parents were losing their jobs in these very poor economic times," Rice said.

Following this get-together Kiwanis plunged its efforts into housing. Using every type of housing available for subsidy under CMHC's social housing programs–hostels, "scattered units", infill and apartments, the group housed more people in a shorter period of time than any other non-profit housing group in the Hamilton area.

The group had had previous dealings with CMHC regarding a group home project so it was aware of the assistance the Corporation could provide to non-profit housing including "start-up" funds to put together a detailed application for funding, loans covering up to 100 per cent of project costs for up to 35 years, assistance to reduce the interest rate to two per cent and loans under the Residential Rehabilitation Assistance Program (RRAP) to help with repairs to existing housing.

Dave Gruggen

In developing their housing projects the group dealt with the problem of how to provide a large number of inexpensive housing units without turning a neighbourhood into a public housing ghetto. At the same time their projects met three general conditions of cost effectiveness, tenant satisfaction with the housing and the neighbourhood, and neighbourhood support for low-income housing.

The group began operating early in 1982 and by September of the following year had housed 148 families: 136 families in single-family and semi-detached units and 12 families in an old commercial property converted to apartment units. Most initial applications were sparked by the publicity the group received. Thereafter, a storefront operation was set up so that Kiwanis Housing was accessible and known in the community.

Tenant Satisfaction

Working on the theory that the greater the degree of tenant satisfaction, the more likely the resident will be to care for the house and be a pleasant and co-operative member of the neighbourhood, the group included a number of features it thought would contribute to tenant satisfaction.

All houses are ground-level with private front and back yards. Each house is located in an established urban neighbourhood with a mature network of public services: schools, libraries, recreation centres, social service agencies, hospitals, bus service, clubs, churches and neighbourhood stores. Location within this web of services is particularly important for low-income families because they generally lack the private resources to make use of services unless they are in close proximity.

When applying for a house, a family can list its preference for a house and neighbourhood. It can consider the advantages of different locations taking into account proximity to friends and relatives, jobs, schools and churches. This element of choice is unique to the area administered by CMHC's Hamilton Office.

To be eligible for occupancy Kiwanis has decided that tenants must have lived in Hamilton for the past year, they must have children and they must be able to meet their financial commitments.

The houses are widely dispersed throughout the north end so families become an unobtrusive part of a typical neighbourhood. Many neighbours don't even know that the family next door is participating in the project.

As part of on-going research, 40 of the first 45 tenants were interviewed ten months after moving into project houses. Of these 40, 92.5 per cent responded that they were satisfied with their home and 85 per cent were satisfied with the immediate neighbourhood.

Since the Hamilton projects are designed to generate support by improving the physical environment for the immediate neighbours of each project home, neighbours in adjacent houses and those immediately opposite were interviewed too: 78 per cent responded that it had been good for their street to have the house fixed up and occupied.

Ownership Opportunity

Although the group expects to rent many of these homes indefinitely, it has provided tenants with the opportunity to purchase–an opportunity available to tenants in all CMHC non-profit projects featuring scattered units. However, there is no obligation; each family may purchase if and when it wants to assuming it has enough money.

First Stage

In the first stage of the project 80 houses were purchased from CMHC. They had been acquired by the Corporation when their owners defaulted on their mortgages. All the houses were vacant when purchased and some had been empty for more than three years.

Empty houses create a variety of problems in a neighbourhood as the grounds become overgrown and the exterior deteriorates. At the very least they become an eyesore, a nuisance

for adjacent homeowners and they may reduce the market value of nearby homes. The prospect of vandalism is a danger too as is the risk that the house will be set on fire by a trespasser.

Because they had been empty for so long, most of the houses required extensive renovations which provided a shot in the arm for the sagging construction trades in the city. Between $9 000 and $11 000 was spent to renovate each house, a total of $728 000 to improve the electrical and plumbing systems, foundations and roofs. A total of 350 sub-trades, contractors and suppliers helped with renovation. Homes were renovated to a neighbourhood housing standard which provided an incentive for other homeowners to maintain and improve their properties as well.

The average price of the first 126 units was $22 000; coupled with renovation costs the house prices escalated to about $32 500. However, building a new three-bedroom house could have cost about $50 000.

Two commercial buildings on Barton Street were converted to residential use (centre) to house needy families. Residents attend special classes to learn life skills that will help them integrate into the community.

Rents

Rents charged are set at approximately 25 per cent of gross family income and range from $170 to $450 per month with an average of $285. Rents below the average of $285 are well below lower-end-of-market, market rents being those charged for comparable accommodation in the same area. Rents above $350 are generally closer to that limit and those houses are occupied by families with incomes above $22 000 per year. Family incomes range between $4 000 and $32 000 and average about $14 000 per year. Approximately 17 per cent of tenants receive social assistance. The group prides itself on subsidizing 90 per cent of tenants in the first 80 houses.

In 1982 Kiwanis rented 57 per cent of its units to families with incomes of less than $15 000 per year and the remainder to families earning $32 000 or less. In Ontario in 1981 about 20 per cent of families had incomes under $15 000 per year.

Second Stage

A new element was added during the next stage of the project. Sixty units were purchased, but five houses were subsequently demolished and new homes of similar size and style were built on the site.

Another four units in the form of a four-bedroom house were rented to L'Arche, a non-profit social service

agency that helps the mentally handicapped. These residents need assistance to live outside an institution. Each resident has his or her own room and lives in an atmosphere as close to a family setting as possible, supervised by caring adults.

Barton Street

But the most remarkable aspect of the project has been Barton Street. The 12-unit apartment building was renovated in conjunction with St. Matthew's House, a community social service agency referred by CMHC to Kiwanis for help in housing the needy families they counsel.

The Barton Street project began with the purchase of two vacant rundown commercial buildings constructed in 1909 when the street was the heart of a thriving business area. The site, located near Westinghouse Avenue in the heart of the north end, has been in decline for some time. Over the years the building had been used by a tinsmith, a butcher, a barber and an undertaker. Four vacant stores had occupied the two buildings before the Kiwanis Club bought them, demolished one building and converted the other into an attractive three-storey apartment building. A Canada/Ontario Employment Development Grant was used to hire 35 unemployed construction workers who had been on welfare, for the 20-week renovation program. The project recently received the Ministry of Municipal Affairs and Housing's Ontario Renews Award in the category of conversion from non-residential to residential.

Some tenants had been paying as much as 60 to 75 per cent of their total income to live in housing about to be condemned by the city's health department. Now, at Barton Street, they will pay only 25 per cent of their income for rent.

Hamilton's former mayor Jack MacDonald, the project coordinator and construction engineer, arrived at the site every morning at 7:30 and, donning hard hat and safety shoes, worked side-by-side with the tradesmen.

"I have a deep personal interest in the area and project because, you see, I lived about two blocks away from here above a plumber's store when I first married. This is where I brought Jess," MacDonald recalled.

As part of the total living package at Barton Street each adult family member must attend life management skill classes provided by St. Matthews' House. Maxine Stonehouse, a family worker at St. Matthew's, explained the program. Tenants attend the classes a couple of times a week to learn skills that will help integrate them into the community. Many have never lived in regular apartment buildings or houses because of problems with financial, legal and social matters. The life skills program teaches them about nutrition and they learn child-rearing and home-management skills and how to budget, cook, keep house and shop.

Since the Barton Street project opened last September Stonehouse reports improvement in personal hygiene, child-care, school attendance, levels of employment and adaptability to apartment living. Some residents have deposited savings in a bank for the first time.

The building's superintendent is one of Stonehouse's success stories. A drifter, this young man in his early thirties now lives in the complex with his girlfriend and their two children.

"This is a good place to live. I feel lucky to be here. You know, if I can't make it here I won't be able to make it anywhere," says the young man. He has begun a training program as a baker's apprentice.

In fact, all the tenants care about the building and feel fortunate to live there, MacDonald says. "It shows up in the fact there has been no vandalism to the building. We provided them with washers, dryers, a recreational and training room for their life skill classes and a building security system. Each unit has its own heat controls and appliances. One unit has even been adapted for a handicapped person with a wider bathroom and doorways."

The building is finished in beige stucco and brick. With the exception of about 300 bricks, all the bricks in the new building came from the demolished structure, some were also used in the courtyard–an oasis of greenery complete with benches and lighting. Some of the wood from the old building was sanded down to make the benches. Each two-bedroom apartment has bay windows with venetian blinds to improve the building's appearance from the outside.

Plans call for tenants to live at Barton Street for a maximum of two years and then, with their new knowledge, experience and confidence, to move to a single-family Kiwanis house in the north end. Should they not be ready to move, they might be able to stay in the building longer.

Potential

Kiwanis feels its form of social housing has the potential to be a significant factor in stabilizing inner-city neighbourhoods well beyond the immediate improvement of project houses. Because neighbourhood support of the project is expected to trigger improvements in and/or slow the deterioration of nearby houses, renovation should be detectable in the immediate vicinity of project homes.

In newer areas, with residential and commercial properties in generally much better condition, there is less scope for projects like those sponsored by Hamilton Kiwanis. However, in older municipalities which have a substantial stock of deteriorating residential and/or commercial property, the potential for providing housing for low-income families and improving neighbourhoods is great.■

Carla Mastromattei is a freelance writer living in Hamilton.

Building and planning for

Community Energy

"Everyone talks about the weather but no one does anything about it."
Mark Twain.

Community energy use, particularly for space heating, depends partly on the weather, and used to be something nobody did anything about. This was partly rectified in a series of energy planning studies undertaken in 1981 and 1982 for Tumbler Ridge, a new resource community in northeastern British Columbia. The studies were initiated by the B.C. Region of CMHC and were managed in collaboration with the B.C. Ministry of Energy, Mines, and Petroleum Resources, with funds provided by Energy, Mines and Resources Canada, and included:

- *A District Heating System for the Town* (CoGeneration Associates Limited)
- *Cost-Effective Energy-Efficient New Housing* (Saskatchewan Research Council)
- *Energy-Efficient Planning and Subdivisions* (Planning Collaborative Inc.)
- *Financing Alternatives for Energy-Efficient Housing* (Edwin, Reid & Assoc.).*

The reports revealed some very complex interactions between the forces of energy supply and energy demand, and some fascinating insights into the costs and benefits of energy-efficient housing and planning.

The District Heating Study is concerned with community *energy supply*, a specific opportunity created because Tumbler Ridge has extensive local coal supplies. Normally however, community planners would have little influence over energy supply since most energy sources originate from outside a community. District heating in a remote community has the potential to lower the cost of the supply of energy. Since a district heating system was not pursued by the municipality it is not dealt with here.

The other studies on energy-efficient housing, planning, and financing deal with *energy conservation*, a matter which can be influenced by planners since it is affected by the ways in which a community's physical infrastructure of roads, services, and buildings is planned, financed, and used.

These two aspects of energy supply and energy conservation can work against each other. An expensive energy supply encourages conservation by allowing more capital dollars to be invested to save each energy unit. Conversely, a cheap energy supply encourages consumption. Most resource communities in Canada have very expensive and often imported energy sources, which explains the interest of the federal and provincial governments in reducing their energy use.

Tumbler Ridge was an ideal case study for resource community energy planning. One of the few Canadian "mega-projects" of the 80s actually going ahead, Tumbler Ridge, as the community for the North East Coal Project, was a project being planned and built from the ground up, under conditions of high interest rates (18 - 21 per cent in 1981) and high energy prices. It has the harsh climate, partial isolation, and exceptional natural setting of many of Canada's resource communities. Tumbler Ridge also has some atypical advantages: several available energy sources, good transportation links, a diverse resource base, and other well-established communities nearby.

Energy-Efficient Housing

Four levels of construction for a variety of housing types were developed and costed in the *energy-efficient housing* study prepared by the Saskatchewan Research Council to determine an appropriate level of investment in energy-efficiency under the financial and climatic conditions of Tumbler Ridge. These were:

- *Standard,* based on a platform-built bungalow with concrete basement, costing $76 000 to $87 000 in 1982 for 100 m^2 of ground floor area.
- *Measures* (named after the 1978 National Research Council publication, *"Measures for Energy Conservation in New Buildings"*). This level was estimated to cost an additional $1 500 over *"Standard"* for a 100 m^2 detached bungalow.
- *Retrofit Ready,* so-called because it concentrates on those aspects which would be difficult to retrofit at a later date, and estimated to cost $4 500 more than *"Standard"* construction.

*Copies may be obtained from Gary Hiscox, Manager–Special Projects, B.C. Region, CMHC.

by Ted Martin

Conservation: Lessons from Tumbler Ridge

Table 1 **Construction details, 100 m² detached bungalow**

	Standard	Measures	Retrofit-Ready	Super Energy-Efficient
Ceiling Insulation	RSI 3.5	RSI 5.6	RSI 7.1	RSI 10.6
Wall Insulation	RSI 2.1	RSI 3.5	RSI 4.9	RSI 7.0
Foundation Insulation	None	RSI 1.4 for the top 1.2 m	RSI 1.4 full height	RSI 3.9
Basement Slab Insulation	None	None	None	RSI 1.3
Roof Trusses	Conventional	57 mm heel	89 mm heel	Cantilever design
Vapour Barrier	2-mil polyethylene	2-mil polyethylene with sealing around doors and windows	6-mil polyethylene air tight	6-mil polyethylene air tight
Air Management	None	None	Simple ventilation	Air-to-air heat exchanger
Windows and Doors	Double glazed	Double glazed	Double glazing on south, triple glazed elsewhere	All triple glazed
Passive Solar Design (orientation, windows)	None	Orientation	Yes	Yes

Table 2 **Monthly incremental costs, 100 m² detached bungalow**
(Natural gas, 1982 Rates, 60% Efficient Furnace)

		Standard	Measures	Retrofit-Ready	Super Energy-Efficient
Monthly Value of Energy Saved		$0	$31	$52	$72
Extra Monthly Carrying Costs	(18%)	0	$17	$49	$119
	(12%)	0	$12	$35	$90
Net Monthly Difference	(18%)	0	$14	$3	−$47
(Energy Savings−Extra Costs)	(12%)	0	$29	$17	−$13

Table 3 **Monthly incremental costs, 100 m² detached bungalow**
(Electric Heating, 1982 Rates)

		Standard	Measures	Retrofit-Ready	Super Energy-Efficient
Net Monthly Difference	(18%)	$0	$38	$40	$0
(Carrying Costs−Energy Savings)	(12%)	$0	$43	$54	$34
Monthly Effect of Interest Rate Drop			$5	$14	$34

Table 4 **External effects and the incentive to invest in energy measures**

	Energy prices	
Interest Rates	Low	High
Low	Little (1977)	Strong (1983)
High	None	Moderate (1981)

- *Super Energy-Efficient,* based on Saskatchewan Research Council designs already constructed in Saskatoon, and estimated to cost $10 800 more than *"Standard"* construction (Table 1).

The first test answers the question: "Does energy conservation pay?"; that is, the extra monthly cost of the energy conservation measures should be less than the value of the energy saved (Table 2). The answer in general is yes, except for the Super Energy Efficient (SEE) house, which costs more than it saves. However, with electric heating, which is more expensive than natural gas at Tumbler Ridge, even the SEE house is cost-effective (Table 3).

The second aspect demonstrated in the study is that energy conservation follows the old maxim: "the more you do, the harder it gets." Another term for this is declining marginal value. For example, in a 100 m² detached bungalow it costs $22.24/GJ* of energy saved to upgrade the house from Standard to Measures construction (a total of 68 GJ saved annually). To save the next 43 GJ (Measures to Retrofit-Ready) costs $69/GJ. To upgrade from Retrofit-Ready to Super Energy-Efficiency, a further 38 GJ energy saving, costs $166.45/GJ, which is clearly uneconomic.

The third aspect demonstrated is the sensitivity of energy conservation measures to changes in interest rates. The analysis was originally done at a time of 18 per cent interest rates, which have now declined to 12 to 13 per cent. Lower interest rates make energy conservation more attractive by reducing the monthly carrying cost of capital improvements. For example, a reduction in interest rates from 18 to 12 per cent can cut as much as $30 off a homeowner's monthly energy costs (Table 2). But even more dramatic are the effects of the same interest rate changes on monthly mortgage costs. At 18 per cent, a 100 m² detached bungalow may cost as much as $957/month (principal and interest on $65 250), while at 12 per cent, the monthly payments on the same amount drop by $270 to $687.

As mortgage rates and energy prices fluctuate, they affect the incentive to invest in energy conservation (Table 4):

- If mortgage rates remain high along with high energy costs, there is a moderate incentive to invest in energy conservation; probably, as the study indicates, at the "Measures" level of construction.

* 1 GJ (Giga Joule) is a measure of energy equal to 1 billion joules or about 9,478 BTU (British Thermal Units).

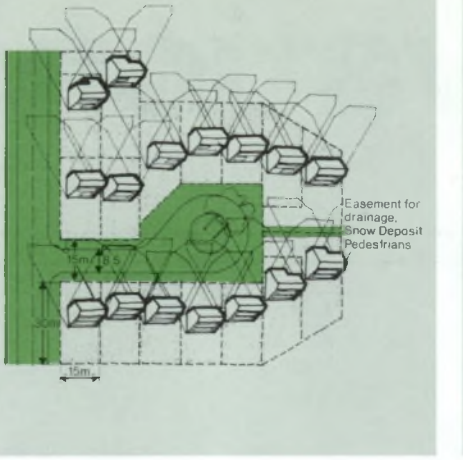
- If mortgage rates come down and energy prices remain high (the current scenario), there will be a stronger incentive to invest in energy conservation, at the "Retrofit-Ready" or higher levels.
- If mortgage rates are low and energy costs are low (the situation of several years ago), there is little incentive to invest.
- High mortgage rates and low energy prices provide literally no incentive to invest in energy conservation. However, this situation is unlikely to occur in the future since the new sources of supply, major energy projects, require a combination of high energy prices and large amounts of capital in order to be developed.

Aside from these fluctuations, reducing the size of the unit appears to have the greatest initial effect on lowering monthly housing costs. For example, reducing a 100 m^2 detached bungalow to 80.6 m^2 in floor area cuts about $10 000 off the amount to be financed and about $100/month off mortgage payments (at 12 per cent). To compensate for this reduction in floor area, one suggestion is to develop unit designs which include a livable basement (for example, the so-called "bi-level" plan).

Another major lesson learned at Tumbler Ridge was that a resource community represents a very particular kind of housing market. At start-up, a great deal of housing is built in a short period of time, with very little follow-up thereafter. Both buyers and builders are "captives" of the growth in primary employment, and the true long-term reactions of the market to innovations in energy conservation cannot be predicted.

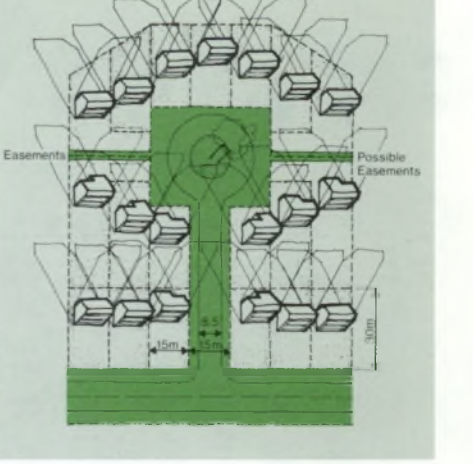
While the tables tell the story that energy conservation pays off on a monthly basis, there is also a built-in reluctance on the part of lenders and buyers to pay for what appears to be an up-front premium for energy-efficient construction.

Figure 1



East-West cul-de-sac housing clusters.

Figure 1



North-South cul-de-sac housing clusters.

Incentives and loan guarantees by lending institutions could be instrumental in overcoming this resistance.

Energy-Efficient Planning

While the housing study dealt strictly with the energy costs of domestic space and water heating, the *Energy-Efficient Planning* study also looked at several aspects of how people pay for and use community infrastructure, including 1) the transportation costs of individuals and businesses, and 2) the capital costs of roads, services, and site development. The potential savings in these two areas are enormous.

Some basic principles were developed, including:

- *land efficiency:* compact lots and housing clusters
- *network efficiency:* reducing the lengths of roads and services
- *solar design:* orienting and spacing houses to receive passive solar gain
- *wind protection:* reducing wind velocities around the housing unit in order to cut infiltration-related heat losses.

These principles were translated into patterns such as: compact lots oriented north-south along east-west and north-south streets, housing clusters primarily in the form of culs-de-sac of 20 to 30 lots (Figure 1), retention of major tree shelter belts throughout the community, compact overall community form, radial collector roads from the Town Centre to neighbourhoods, and location of the highest density development (apartments) within walking distance of the Town Centre. The individual patterns were summarized into refinements, some of which were incorporated into the community plan as it evolved during development.

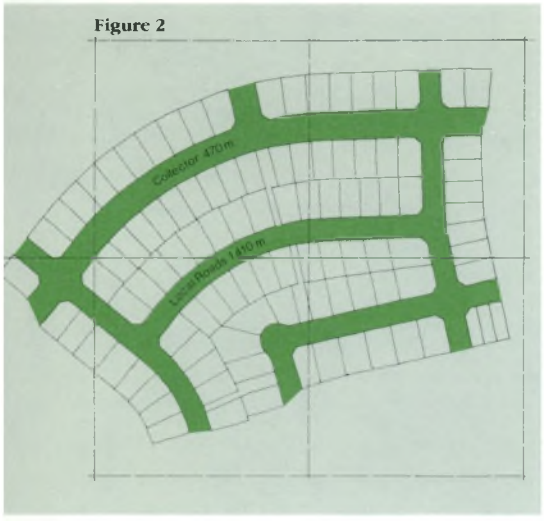
The benefits of "good" environmental design–100 per cent unimpeded solar access and wind protection for every house, were measurable but not striking:

- $25 to $45/year in energy savings for solar access
- $30 to $40/year for wind protection
- $54 to $74/year for their combined effects.

However, the benefits of "compact" community design in comparison with a conventional subdivision design (Figure 2) are impressive: capital cost savings (in roads, services, lot development) of as much as $8 250 per detached unit, and $110/year in operating costs (transportation and municipal services) for annual savings of $1 150 to $1 600 per unit (depending on interest rates). This affects the homeowner directly in his housing affordability pocketbook.

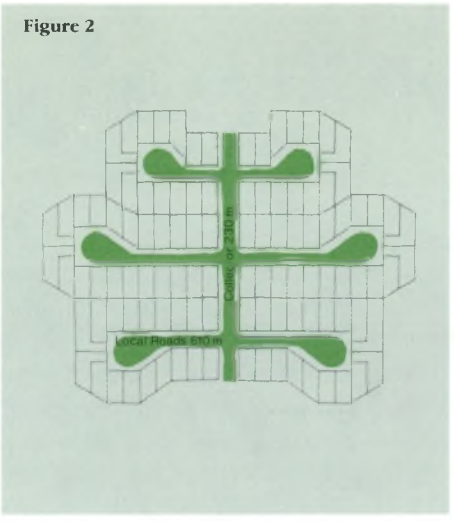
At Tumbler Ridge, every kilometre of arterial or collector road cost nearly $950 000 (pavement, sewers, water supply lines, lighting, etc.). Therefore, every km which could be removed from the community plan would save $129 000 to $181 000 in interest charges and operating costs annu-

Figure 2



Conventional community design.

Figure 2



Compact community design.

ally, which would be reflected in lower lot costs and taxes, spread over the entire community.

Based as it is on the principle of accumulating savings of pennies over thousands of households and millions of trips, a "compact" community plan is strongly affected if any exceptions are made to the principles described. For example, a few wider lots not only increase capital costs for the households directly affected, but also increase very slightly the trip length for every vehicle entering the neighbourhood, making it slightly more expensive to serve. The costs of supplying even a few households outside the "compact" area with any "hard" service such as water supply or sewers, or any "soft" service (such as school bussing, snow plowing, emergency services, etc.) could quickly outstrip the savings of pennies accumulated within the compact layout.

Implications

Both reports came up with positive conclusions about the future of energy conservation.

The cost-effectiveness of *energy-efficient housing* is very dependent on the combined interaction of interest rates and energy prices. It is most favourable with low interest rates and high energy prices. Unfortunately or fortunately, depending on one's perspective, high energy prices appear destined to be with us for a long time. Interest rates have been very volatile in recent years, and hopefully will be lower in the long term. When interest rates are high they tend to restrict housing starts and related forms of capital investment, even if they can be shown to pay off in the long run.

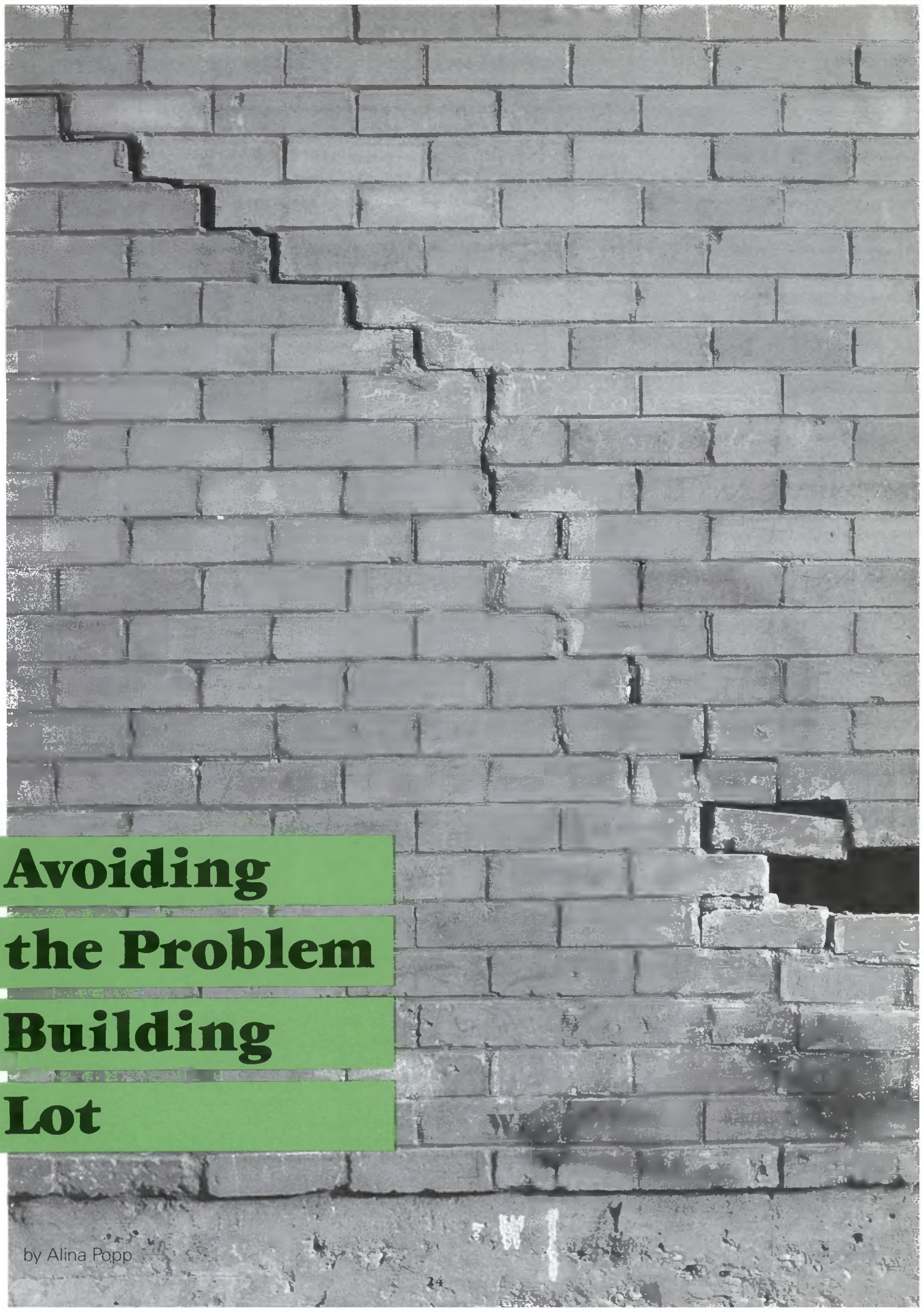
The cost-effectiveness of *energy-efficient planning* appears to be excellent, since so little in the form of monetary investment is required. A compact community costs much less to build, service and operate than a conventionally designed, low-density community. However, this vision may be difficult to reconcile with a frontier image and lifestyle of wide-open spaces, not to mention the southern Canadian suburban dream. It is hard to convince residents and developers that an isolated community with kilometres of undisturbed land around it in all directions, should be closely huddled together in an urban fashion. It may also be difficult to convince a resident who wants to live in a farmhouse or log cabin just a few kilometres outside town that the community cannot afford to supply him with emergency services, school bussing, snow plowing, electricity and other forms of energy or communication.

An analogy can be made here with the medieval European pattern of compact villages and hamlets clustered for defence, from which workers ventured every day to toil in outlying fields. In frontier Canada, the imperative for a similar pattern is now energy and construction costs. Tumbler Ridge is a community with full collective services, and it may be that the virtues of compactness and clustering would be less in a smaller town with gravel roads and individual sewage disposal.

Environmental responses such as the sun and wind orientation of houses and lots are important, but affect space heating costs to a relatively minor extent, partly because higher latitudes (Tumbler Ridge = 55° 8′ North) derive less benefit from solar gain. Interestingly, as houses or other buildings become more energy-efficient, with high insulation levels and better air and vapour barriers, they become more isolated from the outside environment. Thus, the benefits of sun and wind orientation go down as heating bills are reduced. There may be reasons to make exceptions to these principles such as the desire to create a more varied streetscape or respond to more varied terrain. However, it is expected the economic consequences will not be as severe as exceptions to the planning principles described above.

It is interesting to speculate on the lessons that these reports may have for other communities. Housing clusters and compact community design have energy and capital cost payoffs. Cul-de-sacs also have important socialization and crime prevention benefits. The trick, in resource communities, as in southern urban centres, is how to make these patterns and higher densities more livable. More tightly packed houses can be given relief by integrating major open spaces and slices of the natural environment into subdivisions and neighbourhoods. Pathways and climatic protection can be used to encourage walking and cycling, as well as driving. A new era of resource community design may be about to begin.■

Ted Martin is president of Planning Collaborative Inc., a Toronto-based firm of consultants that prepared the study on energy-efficient planning and subdivisions for Tumbler Ridge and an overview document of the four studies that were prepared on that community.

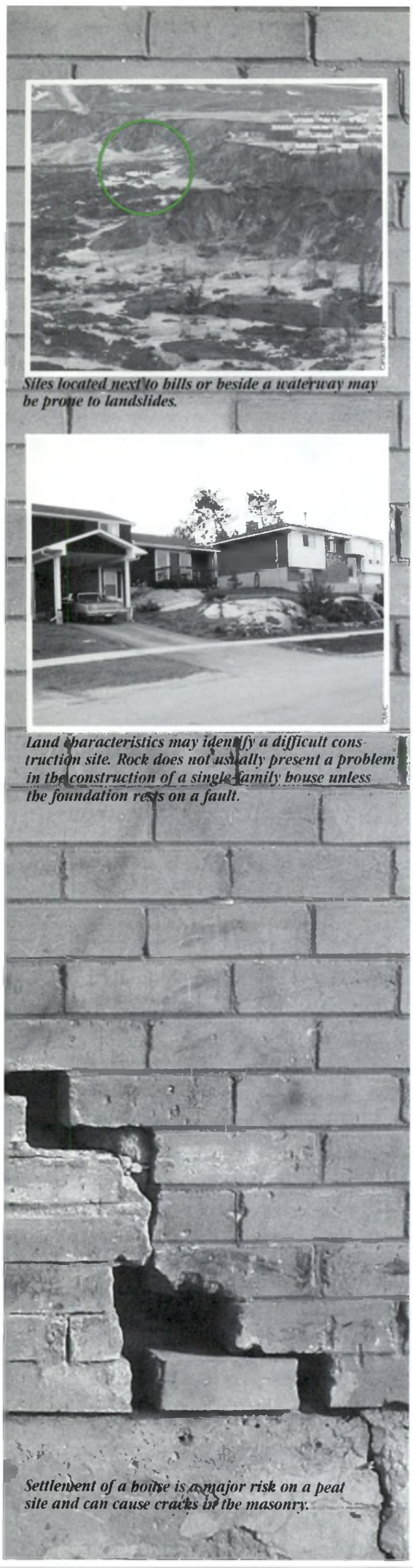


Avoiding the Problem Building Lot

by Alina Popp

Sites located next to hills or beside a waterway may be prone to landslides.

Land characteristics may identify a difficult construction site. Rock does not usually present a problem in the construction of a single-family house unless the foundation rests on a fault.



Settlement of a house is a major risk on a peat site and can cause cracks in the masonry.

Small builders and individuals intent on constructing single-family homes often assume that any serviced residential lot in the city, flat piece of farmland or clearing with a view in the country is suitable for construction. The attractive appearance and siting of a potential building lot can be very deceiving. Problem lands occur all across Canada.

Falling within the problem land classification is any site that will not adequately support a building throughout its life or that may damage a structure through soil movement or flooding.

Rising land costs and the shortage of sites in built-up areas has made land previously considered unsuitable, attractive for residential development. Large housing developers are usually able to avoid such areas, but it is more difficult for the small contractor or individual land purchaser, who does not have the experience, the same easy access to professional advice or the same financial resources.

How to avoid trouble

There are simple precautionary steps based on common sense that every building lot purchaser can follow to avoid the pitfalls of buying problem land. They include the following:

- if the available site is in a built-up area, find out why it has remained empty. Talk to neighbours and check it out with the municipal planning and engineering offices.
- in a rural area, it is more difficult to obtain information about a specific piece of land because there may not be any neighbours close by. In such cases it is well worthwhile to obtain the professional opinion of an engineer or architect.
- the seller is not necessarily required to tell the potential purchaser if a building permit will be authorized for the land offered for sale. Have a solicitor check any offer to purchase agreement and make the offer conditional on the site being approved for the purpose for which it is being bought.
- check with the municipal office to ensure that no land-use changes are under consideration that would put a highway or pipeline across the front lawn.

How to spot problem land

Some common land characteristics may identify a difficult construction site.

Rock, for example, does not usually present a problem in the construction of a single-family dwelling, unless the foundation rests on a fault. A fault occurs where one section of rock has either heaved or dropped in the past because of an earthquake. A fault line will probably remain stable, but there is no guarantee that it will.

Meandering streams in the Prairie Regions and other flat lands often loop and twist cutting new channels. The abandoned river bed between loops gradually fills with organic material, silts and clays. Such sites may appear attractive but should be carefully examined to ensure that the soil can support a foundation.

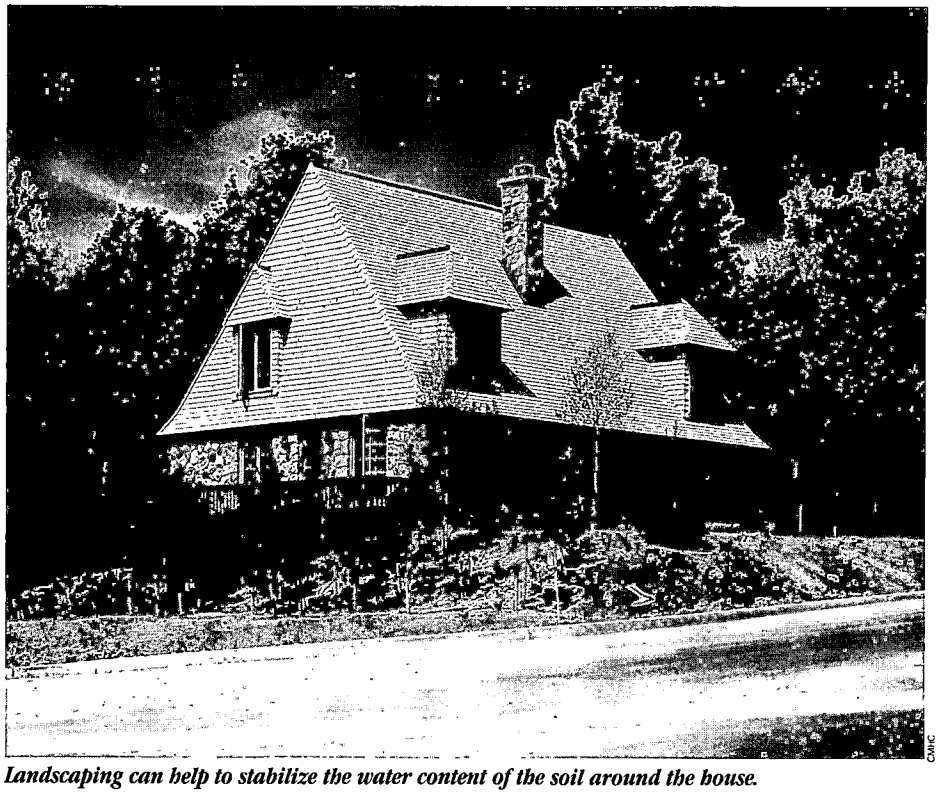
Aerial photographs[1] can help identify the location of former loops much more easily than a search on the ground. Such photographs also show the changes in vegetation and ground indentations which identify kettle holes. These holes, which may stretch hundreds of metres in length, were formed by blocks of ice thousands of years ago and have filled with peat or soft organic soils which may not be suitable for construction.

Locations next to hills or beside a waterway may be prone to landslides. Bowed or tilting trees, falling fences, obvious depressions in the hillside or piles of earth and rock at the foot of the hill are sure signs that a landslide has occurred in the past. Sites along outside bends of rivers are always suspect, since some erosion of the bank is usually taking place.

The high water table of an area that indicates how much of the ground is wholly saturated with water is another factor that affects

[1] Aerial photographs can be ordered from the National Air Photo Library, 615 Booth Street, Ottawa, Ontario, K1A 0E9

construction. If the foundation of a house is built below groundwater level, a sump pump must operate continuously to keep the basement dry. A close look at neighbouring houses can provide a clue. If foundations have been placed at or near ground level and then graded with soil brought to the site, this may indicate that the water table is high.


CMHC

Landscaping can help to stabilize the water content of the soil around the house.

The tricky clays

Clay soils, which are common throughout Canada, generally provide adequate support for housing. Under specific circumstances, however, clays can become unsuitable for construction.

The major types of clay prevalent in Canada are consolidated clay, swelling clay and sensitive clay. It is difficult for the layman to differentiate one type of clay from another but that is usually unnecessary. Each type of clay tends to occur in specific areas and can be readily identified by talking to neighbours and consulting municipal offices.

Consolidated clay such as found in the Windsor-Lake St. Clair region of Ontario and the northern parts of Manitoba, Ontario and Quebec, is clay which has been compressed only by the weight of the overburden on it. The added weight of a house or landscape fill can cause the clay to settle significantly over a number of years.

Construction is possible on such soil if piles or other supports which do not displace the clay are used for foundations.

Swelling clay expands rapidly with the addition of water from a heavy rainfall or spring run-off and shrinks just as quickly when the water evaporates or is drawn off by vegetation. Swelling clay occurs in Manitoba, Saskatchewan, Alberta, Ontario and in pockets in other parts of Canada, usually in dried-up and extinct lake areas.

Foundations built on swelling clay may shift as the water content of the soil changes. To overcome this problem, the foundation can be set deeper than conventional practice, perimeter walls can be reinforced and adjustable columns can be used in construction. Landscaping can also help to stabilize the water content of the soil around the house. Slow-growing trees that do not require a lot of moisture in the growing season, such as evergreens, larch, oak, beech or ash, are suitable.

Sensitive clay loses 75 per cent or more of its strength if it is disturbed or remoulded. This clay has an open network of plate-and oblong-shaped particles that are bonded at contact points. The large open spaces between particles are filled with water. Upon disturbance or remoulding, the particles separate and the clay becomes fluid.

Sensitive clay exists in many regions[2] including the St. Lawrence River lowlands and tributary valley areas in Eastern Canada.

Sensitive clay is unstable under various conditions. It is prone to landslides and can heave from frost action when ice lenses form in the clay and pry the soil particles apart.

Sensitive clay usually has sufficient strength to support medium to light structures like houses. Special precautions however must be taken to ensure soil stability. The home builder should avoid any hill or excessive slope as a construction site and should consult an engineer to ensure that overloading of the soil does not occur.

Frost heave damage can occur in unheated structures built on sensitive clay soil. Effective methods to prevent frost action include backfilling against foundation walls with any readily available granular material, which helps to drain ground water.

The problem of building on peat

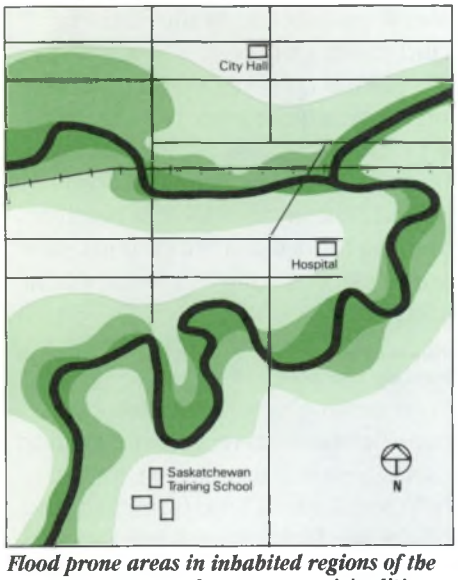
Peat is found in wetlands, often called bogs, which cover about 18 per cent of Canada's total land area. The water there is generally stagnant, has formed a small lake or beaver pond, and has accumulated either from rain or flooding streams. The peat has gradually formed since the ice age, created by the progressive accumulation, submergence and incomplete decomposition of plant life in this water-saturated environment.

No peat is homogeneous. It varies from a near-black, mud-like substance with little fibre content to a spongy material made up of the fossilized remains of roots, plant fibres and inor-

[2]Surficial geology maps that identify sensitive clay areas are available from Energy, Mines and Resources Canada, Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario, K1A 0E8

Flood Hazard Map
Moose Jaw, Saskatchewan

Normal water surface
Designated floodway
Designated floodway fringe
Depression contours



Flood prone areas in inhabited regions of the country are mapped to warn municipalities and builders of potential hazards.

Housing located in flood plains, the flat areas of land beside rivers, can be destroyed in a flash flood.

ganic sediment which can absorb many times its own weight in water.

The surface area of peatland in Canada is estimated at over 120 million hectares. Much of it occurs in the permafrost areas of the Yukon but Saskatchewan, British Columbia, Alberta, New Brunswick, and northern Ontario have large deposits too. The average depth of peat in a deposit is about 2.5 m although pockets of up to 11 m deep have been found.

It is interesting to note that in the decade between 1966 and 1976, an estimated 470 hectares of wetlands around 23 major cities in Canada were converted to urban development. That figure has undoubtedly increased substantially since then. The problems of building on peat, therefore, are not restricted to construction in the hinterlands.

Because of its capacity to absorb and hold water, peat is often unable to bear the weight of a building without sinking or shifting. Professional engineering advice, based on a proper soil analysis, is essential when building on peat. The settlement of a house is a major risk on a peat site. It can occur in two forms–differential settlement causing cracks or a unified sinking of the house. Such sinking occurs because the peat is squashed under the weight of the building or because it has dried out and therefore lost its bearing capacity.

Fire is another hazard. Dry, porous peat can burn under the surface for long periods and travel underground over large distances. It is often very difficult to extinguish.

If building a house on a peat lot is the best of available choices, there are costly ways of overcoming potential problems. They include the following:

- removing the peat if it is of shallow depth and replacing it with properly compacted granular fill
- driving concrete or pressure-treated timber piles through the peat layer to support the building on solid ground or in sufficient depths of peat
- floating a slab foundation on a granular layer of fill on top of the peat
- preloading the site with sand, gravel or any other readily available inexpensive fill to compress the peat sufficiently to support the house.

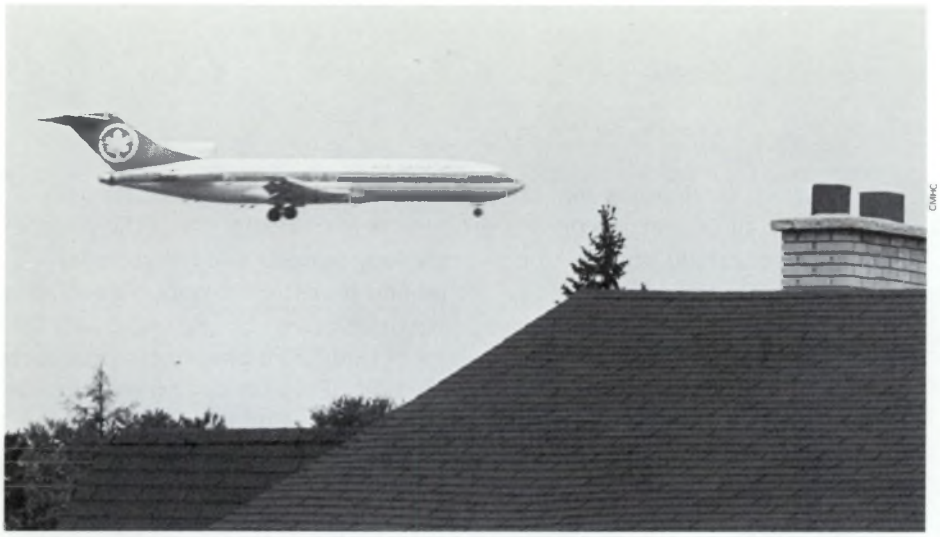
The installation of essential services, sewage disposal and water drainage may also require a preloading of granular fill, the use of flexible pipes and other special considerations on a peat lot.

The beautiful lot *in the flood risk area*

Many attractive building lots are located in the flood plains of rivers and streams. These flat areas of land beside a river or lake are liable to flooding if any overflow occurs. A rapid snow melt or a flash flood caused by a heavy rainfall can destroy or damage any building in the flood plain area.

Flood-prone land is described as a one-zone or two-zone area. The one-zone region is that part of the flood plain that will be covered in the once-in-a-hundred years flood which could happen tomorrow. The two-zone area refers to the floodway where the water flows fastest during a flood and the fringe area around it.

Floods cause loss of life and millions of dollars worth of property



CMHC

Nature is not alone in creating building problems: noise pollution from aircraft are among the problems which should be taken into account when considering the suitability of a site.

damage at frequent intervals in Canada. Floods in six provinces and the Yukon in 1974 resulted in an estimated $71.6 million of damage of which $59.9 million was covered by compensation payments by provincial and federal governments. This, of course, is only part of the cost of flooding. Governments spend vast sums in flood protection constructing control dams, storage reservoirs, dikes and channel improvements.

In 1975, the federal government initiated the National Flood Damage Reduction Program designed to identify flood-risk areas and to discourage any construction within them.

Under Flood-Risk Mapping Agreements with the provinces, flood prone areas in inhabited regions of the country are mapped to warn municipalities and builders of the potential hazards and thereby discourage development. If no map is yet available, past flooding can sometimes be identified by loose stones or sand deposits mixed with grass or by uprooted bushes and trees lying about. Neighbours and newspaper records are other sources of information.

Financing under the National Housing Act is available for housing in a flood-risk area only under certain conditions. Information about NHA financing for houses in flood-risk areas can be obtained from CMHC offices.[3]

If a homeowner has already built a house and discovers that the site has newly been designated a flood plain, National Housing Act funding can be obtained for extensions or significant alterations if these meet CMHC floodproofing requirements. Similarly, funding from CMHC's Residential Rehabilitation Assistance Program may be available, unless the house is now in a designated floodway area.

Not so visible man-made problems

Nature is not alone in creating building problems; pollution, waste disposal, cables and pipelines are man-made conditions that can seriously affect the suitability of a site.

Air and noise pollution vary according to the weather, day of the week, and season of the year. Living under the flight path of the shuttle plane service between cities can be very disruptive to some people and acceptable to others. It is best to visit the proposed site during the work week and check in the neighbourhood about possible sources of both air and noise pollution.

Easements or "rights of way" give hydro, telephone, gas and oil companies legal access to residential properties for the installation of overhead or underground utilities. Easements must be registered in the municipalities and in the district land-registry office.

Homes constructed on landfill sites may require piles and other supports to prevent settling, if the fill had not been adequately compacted. Take a close look at neighbouring homes and check with the municipality to determine the extent and age of landfill.

Facing the sun

Solar heating may be an important consideration. To receive the greatest exposure to solar radiation and to help reduce heat loss, houses should be oriented with their largest windows running in an east/west direction. This exposes the largest surface area of the building to the greatest amount of winter sunlight and offers the least exposure to the hot afternoon summer sun.

Prevailing winds should be taken into account when orienting the house. Cold winds whipping the house from the east or west may offset the benefits of solar radiation. Talking to neighbours and checking with the nearest weather station can help decide if winds are a valid consideration.

For most small builders and individuals, it saves dollars and makes sense to look, check, ask many questions and seek professional advice before purchasing a lot.

Related reading:

- Problem Lands–series of booklets published by CMHC
- Residential Standards, NRCC 17304 published by the National Research Council of Canada
- National Building Code of Canada, NRCC 17303 from the National Research Council of Canada
- Technical Builders' Bulletin (floodproofing standards) published by CMHC. ■

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[3] Acceptable floodproofing methods are described in: *Technical Builders' Bulletin* (concerning floodproofing standards), CMHC, Ottawa.

Le marché du condominium au Québec: une évolution tourmentée

par Alain Lapointe

Au coin des rues Saint-Laurent et Châteauguay à Longueuil, l'ensemble de condominiums Le Square offre entre autres à ses propriétaires une cour intérieure de verdure.

Historiquement, le marché de l'habitation s'est développé autour de deux grandes catégories de produits très standardisés. Les appartements, d'une part, situés dans des zones densifiées étaient la plupart du temps loués par leurs occupants. L'unifamilial conventionnel, d'autre part, localisé en banlieue constituait le canal privilégié de l'accession à la propriété. Chacun de ces marchés opérait selon sa dynamique propre. Au cours des années 70, sous l'impulsion de facteurs socio-démographiques, un véritable éclatement des solutions d'habitat a commencé à se manifester. La formule du condominium allait être au centre de cette transformation.

L'analyse de l'évolution de cette formule d'habitat au Québec présente un intérêt particulier dans la mesure où c'est peut-être dans cette province que les solutions d'habitat étaient déjà les plus diversifiées avec, entre autres, une forte proportion de duplex et triplex. Cette analyse présente un intérêt particulier aussi parce que c'est au Québec où l'évolution du condominium fut la plus tourmentée. Dans cette perspective, nous nous interrogerons sur les particularités de l'évolution de la formule du condominium au Québec, soit les différentes phases de cette évolution, le rôle plus récent des programmes gouvernementaux et le développement des condominiums à prix modéré.

La copropriété: une adoption tardive au Québec

La copropriété divise ou le condominium représente une forme d'occupation relativement récente au Québec. En effet, la prejère loi sur la copropriété des immeubles ne fut déposée à l'Assemblée nationale qu'en novembre 1969. Ce n'est que deux ans plus tard, soit en

Exemple de copropriété horizontale, Les Sentiers de Brossard, à Ville de Brossard, forment un ensemble de condominiums entouré de verdure dont l'architecture est intéressante. Des maisons de deux étages en rangée sont disposées autour d'une place; à l'arrière, parc, piscine et parc de stationnement.

1971-1972, qu'on assiste au véritable démarrage de la formule du condominium au Québec. En comparaison avec les autres provinces canadiennes, où dès la fin des années soixante, cette formule connaissait déjà un certain succès, le départ au Québec fut tardif. Par rapport à l'Europe où le condominium était déjà implanté autour des années vingt, la province accuse un véritable retard.

Comment expliquer cette adoption tardive de la formule du condominium? D'une part, ce fait est lié au retard même du Québec sur le plan de l'accession à la propriété dans son ensemble. En effet, malgré le rattrapage considérable effectué durant les dernières années, la proportion des propriétés demeure largement inférieure à l'ensemble canadien et cela malgré le taux élevé d'urbanisation du Québec. Au dernier recensement de 1981, 62,1% des logements occupés au Canada étaient possédés par leur occupant contre 53,3% seulement au Québec. Les différences dans les caractéristiques socio-économiques ne suffisent pas à expliquer la totalité de cet écart, une partie étant attribuable à des facteurs d'ordre culturel. Le peu de faveur de la formule du condominium s'explique, d'autre part, par la situation propre du marché de la propriété au Québec. La production de l'unifamilial s'est faite historiquement à un coût significativement inférieur à celui des autres provinces. Dans un tel contexte, le condominium n'offrait pas d'avantages financiers suffisamment importants permettant de compenser les invonvénients liés à cette formule de propriété. Ces divers éléments permettent d'expliquer le retard avec lequel la formule du condominium a été adoptée. Toutefois, même après son adoption, l'évolution du condominium a été marquée par une forte instabilité et une très grande spécialisation des produits. L'examen des différentes phases de développement du condominium met en évidence ces caractéristiques de l'évolution du condominium au Québec.

Les différentes phases de développement du condominium

On peut distinguer trois phases distinctes de l'évolution du condominium au Québec. Chacune des phases est liée au développement d'un type de produit spécifique. La première phase, celle du démarrage se situe en 1971-1972. Les mises en chantier atteignent alors près de 900 unités annuellement et représentent environ 1,4% du total des mises en chantier. Suivra par la suite une évolution passablement erratique jusqu'au boom de 1979-1980 où les mises en chantier de condominiums atteignent près de 6% du total des mises en chantier. La dernière phase coïncide avec la reprise de la construction domiciliaire à la fin de 82 et de 83. Le condominium connaît un regain de faveur alors que la demande pour l'accession à la propriété se trouve stimulée par un ensemble de programmes gouvernementaux.

Le démarrage de la formule du condominium au Québec s'est fait principalement autour d'un produit bien spécifique: la copropriété horizontale, située en périphérie et formant de grands ensembles de maisons en rangées. On vise alors une clientèle de jeunes couples ou de familles de revenu moyen ou légèrement inférieur à la moyenne effectuant un premier achat immobilier à des coûts inférieurs à ceux de la maison unifamiliale conventionnelle. On visait donc avec ce produit la clientèle traditionnelle de l'unifamilial. Or, cette forme de propriété n'offrait pas d'avantages financiers suffisants pour faire concurrence à l'habitat unifamilial disponible dans les mêmes voisinages. La compensation était finalement trop faible en regard des nombreux inconvénients de la formule: obstacles à la personnalisation, partage des équipements et territoire commun, problèmes de coexistence dans un cadre très dense, etc. De plus, le démarrage du condominium s'est fait avec un type de projets et de produits dont la qualité de construction laissait souvent à désirer. Ceci explique sûrement les difficultés subséquentes d'implantation de la formule. Cette première phase aura laissé une image peu favorable du condominium. Cette forme de copropriété formant de grands ensembles horizontaux a pratiquement disparu aujourd'hui.

La seconde phase de développement correspond au boom des années 1979-1980. Cette phase est largement associée à un produit spécifique, le condominium vertical luxueux, généralement situé dans les zones centrales et intégré au milieu urbain environnant. La clientèle visée en est une d'âge mûr et de retraités, antérieurement propriétaires, disposant ainsi d'un important capital de même que de ménages non familiaux ou de couples de jeunes professionnels à deux revenus et travaillant au centre-ville. L'absence de responsabilité personnelle face à l'entretien et à la sécurité de la propriété joue un rôle important dans le choix de la formule de copropriété. Durant cette période, le marché du condominium de luxe a été l'objet d'une vague spéculative considérable, le motif principal d'achat en étant un d'investissement.

On estime à près de 30% les achats de ce type de condominium qui ont été faits par des spéculateurs à court ou à long terme. Cette surenchère a conduit à une surproduction d'unités dont l'écoulement pour certains projets n'est pas encore terminé. Actuellement, on peut dire que relativement peu de projets de condominium luxueux se vendent bien.

La dernière phase de développement du condominium correspond à la période récente de reprise de l'activité de la construction, à la fin de 82 et de 83. Elle est axée en grande partie sur des condominiums verticaux à prix modéré formant de petites structures principalement situées en périphérie. La clientèle visée est celle du locatif traditionnel: ménages non familiaux et jeunes couples disposant d'un certain comptant et désireux de profiter des nombreux programmes d'aide à l'accession à la propriété mis en place par les divers paliers de gouvernement pour favoriser la relance de l'activité. La présente phase du développement du condominium mérite qu'on s'y attarde puisqu'elle témoigne des perspectives d'avenir de ce type d'habitation au Québec.

L'impulsion des programmes gouvernementaux récents

Depuis deux ans, l'activité résidentielle au Canada et au Québec en particulier a été favorisée par un ensemble de facteurs dont le fléchissement des taux d'intérêt hypothécaires à partir de la fin du second semestre de 1982, une reprise de confiance dans les perspectives de croissance de l'économie et finalement une batterie imposante de nouveaux programmes d'aide orientés spécifiquement vers la relance. Tous ces facteurs ont permis à cette demande "latente", qui n'avait pu se matérialiser en raison des coûts élevés de financement, de le faire dans des conditions plus favorables.

Les gouvernements ont adopté plusieurs mesures en vue de relancer l'industrie de la construction. Le gouvernement fédéral a modifié son programme d'accession à la propriété en 1982, soit le PCEAP, en offrant une subvention de 3 000$ aux acheteurs. La relance a été particulièrement soutenue au Québec par le programme Corvée-habitation qui, selon ses phases d'application, offre des réductions de taux d'intérêt en plus d'une subvention aux acheteurs. Le fédéral a abandonné son programme de subvention le 1er mai 1983 mais le gouvernement provincial a pris la relève en accordant aux acheteurs dans la phase III de Corvée-habitation une subvention qui pouvait atteindre 3 000$ avec la participation de la municipalité concernée.

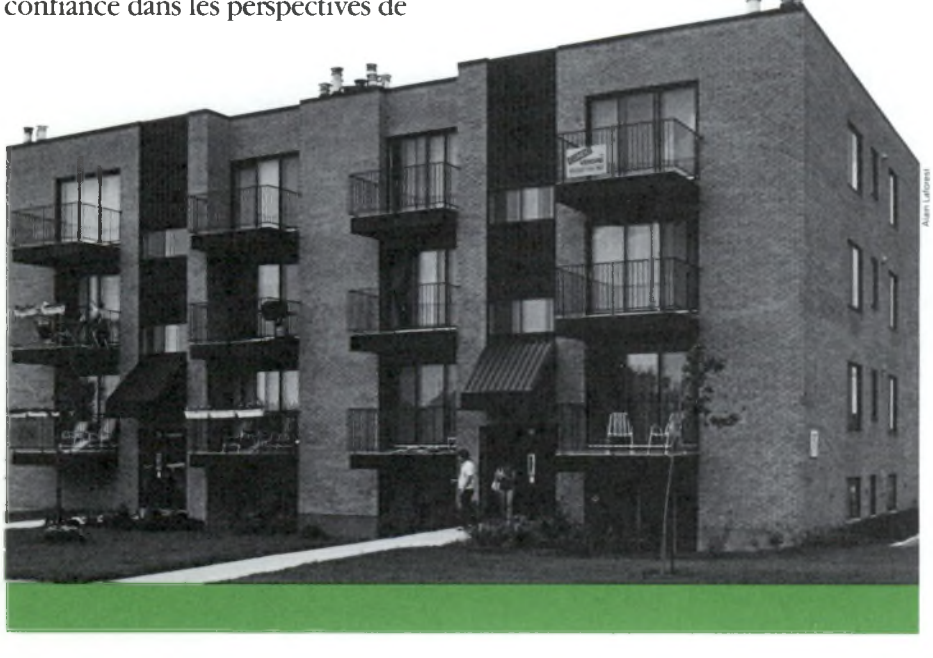
La plupart de ces programmes ont été initiés au moment où les conditions mêmes du marché devenaient plus favorables à une reprise de l'activité. Il est difficile d'isoler l'impact spécifique de ces programmes mais l'histoire montre qu'au Canada ce type d'intervention a souvent contribué à accentuer l'amplitude des cycles de la construction. Une chose est certaine cependant, ces programmes, dans leur modalité même d'application, ont des effets allocatifs non négligeables sur l'ensemble du marché de l'habitation. Étant donné qu'ils sont conçus pour stimuler l'activité économique en général, ils favorisent le neuf au détriment de l'existant. De plus, étant pour la plupart des programmes d'accession à la propriété, ils favorisent également ce secteur d'activité au détriment du locatif.

D'une façon générale, la demande de logement s'est portée presque exclusivement sur l'accession à la propriété en raison d'une évolution favorable des prix relatifs. Les hausses de loyers considérables observées en 1981 et 1982 combinées avec les programmes d'aide ont contribué à abaisser substantiellement le prix relatif de l'accession à la propriété. Il s'agissait alors pour les constructeurs d'offrir une gamme de produits suffisamment variée pour capter les clientèles potentielles. Ce fut l'arrivée du petit condominium à prix modéré.

Un nouveau segment de marché: le condominium à prix modéré[1]

La dernière phase du développement du condominium s'est faite avec un produit qu'on avait peu exploité auparavant, le condominium à prix modéré. Cette unité dont le prix ne dépasse pas 50 000$, située dans de petites structures (7 à 16 unités) généralement en bois et briques de type walk-up n'offre peu ou pas d'aménités et elle est principalement localisée en périphérie de l'agglomération urbaine. Pour la région métropolitaine de Montréal, on estime que ces unités représentaient près de 60% des mises en chantier de condominiums durant la période s'échelonnant sur les deux derniers trimestres de 1982 et l'année 1983.

Par rapport au locatif, il faut souligner que ces condominiums sont généralement mieux conçus, plus privés et mieux insonorisés. Ils offrent, de plus, à leur propriétaire la possibilité de réaliser un gain de capital. À cet égard, des considérations d'investissement peuvent s'ajouter



À Rivière-des-Prairies, en périphérie de Montréal, boulevard Perras, condominiums neufs à prix modéré formant de petits ensembles.

aux considérations strictes de consommation à l'achat. De plus, ils offrent une meilleure sécurité d'occupation et donnent à l'occupant un contrôle plus grand sur son habitat. Par rapport à la propriété unifamiliale, la formule de copropriété a l'avantage de limiter l'entretien ou tout au moins d'en partager collectivement les coûts. Cette dernière considération peut être un élément important de choix entre le condominium et l'unifamilial. Elle devient prioritaire dans le cas des personnes âgées.

La formule de copropriété n'offre pas que des avantages, elle présente un certain nombre d'inconvénients. Elle est "plus coûteuse" que le locatif. En effet, elle exige généralement des déboursés mensuels plus élevés que le locatif comparable. Il se peut cependant que, sur la période d'occupation, le "coût réel" d'occupation soit moindre que celui du locatif comparable dans la mesure où le gain de capital actualisé vient compenser la différence des déboursés annuels actualisés.[2] De ce point de vue, c'est l'évolution du marché de la revente qui devrait déterminer l'avantage de l'une ou l'autre formule.

Les inconvénients les plus souvent sous-évalués par l'acheteur sont liés aux exigences de la participation. En effet, la copropriété divise est une forme de propriété collective qui laisse à l'ensemble des copropriétaires les décisions qui touchent les parties communes. De plus, les contraintes qui régissent l'utilisation des parties divises de même que les statuts et modes de fonctionnement des organismes collectifs tels que l'assemblée des copropriétaires sont contenus dans l'acte de copropriété. Celle-ci exige donc de la part de ses membres la participation aux organismes collectifs de décision. Cela peut être gratifiant pour certains alors que pour d'autres, au contraire, cela constitue un inconvénient majeur. Les décisions étant, en principe, soumises au vote, elles tendent à refléter les préférences de l'électeur (copropriétaire) médian. Ce mode de fonctionnement démocratique s'accommode mal des préférences minoritaires. Ainsi, plus il y aura de diversité dans les caractéristiques socio-économiques des copropriétaires, plus les possibilités de tensions internes seront grandes. Dans les petites unités, où le nombre de copropriétaires est limité, il devient plus facile d'établir des alliances et le fonctionnement au vote majoritaire. D'une façon générale, il ne faut donc pas sous-estimer le potentiel de conflits à l'intérieur de ces formules collectives de propriété.

Qu'en est-il de la clientèle visée par ce condominium à prix modéré? S'agit-il d'une clientèle dont la capacité financière se situe à la limite de l'accession à la propriété auquel cas sa solvabilité deviendrait fort sensible aux aléas de la conjoncture? Pour effectuer ce genre d'analyse, on peut comparer les acheteurs de condominium avec la clientèle de l'unifamilial dans les mêmes catégories de prix. Aux fins de comparaisons, nous utilisons un échantillon d'acheteurs dont le prêt hypothécaire est garanti par la SCHL, échantillon qui couvre la période entre juin 82 et septembre 83.

La clientèle

Le tableau résume les principales caractéristiques des clientèles de l'unifamilial et du condominium dans la gamme de prix que constitue notre segment de marché. Contrairement à ce qu'on aurait pu croire au départ, la clientèle du condominium à prix modéré présente globalement des caractéristiques financières relativement bonnes par rapport à la clientèle de l'unifamilial. Le revenu total et la mise de fonds y sont plus élevés et l'amortissement brut de la dette (ABD) plus faible. D'une façon générale, par rapport à l'ensemble de l'échantillon où l'ABD se situe en moyenne à 21,3%, dans le condominium à prix modéré on obtient un ABD plus faible grâce à une mise de fonds par rapport au prix qui est bien au-dessus de la moyenne de 21,4%. Ce ratio se situe en effet autour de 25% pour le condominium à prix modéré contre 16% environ pour l'unifamilial de prix comparable. De plus, une proportion plus faible de ménages présente un ABD supérieur à 23%. En effet, pour les prix inférieurs à 40 000$, 18,6% se trouve dans cette situation contre 33,2% dans l'unifamilial comparable.

Du point de vue des caractéristiques socio-démographiques, la clientèle du condominium à prix modéré est plus âgée que celle de l'unifamilial comparable. Elle comprend une proportion substantiellement plus grande de personnes âgées de plus de 65 ans. La taille des ménages y est beaucoup plus faible et la proportion de ménages composés d'une seule personne est très élevée. Il faut mentionner que ces renseignements sur l'âge et le nombre de dépendants se rapportent à l'emprunteur, considéré comme chef d'un ménage, ce qui, dans certains, peut s'avérer une interprétation abusive. D'une façon générale cependant, on peut penser que l'emprunteur sera effectivement le chef de ménage.

Un autre aspect tout aussi, sinon plus important qui se dégage des données précédentes concerne l'homogénéité relative des clientèles. À cet égard, la clientèle du condominium à prix modéré apparaît plus hétérogène que celle de l'unifamilial. Les écarts de revenus entre les copropriétaires y sont plus importants. La proportion des revenus supérieurs à 50 000$ et inférieurs à 20 000$ y est aussi plus élevée. L'étude des autres variables financières montre également des écarts plus grands.

Quand on analyse le nombre de dépendants, on constate une plus grande homogénéité dans la clientèle du condominium à cause d'une forte concentration de personnes seules. Toutefois, les différences d'âge sont plus grandes. Ceci s'explique d'ailleurs assez facilement dans la mesure où les ménages d'une seule personne peuvent être composés aussi bien de personnes âgées que d'âge moyen ou faible.

Cette dimension de l'homogénéité est importante dans le cadre d'une formule de propriété collective car elle peut être un indicateur de tension. En effet, si l'hétérogénéité des clientèles observées par rapport à l'ensemble de la population se vérifie dans un immeuble, elle peut être source de conflits et d'un fonctionnement plus ou moins harmonieux. À

Au coeur de Montréal, rue Atwater au nord de la rue Sherbrooke, Le Fort de la montagne, un ensemble de condominiums des plus luxueux dont l'arrière donne sur les jardins du Séminaire.

Principales caractéristiques des clientèles de l'unifamilial et du condominium à prix modérés
Région métropolitaine de Montréal

		Condominium		Unifamilial	
		– 40 000 $	40 000-50 000 $	– 40 000 $	40 000-50 000 $
Revenu total	($)	29 306	31 266	27 816	31 081
Revenu < 20 000 $	(%)	18,5	10,5	17,1	4,4
Revenu > 50 000 $	(%)	6,5	4,9	1,5	1,1
Mise de fonds[a]	($)	8 992	10 474	5 452	8 249
ABD[b]	(%)	17,7	20,2	20,4	21,7
Nombre 2e revenu	(%)	30,6	37,5	48,2	52,7
Mise de fonds/prix	(%)	27,8	23,2	15,7	17,9
ABD > 23%	(%)	18,6	29,4	33,2	38,7
Âge moyen		34,5	36,3	29,8	29,5
– 35 ans	(%)	55,5	48,5	80,9	74,5
+ 65 ans	(%)	10,2	13,7	3,0	11,6
Nombre de dépendants		0,36	0,47	1,47	1,18
Aucun	(%)	79,6	71,0	28,6	33,6
3 +	(%)	3,7	4,3	17,6	14,8

[a]La mise de fonds n'inclut pas les subventions aux termes des différents programmes d'accession à la propriété.
[b]L'ABD est calculé en tenant compte des réductions d'intérêt associés à certains programmes d'accession à la propriété.

ce propos, les écarts de revenus, les différences de composition des ménages et des différences d'âge peuvent être une source d'insatisfaction dans la mesure où le processus démocratique ne permet pas de satisfaire ceux qui sont aux extrêmes de l'échelle des caractéristiques socio-économiques.

Pour conclure sur la clientèle, il faut d'abord mentionner que, contrairement à ce qu'on aurait pu croire au départ, les acheteurs de condominium à prix modéré ne présentent pas de caractéristiques financières qui incitent à croire qu'ils constituent un risque plus grand. De fait, par rapport aux acheteurs de maisons unifamiliales dans les mêmes catégories de prix, ils présentent des caractéristiques financières plus favorables: un ABD plus faible, une mise de fonds plus grande et un rapport mise de fonds/prix plus élevé. Par contre, l'élément qui pourrait paraître moins positif dans cette comparaison des clientèles, c'est la plus grande hétérogénéité des acheteurs de condominiums. Il s'agit d'une part d'une clientèle plus mobile si on tient compte de la proportion élevée de personnes seules et une clientèle qui se recrute dans toute la gamme des âges. De plus, les écarts de revenus sont plus considérables que pour l'unifamilial équivalent. Dans une forme de propriété collective, comme le condominium, ceci représente un danger d'une plus grande instabilité. Il est bien certain toutefois que l'hétérogénéité observée par rapport à l'ensemble de la population peut ne pas se reproduire dans chaque immeuble. Enfin, la clientèle du condominium neuf à prix modéré se recrute majoritairement dans la zone du projet et cela davantage que pour l'unifamilial comparable. Il s'agit donc d'une clientèle différente de celle de l'unifamilial conventionnel et, dans ce sens, la présente vague de développement du condominium a su élargir la gamme des produits pour capter ces clientèles plus mobiles dont la capacité financière permettait l'accession à la propriété.

Toutefois, cette dernière vague de développement du condominium risque de connaître le même sort que les deux premières. La plupart des acheteurs ont acquis leurs unités sur plan, sans connaître les copropriétaires avec lesquels ils auraient à vivre. Des tensions sont susceptibles d'apparaître dans la gestion collective de ces unités. De plus, il s'agit de produits de bas de gamme dont le rythme de dépréciation devrait être rapide. Tous ces éléments risquent de créer une image négative du condominium et nuire à la diffusion du produit.

Si on voulait résumer l'évolution du marché du condominium au Québec, on pourrait dire qu'elle fut marquée par une instabilité encore plus grande que l'ensemble de l'activité de la construction, qu'elle s'est appuyée sur des produits spécifiques dont l'objet était de répondre à des clientèles restreintes. On observe le même phénomène avec le développement du condominium à prix modéré. Les méthodes de mises en marché, le contexte de son introduction laissent présager que le condominium à prix modéré va connaître un sort semblable à celui du condominium horizontal ou du condominium de luxe: une baisse rapide des mises en chantier et le retour à une production ponctuelle, associée à des besoins limités et mieux identifiés.■

Alain Lapointe est professeur à l'École des Hautes Études Commerciales.

Références

1. Cette section du texte s'appuie sur une étude de l'auteur faite pour le compte de la SCHL et intitulée *le condominium à prix modéré à Montréal*. Les vues exprimées sont celles de l'auteur et ne sauraient engager la Société.
2. Ces déboursés devraient inclure le coût d'opportunité du capital initialement investi dans la propriété.

ECRU

ECRU

Informal communications saved the day when a mudslide hit the B.C. town of Port Alice. A team of women ran door-to-door alerting neighbours to leave their homes.

COMMUNICATIONS:

This is the second of two articles on emergency planning in Canada.

A Vital Link in Emergencies

by Christine Tausig

When disaster strikes, quick and accurate communications can literally mean the difference between life and death.

When the small logging town of Port Alice, British Columbia was hit by a mudslide in 1975, for example, a team of women ran quickly from door to door, alerting neighbours to leave their endangered homes. At times citizens turn to more formal communication methods such as newspapers, radio or television to find out what happened and what to do about it. When New Brunswick was rocked by earthquakes in 1982, for instance, the media, informed by seismologists from Energy, Mines and Resources Canada, told even emergency agencies where the earthquakes had occurred and how strong they were. At the time no link existed between EMR and local emergency measures organizations, but this has changed thanks to ECRU.

Carleton University's Emergency Communications Research Unit (ECRU) is a team made up of journalism professors and student volunteers who have set out to understand how people find out about emergencies and disasters, how they pass on information and how they react in a crisis. Emergencies studied by ECRU range from a snowstorm in Ontario to a freight train derailment and toxic chemical spill in Alberta to a hostage incident in New Brunswick.

When disaster strikes, quick and accurate communications can literally mean the difference between life and death.

ECRU's extensive reports on each crisis provide a comprehensive snapshot of the disaster and are an important aspect of Canada's emergency planning. "It's important for an independent agency to reconstruct an event," states Joseph Scanlon, a Carleton University journalism professor and senior researcher for ECRU. "We accurately portray what happened and why".

The unit, which conducts contract research funded by agencies such as Emergency Planning Canada, Correctional Services Canada and the Canadian Police College, was established in 1970 as the result of a class assignment. On the day kidnapped British diplomat James Cross was found alive, ECRU researchers travelled to Kingston, Ontario, on their first assignment interviewing people to find out how they had heard the news.

Surprisingly, says Scanlon, as with other events studied by ECRU, the news about Cross did not get very distorted. "In a really important crisis, information does tend to get passed accurately," he states. Perhaps also surprisingly, much of the reliable communications in a time of crisis is through "highspeed word-of-mouth chains".

Despite the accuracy ECRU has found in such word-of-mouth reports, research on crisis communications often remains the study of the unexpected. As Scanlon points out in a recent article in the book *Communications in Canadian Society,* communications systems that municipalities and emergency planners have set up often do not work as they should in emergencies.

The disaster itself can sometimes affect communications. When ECRU studied the impact of a tornado on Woodstock, Ontario,they found serious problems in the communications network. The radio station, which had no emergency power, was off the air. The telephone system was severely damaged by the tornado; police and fire department radios did not work properly; ambulance radios, also with no emergency power, were out; and emergency vehicles were blocked throughout the area by debris on the roads.

At other times, a breakdown in communication can be traced directly to a lack of preparation or training. During the New Brunswick earthquakes studied by ECRU, for example, the telephone link between provincial and federal emergency agencies did not work properly because the person trying to use the system was not familiar with it.

"In a really important crisis, information does tend to get passed accurately."

In other cases, ECRU has found that the response to a disaster can sometimes actually hinder communication. When an explosion occurred in a downtown office building in North Bay, many observers called someone, either ambulance, police, firefighters, or simply a friend. This had the effect of overloading and blocking the telephone system. Then, emergency agencies such as police, fire and ambulance along with power and utility company officials rushed to the scene, bringing already congested rush-hour traffic almost to a stand-still. Finally, the curious rushed to the site of the explosion. Within 10 minutes, about 6 000 people–roughly one-tenth of North Bay's population–were on the scene, estimates Scanlon. (Not all stood and watched. Some aided rescue efforts by pulling victims to safety.)

...communications systems that municipalities and emergency planners have set up often do not work as they should in emergencies.

ECRU's descriptions of disasters draw a picture not only of how emergency communications work but also of how communities and government agencies respond to crises.

The unit operates during the academic year and, in addition to faculty, numbers about 15 to 20 journalism students. The students, who receive no pay or academic credit, are bilingual and trained in interview techniques. Journalism students make good disaster researchers, Scanlon points out. "They're used to dealing at high speeds and coping with people under stress".

When a disaster strikes (and ECRU participation is approved by the funding agency–usually Emergency Planning Canada), Scanlon and a small team of ECRU members travel as quickly as possible to the affected area, asking a random sample of citizens how they heard about the disaster and what they did in response. ECRU usually conducts two or three such major studies each year.

Recently, according to Scanlon, ECRU has been more closely examining the procedures used during evacuations. "We're looking at specifically what makes people relocate or return... and also how people attempt to re-establish links in a crisis".

Although ECRU makes no formal recommendations to the agencies that fund its studies, Scanlon points out that conclusions are often "self-evident". In one small British Columbia town, for example, a group of evacuees were sent to spend the night at a hotel. "That sounds fine," explains Scanlon, "but the hotel had only TV, no radio, so they were cut off from local news (about the emergency)".

ECRU's research has had practical results. The material gathered by ECRU teams forms part of the course content for emergency planners and government officials at Emergency Planning Canada's Federal Study Centre in Arnprior, Ontario. "This keeps the programs current," states Scanlon, who also teaches crisis management at the study centre and at the Canadian Police College. In fact, he adds, he now often meets police or fire officials whom he has trained when the ECRU team travels to a disaster.

...the response to a disaster can sometimes actually hinder communication.

Better education about emergencies, for citizens as well as for emergency response personnel and government officials, will result in an improved handling of crises, Scanlon maintains. One of the barriers to communication in times of disaster is the often-expressed belief: "It can't happen here".

It's a belief that ECRU and Scanlon are doing their best to prove wrong. In ECRU's studies of some 20 disaster sites across Canada, the evidence is real that emergencies can, and do, happen here.■

Christine Tausig is a freelance writer living in Wakefield, Quebec.

The Interchurch Special answers Rural Needs

by Ron Corbett

Much has been written about the wealth and beauty of Nova Scotia's Annapolis Valley. The region known as the major apple growing area of the Maritimes is also the setting for Longfellow's tragic poem "Evangeline". But, a more recent tragedy is the difficulty of the region's rural poor in providing adequate housing for themselves and their children.

Approximately ten to fifteen per cent of the total population of 43 000 living in Kings County, one of the two counties making up the area known as the Annapolis Valley, are forced to live in inadequate and substandard accommodation running the gamut of dwelling types from conventional single-family dwellings with cracked foundations and masonry to one-room tarpaper shacks, buses, travel trailers and converted chicken coops. These so-called dwellings are often uninsulated, and have leaky roofs and walls. The heating facilities, usually an old wood-burning stove, are inadequate and unsafe, often standing next to a cardboard wall located in a basement strewn with newspapers.

In many instances this accommodation lacks even the basic amenities which the majority of Canadians take for granted such as running water and indoor toilet facilities. Where indoor toilets do exist, they can be as crude as a hole in the floor.

The type of people living in these conditions covers the entire spectrum of society: single and two-parent families and the elderly. The problems they face are many and varied and include chronic unemployment, underemployment and mental and physical disabilities.

A minimum ten per cent of the total housing stock in the County can be considered substandard. A recent housing condition survey carried out by the Municipality identified 877 housing units in need of major structural repair. A further 239 occupied dwellings were considered unsafe for human habitation. These figures are minimum since the survey only evaluated the exterior of the dwellings.

Rural Values and Housing Programs

A number of government programs have been designed and implemented to deal with rural housing issues. One of the best known is CMHC's Rural and Native Housing Program.

The restrictions imposed by the program on the design of units have resulted in a housing unit of 75 m^2 with a living room separate from the kitchen, heated by electricity or oil, located in a serviced area. However, the rural poor in Kings County tend to favour smaller houses, 35 to 55 m^2 that are kitchen-oriented and heated by a wood stove since wood is readily available in the area.

Placing the hard-core poor in homes designed for the Rural and Native Housing Program has created a number of problems in Kings County. The houses tend to deteriorate because the residents have never been taught the rudimentary skills needed to maintain the units. Violent conflicts between family members may occur when they are placed in an alien environment and many of the families often find themselves in serious financial difficulties because they have to pay for oil or electricity to heat their homes.

Locating these units in serviced urban areas has created a number of problems which, in turn, creates negative public attitudes towards social housing programs in general. In many instances the units were placed in neighbourhoods where middle class values predominate. This has led to clashes between the two groups due to differences in attitudes regarding activities such as lawn mowing, exterior maintenance of units and the storage of junked cars in the backyard.

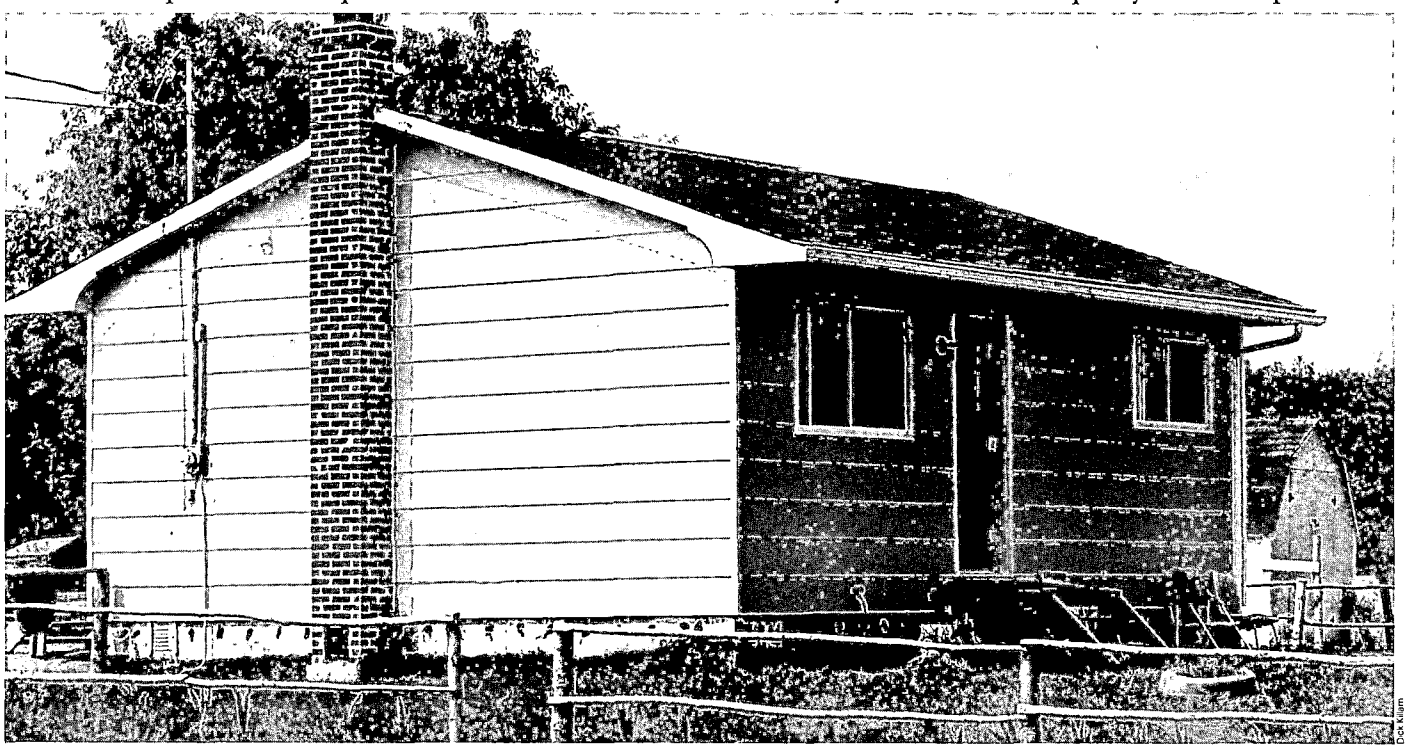
These problems have resulted in a number of unsuccessful deliveries where the units have had to be rede-

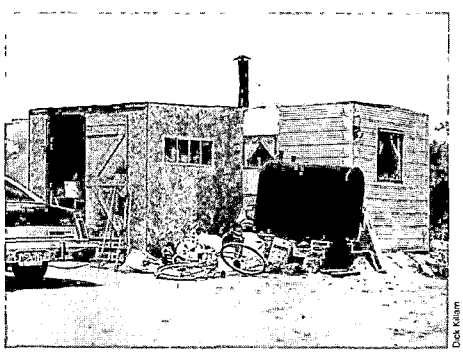
livered and major repairs made by CMHC. In order to deal with this problem in the County, the local delivery agency, Kings County Housing Repair Society, has initiated a new approach based on a strict selective procedure backed up with orientation seminars and individual social counselling.

Applicants are questioned on their financial situation, housing needs, and home repair and maintenance skills. Their answers are applied to a point rating system to determine their potential to acquire the necessary skills to maintain their housing before they are eligible for a unit. Their move into the housing is followed by seminars on such topics as budgetting, how to make home repairs or who to contact so repairs will be made. Counselling is available to prevent residents from falling behind on their monthly mortgage payments.

This approach has been dramatically successful in that virtually all applicants passing this process have been able to maintain their homes. The success rate is measured by the fact that over 90 per cent of units remain in the hands of the initial applicant.

The major negative impact of the change in the selection process is that it almost automatically eliminates the hard-core rural poor from the program. While they certainly can demonstrate a need, they simply cannot meet the other requirements which are part of the selection process in terms of skills, education and the motivation to emulate middle class values. Experience indicates that the latter quality is most important in determining the success of an applicant in keeping a unit.





Specifically designed to suit the needs of the rural poor in Kings County, Nova Scotia, the Interchurch Special replaces substandard housing.

This reality convinced the Wolfville Area Interchurch Society, a group involved in housing issues in Kings County since the early 1970s, that another option designed with the rural poor in mind was needed. The Society's major thrust has been improving existing substandard housing in the County through its low-interest revolving loan program. The $100 000 it has received from provincial government loans and donations from individuals and church groups for its program has been used to

provide small loans to potential homeowners. The money received when loans are repaid goes back into the program. The Society's major philosophy has been to give a helping hand to those who can't qualify for financing to buy a house.

In many instances the people who come for help are destitute and their applications for mortgage money to buy a house have been turned down by conventional lending institutions. Their housing needs are wide-ranging and include emergency repairs, indoor toilet facilities and replacement of major appliances.

The Society is administered by a 12-member Board made up of volunteers appointed by member organizations: the provincial department of social and family services, Kings County Housing and local churches. The volunteers represent a wide range of talents and professions including construction, real estate, finance, social work and the law.

The Board recognized that available housing options were not meeting all rural needs and that housing options should be tailored to the human values and lifestyles embraced by local rural residents. In 1981 it directed the Society's co-ordinator, Cameron Jess, to co-ordinate the development of a housing unit specifically adapted to the rural lifestyle which would be economical to develop and energy-efficient. A design incorporating all the basic criteria was completed by a local contractor and the first "Interchurch Special" was constructed in 1982.

The Interchurch Special

The size of the house is relatively small in keeping with the style familiar to the rural poor. The house is 6.5 by 7.3 m with a floor area of approximately 51 m^2. The unit meets the requirements of the National Building Code (1980) using the stick-built method of construction with 38 × 184 mm floor joists and 38 × 140 mm wall studding. The foundation consists of a 1200 mm concrete frost wall.

The exterior walls are board or aspenite with "colour lok" or vinyl siding. The unit has a pitch roof. Living areas consist of two bedrooms, combined kitchen and living room and a full bathroom. In deference to rural lifestyles the kitchen is the focal point of the unit with no wall separating it from the living room area.

The interior is finished modestly with emphasis on comfort rather than style. The interior walls are 2.7 mm gyproc filled and painted and the floors are covered with a vinyl cushion material. The interior wood is shellacked and the kitchen cupboards are standard oak plywood.

The heating system provides for a wood stove since wood is readily available and commonly used by the rural poor of Kings County. An electric back-up system ensures units are provided with a safe back-up when required which, to date, has been infrequently. One unit which has been used for two winters has a monthly electricity bill of $38.00. The dwelling is insulated to ensure energy efficiency. Both the walls and floors have an insulation rating of R20, the attic R40.

The cost of the two houses which have been built range between $24 000 and $27 000. This is comparable on a square metre basis to conventional housing and yet the total cost is within the financial capability of the rural poor.

Delivering the Interchurch Special

Both of the two small houses constructed, one in 1982, the other the following year, are lived in by families on disability pensions with children living at home. Both were financed with Society funds. The first has a mortgage amortized over ten years with residents making monthly payments of $310.00. The second is leased by the Society to tenants who pay a monthly rent of $284.00. The tenants will assume the mortgage once they can demonstrate to the Society's satisfaction that they can financially and physically maintain the unit.

Both families take real pride in their homes and have made major efforts to maintain them and improve their property; improvements include landscaping and fence building.

The Society has continued to examine ways to build more of these small units. An agreement has recently been reached with a major bank to finance 20 units under a conventional mortgage the Society will hold, with the Province of Nova Scotia agreeing to insure the mortgages for the units.

These dwellings would replace existing substandard housing and would be delivered primarily to applicants owning land. The major obstacle to immediate construction is the present mortgage rate. Twelve per cent is the upper level of economic viability for this project.

CMHC is currently examining the possibility of delivering these units under the Rural and Native Housing Program. A revised design which meets all the Corporation's minimum requirements for room size and storage space has been prepared by CMHC architects and there is a strong possibility that a number of small dwellings will be built under the program in the near future.■

Ron Corbett is a policy planner with the Municipality of the County of Kings, Kentville, Nova Scotia.

La formation des espaces résidentiels, le système de production de l'habitat urbain dans les années soixante-dix au Québec.
par Gérard Divay et Marcel Gaudreau
Presses de l'Université du Québec/ INRS-Urbanisation, Sillery et Montréal, 1984, 262 pages.

La production de logements nouveaux durant la décennie des années 70 n'aura été ni meilleure, ni plus mauvaise que celle des deux décennies précédentes. La production, s'appuyant sur les mêmes tendances, s'accélère et s'accroît, atteignant des sommets d'activité et de mises en chantier inégalés depuis.

"... À la fois pour les types d'habitat et pour les traits principaux du système de production, les années soixante-dix semblent prolonger les tendances de l'après-guerre et les amener à leur paroxysme dans le cadre des programmes gouvernementaux du milieu de la décennie... la période étudiée semble se caractériser par la stabilité du système de production et la poursuite des tendances antérieures" affirment Gérard Divay et Marcel Gaudreau, de l'INRS-Urbanisation, dans la conclusion d'un ouvrage que viennent de publier les Presses de l'Université du Québec.

La formation des espaces résidentiels, le système de production de l'habitat urbain dans les années soixante-dix au Québec, s'intéresse particulièrement au système, et à ses principales composantes articulatrices, qui a pu changer en quelques années la configuration des agglomérations urbaines de Québec et de Montréal en étalant bien au-delà du périmètre traditionnel de la ville des zones résidentielles nouvelles dont l'une des principales vertus, semble-t-il, consistait à se distinguer de la ville ancienne en étiolant sa densité.

Les auteurs ont étudié une quarantaine de zones résidentielles constituées pour la plupart entre 1970 et 1976, années pendant lesquelles les mises en chantier ont atteint des sommets. Cette précision sur la période étudiée a une signification importante car elle marque dans le temps la dernière période de grande activité de l'industrie de la construction résidentielle. Depuis, l'évolution démographique, la crise économique et de nouvelles règles législatives (loi sur la protection du territoire agricole, loi sur l'aménagement et l'urbanisme, réforme de la fiscalité municipale, etc.) composent un environnement différent de celui dans lequel a évolué le système de production décrit par Divay et Gaudreau.

L'intérêt de cette étude réside précisément là. Les mêmes acteurs (promoteurs immobiliers, gouvernements, administrations municipales, professionnelles, institutions financières et consommateurs) ayant sensiblement les mêmes intérêts (bénéfices, création d'emplois, enrichissement de l'assiette foncière, etc.) sauront-ils opérer le changement en tirant de sages enseignements des modifications intervenues dans l'environnement depuis 1976?

"La période actuelle, commençant à la fin des années soixante-dix, s'annonce peut-être différemment" concluent les auteurs. "Des modifications au contexte institutionnel sont susceptibles d'enclencher des transformations dans la structure de la promotion, attisées par le contexte démo-économique général, et appelées par de nombreux professionnels et faiseurs d'opinion."

Pour l'heure, les promoteurs, que les auteurs placent fort justement à l'avant-scène de leur étude, paraissent demeurer dans l'attente bien que, stimulés par des programmes tels Corvée-habitation, ils aient accru l'activité tout en demeurant bien en deçà des niveaux atteints avant 1976. Le fait, par exemple, que les terres en spéculation de l'île Jésus et de l'île Bizard, assujetties depuis 1978 à la loi de protection du territoire agricole, n'aient pas été retournées à l'agriculture, même provisoirement, constitue une indication que les promoteurs n'ont pas encore renoncé à les bâtir.

L'étude de MM. Divay et Gaudreau demeure donc d'actualité, d'une grande actualité en cette période où l'incertitude, de l'économie particulièrement, invite à une réflexion plus approfondie sur le développement de notre cadre de vie.

Sa publication constitue l'un des premiers titres de la collection *Questions urbaines et régionales* qui doit publier des ouvrages portant sur des recherches inédites et originales. Elle reprend les conclusions de travaux publiés à la pièce dans des rapports de recherches et d'études et dans des documents réalisés dans le cadre d'un programme de recherche sur les développements résidentiels subventionnés par le Conseil de recherches en sciences humaines du Canada.

Le lecteur plus studieux devra s'armer de patience car, fréquemment, une affirmation ou une référence à une autre étude renvoie à un document à paraître éventuellement. Il faut espérer que ces parutions annoncées ne tarderont pas. ■

Alain Duhamel

Alain Duhamel est journaliste au quotidien *Le Devoir.*

Christopher Alexander: The Search for a New Paradigm in Architecture,
by Stephen Grabow, Oriel Press, Stocksfield, Northumberland, 1983, pp 306, $48.75

This is the story of one architect's long and relentless quest–spanning a period of twenty-five years–to identify the elusive qualities inherent in such "miraculous" architecture as exemplified by the cathedrals of Chartres and Strasbourg, the Blue Mosque of Istanbul, the Great Buildings of Pisa and Isfahan or, on a much smaller scale, the indigenous buildings of Greek island villages, among others. Not surprisingly the search for the elusive "It", the "One", or the "Quality without a Name" still continues, leaving the door open for a follow-up volume.

The text of this book consists of a series of un-colloquial, carefully edited, and condensed transcripts of taped interviews with Christopher Alexander, interspersed with Stephen Grabow's running commentary. Always complementary and affirmative, the author is invariably supportive of Alexander, who is a widely known theoretician, teacher and writer on architecture, as well as, of late, a builder. We are informed that the autobiographical comments forming the backbone of this book took hundreds of hours to record within a period of six months, while the author was in Berkeley.

Stephen Grabow's book commences with a preamble on Alexander's work and his search for a generative theory of architecture, pursued from the outset "by a gradual but intensely persistent homing-in on the very heart of the creative process". The accepted notion that architecture is enriched by interdisciplinary input is reinforced in this book, since it becomes quite evident that Alexander's main contributions to the better comprehension of good architecture are based on his mathematical background. We discover that this background enables him to illuminate the art and science of building from new vantage points, namely through his insistence on applying the concreteness of "the idea of aesthetic criteria" found in mathematics and physics to architecture. But, near the end of the book the fact is revealed that Alexander's premises that "there is no split between art and science" is unfortunately not a universally shared view since–as he himself explains–art isn't taken seriously enough, and science won't admit to the existence of the mysterious "it". To people who, throughout their lives, have admired the honesty and beauty of indigenous architecture in its rich variety in most parts of the world, it is no surprise that Alexander frequently forays into the vernacular domain of architecture to gain insight into what he calls "quality without a name". On the other hand, it is disappointing that there is no recognition given in this book of the influence of humility which no doubt was also a characteristic of the builders of both great and small "miraculous" architecture. Builders of cathedrals and mosques in their religious fervour surely viewed themselves as "contributors to", rather than "creators of" architectural masterpieces, to be sure expecting some reward during their life on earth, but most of it thereafter. And the anonymous builders of the indigenous architecture of the Greek islands did not mastermind their creation with the objective of inspiring future architects; if anything, they probably felt their work to be inferior to architecture by architects and in their innocence would surely be astonished by the fact that there are people who try, but fail, to capture the spirit of their building art.

While Alexander graciously acknowledges the benefits derived from collaboration within his group, he fails to emphasize the consensus of values which must have existed among the collaborating teams that built "miraculous" architecture. It seems quite obvious that the builders of Gothic cathedrals and Greek villages subscribed to uniform values that were shared in principle by their respective societies. A contemporary lack of such a consensus is probably at the root of the widespread phenomenon of so much ugliness created in the name of beauty.

It is difficult not to find Alexander's remarks gratuitous in some parts of the book, for example, his off-handed reference to Cambridge University's school of architecture as a "lunatic asylum" at the time when he studied there. On the whole, however, he emerges as a man with a deep commitment to the discovery of the complex variable factors, *the equation,* that would bring about a beautiful living environment. And, equally gratifying is the portrayal of Alexander as an architect not caught up in the frivolous pursuit of fashionable design.

In summary, *The Search for a New Paradigm in Architecture* is interesting reading, but most likely not persuasive enough to stop the current tug-of-war within the profession that prevents architecture from being "miraculous" again.■

Norbert Schoenauer

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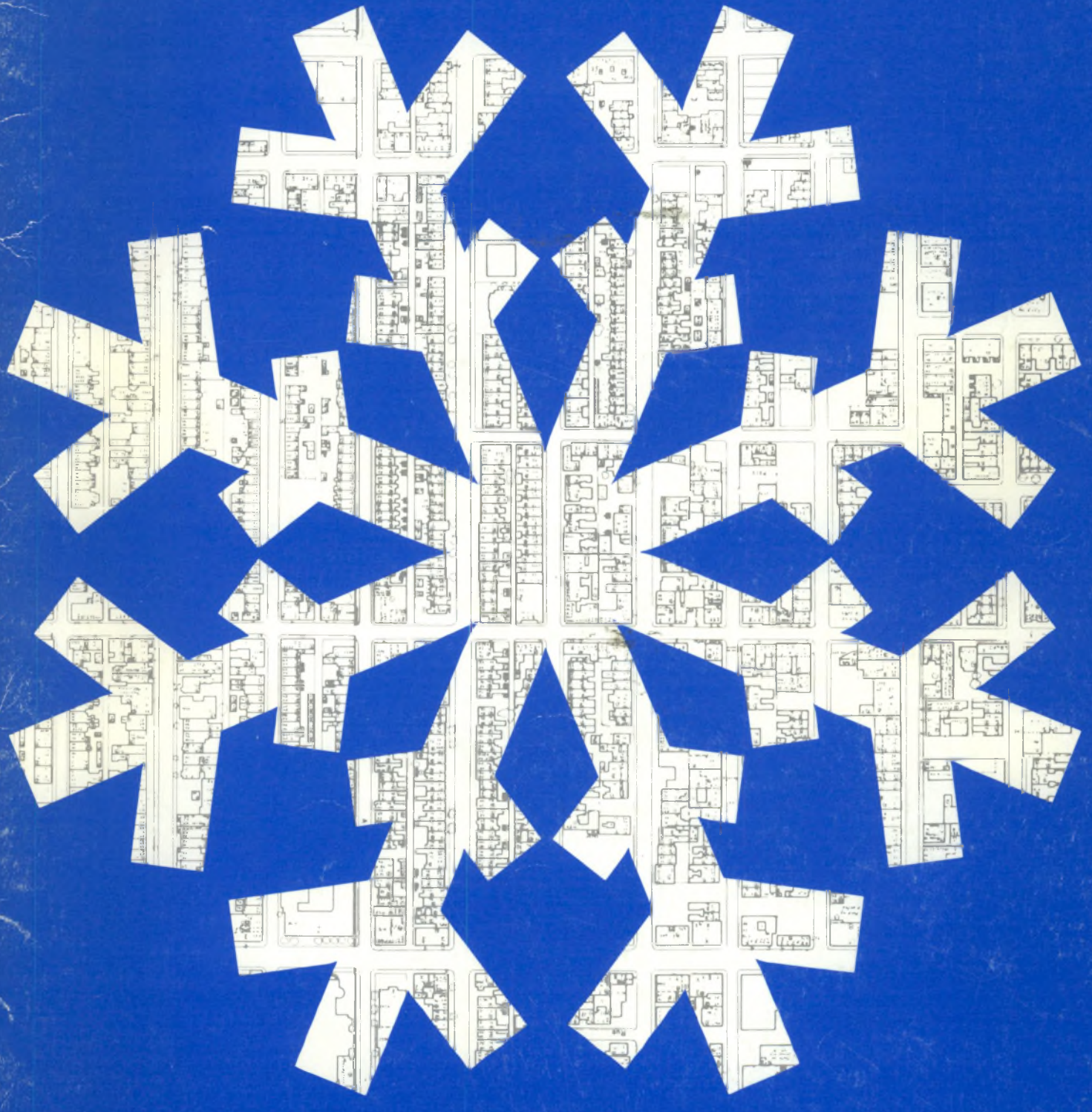
SOCIÉTÉ CANADIENNE D'HYPOTHÈQUES ET DE LOGEMENT

Vol. 27, No. 4, 1984

Habitat



Canada Mortgage and Housing Corporation, Canada's housing agency, is responsible for administering the National Housing Act.

This legislation is designed to aid in the improvement of housing and living conditions in Canada. As a result, the Corporation has interests in all aspects of housing and urban growth and development.

Under Part V of this Act, the Government of Canada provides funds to CMHC to conduct research into the social, economic and technical aspects of housing and related fields, and to undertake the publishing and distribution of the results of this research. CMHC therefore has a statutory responsibility to make information widely available which may be useful in the improvement of housing and living conditions.

This publication is one of the many items of information published by CMHC with the assistance of federal funds.

La Société canadienne d'hypothèques et de logement, l'organisme du logement du gouvernement du Canada, a pour mandat d'appliquer la Loi nationale sur l'habitation.

Cette loi a pour objet d'aider à améliorer les conditions d'habitation et de vie au Canada. C'est pourquoi la Société s'intéresse à tout ce qui concerne l'habitation, l'expansion et le développement urbains.

Aux termes de la Partie V de la Loi, le gouvernement du Canada autorise la SCHL à affecter des capitaux à des recherches sur les aspects sociologiques, économiques et techniques du logement et des domaines connexes, et à publier et diffuser les résultats de ces recherches. La SCHL a donc une obligation légale de veiller à ce que tout renseignement de nature à améliorer les conditions d'habitation et de vie soit connu du plus grand nombre possible de personnes ou de groupes de personnes.

La présente publication est l'un des nombreux moyens d'information que la SCHL a produits avec l'aide de capitaux du gouvernement fédéral.

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Habitat

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Manuscripts on issues related to housing and urban affairs are welcome. Query first with a one-page outline. Manuscripts should be about 2 000 words in length, typewritten, double spaced and addressed to the Editor. Material accepted is subject to the magazine's editorial requirements. Where possible, any unused material will be returned.

Note: The Corporation is not responsible in event of loss of or damage to any material submitted.

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Vous pouvez soumettre des articles qui traitent du logement et des affaires urbaines. Mais veuillez nous faire parvenir au préalable un résumé d'une page. Les textes soumis à HABITAT doivent avoir environ 2 000 mots, être dactylographiés à double interligne et être adressés au rédacteur en chef. Les articles acceptés seront assujettis à la politique éditoriale de la revue. Dans la mesure du possible, les textes, photos et illustrations non utilisés seront retournés à leur auteur.

Note: La Société ne se tient pas responsable de la perte des documents ou des dommages qui pourraient leur être causés.

Les sujets traités dans HABITAT sont inscrits dans l'Index des périodiques canadiens. Notre numéro de recommandation du courrier de deuxième classe est le suivant: 1519. ISSN 0017-6370.

Developing Livable

WINTER CITIES

by Norman Pressman

In most of Canada, even in the south, winters can be harsh, lengthy and uncomfortable. Coping with winter is an ordeal of substantial proportions for most urban dwellers. A fundamental change is required to winter's negative imagery by obtaining deeper, more meaningful and more systematic in sights into winter and its associated activities in both urban and non-urban areas.

We urgently need to develop strategies and techniques whereby towns and communities can be designed, managed and retrofitted in more lively and enjoyable ways thereby promoting a positive view of the 'frost belt'. Creative and innovative approaches at the project level and in planning and development policies must be sought to make winter cities more livable through the transformation of their natural, built and social environments.

The recently formed Canadian organization, The Livable Winter City Association/Association pour l'animation des villes en hiver (henceforth referred to as LWCA), has set out to provide both a focus and direction for these objectives. It hopes to serve as a vehicle to exchange and discuss ideas, approaches and information in winter city development. It also hopes to act as a catalyst for research into winter-related issues and the range of responses which can be adopted in resolving some of the dilemmas posed by inhospitable climates such as those experienced in most parts of Canada. One of the aims of the LWCA is to influence the public and politicians to seek changes in urban designs and municipal policies which will create uniquely northern environments to be enjoyed on a year-round basis.

The problems confronted by winter cities are invariably different from those of sunbelt cities. Cities in the cold need to consider development densities. They need to address the nature and use of year-round recreational spaces and facilities as well as the transformation into winter use of essentially summer-oriented spaces. Energy conservation concerns must be carefully analyzed as must human behaviour patterns under cold conditions. In fact, a rigorous approach must be taken to the major planning, development, architectural and policy considerations in the design and management of winter cities. No broad-scale systematic analysis of urban development has ever been attempted under severe winter conditions. This is the challenge to which the LWCA is geared... to transform winter from a punitive force into a more gentle, tame and friendly element.

The City of Edmonton and the Livable Winter City Association of Canada will host a major International Forum/Conference in Edmonton, February 14-19, 1986.

Winter Cities '86 will focus on finding better solutions to problems of the Northern City which is home to almost 400 million people.

Northern, for the purposes of this Conference, identifies nations and cities that lie north of the 45th degree north latitude and which experience winter as a major season with temperatures near 0°C and two to three months of snow.

The Edmonton Forum will carry on the initiative of the Northern Inter-Cities Conference held in Sapporo, Japan, in 1982. The Sapporo Conference included Mayors and representatives of major cities in China, Japan, Germany, Finland, the U.S. and Canada. In this second event, we hope to extend participation to more than 75 cities in these and other countries. In addition, we will extend the conference to a major public forum involving professionals, scientists, designers and others interested in the subject area.

Winter Cities '86 will include a major conference on "Livability and Technology in the Northern Latitudes", a large and colourful Winter Festival in the spirit of Sapporo's Ice Festival and a Competition of Ideas open to all citizens. The organizing committee is also exploring the feasibility of a major international exhibition of uniquely northern technology and community design.

Between 750 and 1000 delegates are expected to attend the conference from outside Edmonton. Between 500 and 600 of these delegates will come from the northern United States, Alaska and the rest of Canada.

A concerted effort is being made by the University of Alberta and Canadian Government agencies such as the Science Council, the National Research Council and Environment Canada to invite at least 600 political and northern specialists from northern Europe, the USSR and northern Asia.

We expect attendance by delegates from 19 countries and representatives from over 100 cities.

For information on membership and activities of The Livable Winter City Association, write:
Livable Winter City Association
Box 1398, Station 'B'
Ottawa, Ontario
K1P 5R4

The 1984 National Student Competition in Planning and Design

One of the major activities that the LWCA has undertaken has been the first National Student Competition in Planning and Design. Under my initiative and leadership, with the generous assistance of John C. Royle, founder of the LWCA, and Xenia Zepic, urban design planner with the Metropolitan Toronto Planning Department's policy development division, the competition was announced in September 1983. Under the heading *The Livable Winter City: Possible Concepts, Forms and Developments,* its aim was "to encourage the development of useful and innovative ideas, applicable during the severe winter season, in different places in Canada–as alternatives to present situations and trends."

Entries were invited from university students at institutes offering courses in urban or regional planning, architecture and landscape architecture as well as from other faculties where the biophysical, social or economic aspects of urban and regional development, as well as urban design were being studied. Prize money was awarded as follows: 1st prize–$700; 2nd prize–$400; 3rd prize–$200. The prize money was made available through the generosity of Hallmark Hotels Ltd. and Canadian National Railways. In addition to these two companies, other co-sponsors of the competition were the Livable Winter City Association, The Faculty of Environmental Studies and School of Urban and Regional Planning at the University of Waterloo, the Urban Development Institute, the Canadian Housing Design Council and the Municipality of Metropolitan Toronto.

Jury members were internationally known Planner Dr. Hans Blumenfeld, Toronto Architect Eberhard Zeidler; Guy Gérin-Lajoie, an architect from Montreal who has built schools and housing in the Canadian Arctic; Toronto Landscape Architect Walter Kehm; Wojciech Wronski, executive vice-president of the Urban Development Institute, an organization that represents private developers in Ontario; Norman Pressman; John Royle and Xenia Zepic.

The following criteria were used in reviewing the 41 entries received:

Creative and Innovative Contributions
Imaginative ideas and original contributions were sought with special consideration given to entries which responded to the actual realities of human settlements in a new and more appropriate manner.

Useful Ideas
Entries were to be judged on the extent to which the schemes improved the quality of life. Consideration was devoted to such factors as environmental quality, a more equitable distribution of urban facilities, wider general accessibility, sensitivity to socio-cultural values and socially intensive use of public space.

Comprehensive Approach
Consideration was given to the multiple elements which make up human settlement. The jury was looking for a broad perspective rather than a particular aspect.

Human Needs and Aspirations
It was deemed essential that the proposed forms or concepts be linked to their social and cultural context. Proposals were reviewed for an understanding of, and concern for, the needs and requirements of users.

Urban Form
The jury was to assess concepts of urban form in so far as they related to real social and economic conditions. The proposed concepts and ideas were considered for their coherence and in the light of their location in terms of climate, land morphology, vegetation and other critical factors.

Feasibility
All proposals had to be capable of implementation by the competitors' professional colleagues. They had to be sensible, viable, and with a practical technical and economic base.

Implementation
Entries were expected to provide a general strategy for implementation, including the fulfillment of political, institutional and organizational requirements. The realistic phasing was also important.

Clarity of Presentation
Submissions were expected to be understood by non-technical people as well as by experts and presentation methods were to be clear and easy to understand.

Of the 41 entries received, the breakdown by institution and disciplinary field of study was as follows:

Institution	Field of Study	No. of Entries
University of Guelph	Landscape Architecture	2
	Social Sciences	1
University of Manitoba	City Planning	1
	Architecture	6
McGill University	Architecture	1
Nova Scotia College of Art and Design	Environmental Planning	11
Université du Québec à Montréal	Design de l'environnement	2
Ryerson Polytechnical Institute	Urban/Regional Planning	1
University of Toronto	Architecture	2
	Landscape Architecture	2
University of Waterloo	Architecture	2
	Urban/Regional Planning	8
York University	Environmental Studies	2
	Total	**41**

Awards presented to:

First Prize:
University of Manitoba (architecture)

Second Prize:
University of Waterloo (planning)

Third Prize: (shared)
University of Guelph (landscape architecture)
York University (environmental studies)

Honourable Mentions:

First mention:
University of Waterloo (planning)

Second mention:
University of Waterloo (planning)

Third mention:
University of Toronto (landscape architecture)

Fourth mention:
University of Waterloo (planning)

Reshaping Winter Cities
Concepts, Strategies and Trends

This first book published in Canada on policies, strategies and concepts for making cities more livable in winter will be ready in early 1985. Edited by Professor Norman Pressman of the University of Waterloo, as a spin-off from the National Student Competition on "livable winter cities", it contains contributions on the winter city theme by John Royle, Norman Pressman, Xenia Zepic, Eberhard Zeidler, Guy Gerin-Lajoie, Walter Kehm, Hans Blumenfeld and Peter Broberg, of Sweden who has written the foreword based on his trend-setting approaches and experience in the realm of climate-responsive development.

The contents deal with approaches, design concepts and policy for reducing stress and improving the overall level of comfort and livability in urban environments. With the exception of Peter Broberg, all authors are Canadian experts in this highly specialized subject.

This book deals with a subject critical to our country, which has never been comprehensively treated. It is a unique collection of ideas and experiences and will constitute a useful tool for exploring the problems of formulating and implementing public policy in realistic settings.

The book will be sold under the auspices of the Livable Winter City Association. ■

The Winning Entries: 1st Prize

First Prize was awarded to four students of architecture at the University of Manitoba. They were Abe Chan, Heidi Hanson, Wilson Jung and Jackson Low. They intended to create both an environment and an attitude promoting the use of the outdoors during the winter months to bring activity back to the city on a year-round basis. They have proposed "ideas to be implemented at almost every conceivable level– from large-scale planning to small-scale detail that will assist in making winter living more bearable and even enjoyable." They have attempted to generate a "spirit of winter" and to run a series of promotional campaigns. In addition, they have provided ways in which winter activities and day-to-day routines can be carried out with greater comfort and within an exciting atmosphere.

The two significant goals this team wished to achieve were:

- protection from the climate
- constant activity which would generate a spirit of warmth and comfort.

The following suggestions were offered to achieve them:

Increase development densities

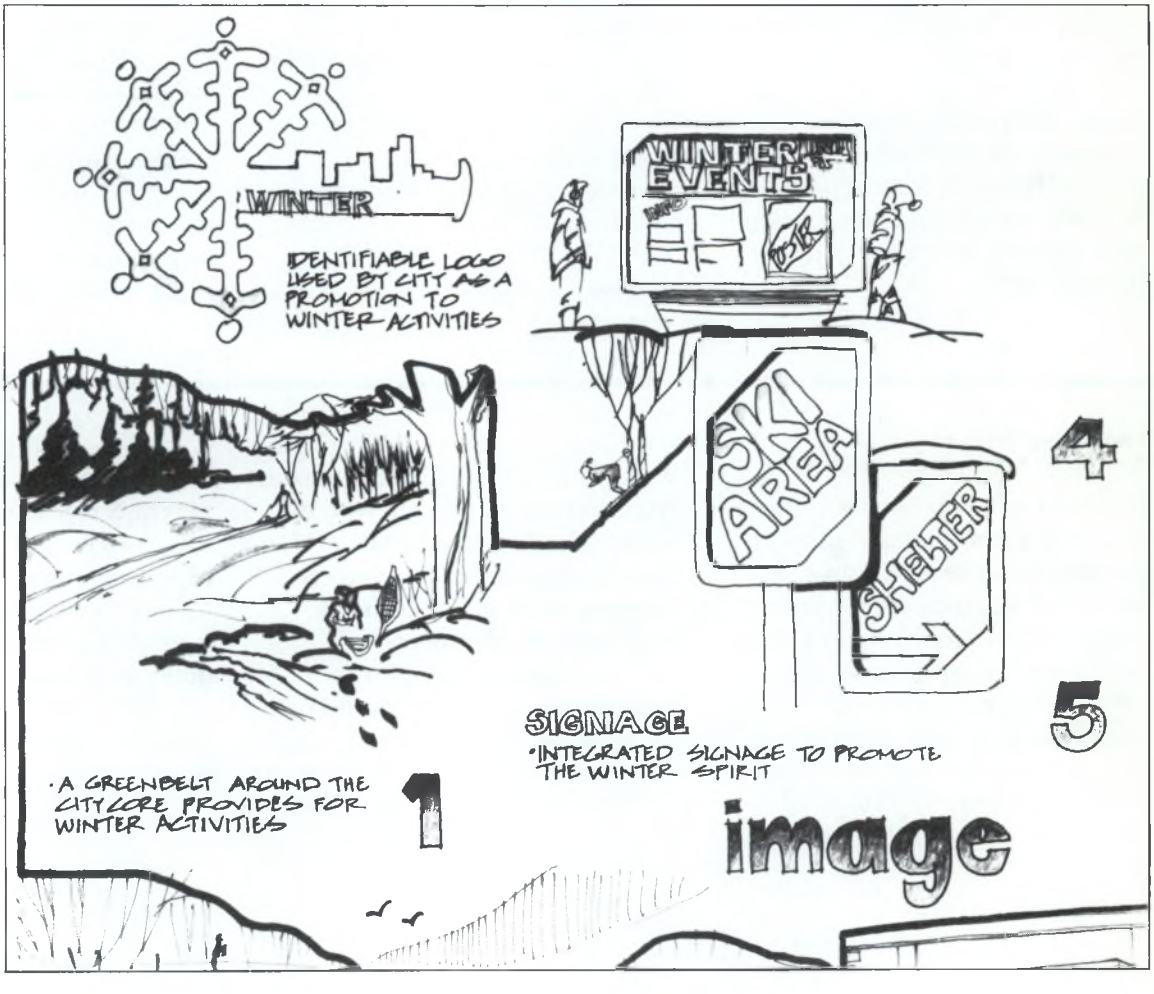
- More efficient use of land and infill of existing vacant space
- Infill buildings to act as windblocks
- Shortened travel distances between origins and destinations
- Concentrated functions within a given urban area to generate more activity
- People encouraged to come together thereby creating a warm ambiance for the winter city.

Site plans should group buildings

- Buildings should be grouped to reflect a sense of community
- Small groupings should focus on one common space
- Buildings should be "huddled together" to protect each other from the cold
- The common open space, protected from the wind, is to promote social interaction due to clustering of activities.

Winter city to be bright and colourful

- Streetscape to incorporate banners, integrated signs and brightly painted wall murals
- A feeling of excitement and warmth created
- Permanent or temporary facilities provided to accommodate and en-



University of Manitoba Ideas and Concepts for Winter Cities and University Campuses

courage winter festivities, e.g. colourful tent structures, winter parks, etc.

Trap the light

- Urban forms designed to allow for solar penetration
- Maximum use of light encouraged especially during winter months
- A brightly lit night environment should also be achieved.

Incorporate the natural environment

- Integrate urban recreation activities within the built environment
- Cross-country skiing, skating, tobogganing, etc. should form an integral part of the transportation system
- Trees and carefully selected vegetation should be dispersed throughout the urban area to serve as "wind sponges" and reduce snow drifting in both pedestrian and vehicular areas.

Link structures for improved protection

- Buildings should be linked to each other with pedestrian and shuttle bus connections to form a module within the city core
- Every module is to have peripheral vehicular circulation and a central rapid transit route
- The central transit route will continue out from city core to suburbs thus forming a commuter network
- Pedestrian and rapid transit are the major means of transportation within the city itself; cars to be left in parking structures on the periphery with drivers having a choice of walking or using a shuttle bus into the core.

Pedestrian environment

- Choice offered between "interior" and "exterior" movement
- Interior paths occur in a series of bright, above-grade spaces rather than in tunnels where there is no awareness of outdoor weather conditions
- Exterior paths are to be sheltered from the wind by way of berms, built forms and appropriately distributed vegetation.

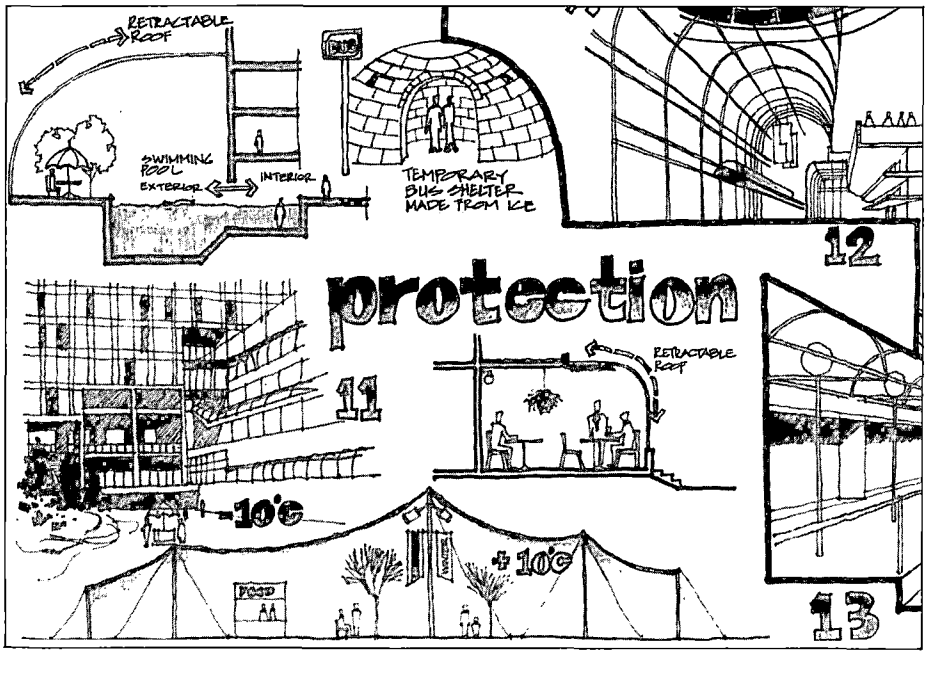
Implementation

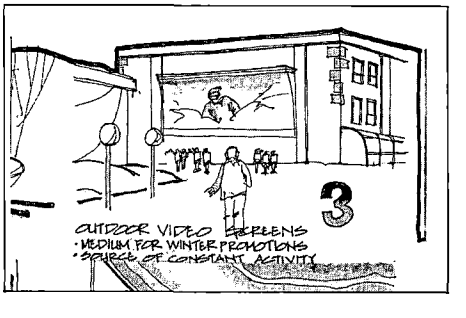
- Educate the public through promotional campaigns (change negative attitudes toward winter)
- Organize festivals celebrating winter
- Encourage people to participate actively in winter activities
- Offer development incentives (e.g. tax shelters, code concessions, cheaper land prices) to initiate winter activities
- Balance public and private investment which is winter-city related.

Judges' Comments

"A multitude of ideas presented in an interesting and spirited montage. This entry, more than any other, touches on the built, the natural and the human aspects and achieves a high level of creativity and imagination in interpreting the terms of reference of the competition. While several entries speak of the need to find more pleasure in winter, this entry demonstrates the lively, fun-filled attitude northerners will need to adopt. Winter will need to be a "celebration" and this scheme shows us how to do just this.

Weaknesses:
Some lack of organization and the recommendations have not been developed or supported as thoroughly as they might have been."





2nd Prize

Second Prize was awarded to a group of six students in Urban and Regional Planning, University of Waterloo. They were Marlene Wansel-Swirski, Blair Allan, Jeff Brewitt, Margaret Chan, Rob Hardy and Malini Menon.

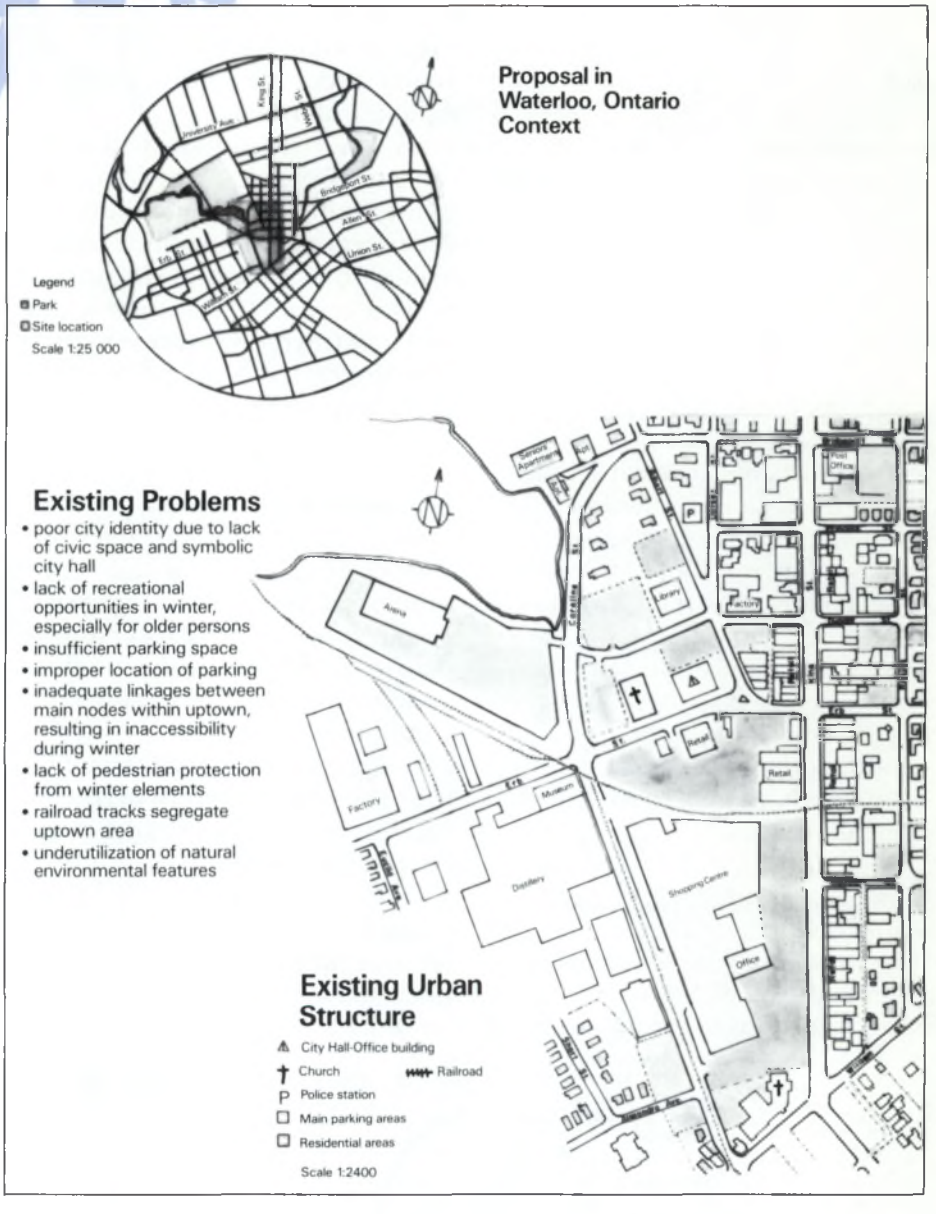
Stressed in this submission were policy thrusts directed in three sub-areas:

Social
- Sidewalk clearing days
- Promotion of the positive aspects of winter
- Winter colours festival
- National winter fitness and sports programs
- Winter health care and safety programs (e.g. winter driving techniques, clothing etc.).

Economic
- Transit assistance with respect to winter-oriented activities
- Energy efficiency through the use of fiscal incentive programs
- Winter tourism promotion
- Financial 'winter' subsidies to lower-income groups (e.g. heating allowances, winter clothing bonuses, insulation upgrading)
- Winter employment and training programs.

Physical
- Pedestrian safety and protection
- Maximization of access to facilities
- Comprehensive development
- More meaningful use of public space
- Promotion of energy-efficient designs.

Their key objectives were threefold:
- To socially improve winter problems
- To render winter issues more economically viable
- To make winter more physically enjoyable, reducing inconveniences.



This group then went ahead and applied the above concepts within the Kitchener-Waterloo region. They proposed a "Four-Season" Palace, an Ice Castle prominently located downtown, and protection of sidewalks for pedestrians through the use of a canopy system.

Judges' Comments

"This entry addresses the social and economic implications of winter in the city and community and contains strong implementation strategies. It shows good clarity of presentation. The graphics are not as professional as they might be, but symbols are shrewdly used. As with the first prize entry, a wide range of possible improvements in winter city adaptations are proposed.

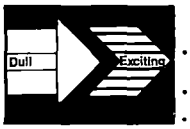
Weakness:
more attention could have been given to the all-important area of citizen attitudes towards winter and the steps by which this might have been improved."

Policies

Social

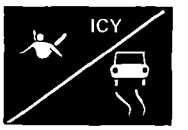
Winter Promotion Schemes
- promote positive images of winter through media
- cultural events such as: snow and ice sculptures, outdoor hot food markets, sleigh rides
- winter innovation contests
- "bring in winter" week promoted by local city council

Sidewalk Clearing Days
- neighbours, local community groups join together for bi-monthly event
- volunteers provided for elderly and handicapped



Winter Colours Festival
- break tradition of dull winter colours
- introduce bright, vibrant colour into clothing and winter settings

National Winter Fitness & Sports Programs
- promote popularity of winter fitness and sports programs
- winter "outward bound" survival programs
- winter cap



Winter Health Care & Safety Programs
- educational messages and programs regarding pedestrian movements on ice, proper clothing, winter driving conditions

Resulting Change
- social interaction promoted
- civic responsibility aroused
- streets cleared
- mobility increased
- increased winter activity participation
- *alleviate winter blahs*
- increased fitness participation
- increased adaptability to winter *conditions*

Economic

Transportation Assistance
- free and/or reduced transit *rates to winter activity* nodes, sponsored by local BIA

Energy Efficiency Via Monetary Incentives
- tax incentives for energy-efficient development
- awards for innovative *designs*
- increased budget for research and development

Winter Tourism Promotion
- increased spending on *tourist attractions such as* winter festivals, recreational resorts and accommodation, winter landmarks (e.g. ice castles, Rideau Canal)
- *establish* publicly owned winter recreational facilities

Lower Income Group Winter Subsidies
- heating allowances
- winter clothing bonuses
- insulation-upgrading assistance

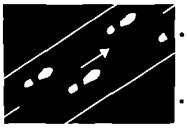
Employment Programs
- "make work" programs *such as snow shovelling* for the elderly, street maintenance, city sleigh rides, winter tourism activities

Resulting Change
- increase affordability of winter recreation and living
- promote energy efficiency
- promote downtown activity and vitality
- alleviate traffic, parking problems
- alleviate seasonal unemployment
- develop tourism industry
- make winter sports a social community

Physical

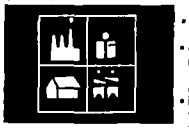
Pedestrian Safety & Protection
- sidewalk cleaning bylaws
- guidelines to promote sheltered sidewalks in the Cultural Business District
- recommendations for heated transit shelters

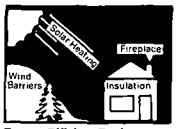
Accessibility Maximization
- guidelines for minimizing distances to transportation *nodes*
- establish linkages between major activity nodes and transit points



Comprehensive *Development*
- encourage holistic physical development incorporating physical, intellectual, spiritual and emotional *experiences*
- use a mixture of functions and forms

Utilization of Public Space
- consideration for climatic *factors in development* design and approval
- encourage seasonal use of public space





Energy Efficient Design
- *density incentives for energy-efficient development plans*
- encourage design which makes use of the natural elements (eg. wind, sun, *ice, snow, water*)
- incorporate landscaping, wind barriers to minimize winter winds

Resulting Change
- protection from harsh climate
- effective use of public space
- create seasonal settings for public enjoyment
- development of a balanced community
- maximize accessibility
- reinforce "conserver society" ethics
- enjoy maximum benefits of natural elements

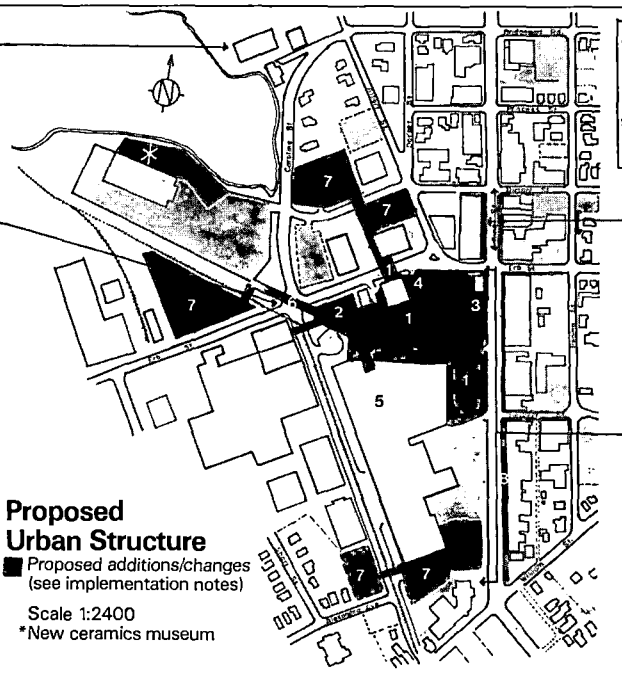
The three policy areas aim at making winter socially, economically and physically enjoyable. The physical, economic and social policies cannot be implemented in isolation. The Uptown Waterloo area is chosen to illustrate their relationship. The plan is physical in context, however it is combined with the other policy areas to demonstrate how livability can be achieved in winter and all year round.

Application:

5. Shopping Plaza
An additional two storeys are constructed above Waterloo Square to accommodate expanding population.

6. Linkages
A covered and elevated linkage system is used to connect major activity nodes.

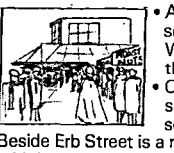
7. Parking
Additional parking space is created in the form of 2 and 3 level as well as underground structures.



Proposed Urban Structure
■ *Proposed additions/changes* (see implementation notes)

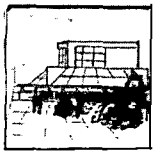
Scale 1:2400
*New ceramics museum

8. Pedestrian Protection
- Sidewalks in the main strips are covered by canopies for climatic protection.
- Parking areas have direct access to the main buildings.



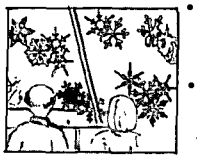
1. Civic Square
- An extensive civic square is built from Waterloo Square to the Marsland Centre.
- On King Street is a skating rink/public square.
- Beside Erb Street is a raised platform with lower deck parking and multi-use buildings above.

2. New City Hall
Overlooks the civic square and is linked with Seagram's Museum and the new ceramics museum by a covered sidewalk.



4. Seasonal Palace

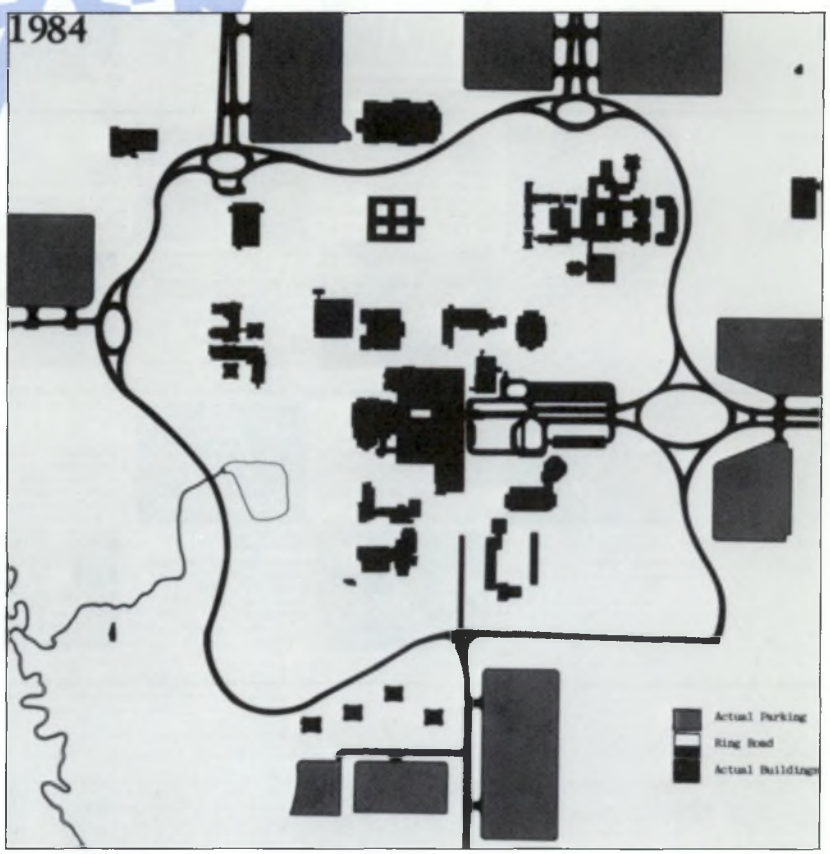
- An atrium containing four areas resembling the climatic, physical and atmospheric conditions of each of the four seasons.
- Each area has open space suitable for seasonal activity use and a movie screen for seasonal films.



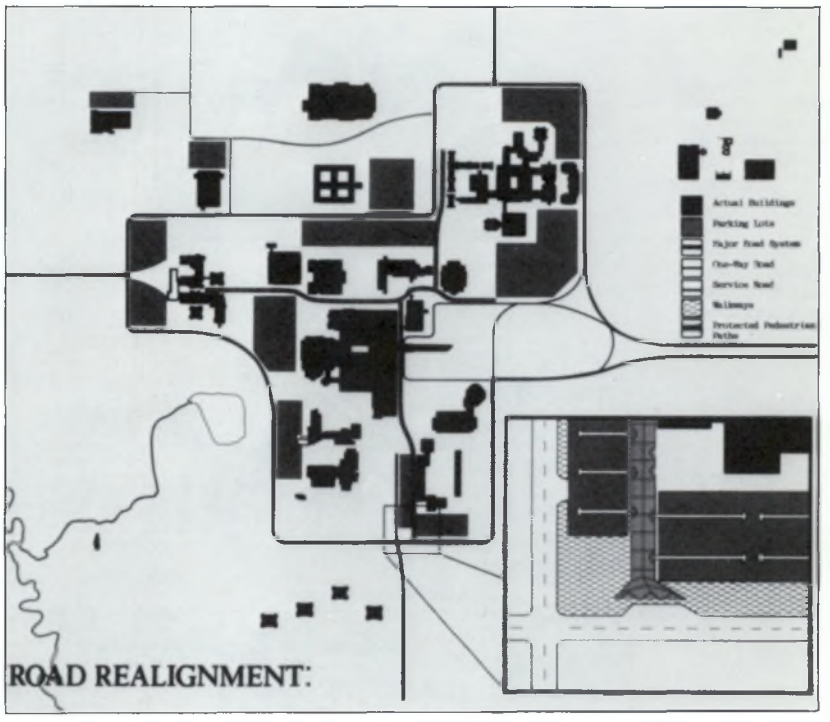
3. Ice Castle
- A year-round recreational structure which makes use of the winter elements such as ice, snow and wind.
- Constructed of: temperature-controlled glass walls which form an ice cover; wind is used to generate power for a fountain; magnifying glass is used for snowflake observation.

3rd Prize

Third Prize was divided between two groups. One was a team of multi-disciplinary background students from York University's Environmental Studies Faculty composed of Nnamdi Amrukin, Claude André, Lorne Leman, Dino Lombardi, Paulina Mikicich and Robert Russel. Their entry was entitled 'Compact for the Cold'. Using the York University campus as a typical problem setting, they sought to re-organize the campus plan making it more climate-responsive while developing a series of inter-related principles facilitating day-to-day movement and activity patterns within the campus. The key elements of this strategy were to provide shelter against the wind and snow and to minimize walking distances from parking areas to various buildings.



York University "Winterized Campus"



Judges' Comments

"A very shrewd analysis of steps that could be taken to make the York University campus more viable in winter. Some significant elements in the scheme:

- increase the density by clustering future new buildings in existing open spaces while retaining sufficient park-like and natural areas to allow easy access to and instant communication with nature.
- shorten the driveways and bring parking facilities as close as possible to the buildings in order to reduce areas requiring snow and ice clearance.
- minimize walking distances for students during severe weather.
- provide attractive indoor and outdoor walkways for pedestrians thereby offering choice.
- use buildings and landscaping elements as climate control barriers and plan the campus with energy conserving goals in mind.

Weakness:
the scheme hardly touches on the development of surrounding areas and thereby fails to relate the campus to the total urban fabric."

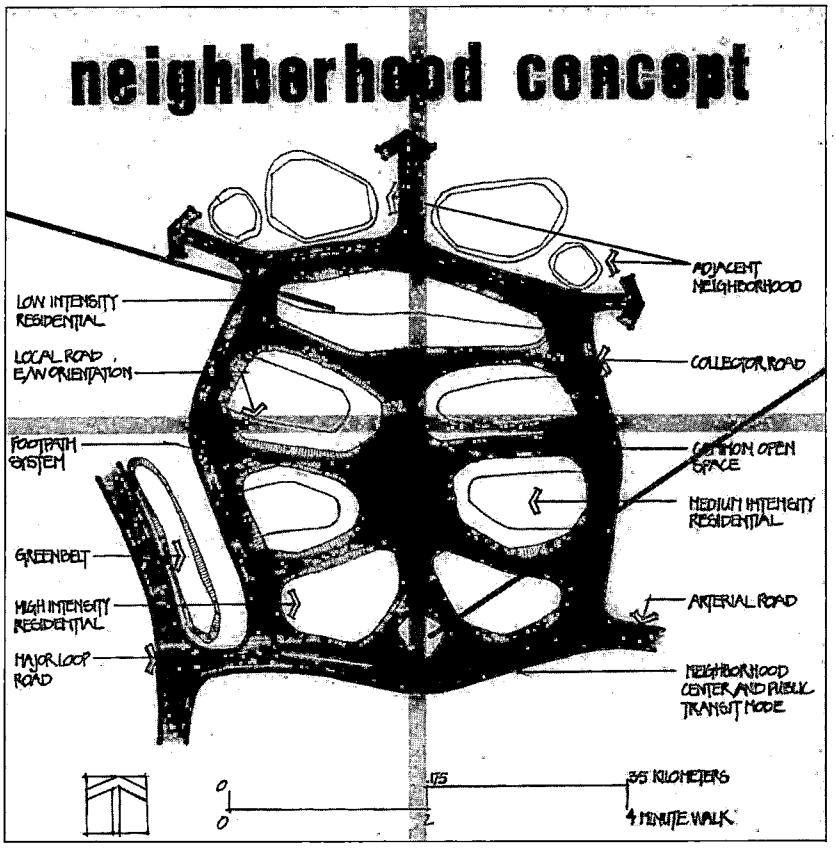
The other Third Prize was won by a team of Landscape Architecture students at the University of Guelph: Kerrie Curran, Paul Carabott, Robert Evans and Steven Wimmer. This submission tended toward a more general-theoretical approach and proposed a typical climate-responsive "master plan" for a new neighbourhood or community. It developed a series of principles based on both physical/climatic and social organization while drawing upon a multi-disciplinary perspective. Its major focus was on urban form at both micro- and meso-levels.

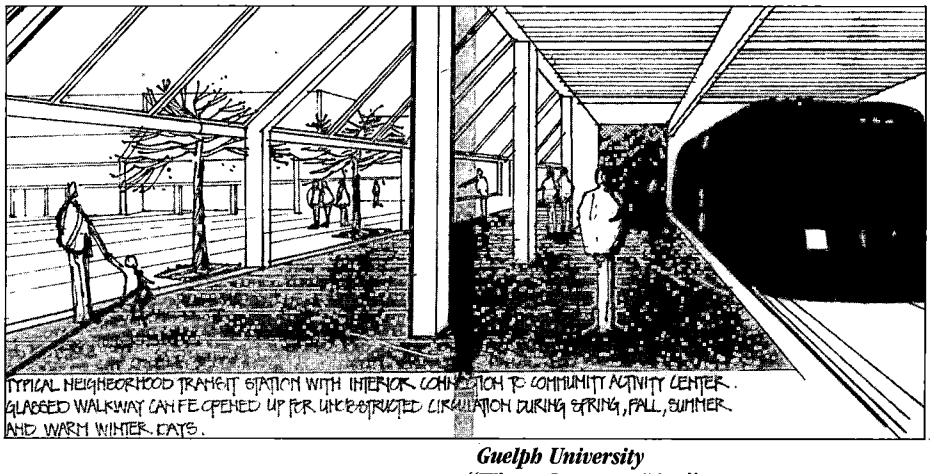
Judges' Comments

"This is more theoretical than most other entries and presents a plan that can be adapted for an entire community, a town or a city centre. It deals with densities, form, transportation and recreation while reaching for answers to the relationships among residential, commercial and industrial uses. The community envisioned would orient its larger buildings to the windward side and arrange the lower buildings so that maximum solar penetration and exposure would result.

It would make year-round use of natural and heritage features such as the river frontage on the selected site. Both recreation and transportation arrangements would be sensitively attuned to the severe climatic constraints. Blended with these concepts would be some structural features such as glass-covered sidewalks.

Weakness:
there appeared to be some disparity between text and illustrations, some of the latter indicating amenities that would be costly and difficult to construct."





Guelph University
"Winter Structure Plan"

1

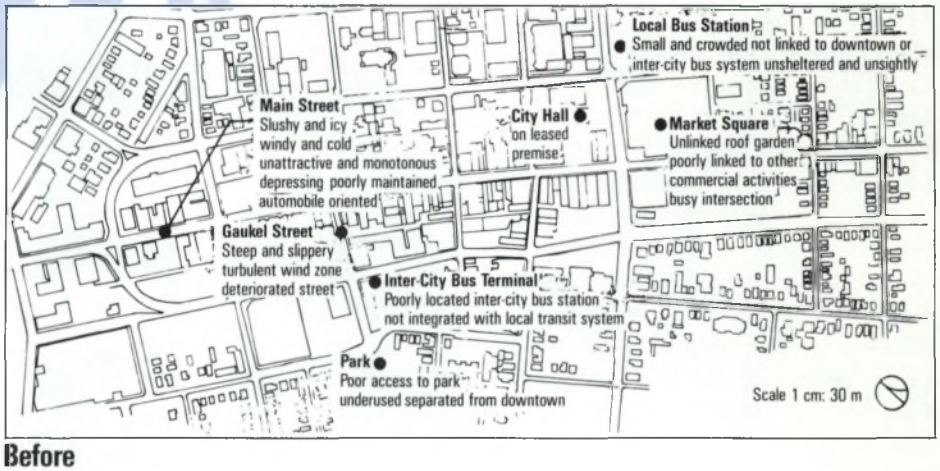
First Honourable Mention went to a group of six University of Waterloo Planning students: Margaret Duxbury, Ralph Edelbrock, George Heughan, Brian Letman, Yvette Rybensky and Anthony Er. They decided to look at the problems of a typical medium-sized Canadian city.

Some of the principles advocated were:

- Harnessing waste heat.
- Creation of a walking zone in the central business district.
- Linkage of transit, public open space, walking areas and parking structures (with some form of sheltering).
- Creation of year-round botanical gardens adjacent to the CBD.
- Linkage of the existing CBD to the open space/park system.

Judges' Comments

"A fair number of ideas have been assembled in this scheme but most are already being experimented with. The idea of new and more extensive use of solar collectors is a good one. Some judges felt the proposal to construct a galleria covering so large a portion of the busiest section of the main street was unnecessary–a shorter galleria might serve the needs of this medium-sized city even better by focussing on a more concentrated space thus rendering it more animated and offering a better selection of attractions. Ideas on planning, transportation and implementation were felt to be useful but more attention might have been given to the need and procedures for changing public perceptions of winter and winning acceptance of the proposed adaptations. Graphic delineation was of a very high order."



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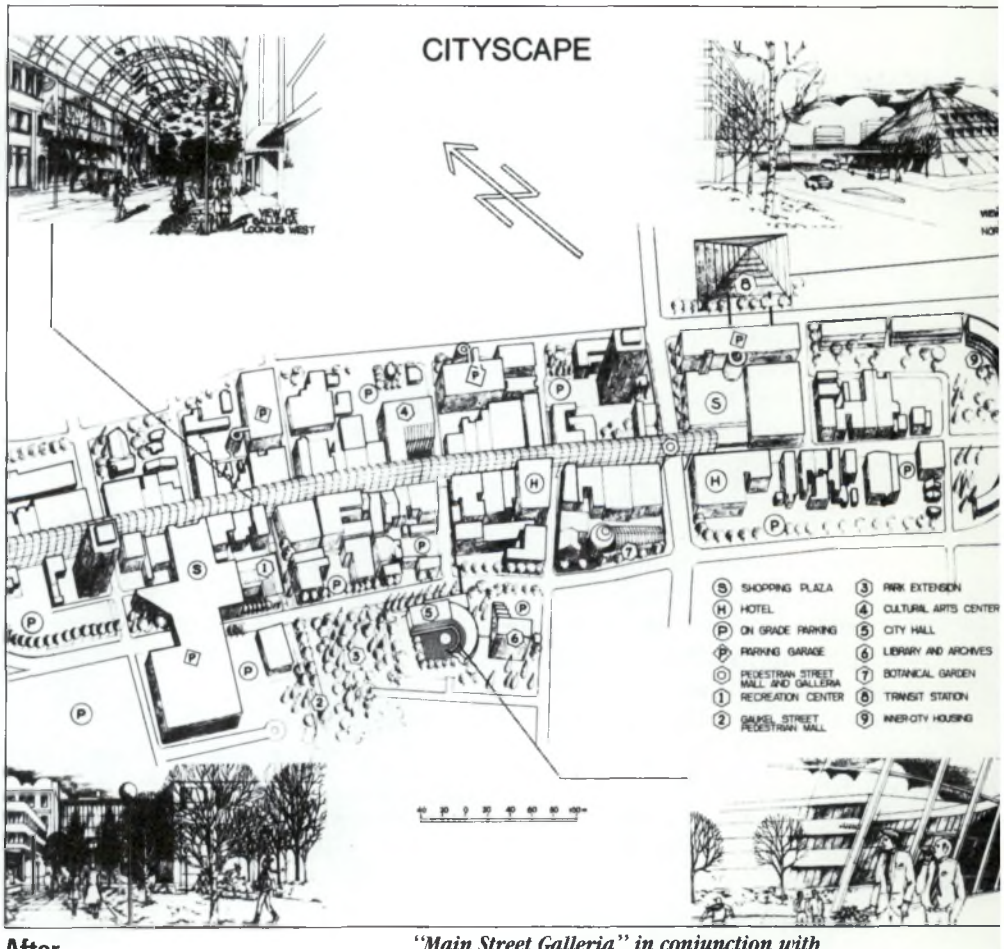


After

"Main Street Galleria" in conjunction with a series of redevelopment strategies

2

Second Honourable Mention was awarded to a team of six University of Waterloo students: Grace Man, Veronica Lim, Gary Jin, Weng Meng Mok, Steve Karn and Scott May. This group decided to identify a most important problem area–the elderly in small towns. They looked at the question of location of senior citizens' homes and suggested heated sidewalk crossings at critical intersections, covered walkways, arcades at street level in the more heavily used shopping areas and a shuttle bus system for seniors.

Judges' Comments:

"An example of spotlighting a special problem that relates to our failure to pay adequate attention to our climate in planning and decision-making. This well-researched entry suggests that large areas of Canada (and probably other northern countries) are being depopulated as young people leave for the attractions of the big city.

Hundreds of small communities are left with a large and growing proportion of older residents. Little attention is being paid to the problems that result. Although this entry examines four typical communities–Meaford, Mount Forest, Hanover and Durham, all in Ontario, the recommendations could be heeded in communities of all sizes:

- Grouping and organizing of the residences of older citizens to make their lives more convenient and to make possible greater opportunities for socializing.
- Shuttle buses, covered walkways, heated sidewalks at particularly dangerous corners and other steps to permit safe and easy movement, particularly during winter.
- Provision of greenhouse areas and solar traps to make winter living more agreeable.
- The discussion of means for grouping seniors' residences handy to downtown activity and shopping both in new construction and in retrofitting was useful, as was the suggestion that citizens' committees be involved in the planning process.

The specific proposals for the town of Meaford have been well thought out. Illustrations, although not highly professional in quality, were nevertheless effective. The limitation of the subject matter was perhaps the principal reason this entry did not win a top prize."

3

Third Honourable Mention was awarded to two students of Landscape Architecture at the University of Toronto–Shelagh Deike and Garth Meil. The theme of winter recreation in the city developed the Don Valley ravine (Toronto) for both active and passive uses, including cross-country ski trails, etc. with attention being paid to both summer and winter use.

Judges' Comments

"This entry was rated best of the submissions dealing primarily with the natural environment, landscaping and open space systems. The text is well written making a case for better use of such natural areas as ravines for citizens' recreation and leisure.

Such areas within a city are accessible for daily use in odd hours left over from business or social activities. Ideas put forward–re-arranging transportation systems to open up park lands and development for hiking, jogging and skiing as well as toboggan slides, small lakes and picnic and nature areas–were neither startlingly new nor different.

Natural areas can be re-arranged to add to their attractiveness and usefulness for recreation without destroying their natural beauty. The entry could have been strengthened with some further discussion of recreation land policies and planning."

4

Fourth Honourable Mention went to four planning students at the University of Waterloo: John Smith, Ron McIntyre, Laura Atkins and Fred Protopapa. Their project was entitled Winter Sidewalk Sheltering–Downtown Retail Streets.

Judges' Comments

"This was the most comprehensive scheme for pedestrian shelter submitted. Preparation was quite professional and well thought-out as was the implementation strategy.

A city accepting this plan would have the most elaborate system of climate-controlled walkways to be seen anywhere.

With recognition of the importance of commercial, cultural, heritage and recreational areas, the plan would no doubt have the effect of enriching and strengthening downtown life. While some attention is devoted to the 'open air' alternative–particularly in dealing with park and riverbank areas–the major emphasis seems to be on man-made structures, possibly too much so.

The quality of the proposals and full implications for other elements in downtown city life are not discussed as thoroughly as might be desired. On the whole, though, this is a useful submission which cities of all sizes could profitably examine."

The scheme concentrated on a series of strong policy-oriented recommendations and council actions. It was especially strong in the domain of implementation strategies, by-laws and costing arrangements.

Innovation and Competitions

It is clear that this livable winter city competition has provided a range of alternative approaches to the redesign and redevelopment of communities in cold climates. It has, furthermore, offered a fresh stimulus for ideas for making cities livable–not only in winter but on a year-round basis. The concepts and developments exhibited general applicability to a range of different places and times throughout Canada–indeed, also throughout most nordic countries experiencing relatively severe winters.

The jury was composed of talented individuals all of whom are both nationally and internationally recognized in their respective professions. There was general agreement that greater efforts must be made, within Canada and worldwide, to develop a better understanding of the concepts and principles for building, redeveloping and managing cities and environments situated in cold weather zones. More innovative approaches, conceptual thinking and experimentation will be essential if our urban settings are to be more livable.

One of the finest means for encouraging innovative ideas is through a competition at the local, provincial, national or international level. Competitions tend to attract design talent and compel the pursuit of excellence. They stimulate talented individuals or teams to perform at the highest, most creative potential and frequently produce the best results. They also highlight many of the problems inherent in the day-to-day process of planning, designing and managing components of the urban environment. Lastly, they stimulate public dialogue and debate regarding both design-oriented issues and policy.

Although Canada's best examples of urban design and management are very good indeed in an international scale, the general environment is decidedly second-rate. We simply do not make the best use of our existing pool of national talent particularly where young, recently graduated or about-to-graduate architects, landscape architects, urban planners and policy analysts are involved, those who have not yet made their imprint on the profession.

It can assuredly be said that more competitions of the type the LWCA has underwritten must be sponsored within Canada. They must not only be of an architectural or site-specific nature which tend to be the most common variety. They must also embrace the disciplines of landscape architecture, town and regional planning and public policy as well as product design (e.g. a genuinely well-designed bus shelter which is properly integrated with urban transport at both vehicular and pedestrian levels), graphic arts and environmental art (sculpture, supergraphics, wall murals, etc.). The public conscience and intelligence must be raised so that it can demand more from professionals and policy makers. Competitions serve as meaningful vehicles for such objectives.

Finally, a few remarks must be made regarding the educational system. Are planners, urban managers and architects taught about the function and design of winter cities? Are there specific courses or workshops in our universities to accomplish this task? The answer is a simple one–there appears to be no school where either architecture or planning for winter environments is taught, at least not as a specialized sub-discipline. Given our harsh climate, it would appear axiomatic that students should be able to gain special insight and expertise in the area of winter planning, design and policy formulation. How about some programs in winter planning and design as part of a long-range educational plan for this country? It could not be more urgently needed.

Conclusion

This competition was organized on a $2 000 budget. Given this handicap, the organizing committee was delighted with the overall response and the high quality of submissions. Clearly, the entrants took a serious look at the problems faced by inhabitants of snowbelt cities.

As chairman of the competition committee, I was skeptical about this venture. Because of the low budget it was not difficult to view this undertaking in a somewhat frivolous manner. However, as time progressed, my initial skepticism vanished. Jury members were enthusiastic and the support committee–John Royle and Xenia Zepic–was always helpful. The results were a great compensation for the efforts made and while all the entries might not have been truly 'professional' in their allure, a large number exhibited a range of ideas, genuine vitality and subtlety of observation that are frequently not found in even the most professional work today.

If a subsequent competition was planned, I would surely recommend more adequate funding for awards and other unseen contingencies which constantly arise, with a guarantee of publication from journals or public and private sector sponsors. I would encourage a competitive spirit within Canada and among the Nordic nations. We have much in common and require greater collaboration in future. Competitions challenge the imagination. In addition to dramatizing the critical issues at hand they have the potential of portraying solutions from which both producers and users of the environment can learn. Our competition has provided fresh ideas for architects, planners and policy makers. Ideas abound and attitudes must inevitably change if we are to advance. Alternatives to existing situations are gradually emerging and we should do everything possible to encourage positive change.■

Norman E. P. Pressman is a professor in the School of Urban and Regional Planning at the University of Waterloo, Waterloo, Ontario, and was a member of the jury for the first National Student Competition in Planning and Design.

Sam McLeod, London Free Press

Shirley and Jack Chrisjohn, shown in front of one of the co-op's homes, discussed the idea of developing a co-op in early 1982 after purchasing their own first home privately.

Canada's First All-Native Housing Co-Op

by Gordon Sanderson

London, Ontario (pop. 268 000) is a provincial city of fairly close-knit residential neighbourhoods so when a new family moves in there is usually a great deal of interest.

It is therefore significant that the Native Inter-Tribal Housing Co-Operative, Canada's first all native co-op aimed at providing affordable housing for families of native ancestry, has managed to buy 17 residential properties in nine months in a 20-block area of southwest London and move families with a minimum of fuss.

The $1 million project has broken new ground in establishing scattered housing of a highly visible native minority within a strong, predominantly Anglo-Saxon community. Despite some initial hostility, the native group has managed to turn a potential confrontation into a model of friendly co-operation.

A Self-Help Project

How it was done, as an innovative self-help project under CMHC's newly revised Urban-Native Housing Program, is a success story which could encourage further use of this plan to integrate a previously disadvantaged group into the mainstream of Canadian urban life.

Ironically, the couple credited with initiating the project did not derive any direct benefit, but left a legacy of goodwill for others to follow.

Jack and Shirley Chrisjohn (Jack, a native consultant with the Ontario ministry of citizenship and culture, and his wife Shirley, a family support worker with Family and Children's Services of London and Middlesex) first discussed the idea of developing the co-op in the early part of 1982 after purchasing their own first home privately.

"I guess we ran into all the same kinds of problems everyone else finds when they buy a home–extra hidden charges and interest rates. It was suddenly a whole new language for us," said Jack Chrisjohn. "We realized there are a lot of people who cannot afford to own their own home and the co-op concept seemed like a good alternative."

Shirley became the first president of the co-op which resulted from their efforts.

A survey of housing needs undertaken by four native groups associated with London's N'Amerind Friendship Centre that summer and fall showed few native families owned their homes or were financially capable of considering ownership. Many were living in crowded or sub-standard accommodation, paying more rent than their housing was worth, and some had experienced discrimination.

Lloyd (Butch) Stevenson, a member of the original steering committee who became the co-op's first full-time co-ordinator, recalls the informal way it was started.

"Jack and Shirley Chrisjohn got the idea and called my wife and me to ask if we'd like to sit on the board of a native co-op," he said.

"I got to know them when I was on the board of directors of

N'Amerind where Shirley was employed as a Little Beavers program coordinator. We met through bowling and I recruited Jack for my ball team. We've been good friends ever since."

The N'Amerind housing needs survey became the starting point, but it took another full year of planning before the group was ready to proceed.

Initial Misgivings

Greg Playford, program manager for social housing at CMHC's London office, remembers having certain misgivings about the plan.

"When we first had it proposed to us we were somewhat apprehensive because the record of groups that have acquired scattered existing housing and repaired them was not the best," he said. "It's the nature of existing housing that you're often buying problems. And if you're buying a lot of houses you're increasing the chance of getting more problems. That was one of our concerns.

"Co-op housing was still fairly new in London, here was a group proposing to do a very specialized type of project with a particular client in mind–natives in the City of London–and the track record of such projects in other areas was poor.

"Nevertheless we were impressed by the information that was collected in the N'Amerind survey," said Playford. "A lot of natives were indicating problems in finding decent rental housing. Some had experienced discrimination in renting and a very large percentage expressed an interest in getting involved in a co-op.

"It was primarily for these reasons that we gave the group some start-up funding, to a maximum of $10 000."

Professional Planning Help

The native group was encouraged to enlist the aid of professionals in planning their approach to a co-op. The most knowledgeable group in the field locally was London Community Homes, now known as Community Homes of Southwestern Ontario, a non-profit organization with a community-based board of directors that was developing housing co-operatives. They were linked with the regional and national network of the co-op housing federation and had successfully developed 10 co-ops in the London area between 1981 and 1983.

To be successful, the London group had to find houses available for a maximum of around $40 000, the limit the co-op's potential membership could support.

Community Homes surveyed the city looking at house prices and conditions and identified three areas as potentially suitable. They finally focussed on a southwest area of the city known as the Manor Park-Highland Park district.

Besides having a good selection of available properties for sale, this area had other advantages; it is close to shopping facilities, served by a community school, with two municipal parks and playgrounds (Murray and Southcrest Parks) within easy walking distance and offering excellent recreational facilities.

While real estate listings showed a good offering of houses, it was not a transient neighbourhood. Owners were selling for the usual reasons; upwardly mobile families who had outgrown their units were looking for larger homes in the suburbs while seniors were ready to move into retirement homes or apartments.

With funding for the acquisition of up to 20 units authorized under the CMHC Urban-Native Housing Program, the co-op started to identify properties in August, 1983.

A realtor was engaged to handle negotiations and a contractor was hired to carry out inspections and estimate the required upgrading. As each prospective property was examined, a CMHC inspector and appraiser followed up to determine the approvable market value and extent of mandatory repairs to be done. "We then indicated the price we could agree to and repairs that were acceptable under the program," says Playford.

The co-op was successful in closing most of the properties it really wanted, with only a couple rejected by CMHC (because they needed too much work or were outside the area) and two on which negotiations failed to reach an agreement.

Going Public

By September, 1983, the co-op had completed deals on 10 properties before word got around that a native people's group was buying houses in the neighbourhood. "I don't think there was actually any real impact on house prices in the area," recalls Playford.

But this was the dilemma. By keeping the facts quiet, rumours began to spread. The realtor acting for the co-op became known in the immediate area as "the Indian agent". A few alarmist residents suggested this was "another government scheme" to depopulate nearby reserves and resettle natives in a local urban setting, bringing with them hordes of undisciplined children and families with no sense of property upkeep.

Such were the stereotyped prejudices, based on misinformation, and there was concern that property values would be harmed by the impending influx.

On the other hand, to openly declare its intentions too soon might have exposed the co-op to exploitation and higher asking prices.

The solution was a compromise. With half of its allotted 20 properties

signed, and deals nearing closure on several more, the co-op decided to make full disclosure of its plans to the local media and at the same time organize an open-house and information meeting in November.

Even so, Playford says he was prepared for a confrontation with hostile elements when he attended a meeting of the Manor and Highland Park Community School Council following local newspaper reports about the native co-op's house-buying activities.

It was Burton Kewayosh, who had moved into the co-op's first home with his wife and two preschool children, who defused the situation. Kewayosh, who is executive director of the Association of Iroquois and Allied Indians, was an articulate spokesman for the co-op. Contrary to rumours, he said, it was not true Indian families "with up to 12 kids" were moving in on the community.

"Some of our forebears may have had families that size but I for one could not afford it and I know my wife would not allow it."

He went on to explain the aims of the co-op, the concept of shared ownership and the desire of native families to become contributing members of the community.

The president of the community school council, local grocery store owner Joe Bowman, said the meeting was a turning point towards community acceptance of the co-op. "I haven't had any bad reports since," he said, "or heard anybody speak against them. It was the best thing that ever happened. It cleared the air."

Complex Administration

Administratively the project was somewhat complex for CMHC staff because instead of a normal co-op project involving a townhouse or apartment complex requiring one project commitment, the Corporation was looking at a total of 17

Sam McLeod, London Free Press

Children play on the front lawn of one of the homes purchased by Canada's first native housing co-op.

project commitments. The native co-op acquired 13 detached single-family homes, both sides of a semi-detached, one duplex and one triplex building, the latter with living units for two families on the upper floors and the sub-basement now housing the co-op's offices and meeting room.

It also generated a stack of paperwork for the lender, Family Group, of London, acting as agent for Investors Syndicate Realty, of Hamilton and Winnipeg, which was involved in individual appraisals and commitments.

"All in all it was a good partnership, with professionals helping the co-op and CMHC reviewing the overall package," says Playford. After establishing an acceptable purchase price and an agreed closing date there then had to be agreement between co-op, lender and CMHC on needed repairs. The co-op borrowed 100 per cent of the acquisition cost, insured under the CMHC program, and a portion of repairs was covered by grants under RRAP, the Residential Rehabilitation Assistance Program.

Stevenson, the co-op cordinator and member of the inspection team which looked at properties before ac-

Sam McLeod, London Free Press

Inside their co-op home, Lucille Kewayosh plays with her daughter Sally while her daughter Sara reads.

Sam McLeod, London Free Press

Grocer Joe Bowman, shown here in his store, is president of the community school council and says the community has accepted the co-op.

quisition, said units purchased averaged $7 000 in repairs under RRAP. "We ran into a few hidden problems such as faulty weeping tiles and sewer connections that couldn't be seen on inspection. We also filled in a few backyard septic tanks. But we've managed to squeeze through it all without too much difficulty."

Under the RRAP program, $2 500 of an approved loan up to $5 000 and 50 per cent of loans between

Sam McLeod, London Free Press

Other homes purchased by the co-operative in the Manor Park-Highland Park area of London.

$5 000 to a maximum of $10 000 is forgiveable. Generally the condition of the homes was good and the co-op fared well. Only two units went above the $40 000 acquisition cost and in each case the amount was less than $1 500.

After purchase, the co-op tendered repair work to local firms, using the services of the same contractor hired to carry out initial inspections at a fee of about $40 per unit. He was not allowed to bid. "Technically it would have posed a conflict since he was also paid the same fee to do follow-up inspections when RRAP work was completed."

While some properties required more, others less than the allowable RRAP maximum, some adjustments to RRAP loans were made when the unexpected need for repairs was discovered. Any amount over that was included in the mortgage amortization.

Also included in the mortgage were all legal and consultants' fees and organizational expenses, plus cost of stoves, refrigerators, washers and dryers provided in each unit.

A typical case was 13 Paddington Avenue, one of the co-op's early acquisitions. Actual purchase price was $35 000 but $7 800 in RRAP repairs, $2 000 for appliances and $7 700 in legal and other overhead charges brought the total cost to $52 500.

With this costing, the co-op went to Family Group and made an application for a mortgage. When approved by the lender, it was returned to CMHC for an undertaking to insure against default, along with a complete breakdown showing all costs.

First mortgage on that unit worked out to approximately $49 000 with a RRAP grant of $3 500 making up the difference.

"Our practice was when they had all costs for a particular acquisition finalized we called everyone in for a meeting, went over repairs and operating costs and then issued a commitment," said Playford.

The interest rate on 13 Paddington was 13.25 per cent for a five-year term, 30-year amortization. Interest rates on most other co-op property mortgages were in the 13 per cent range.

Sam McLeod, London Free Press

Lloyd Stevenson, the co-op's first full-time coordinator and a member of the original steering committee, is shown in front of the co-op's offices located in the basement of the apartment building.

CMHC's Co-op Program

CMHC provides two things under the co-op program. It insures the mortgage and also makes a commitment to provide an on-going subsidy over the 30-year life of the mortgage calculated as the difference between the market rate and two per cent, paid monthly. The co-op makes full payment of mortgage plus interest to the lender and is reimbursed by CMHC.

"One of the big advantages of the program is that when the mortgage rolls over in five years, if interest rates

are higher, the co-op still pays only two per cent," says Playford. "It provides protection against inflation."

This is the basic Co-Operative Housing Program available to any co-op group approved by CMHC. Under basic co-op financing, such groups are usually able to have from 15 to 30 per cent of the units rented on a geared-to-income basis.

The native co-op, under the Urban-Native Housing Program, has an additional benefit receiving a further subsidy sufficient to lower monthly costs to one-quarter of monthly income for all residents requiring it.

However, in the case of London's group, this provision was not invoked in full. "They didn't want to take advantage of that provision," says Playford. "They wanted a mix of working people."

In the co-op's initial submission, an income profile of prospective co-op members was provided which showed six or seven willing and able to pay full market housing charges, ranging from $350 to $450 monthly.

That's a little different from some of the other urban-native housing programs in Canada which take full advantage of all available assistance to accommodate almost 100 per cent geared-to-income families.

The co-op now in its second fiscal year of operation seems to be working successfully, says Playford. Members have run into a few unexpected maintenance costs but in the first nine months ended June 30 managed to cover costs and build up $4 500 in a reserve or replacement fund, without impacting on housing charges.

The co-op now is considering the acquisition of 10 more dwelling units, possibly scattered over a wider area of London. Meanwhile all homes they have purchased so far have been upgraded and, in the eyes of Joe Bowman, the local school council president, "are a credit to the neighbourhood."

Lucille Kewayosh, wife of Burton, who succeeded Shirley Chrisjohn as co-op president after the Chrisjohn's moved to Sudbury, senses the co-op experiment may still be on trial in the minds of some people.

"In a sense, we're being watched. We're trying to set up our own co-op within an existing strong community and there's room for a lot of hostility, but it's not that apparent.

"That first meeting last fall was full of tension, but we have several members meeting now in a local church parish hall and the community school council has asked us to have a representative sit on their board. It's working out quite well."

There is a social side to co-op membership which has seen the 31 adult members involved in Christmas parties, summer barbecues and springtime backyard cleanups.

"The other benefit is the training you get as a volunteer. We train all our board members to organize and chair a meeting. There's a sense of ownership, too. The hardest thing to get used to living in a co-op is there is no landlord. We are the landlord and it's a nice feeling once you realize it."

The native co-op chose the co-op alternative over the non-profit option for just those reasons, and now has a waiting list of more than 15 families eager to join, as soon as additional properties become available.

Native Housing Programs

The London co-op is just one project developed under a comprehensive package of native housing programs flowing from new policy initiatives taken by CMHC in 1978 after reviewing six previous years of questionable results in meeting the demands of the Native Council of Canada.

The main thrust of policy outlined at that time was to assist the NCC in the promotion of urban-native housing using private non-profit programs for rental units under the National Housing Act and combining a number of federal subsidies from earlier programs. Assistance under Section 56.1 of the NHA provides for an interest write-down from current market rate to two per cent on a geared-to-income basis, with provincial participation under Section 44.

However all provinces, with the exception of Saskatchewan, refused to participate for financial reasons. And the problem of making the geared-to-income program meet the needs of lower-income natives ran into difficulties of finding enough tenants able to pay the lower end of market rents to make projects viable. This led to situations where one project was prepared to take three moderate-income tenants (often non-natives) in order to assist one lower-income native family–an approach blocked by those projects stipulating native tenants only.

Notwithstanding lack of provincial support, approximately 20 new groups have been created since the joint urban native housing initiative began in September of 1978 and some 2 000 units committed under Section 56.1 to the end of 1983.

Moving to provide deeper subsidies on a unilateral federal basis under the Urban-Native Housing Program, CMHC has a potential commitment of 1 000 units this year where tenants of native ancestry pay no more than 25 per cent of income as rent in non-profit projects.■

Gordon Sanderson is a reporter with the *London Free Press.*

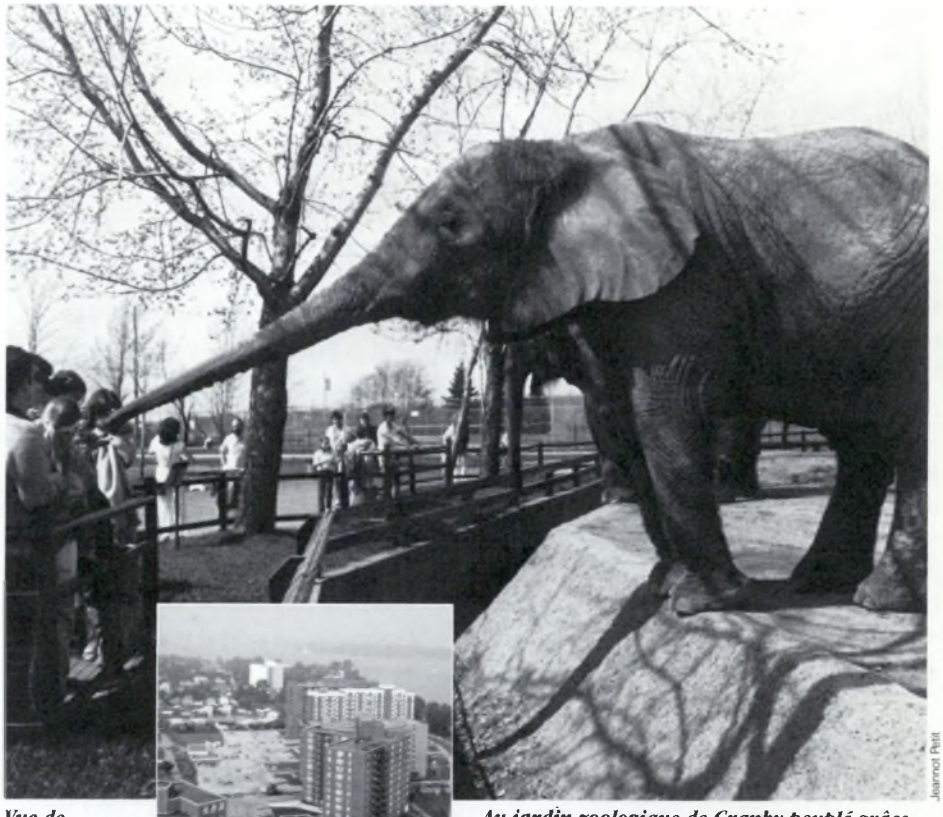
Recherche: Suzanne Blanchet
Rédaction: Colette Beauchamp

Granby a dix soeurs jumelles de par le monde

Deux maires de Granby, ville québécoise célèbre pour son jardin zoologique, sont responsables, à eux seuls, de dix jumelages de leur ville à des cités soeurs. Leur esprit d'initiative a fait de ces deux hommes des figures presque légendaires et leur nom est devenu inséparable de celui de leur ville.

M. Paul-O. Trépanier, l'actuel maire de Granby, en fonction depuis 1964, remonte le cours de l'histoire de ces multiples jumelages: "Cette histoire commence avec mon prédécesseur, Horace Boivin, qui a été maire de la ville pendant vingt-cinq ans. Propriétaire d'une importante entreprise de textile, il était appelé à voyager à travers le monde. Au cours de ses nombreux périples, il entend parler d'une association internationale de jumelages de villes. Le concept l'intéresse et, en 1956, il réalise un premier jumelage avec une ville de textile, Windsor en Ontario. En 1963, Granby et Windsor se jumellent à Coventry en Angleterre, autre ville de textile; nous entretenons encore aujourd'hui des liens étroits et réguliers avec nos deux premières jumelles. Comme M. Boivin faisait aussi affaire avec des industries de Saint-Étienne en France et qu'à titre de maire, il s'intéressait à l'administration municipale dans les autres pays, le jumelage avec cette ville se concrétisa aussi en 1963."

C'est toutefois le souvenir du jumelage avec Thun, ville natale d'un de ses grands amis, alors consul général de Suisse au Canada, qui semble le plus cher au coeur de l'ancien maire de Granby et instigateur de son jardin zoologique. "Lors des cérémonies de jumelage, rappelle-t-il, le maire de Thun nous a remis quatre cygnes; les deux mâles ont reçu les prénoms de ses fils, Uns et Jogs, et les deux femelles les prénoms de mes filles, Diane et Élise." Ce geste devait être le premier d'une série d'étranges échanges. "Nous avons peuplé le zoo, poursuit-il, grâce à nos liens d'amitié avec différents pays. Comme le castor est l'emblème du Canada, tout le monde en voulait; nous avons échangé un castor contre un éléphant, un castor contre un zèbre, un castor contre un chameau..." Ce jardin zoologique, créé en 1953 et qui compte aujourd'hui près de mille animaux, est le plus important au pays et attire, chaque année, dans la région, un demi-million de touristes.



Jeannot Petit

Au jardin zoologique de Granby peuplé grâce à plusieurs échanges d'animaux avec les villes jumelles de pays étrangers.

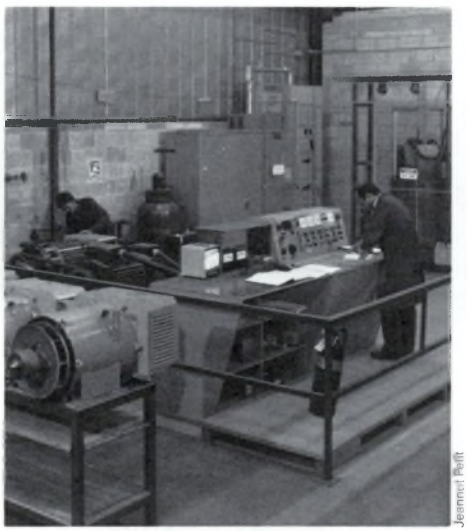
CNRC

Vue de Windsor en Ontario, jumelée à Granby depuis 1956.

Retombées économiques

Mais les jumelages ne donnent pas lieu qu'à des échanges d'animaux! Granby a vu, en effet, s'installer chez elle des entreprises étrangères comme Leroy-Somer, le plus grand producteur de moteurs électriques d'Europe (en 1975), et Rossignol, un important fabricant de skis de fond (en 1978). Il en résulta la création de 145 nouveaux emplois. "Les maisons-mères de ces deux entreprises ne sont pas établies à Saint-Étienne même, mais

Le Parc Yamaska, rendez-vous des Granbyens.



Leroy-Somer, le plus grand fabricant européen de moteurs électriques s'est installé à Granby, en 1975.

Le fabricant de skis français Rossignol s'est établi à Granby en 1978.

ce sont les relations privilégiées avec la France suscitées par le jumelage avec cette ville qui ont amené ces investisseurs chez-nous, précise le commissaire industriel adjoint, Bernard Beaudry. Même chose avec l'Italie. Nous sommes jumelés avec Ancona mais ce sont des manufacturiers originaires de d'autres régions italiennes qui sont venus s'établir dans notre ville comme Bontempi, un fabricant d'instruments de musique, qui est arrivé en 1976 et a créé chez-nous 60 autres emplois. Ou encore, prenez l'exemple des retombées de notre jumelage avec la ville ontarienne de Windsor, cette capitale de l'automobile. Aucune industrie de cette région n'a implanté d'usine chez-nous mais plusieurs industriels locaux ont décroché des contrats de fabrication de couvre-sièges et de ceintures de sécurité, grâce aux contacts privilégiés et à la publicité qu'entraîne un jumelage."

Il est toujours difficile d'évaluer en dollars, de façon précise, les retombées économiques de telles réalisations, d'autant plus que la concurrence entre les régions incite les administrations municipales à en garder jalousement le secret. "C'est le secret du chef, comme en cuisine" lance en boutade le commissaire industriel adjoint. Mais qu'on songe aux coûts de construction d'une seule usine de 150 000 pieds carrés (13 935 m^2), au coût d'achat des terrains, aux taxes municipales payées par les entreprises, aux achats locaux de matériel et d'équipement, au nombre de nouveaux emplois créés. Sur les 191 entreprises manufacturières établies à Granby, une trentaine serait le résultat direct ou indirect du rayonnement international de cette ville moyenne de 45 000 habitants, située dans les Cantons de l'Est.

Culture et technologie

Il y a aussi d'autres retombées. L'association Granby et ses villes jumelées, organisme responsable des activités reliées aux jumelages de la ville, a pu constater en de nombreuses occasions les avantages culturels liés aux jumelages. Rosaire Préfontaine, son président actuel, évoque quelques souvenirs: "Un groupe de citoyens est allé à Rayne, notre ville jumelle de Louisiane, au moment du Frog Festival. L'accueil qu'ils y ont reçu a été plus qu'amical. Ils ont été littéralement portés sur la main. Un autre groupe s'est rendu à Saint-Étienne en France, en réponse à l'invitation de son maire qui voulait commémorer nos vingt ans de jumelage par un festival artistique consacré aux films et aux pièces de théâtre québécois."

Toujours avec Saint-Étienne, un autre échange, d'ordre technologique celui-là. "Notre ville jumelle est nettement plus avancée que nous en technique d'épuration des eaux, explique l'ancien maire Boivin qui n'a pas tout à fait quitté la chose municipale puisqu'il est aujourd'hui le directeur des relations publiques de la ville. En 1983, quand a commencé à fonctionner notre nouvelle usine d'épuration construite au coût de 35 millions de dollars, nous avons pu envoyer son nouveau directeur faire un stage de formation d'un mois à Saint-Étienne, sans avoir à débourser un sou."

Jumelages de coopération

S'il est possible de tirer profit des jumelages avec d'autres villes, ce n'est pas là l'unique but. Le fondateur du mouvement, Jean-Marie Bressand, visait tout d'abord des objectifs de paix et de compréhension entre les peuples. Granby a certes observé la consigne en participant aux jumelages de coopération, qui se traduisent par l'aide apportée par une ville industrialisée à une ville d'un pays en voie de développement.

À ce propos, Paul-O. Trépanier raconte l'expérience vécue avec une ville du Cameroun: "Après notre jumelage avec Bokito, nous avons pris connaissance des besoins de notre cité soeur. Les femmes de Bokito passaient leur vie à transporter de l'eau; il fallait aider cette population à creuser quatre puits, un projet de 40 000$. Nous avons recueilli 12 000$ auprès de la population granbyenne et la différence a été comblée par l'Agence canadienne de développement international. Les fonds ne provenaient pas des deniers publics: pour que le geste en soit vraiement un de coopération, il fallait que la

population soit sensibilisée à l'aide à apporter à Bokito. C'est pourquoi l'association Granby et ses villes jumelées a organisé une vente monstre d'allumettes dans toutes la ville et même sur le parvis des églises, le président montant en chaire pour se faire plus convaincant!"

Monsieur Trépanier profite de l'occasion pour ouvrir une parenthèse: "Pourquoi l'ACDI ne s'intéresse-t-elle pas davantage au principe du jumelage des villes, pourquoi ne sollicite-t-elle pas l'appui de municipalités pour des projets précis? Prenez l'exemple de la motorisation des pirogues au Sénégal.

Lorsque l'ACDI a injecté un million et demi de dollars dans ce projet qui visait à permettre aux pêcheurs sénégalais de se rendre en haute mer, le poisson étant l'une des principales sources d'alimentation du pays, qui en a entendu parler?...

Si les citoyens de Scarborough, là où les moteurs ont été fabriqués, avaient été jumelés aux citoyens d'une ville du Sénégal, ils auraient sans doute suivi l'histoire de près, tandis que sans jumelage, ils n'ont même jamais été au courant de ce qui se passait dans une usine de leur propre ville!, déplore le maire de Granby. Nous aussi, nous avons participé à un projet avec l'ACDI. Pourtant, chez nous, la population a été sensibilisée au projet; elle est par conséquent consciente de l'action de cette agence gouvernementale à l'étranger. L'expérience pourrait se répéter ailleurs, et pas uniquement pour des programmes de grande envergure. Les puits de Bokito en sont la preuve!

Et la famille s'agrandit

Mais n'allez pas croire que ces quelques jumelages suffisaient. Horace Boivin continuait de veiller au grain, même s'il n'était plus maire. Commissaire du Pavillon chrétien de l'Exposition universelle de 1967 tenue à Montréal, il rencontre le docteur Sadok Boussafara, maire de Hammam-Lif en Tunisie. Celui-ci, très actif au sein de la Fédération mondiale des villes jumelées, amène l'idée sur le tapis et un nouveau jumelage se concrétise. Peut-être à titre symbolique, il offre précisément à la ville de Granby un superbe tapis qui occupe depuis la place d'honneur dans la salle du conseil de l'hôtel-de-ville.

Ville de Granby

En mars 1979, cérémonie de jumelage à Joal-Fadouth au Sénégal en présence du Président Leopold Senghor et de l'ancien maire de Granby, Horace Boivin et d'une foule de 5 000 personnes.

Les Frères du Sacré-coeur de Granby ont une institution d'enseignement à Dakar, au Sénégal, la Maison Saint-Michel qui a formé une foule de Sénégalais qui occupent aujourd'hui des postes-clés dans l'administration de leur pays. Le Frère Emmanuel, qui a été directeur de la Maison Saint-Michel, suggère que Granby se jumelle à Joal-Fadouth, la ville natale du Président Léopold Senghor. En 1976, lors de la tenue des Jeux Olympiques de Montréal, le Président sénégalais est invité à inaugurer le Village olympique. L'occasion est trop belle: Granby l'invite chez elle à participer à la cérémonie de jumelage des deux villes; la réception fut grandiose, il va s'en dire. Mais pour qu'un jumelage soit officiel, une cérémonie doit se dérouler dans chacune des villes, même si plusieurs années séparent parfois les deux événements. Celle de Joal-Fadouth aura lieu le 16 mars 1979. Il n'en fallait pas plus pour que l'association Granby et ses villes jumelées organise un voyage pour assister à cette fête qui a rassemblé 5 000 personnes–la quarantaine de délégués granbyens, défrayant, il va de soit, le coût de leur voyage. Aucun jumelage de Granby ne s'est d'ailleurs fait avec la seule participation du conseil de ville.

Granby est également jumelée à la ville marocaine de Marrakech, que le maire Trépanier qualifie de perle de l'Afrique du Nord. Déjà, des échanges culturels ont eu lieu entre des professeurs, des étudiants et même des groupes d'enfants. Il est aussi question de grands projets de développement industriel et, cette fois, des industries granbyennes iraient s'implanter dans la ville jumelle. "Malheureusement, déplore le maire, nous n'avons pas encore pu réaliser ces projets à cause de la situation économique actuelle. Mais nous demeurons confiants dans l'avenir; nous maintenons les contacts avec Marrakech par des échanges fréquents et des visites régulières de délégués des deux villes."

Cet avenir se traduira sans doute prochainement par un autre jumelage, puisqu'une compagnie allemande installée à Granby en a proposé un avec sa ville d'origine. Les pourparlers vont bon train.

Présence internationale

La municipalité qui opte pour le jumelage s'engage aussi sur le plan international, notamment par sa participation aux congrès de la Fédération mondiale des villes jumelées-cités unies qui se tiennent tous les trois ans. Même s'ils se déplacent à leur frais, les membres de l'association Granby et ses villes jumelées se font un devoir d'y assister. "Lors du congrès de Casablanca, en 1981, nous étions 96 délégués de Granby" précise le maire Trépanier.

L'importance de la délégation québécoise à ce congrès n'a sans doute pas été étrangère au fait que Montréal a été choisie comme hôtesse du onzième congrès qui s'est tenu en septembre 1984 et pour la première fois en Amérique du Nord.

La participation à ces congrès permet aux délégués d'en apprendre davantage sur le rôle qu'ils peuvent jouer auprès de leurs soeurs jumelles et d'en tirer profit sur plusieurs autres plans, pour peu qu'ils assistent aux ateliers. Le programme du congrès de Montréal proposait vingt-deux colloques auxquels les conférenciers invités étaient des maires mais aussi des urbanistes, des spécialistes de diverses disciplines et des représentants d'associations prestigieuses. Contrairement à la rencontre de Casablanca surtout axée sur des préoccupations plus proches du Tiers monde comme la pauvreté dans les pays en développement et l'appel à la coopération, le congrès de Montréal a abordé des sujets qui portaient davantage sur la gestion municipale: financement, alimentation en eau, évacuation des déchets, énergie et environnement, accès des femmes aux responsabilités publiques, questions d'actualité pour les Nord-Américains et les Occidentaux.

Les États-Unis, grands absents de ces manifestations, ont un mouvement parallèle, Sisters Cities. Ils refuseraient, dit-on, d'adhérer à la FMVJ à cause de la présence de villes membres appartenant au bloc socialiste. "Pourtant, peu importent nos convictions politiques et la différence de nos systèmes économiques, nous avons des préoccupations humaines et sociales semblables", remarque le maire Paul-O. Trépanier. "Ces rencontres sont l'occasion de créer un réseau de relations internationales entre gens pacifistes" conclut le maire de Granby.■

Colette Beauchamp et Suzanne Blanchet sont journalistes à la pige.

L'histoire du jumelage des villes

Au début des années 50, encore sous le choc de la Deuxième guerre mondiale, un héros de la résistance, Jean-Marie Bressand, discute avec quelques-uns de ses amis. Ils voudraient voir disparaître à tout jamais les risques de nouveaux conflits et en viennent à la conclusion que seule la compréhension entre les peuples en est le gage. La première barrière à franchir est celle des langues, estiment-ils. C'est donc dans cette optique qu'a lieu le premier jumelage, entre Luchon en France et Harrogate en Grande-Bretagne.

L'idée fait son chemin et la préoccupation linguistique perd de son importance. Les raisons qui suscitent les jumelages sont variées. Une municipalité choisira une jumelle homonyme dans un autre pays, une deuxième choisira une communauté à vocation industrielle similaire, une troisième voudra nouer des liens avec un village dont les habitants sont d'une autre culture. D'autres, enfin, y verront une façon de coopérer avec des communes de pays en voie de développement. Mais quelles que soient les raisons, les retombées sont toujours concrètes, intéressantes, parfois même, inattendues.

Associations

À l'échelle internationale, la Fédération mondiale des villes jumelées-cités unies (FMVJ) a vu le jour en 1957. Elle a pour mission essentielle la coopération mondiale fondée sur l'action des populations par l'intermédiaire des communes. Adhérer à la FMVJ, c'est partager ses principes fondés sur l'éducation civique, la coopération municipale, la lutte contre le racisme, la réduction des inégalités, la promotion de la paix et le développement international. Se jumeler, c'est rechercher la réalisation d'activités culturelles, touristiques, sociales ou économiques avec des collègues et citoyens d'une ville-soeur.

À ce jour, on compte plus de 10 000 jumelages de villes à travers le monde. Plus d'une centaine de villes canadiennes sont ainsi jumelées soit à d'autres villes du pays, comme Calgary à Québec, soit à des cités ou villages de pays étrangers: Chicoutimi est jumelée à Angoulème en France, Longueuil, entre autres, à Longueil en France et Loja en Équateur.
Lorsqu'une ville canadienne adhère à l'Association des Villes jumelées du Canada (AVJC), elle est automatiquement membre de la FMVJ, en vertu d'un protocole d'entente entre les deux organismes. Elle s'engage par le fait même à respecter les dix objectifs de la FMVJ, qui sont la démocratie locale, la sauvegarde de la paix, la nouvelle coopération, les échanges internationaux, l'éducation bilingue, la promotion de l'information, l'accès des femmes aux responsabilités publiques, la participation des jeunes, la défense de l'environnement et de la qualité de la vie et l'urbanisme au service de l'homme.

La déclaration solennelle des villes jumelées est plus actuelle que jamais:

"Nous, citoyens des Cités Unies, déclarons solennellement la paix à tous les citoyens du monde, nos égaux, nos frères. Nous condamnons toute forme d'agression armée, d'intervention militaire quel qu'en soit le motif et affirmons qu'on ne peut effacer la guerre totale que par l'effort de tous vers la paix totale. Nous nous déclarons prêts à engager le dialogue sans exclusive, sans parti-pris, avec les citoyens des autres villes du monde, pour coopérer à l'immense tâche visant à réduire le déséquilibre économique et éducatif qui existe entre les peuples du Nord et du Sud du monde, pour pousser à la reconversion des milliards de francs engloutis chaque année pour la guerre et sa préparation, en dépenses de protection et d'épanouissement de la vie humaine."■

Home Equity Conversion Plans:

their potential and how to make them work

by Léon Baudouin

Recent studies have commented on the inadequate level of income of many elderly persons in Canada. In 1979, the Special Senate Committee on Retirement stated that "it is impossible to avoid the conclusion that there is a distressing degree of poverty among those 65 and over" (*Retirement Without Tears*, p. 65). According to *Better Pensions for Canadians*, a report issued by the federal government two years ago, more than half of Canadians aged 65 or over qualify for partial or total Guaranteed Income Supplements (p. 8). Year after year, Statistics Canada's *Survey of Consumer Finances* shows that the incidence of low income is endemic among elderly family units, especially among women living alone. Moreover, "significant numbers of middle-income households can expect a decline in living standards after retirement" (*Better Pensions*, p. 18).

Shortcomings of both the private employer-sponsored pension plans and the public retirement system of Old-Age Security/Guaranteed Income Supplement and Canada/Quebec Pension Plan (OAS/GIS and CPP/QPP) are commonly viewed as the culprits in this situation. The federal government, among others, has put forward a series of proposals to reform the Canadian retirement system. A complementary avenue is explored here: how to make the best use of the elderly's main assets, their houses.

Home Equity among Elderly Homeowners

Home equity conversion has a very important poverty reduction potential among elderly homeowners. But, the implementation of successful home equity conversion plans is difficult not only because of technical obstacles but also because it requires a change of attitude among the elderly themselves as well as lenders and government.

Most elderly family units are homeowners (63 per cent in 1977). Almost all (90 per cent) of these homeowners have no mortgage encumbering their houses.[1] Hence, they have sizeable savings in the form of home equity; in 1977, the average home equity among elderly homeowners amounted to $34 600. On an aggregate level, the amount of wealth "locked" into the elderly's houses is impressive: approximately $30.2 billion in 1977.[2] To obtain an estimate for 1982, we can multiply this figure by 1.5 which gives $45.3 billion–a conservative estimate in view of the general aging of the Canadian population and, more significantly, because of the tremendous rate of house appreciation since 1977.

In June 1983, the total value of Registered Retirement Savings Plans (RRSPs) accumulated by all Canadians was approximately $26.2 billion,[3] roughly 60 per cent of the estimated home equity held by elderly homeowners at that time. Under current conditions, however, the only way a homeowner can unlock his or her home equity upon retirement is by selling the house. In view of the staggering importance of the savings accumulated in the form of home equity, the search for other means of unlocking home equity is certainly justifiable.

[1] Statistics Canada, *Distribution of income and wealth*, Cat. 13-570, p. 34.
[2] Statistics Canada, *Income, assets and indebtedness: 1977*, Cat. 13-572, p.49.
[3] Statistics Canada, *Financial Institutions: Financial Statistics: Fourth Quarter 1983*, Cat. 61-006, p. 197. Note that this figure excludes RRSPs in general funds from life insurers.

Of particular importance here is also the fact that almost half (49 per cent in 1977) of low-income elderly family units are homeowners.[4] Note, moreover, that the average home equity of the low-income elderly is only slightly lower than that of more prosperous elderly homeowners: $31 200 compared to $35 700. Home equity represents the most important component of the elderly homeowner's wealth: in 1977 home equity represented an average of 65 per cent of total wealth for this particular group. For low-income elderly homeowners, we found an even higher figure, 79 per cent; in other words, the low-income elderly have basically one asset, their house.[5]

Home Equity as a Source of Income

Home equity conversion plans are designed for elderly homeowners desiring to transform their home equity into a stream of payments *while staying in their house.* The payments received accumulate (principal and interest) as a liability against the elderly person's house. The actual size of the payments depends upon the amount of home equity made available for the plan, its scheduled maturity, and financial characteristics, and most importantly, the interest rate. Obviously, the greater the home equity available, the larger the payments. But, as we shall see with a fixed-term Reverse Mortgage, because of the operation of compound interest, relatively small differences in the scheduled maturity translate into huge differences in the payments.

There have been relatively few attempts made at home equity conversion plans in Canada. The American experience in this field is definitely richer and more diverse than the Canadian one. Still, even in the United States, the total number of elderly homeowners currently benefiting from one plan or another is very small. This situation contrasts with the European experience: for instance, in France, converting one's home into a "rente viagère" has been a practice for many years.

Various reasons explain why equity conversion plans are still a rarity in the United States and even more so in Canada. There is, of course, the desire of older people to leave a legacy. Also, as suggested by a survey done in Alberta five years ago, home equity is more likely to be viewed as a source of emergency funds rather than as being part of a retirement plan.[6]

But an important reason also is the difficulty, especially in a context of highly volatile interest rates, of structuring a plan in such a way that it gives lenders a return comparable to that of other financial instruments while at the same time satisfying the elderly homeowners' needs, both in terms of income and security. From an elderly person's point of view, a satisfactory plan should provide a significant additional income (preferably lifelong) while offering various safeguards such as the guarantee of lifetime occupancy of the house.

Understandably, elderly homeowners are reluctant to embark on an equity conversion plan that does not offer them sufficient guarantees, such as lifetime occupancy, or that imposes a very high price for such guarantees. They would probably also hesitate at the idea of trading the savings of a lifetime, their house, for a meagre additional income. However trite this may sound, when home equity has been converted into a stream of payments, it is gone. For a low-income elderly homeowner, whose only significant asset is his or her house, the status quo–staying in

[4] Own calculations based upon the Statistics Canada's 1977 *Survey of Consumer Finances: Income (1976), Assets and Debts (1977) of Economic Families: Public Use Micro Dataset.* Unless otherwise indicated remaining figures in this article come from the same source.
[5] Note that the definition of "wealth" or "net worth" does not include the value of contributions towards life insurance and work-related pension plans.
[6] Forma Consulting, Don Ezra, DDE Financial Consulting and Communities Inc., *Study of Demand for Home Equity Dissavings Plans in Alberta*, prepared for Alberta Housing and Public Works (Toronto: 1979).

one's house as long as possible with the confidence of being able to sell it in case of an emergency–probably appears preferable to a plan whose real future is uncertain.

Despite these difficulties, some equity conversion plans have an important potential for reducing low incomes among elderly homeowners. Moreover, research done in the United States (especially by the *National Center for Home Equity Conversion*, Madison, Wisconsin) has developed conversion plans accommodating the needs of both lenders and borrowers. Based on this new approach, American Homestead Mortgage Corporation (New Jersey) has been offering the *Century Plan* since the beginning of this year.

Fixed-Term Reverse Mortgages

One variant of a Reverse Mortgage (RM) involves a lender providing a borrower with monthly advances for a predetermined number of years. Both the monthly advances and the accruing interest accumulate over time as a mortgage loan secured by the elderly person's house. The monthly payments are calculated so that, at maturity, the mortgage debt does not exceed a certain proportion, say 80 per cent, of the house value as defined at the inception of the plan. Contrary to an ordinary mortgage, an RM generates an ever-increasing debt; hence, an RM shifts the risk of default to the end of the term.

For a short period, starting in 1979, Metropolitan Trust offered an RM in Ontario under the name of *Independent Income Mortgage*. In Quebec, *Fiducie Prêt et Revenu* has occasionally granted RM loans. In the United States, the most active group now granting RM loans is probably the *San Francisco Development Fund*, a non-profit organization.

Using the *1977 Survey of Consumer Finances Dataset* of Statistics Canada, we simulated the potential impact of an RM on income, assuming the scheduled maturity of the instrument to be equal to the elderly homeowner's life expectancy. For an interest rate of 13.66 per cent (the average interest rate of the 1977-83 period), the median monthly payment would have been $39 in 1977, so half the elderly homeowners would have obtained at least $39 in additional monthly income. Moreover, this additional monthly income would have reduced the poverty rate among elderly homeowners from 32 per cent to 19 per cent. Beyond these overall figures, there are important variations depending on which subgroup one is considering. As suggested by the attached graphic, the level of payments derived from an RM is heavily influenced by the scheduled maturity, i.e. the elderly homeowner's life expectancy. The higher the interest rate, the more dramatic the influence.

Age, sex, and the type of family (singles vs couples) have a direct influence on life expectancy. For the group aged 75 or more, the median payment would have amounted to $122 per month; this is no negligible sum considering that it corresponds to over half the maximum monthly OAS/GIS benefit available for singles in January 1977, i.e. $240.47. Among this group of elderly homeowners, the anti-poverty impact of the RM is quite impressive: the incidence of low income would have dropped from 54 per cent to 17 per cent. Note also that the low-income group gets a higher median payment than the group above the poverty line. An explanation of this is the fact that the incidence of low income is much higher among elderly persons living alone than among couples.

Based on these figures, RM plans appear promising. But by itself an RM loan does not address a major preoccupation of the elderly: what to do at the end or the term when the loan becomes due? (In simulations, the term or maturity of the plan equalled life expectancy which means that roughly half the borrowers will, in fact, outlive the term of the RM.) *Provided the house has appreciated enough*, the elderly borrower has other options besides an immediate sale of the house in order to reimburse the lender. The RM loan could be rolled over for another term or even better, another RM could be negotiated in order to continue the monthly payments. But at its inception, the future appreciation rate is unknown and small variations in house appreciation rates can make the difference between the possibility of negotiating a new RM loan and the difficulty of seeing the payments stop altogether, or worse, of being obliged to sell the house because its new value is insufficient to carry the debt already incurred. In other words, once its term has run, an RM offers no guarantees of either continued monthly payments or even of being able to stay in one's home.

Moreover, in the context of Canadian mortgage practice, interest rates on RMs would probably have to be periodically renegotiated. In times of extremely volatile interest rates, RM payments could therefore occasionally suffer serious diminution. Of course, if the collateral, i.e. the house, has appreciated enough, the target loan could be increased and hence the payments would stay the same, or even better, they could be increased in order to compensate for inflation. But again, this is conditional upon the house appreciation rate, an unknown quantity when the RM loan is first negotiated. Indeed, simulations were run of an RM commencing in 1977 and renegotiated in 1980 and again in 1983. Even though interest rate variations were smoothed out by taking averages and there was a dramatic house appreciation rate in years 1977 to 1980, the median RM payment would have actually gone down in 1980.

For an elderly person contemplating the sale of his or her house because of onerous taxes and upkeep, a fixed term of RM loan does indeed

Monthly payment of a fixed term reverse mortgage
House value = $50 000
●●● Mortgage rate = 14%
■■■ Mortgage rate = 18%

offer the option of postponing such a sale, but not enough to attract many borrowers.

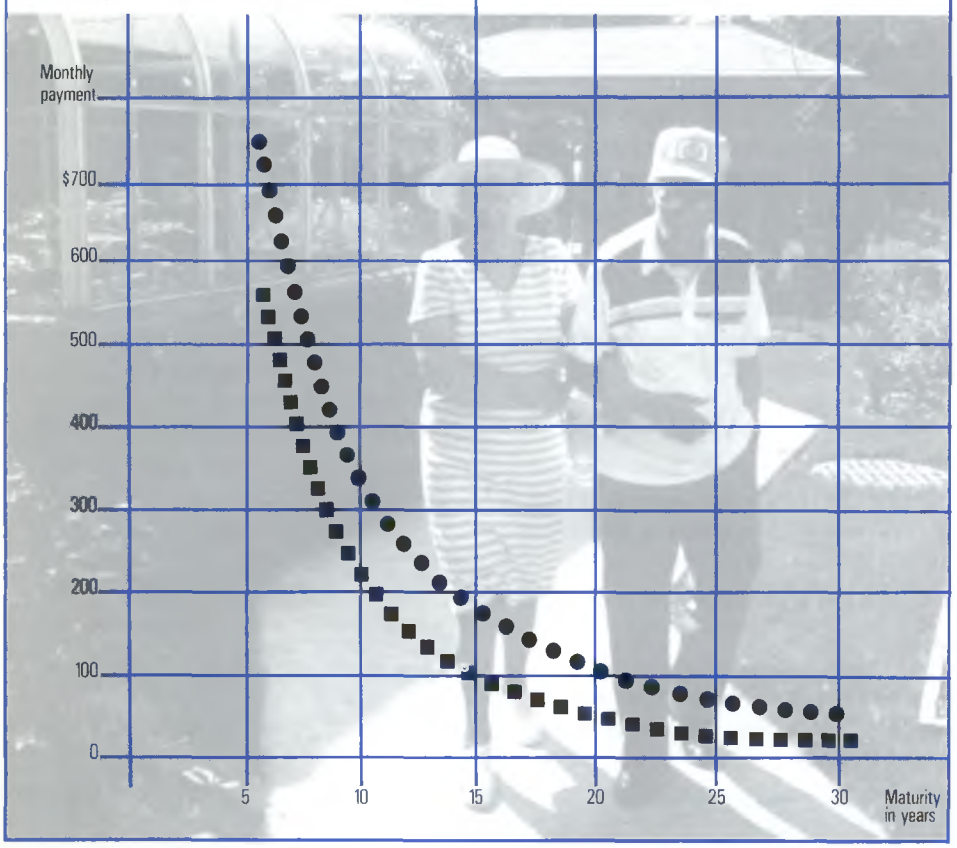
The Case for Diversifying the Risks

There are two major risks associated with RM plans: the risk of insufficient house appreciation and the risk of outliving one's life expectancy. By spreading these risks among many borrowers, better home equity conversion plans could be developed. In this vein, Reverse Annuity Mortgage (RAM) plans have been suggested. Under a RAM, one uses the proceeds of a mortgage to buy a life annuity from a life insurance company. The net monthly income received by the elderly is the difference between the annuity payment and the interest on the mortgage. At the death of the annuitant the mortgage becomes due. But according to most financial analysts, the difference between mortgage rates and annuity rates is simply too great to yield substantial benefits to the elderly homeowner. The simulations we ran confirmed this diagnosis. Part of the success of RAM plans in England comes from the fact that interest payments on a mortgage on one's house are normally deductible from one's income; in other words, British fiscal laws allow the elderly homeowner to report a loss resulting from taking out a RAM.[7]

A much more promising avenue is offered by the newly offered *Century Plan* in New Jersey. Under this plan, a borrower receives monthly advances until he or she dies, moves or reaches age 100, whichever event comes first. The monthly advances and a below-market interest charge on them (11.5 per cent in June, 1984) are secured by the elderly person's house. In addition, the elderly person agrees to give up a share of the house appreciation from the time the plan starts to the time it ends. This allows the lender to spread the risk of low house appreciation rates among many properties: losses on some properties will be compensated by unexpected gains on others. The more appreciation the elderly agree in advance to surrender to the lender, the higher the monthly payments. In any event, the participant's liability under this plan is always limited by the value of the house. For a $70 000 house, assuming all appreciation accrues to the lender, an elderly homeowner would net between $203 and $486 per month for ages ranging from 65 to 80.

According to *A Financial Guide to the Century Plan*, "when the loan term equals the borrower's life expectancy and the annual average appreciation rate is five per cent the combined interest rates (11.5 per cent plus the appreciation share) ran from 13 per cent to 16 per cent depending on the age of the borrower".[8]

[7] Henry Bartel and Michael Daly, *Reverse Mortgages: A New Class of Financial Instruments for the Elderly*, discussion paper No. 188 (Ottawa: Economic Council of Canada, February 1981), pp. 8-11.



Possible Forms of Government Intervention

To help overcome initial reluctance with respect to equity conversion plans, government could promote the development of small-scale self-sustaining conversion programs serving other needs of the elderly population besides the strict income increase objective; by these other needs we refer, for instance, to the burden of maintaining one's house. In this respect, the Buffalo Home Equity Living Plans (HELP) is a particularly interesting example. Under this program, elderly homeowners are offered free maintenance of their houses, payment of taxes and insurance, the guarantee of remaining in the house for the rest of their lives, and cash annuity payments. In exchange for these services, the elderly homeowner agrees that title to the house reverts to the Buffalo HELP upon his or her death. "HELP will then sell the house to regain its

[8] Ken Scholen, Maurice Weinrobe and William Perkins, *A Financial Guide to the Century Plan* (Madison, Wisconsin: National Center for Home Equity Conversion, June 1984), p. 14.

investment and be able to bring another senior homeowner into the program."[9]

HELP is meant eventually to be a self-sustaining program and was initially funded by HUD (the U.S. Department of Housing and Urban Development). The development of a relatively large-scale privately funded program such as the Century Plan did not come overnight in the United States. It was preceded by numerous smaller-scale projects such as Buffalo HELP that promoted the idea of equity conversion and made possible subsequent experiments. Presumably, the development of a large-scale equity conversion plan in Canada would also be facilitated by the introduction of various small-scale government funded plans.

A second possible area of government intervention concerns a legal restriction currently imposed on most Canadian financial institutions. Under current legislation, only life insurance companies can offer lifetime contracts. But for many elderly homeowners, the lifetime feature is probably an essential ingredient of an acceptable equity conversion plan. The extent to which current legislation interferes with this requirement could be examined and, where necessary, the legislative changes could be made.

A further area of government intervention could be a government insurance program that would allow lenders the possibility of offering fixed-term Reverse Mortgages while satisfying the elderly's needs. From the lender's point of view, it is relatively easy to offer a Reverse Mortgage whose scheduled maturity is the borrower's life expectancy (joint and last survivor life expectancy in case of a couple). Lenders would probably insist that the interest rates be periodically renegotiated.

From the elderly's perspective, such a plan is unsatisfactory on two counts. First, because of interest rate changes, the monthly payment could go down. Also, assuming the house has not appreciated enough, an elderly borrower who outlives his or her life expectancy might be forced out of the house at the end of the plan. An insurance program would protect the elderly homeowner against these two contingencies. Therefore, at no point would payments go below their initial level and, secondly, the elderly would have the guarantee of lifetime occupancy. The insurance fees, payable by the elderly, could take the form of a share in the appreciation of the house from the inception of the plan to the time the elderly person dies or sells the house, whichever event comes first.

[9] *Buffalo Home Equity Living Plans: How to convert home equity into lifetime benefits* (Buffalo, New York: Home Equity Living Plans, 1981).

Alternatives

Home equity conversion plans require a radical change in accepted attitudes towards mortgages. From the lender's point of view, most of these plans run contrary to common practice since they shift the risk of default from the beginning to the end of the mortgage. In order to address this problem, current research in the United States points towards the necessity of spreading the risk among many borrowers. In the Canadian context, there is however an additional difficulty: frequent interest rate variations. Contrary to Canada, the United States has a very strong secondary mortgage market where it is possible to sell fixed-interest-rate mortgage instruments.

From the borrower's perspective, home equity conversion plans run against the traditional view that one should pay for one's house as quickly as possible and keep it free of debt. However, it is also possible to view one's house as part of a retirement plan rather than merely a source of emergency funds. In that particular respect, it has been proposed that, under certain conditions, investment in one's house be admitted as a valid RRSP contribution.

In Canada, as well as in most Western countries, the imputed net rental income derived from one's house is not taxable. Hence there is a definite fiscal advantage in staying in one's house as opposed to selling it and being taxed on the interest income derived from the proceeds of the sale. Under certain conditions why not allow elderly homeowners to sell their houses without incurring negative tax consequences? Assuming on the other hand the income derived from home equity conversion plans would not be taxable–this is probably the case with an RM since it involves a pure loan–the elderly homeowner would face a truly unbiased choice: either sell the house and buy a lifetime annuity, or convert the home equity into a stream of payments while staying in the house, either choice having the same fiscal impact. Finally, home equity conversion plans themselves should be flexible enough to allow elderly homeowners to terminate them before the expected maturity. In that respect, the Century Plan might be inappropriate since it is clearly designed for elderly homeowners who seriously intend to stay in their house until death.

The amount of wealth represented by the elderly's home equity is staggering. Senior citizens could greatly benefit from imaginative ways of transforming this equity into income. But for this to happen, home equity needs to be regarded as an integral part of retirement planning not only by the elderly themselves but also by financial institutions and by government.■

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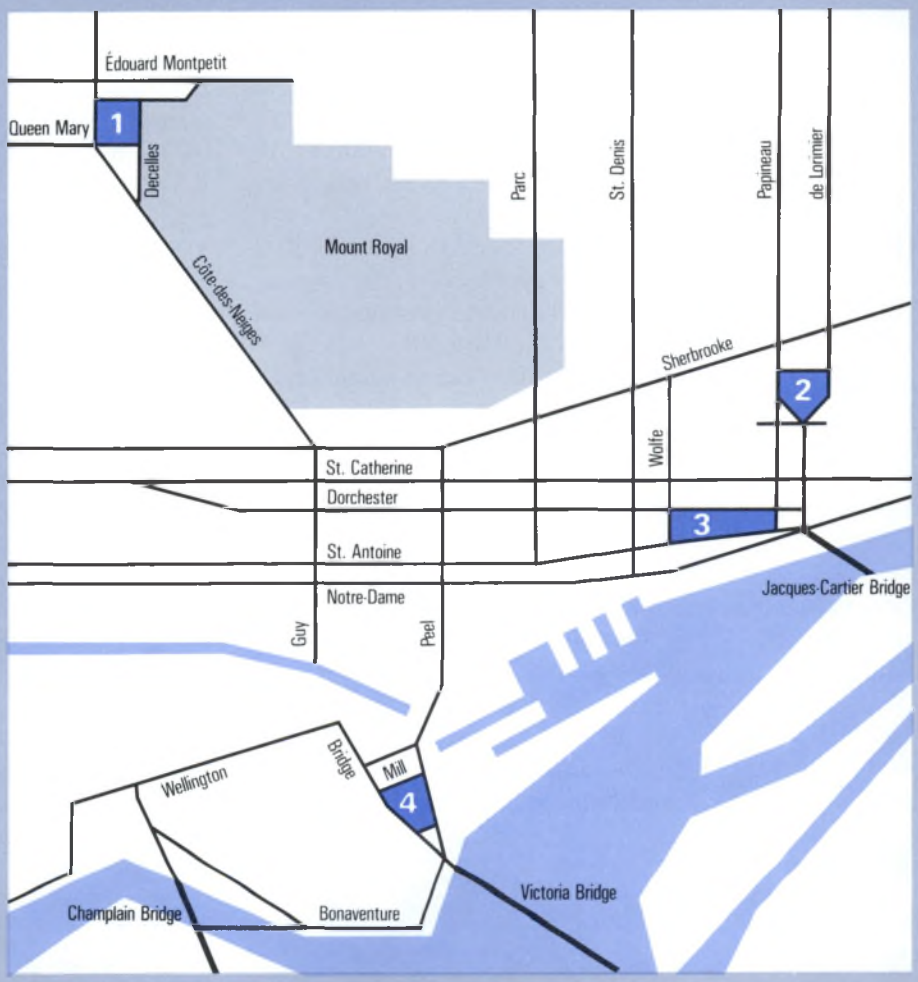
The Effects of Forced Relocation in Montreal

by Anshel Melamed,
John Schaecter
and Marion Emo



1 Côte-des-Neiges
2 Jacques Cartier Bridge Approach
3 Radio Canada
4 Victoriatown

Background of the Study

The early years of municipal reform in Montreal from 1958 to 1968 when the city declared war on organized crime were marked by massive destruction in the neighbourhoods of the poor. The only public housing project built during this period, Habitations Jeanne Mance, replaced 800 older units in the downtown "Tenderloin" district around Ste. Catherine Street with an equal number of units at comparable gross rents.

This period is also known as the "Golden Decade" in Montreal. There were major public investments in street-widenings (e.g. Dorchester, de Maisonneuve, Berri), urban expressways (e.g. Metropolitain, Décarie, Bonaventure), and the first three lines of the Metro. All were aimed at encouraging private investment and tourism. Their culmination was the International Exposition of 1967.

The years after Expo '67 brought high unemployment and rising rents.

Then came the first rumblings of discontent from those who were the most adversely affected by the new transportation systems. Low-rent districts in the city along the St. Lawrence were razed and their inhabitants were forced to relocate. A study on the impact of the Ville Marie Expressway described the predicament of the relocatees in its title: "Expropriation, or the forced over-consumption of housing".[1]

In 1966, following the demolition of at least 15 000 dwellings by City agencies in older sections of Montreal such as St. Henri, La Petite Bourgogne, Chinatown, Griffintown and Victoriatown, the City commissioned its relocation office to survey the relocatees from four project areas.[2] Of 1 390 units demolished in these areas the City followed up on all the households who had received relocation allowances from the City, and for whom a new address was on record. Of a total of more than 800 households, City inspectors contacted and got responses from 381 who still lived at the same address to which they had relocated, and who were probably more satisfied with their housing than those who had moved from their relocation address. The City never publicized the study's findings. However the data contributed to the creation of the City's Housing Department in 1968, and to the first major commitment to public housing ever undertaken by the City of Montreal, from 1968 to 1978, during which time nearly 10 000 units of social (non-speculative) housing were built throughout the City.

[1] Marie Lavigne et Serge Carlos, "L'expropriation ou la surconsommation obligatoire du logement: le cas de l'autoroute Est-Ouest", INRS-URBS, UQAM, 1975.

[2] Radio Canada, Victoriatown, Côte-des-Neiges Village and the Jacques Cartier Bridge approaches.

Objectives of the Study

The objectives of this research project were:

- To analyse these data which the City had not previously made available in any of its published documents
- To compare the impact of forced relocation on relocatees in Montreal with those in other North American cities
- To explore alternative solutions to such major problems as: the chronic shortage of decent housing; the vulnerability of low-income residents to invasions of their urban neighbourhoods by upper-income groups who can out-bid them in the private housing market; the inability of tenants in publicly subsidized low-rental housing to gain access to the housing board. Such control is reserved for well-organized private-sector communities, usually in middle- and upper-income areas.

In early 1983, just as our study was getting underway, this last objective became possible, in a most unpredictable way. Nearly 100 former residents of Victoriatown, many of whom had remained friends twenty years after their eviction, had organized themselves into a housing group, and are now seeking public funding to build new cooperative housing on the former site of Victoriatown.

This unexpected action confirms one of the hypotheses upon which the study is based: that there is an important reservoir of collective human energy in existing older urban areas which has been largely ignored or untapped.

- A final objective of the study was to prepare for a subsequent study of the migration of middle- and upper-income households into older inner-city areas. The impact of this growing phenomenon on the lives of the former residents is even more traumatic than old-style urban redevelopment. They are forced to relocate by private owners, and receive no government subsidies for relocation. This also means that it is very difficult to trace them after they have been evicted.[3]

Findings of the Study

The impact of forced relocation on the former residents of the four areas which were demolished is substantially the same as in other cities in

[3] The information on which our study is based was made possible because the City was obliged by law to aid evicted households to relocate and was therefore able to trace many households who had been evicted from redevelopment areas in Montreal.

The only public housing project built between 1958 and 1968 was Habitations Jeanne-Mance, replacing 800 older units in downtown Montreal.

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The former site of Victoriatown is now occupied by expressways and hydro lines.

Table 1
Impact of forced relocation in four Montreal renewal areas: Radio-Canada (1963-'64), Victoriatown (1963); approaches to Jacques Cartier bridge (1966); Côtes-des-Neiges (1966)

Renewal Area Dwellings Area	Monthly Rent Before Move	Monthly Rent After Move	Monthly Rent % Diff.	Rent Room Before Move	Rent Room After Move	Rent Room % Diff.	Average Years at same Address	Near Work % Before Move	Near Work % After Move	New Dwelling % Better	New Dwelling % Worse	New Rent Too High % Yes	New Rent Too High % No
Radio-Canada (774 units/10 ha)	$43.81	$57.73	+31.8	$ 8.52	$12.12	+42	13	54	61	56	44	36	64
Victoriatown (330 units/8 ha)	$37.86	$48.36	+27.7	$ 7.80	$11.71	+50	13	40	65	54	46	41	59
Jacques-Cartier Bridge (160 units/2 ha)	$44.67	$55.44	+24	$ 9.72	$11.50	+18	9	64	61	54	46	48	52
Côte-des-Neiges (126 units/2 ha)	$50.94	$79.52	+56	$11.31	$18.15	+60	13	61	45	65	35	51	49
Totals (1390 units/22 ha)	$44.35	$59.48	+32	$ 9.20	$12.90	+40	12	54	59	56	44	40	60

Source: Questionnaires administered to 340 households by City of Montreal housing inspectors in 1966, following relocation of these households from the project areas.

North America and Europe – higher rents, less living space and loss of neighbourhood identity. (See bibliography for studies on forced relocation elsewhere).

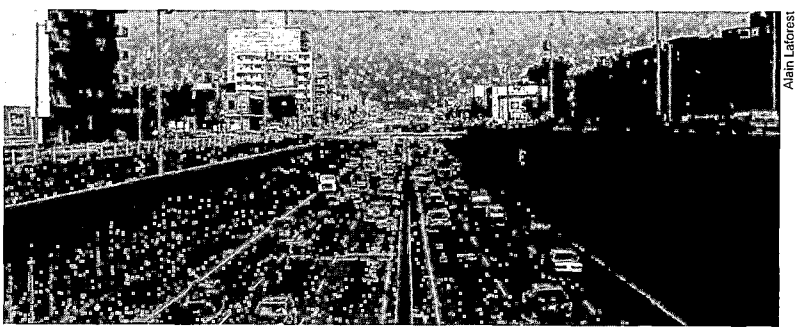
There are major differences in Montreal because the phenomenon is much more related to social class and income levels than to racial segregation and minority exclusion, which loom large in American cities. In Montreal the bulk of the evictees were native-born and were part of the majority of French-speaking people.

Another major difference is that the questionnaires in the Montreal surveys were carried out by official inspectors, paid by the City, rather than by private interviewers. The responses of the evictees must reflect feelings of suspicion, hostility, even fear in varying degrees when those who were asking the questions were representatives of the same government which had forced them to relocate. It is reasonable to expect a certain bias in the direction of trying to give answers which the representatives of the power structure might want to hear.

There is also distortion due to the very nature of the sample, i.e. the presumption that those who still lived at the same address to which they had relocated were the most contented of the relocatees. This is partially confirmed by the data on rent levels. Of the households evicted from the Radio-Canada site in 1963 and 1964 only 36 per cent thought that their rents were too high when interviewed in 1966. Of those evicted from Côte-des-Neiges in 1966, more than half felt that their new rent was too high for them to pay when interviewed later that same year.

More than half of all relocatees felt that their new dwelling was better than the old one. More than half of all relocatees lived relatively close to work. However more of the households who were evicted from Radio-Canada and Victoriatown moved closer to jobs while more of the relocatees from the two other projects were closer to jobs before the move than after it.

The length of tenure was surprisingly high for all four districts, averaging twelve years at the same address, despite the fact that the proportion of owner occupants was sharply lower than the City average in three of the four districts. Just over 80 per cent of all households in Montreal were renters in 1966, while 87 per cent of the 381 relocated households had been renters before they were forced to move. In Victoriatown, where there was an unusually high proportion of home owners (29 per cent), the sample was sharply skewed in this direction. Of the 73 households who were interviewed fully 40 per cent were owners and 60 per cent were renters prior to relocation, and 38 per cent were still owners after the move. In the other three renewal areas the proportion of renter households was 90 per cent before the move and 94 per cent after it.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Major public investments were made in urban expressways like the Décarie.

Rental Increases

The average increase in rent for relocatees from the four project areas was 32 per cent. However, the units which were demolished by the City contained more rooms than the units for which the inspectors were able to obtain responses for the questionnaire. As a result, the average increase in rent per room was 40 per cent.

Of the four areas the largest increase in rents was the 56 per cent rise for former residents of the Côte-des-Neiges area. This corresponds to the fact that more than half of this group felt that this new dwelling cost more than they could afford to pay.

Although the room-count should be balanced against actual floor area in each case, these data were not sought on the questionnaire. However 65 per cent of the respondents from Côte-des-Neiges felt that their new dwelling was better than their old one, in terms of physical comfort and amenities. This is not necessarily a satisfactory trade-off for rents beyond their means, since it inevitably means a compression of other expenditures from their limited budgets. The impact of forced upgrading on the health of relocatees in the English city of Stockton-on-Tees was a reduction in food expenditures and consequently a greater vulnerability to illness.[4]

In Victoriatown the average rent reported by relocatees was 28 per cent higher than before the move. However the average increase in rent per room was 50 per cent. This correlates poorly with the reply by 59 per cent of those interviewed that their new rent was not too high for their income. However the demographic structure in Victoriatown provides an answer to this anomaly: 32 per cent of the households had four children or more and only 16 per cent had none living at home, thus a higher proportion of multi-income households. There is another explanation for this seeming inconsistency in the responses from Victoriatown as well as from the Radio-Canada sample, where the rents averaged 32 per cent more in 1966 than in 1963 when the evictions took place. During the pre-Expo years, housing costs in Montreal rose sharply along with incomes for those who had jobs. Thus the rents for those already relocated in newer units must have compared favourably with those currently available in a tight real estate market, and the relo catees must have been aware of this.

The responses by the Côte-des-Neiges and Jacques Cartier Bridge relocatees reflect this difference. These areas were demolished in 1966 and the respondents had to find housing in the inflated pre-Expo market. This explains several major differences in the responses for these two areas compared to the two earlier projects.

The inspectors found a much larger proportion of the relocatees from Côte-des-Neiges (46 per cent of those evicted) and from the Bridge area (62 per cent), than those from Radio-Canada (20 per cent) or Victoriatown (22 per cent). Thus the degree of dissatisfaction with rent levels was greater for the recent relocatees of less than a year, trapped by the tight housing market, than for those who had chosen to remain in the same dwellings for three years or more. Less satisfied relocatees had already moved to another dwelling and were not able to be interviewed in 1966 because there was no record of their new address.

The Demographic Analysis

The interviews on which this study is based suffer from a number of obvious shortcomings, despite the wide-ranging nature of the questions posed, and the high proportion of responses from those who were interviewed. First of all, the inspectors represented the political power structure, and probably evoked defensive responses. Secondly, all of them were men, and none had been trained in interviewing techniques designed to

[4] Hans Blumenfeld, *Une Ville à Vivre*, Editions du Jour, Montreal 1968.

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Sixty-five per cent of respondents from Côte-des-Neiges felt their new dwelling provided superior amenities to their old one.

Table 2

Demographic analysis

Households displaced from four urban renewal areas in Montreal: Radio-Canada; Victoriatown; Jacques-Cartier bridge approaches; Côte-des-Neiges.

Renewal Area	Heads of Households											
	Single Person Head				By Age Grouping				Number of Households by Number of Children			
	Female		Male		20-29 Yrs.	30-49 Yrs.	50-64 Yrs.	65 + Yrs.				
	Total	>65 yrs	Total	>65 yrs					None	One	2-3	4 +
Radio-Canada												
Total H.H: 119	29	17	11	4	2	46	47	24	44	20	23	32
% of Total	24	14	9	3	2	39	39	20	37	17	19	27
Victoriatown												
Total H.H.*: 69	6	5	6	3	4	35	14	16	11	9	27	22
% of Total	9	7	9	4	6	51	20	23	16	13	39	32
Jacques-Cartier Br. Appr.												
Total H.H.*: 97	24	9	3	1	7	45	25	20	25	18	32	22
% of Total	25	9	3	1	7	46	26	21	26	18	33	23
Côte-des-Neiges												
Total H.H.*: 55	11	9	5	3	3	22	18	12	19	13	11	12
% of Total	20	15	9	5	5	40	33	22	34	24	20	22
All Four Zones												
Total H.H.*: 340	70	40	25	11	16	148	104	72	99	60	93	88
% of Total	21	12	7	3	5	43	31	21	29	18	27	26

* H.H.: Households

reassure respondents. We have already mentioned the skewing of the samples, due to several causes.

Nevertheless, the demographic data and the comments recorded on the questionnaires provide human insights that compensate for many of the weaknesses of the sampling.

Table 2 provides summaries of the age distributions of heads of households (assumed to be males unless otherwise indicated by the interviewer, e.g. "husband unemployed"); it reveals the age groupings of the parents and the number of children per household; and it gives data on single-person and childless households.

In the four zones, 28 per cent were single-person heads of households, compared to 17.6 per cent for the City as a whole in 1966; and 21 per cent of all household heads were 65 years old or more compared to 12.5 per cent for the Montreal area. Only five per cent of the household heads were 20 to 29 years old, compared to 16 per cent City-wide in 1966. Thus a disproportionately high number of the financially least secure relocatee households responded.

Expectations and the Realities of Forced Relocation

According to an article in the *Montreal Star* of December 30, 1959, the demolition of 774 dwelling units to make way for the building of Radio-Canada was justified by Montreal's Planning Department and the Centre Commercial Businessmen's Association. The City's Housing and Redevlopment Committee decided in favour of the present site because: "More than 2 000 families will acquire comfortable homes in the place of their former slum buildings". In fact nearly half the relocatees found their new dwelling less comfortable than their old one. Nearly all paid a higher rent, and a large proportion paid more for less space. No new public housing was built until 1968 and the 796-unit Jeanne Mance project had very few vacancies.

The same article cites the hopes of the planners and businessmen that "...this area will be redeveloped where, for the time being, private initiative is not in the least concerned with its improvement". In fact very few major projects have been built in the area since 1966, other than the expansion of the Tele-Metropole studios. The area just south of Radio-Canada, les Îlots des Voltigeurs, demolished in the early 1970s, is used as surface parking for Molson's Brewery and the Uni-Royal Tire Co. An article in *La Presse* of October 28, 1975, headlined, "Radio-Canada in the East End (of Montreal) has brought nothing except lots of parking lots".* Radio-Canada now feels the need to enlarge its facilities.

The residents' view of the project differs from that of the elite. In *Le Petit Journal* of March 24, 1960, a long-time resident of the area is quoted as saying, "I was born on Montcalm Street, 68 years ago. I now live on Beaudry Street. This should prove how attached I am to my neighbourhood... I find it hard to understand why they fix up Old Montreal around the Château de Ramezay, while they level such picturesque sections as our two lovely parishes in Faubourg Québec".*

In sharp contrast, an editorialist for the prestigious *Le Devoir* wrote in the February 13, 1960 issue, "One finds very few buildings of any value there, mostly slums with a few shabby stores. There is no vestige of history, no piece of architecture worth saving. It is a neighbourhood

* Translation by the author

of working-class housing which has become unhealthy over time. Therefore in the name of public hygiene, good moral standards and policing it deserves to be cleared away".*

As for the damage done to small businessmen displaced by the Radio Canada project another report in the August 14, 1960 issue of *Le Petit Journal* provides this sad picture. "Businessmen and shopkeepers will be the hardest hit. Fifty-two of these merchants–from the one who rents out bikes to the tavern keeper–will face a nearly unsolvable problem: should they try their luck in a new neighbourhood or try to relocate close by, with half of their old customers gone, with the departure of 5 000 residents?... More than half of the twelve grocers and thirteen restaurateurs plan to move to other neighbourhoods. For the four printing shops... with a total of 130 employees nothing has yet been decided. They have a major problem because they must think of permanent relocation, given the cost of moving and installing their machinery.

"The sector allocated to Radio Canada is part of the well-known 'Faubourg Québec', so called because its homes used to be at the eastern exit of the City en route to the Provincial capital.

"Nearly all the residents are French-Canadians who love their neighbourhood. The majority of families have lived there for (several) generations.

"Rents are low and many of the dwellings are very comfortable... The residents are happy and none really want to leave the area. Officials at the Municipal Housing Office have offered families modern housing in the Jeanne Mance (public housing) project but very few have accepted.

Great Expectations

"East-end businessmen have great hopes with the coming of Radio Canada and its 2 400 permanent civil servants... They talk about the building of massive new apartment blocks along Dorchester Boulevard facing the new studios.

"City planners assure us that the Radio Canada Centre will transform the entire east end within fifteen years as a result of a series of projects which will be built following the completion of this one."*

Few of any of these hopes have been realized as of 1984, nearly a quarter of a century later. Much of the area onto which Radio Canada looks out on the other side of Dorchester Boulevard remains intact, with only the beginnings of upgrading of older units for higher-income residents, a process known as whitepainting. New public and private housing has been built since 1973 in this area known as Plateau Mont Royal, which extends northwest toward Lafontaine Park (see Map 1). But this was accomplished with the aid of renewal and housing subsidies, and was not due to the Radio-Canada project.

Finally, at least twenty factories or workshops employing 700 people were forced to move. All the managers of these industries were opposed to being forced to relocate from this area where they had a reserve of low-cost labour and good transportation facilities from the trucking firms and warehouses in the area.

Apart from improved shopping opportunities and whitepainting, the Radio-Canada project met few of the expectations which its planners had forecast, and the net impact on the former residents of the area was negative.

*Translation by the author

*Translations by the author

The Radio-Canada site before and after demolition and construction of the new office tower.

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The Litany of the Relocatees

The nostalgia expressed by relocatees who were interviewed by reporters during each of the periods prior to demolition in the four project areas echo the sentiments expressed by relocatees from redevelopment projects in the United States.[5]

"I was born here 33 years ago and I've lived here ever since (in Victoriatown). It will be difficult for me to try to adapt to another district. Why couldn't they just renovate our village and let us live in peace instead of forcing us to move out and disperse ourselves throughout the city."[6]

A 47-year resident who had lived in Victoriatown since 1917 when he opened his store there is quoted as saying, "Times haven't changed since I first got here. Still the same happiness, the same frendliness."[7]

The area, once cleared, was rezoned for industrial use. It remains largely vacant except for a Hydro-Quebec transformer station at the eastern extremity of the site. The 30 000 seat stadium, the Autostade, which was built on the site of Expo '67, has since been sold for one dollar and moving costs because it was no longer viable eleven years after it was built.

[5] E.g. Fried, Marc, "Grieving for a lost home" in L.J. Duhl, ed., *The Urban Condition*, pp. 151-171, 1963.
[6] May 13, 1964, *Montreal Gazette*.
[7] Ibid.

Consistent with the image of community solidarity and cooperation reflected in the testimony of the relocatees, nearly 100 former residents of the area had organized themselves to petition for cooperative housing to be built on the still-vacant site.

A final quote from a former resident of the Côte-des-Neiges renewal area, in the *Petit Journal* of April 10, 1966, is remarkably apt for the urban experience in 1983. "Although we have lived here for forty years, the City of Montreal wasn't at all interested in our opinion as to the future of our neighbourhood. There will be... American-style buildings, but the area will have lost its special charm for which so many students loved it. But they had to build a park right next to Mount Royal!"*

Massive Demolition Counterproductive

This study confirms the experiences in North American cities and elsewhere in the world that massive demolition of functioning urban neighbourhoods, regardless of their physical condition, is counterproductive. The few positive results in the four areas studied (new construction or facilities on the cleared land) fall short of the City's expectations.

None of the four projects realized primary planning goals. Radio-Canada did not generate private redevelopment along Dorchester Boulevard, nor has any private industrial development occurred on the former site of Victoriatown.

The new approaches to the Jacques Cartier Bridge may have simplified access to it, but the increased traffic volumes in the whole area adjoining the ramps have had a negative effect on the living conditions of the residents in the entire zone. The redevelopment in the small Côte-des-Neiges project area came closest to achieving the objectives of the planners, with the creation of a small park on Decelles Street and some new apartments on Queen Mary Road. However the deep sense of loss by dozens of elderly, long-time residents of the neighbourhood from which they were evicted cannot be measured in terms of money. Nor can the effect of psychological trauma which must surely have hurt a number of the weakest and most vulnerable of the relocatees. The comments recorded by the inspectors on their completed questionnaires provide us with only a glimpse of that pain and suffering.

The New Wave

Public redevelopment projects have diminished in scale and intensity since the last massive demolition project, the clearing of 1 500 dwell-

*Translation by the author

Alain Laforest

New approaches to the Jacques Cartier bridge increased traffic volumes in the adjacent area and have had a negative effect on the living conditions of the residents in the entire zone.

Alain Laforest

The redevelopment of Côte-des-Neiges came closest to achieving planners' objectives with the building of new apartments on Queen Mary Road.

ings for the Ville Marie Expressway in 1971. Nearly six kilometres of the 45-metre swath which was cut through the east end of Montreal is still vacant, and is now to be transformed into a boulevard rather than an expressway.

Since 1968, however, a more pernicious form of up-grading has appeared in Montreal, following a pattern set in other major cities in North America. Private initiative encouraged by public subsidies has been renovating or rebuilding housing for middle and upper income households in formerly lower-income neighbourhoods. This phenomenon, known as "gentrification" or whitepainting, has the added disadvantage of evicting the poor without government responsibility for the real or indirect costs of moving and relocation.

In terms of urban economics this up-grading of older neighbourhoods makes good sense. City revenues will rise in these areas on real estate, business and sales taxes. Risks of fire due to faulty wiring or inadequate fire protection will decline. However, the social problems engendered by this process are just as great as if these areas had been cleared by old-style urban renewal.

In Montreal this process of gentrification has taken on three forms. The oldest of these began in 1967 when the City first began to subsidize property owners to bring their rental units up to Housing Code standards. The subsidies were recouped through increased property taxes on the improved properties. Many thousands of families could no longer afford the higher rents for the improved units and had to move into a continuously shrinking supply of cheap housing. However from 1968 to 1978 Montreal's Housing and Planning Department(s)[8] built 10 000 units of public housing. In 1979 the City created the Commission d'initiative et de développement économiques de Montréal (CIDEM) to stimulate economic growth and particularly new housing. It took over responsibility for public housing from the defunct Housing Department, but in 1979 gave major emphasis to a new program (Opération 10 000 logements) designed to bring in or keep middle-class households in Montreal. CIDEM, in cooperation with the Planning Department which recommended potential sites for such new housing on land owned by or to be acquired by the City, offered public land to private developers at below-market prices. The rate of public housing construction fell sharply and more than 15 000 households are still on the waiting list for such housing.[9]

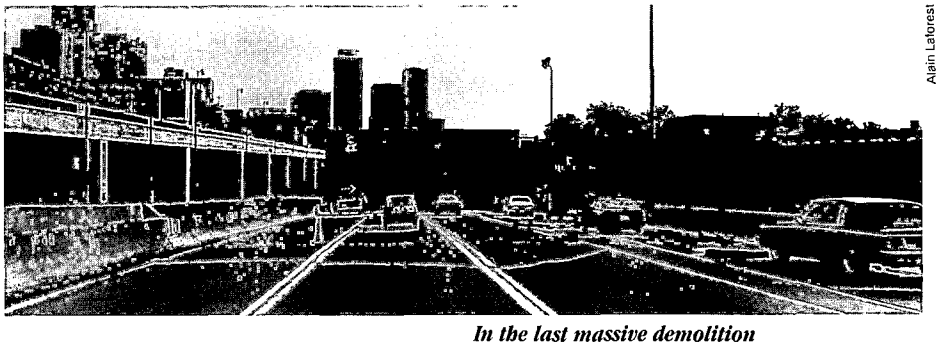
The third element of pressure on low-income households comes from a branch of CIDEM responsible for up-grading older commercial streets, through new street lighting, decorative paving and plantings, and creation of pedestrian malls on some streets. This process inevitably affects the costs and availability of formerly inexpensive housing above the shops.

This policy has generated strife between merchants (poor vs. rich) and between residents and merchants on such streets as Duluth and de la Roche where ground-floor restaurants create noise, fire hazards and garbage collection problems for residents of the upper floors.

It is time that a serious study be undertaken to document the social impact of these programs whose principal objectives are economic expansion. This so-called "back-to-the-city" movement is really a time-bomb with a long fuse, particularly during periods of economic recession, high unemployment and shrinking social services.■

Professor Anshel Melamed is co-ordinator of the Urban Studies Program at Concordia University, Montreal. John Schaecter and Marion Emo are his students.

[8] A Housing Department was created in 1968; joined with the Planning Department in 1971, and dissolved in 1979.
[9] Montreal Housing Offices, April, 1983



Alain Laforest

In the last massive demolition project, 1 500 dwellings were cleared for the Ville Marie expressway in 1971.

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La mobilité des personnes dans la région de Montréal

À pied au Plateau, à Sainte-Dorothée en auto

par Alain Duhamel

Les habitants de Sainte-Dorothée, dans l'île Jésus, comptent parmi les plus motorisés de la région métropolitaine avec, en moyenne, 1,51 automobile par logis. En plein jour, vous n'y verrez que peu d'automobiles... Car Sainte-Dorothée, comme la plupart des anciens villages de ville Laval, est aujourd'hui une banlieue dortoir où, pour se déplacer dans les méandres de ses rues, il faut, de toute nécessité, une automobile.

Il y a fort à parier que l'essentiel de ce parc automobile privé se trouve quelque part en ville, dans des terrains de stationnement du centre-ville ou dans une rue de l'un des quartiers centraux de Montréal, les moins motorisés de toute la région avec, en moyenne, moins d'une automobile par logis.

Des 5 311 déplacements pour des motifs de travail ayant leur origine à Sainte-Dorothée, un jour donné de la semaine, à peine 16% avait leur destination dans cette partie de l'île Jésus. Plus de la moitié des déplacements avait pour destination l'île de Montréal et, pour la majorité de ceux-ci, un quartier du centre de Montréal.

Portrait des déplacements

Ce portrait des déplacements des habitants de Sainte-Dorothée, semblable à plusieurs égards à celui des autres banlieusards de l'agglomération montréalaise, provient des données de l'enquête Origines-destinations de la Commission de transport de la Communauté urbaine de Montréal (CTCUM). Il s'agit d'une enquête conduite en 1982 auprès de 75 000 logis sur les déplacements de près de 200 000 personnes dans la grande région de Montréal, de Verchères à Châteauguay, sur la rive sud, de l'Assomption à Oka, sur la rive nord et jusqu'à Hudson vers l'ouest.

C'est la quatrième enquête Origines-destinations de la CTCUM depuis 1970, enquête menée de quatre en quatre ans. Les résultats obtenus composent un portrait fiable des déplacements de toute nature et par tous les modes pour une journée typique de la semaine, en automne. En même temps qu'ils livrent des données essentielles aux transporteurs publics, les résultats de l'enquête, on le conçoit bien, servent aussi à l'analyse, dans la perspective de la mobilité des personnes, de la qualité de vie dans l'agglomération.

Plus on s'éloigne du centre-ville de Montréal, plus l'automobile s'impose comme le principal mode de transport, même dans les quartiers situés à quelques minutes d'une ligne de métro, d'un train de banlieue ou d'un autobus express. Plus on s'approche du centre-ville, plus le transport en commun et la marche à pied deviennent la façon habituelle et commode de se déplacer.

Or, c'est aussi dans les villes de banlieue de la périphérie que l'on trouve les densités d'occupation les

moins élevées, le plus grand nombre de propriétaires, de maisons unifamiliales et de voitures. À l'inverse, dans les quartiers du centre, on trouve habituellement des densités d'occupation plus élevées, une majorité de locataires, le plus d'habitations multifamiliales et le moins d'automobiles.

Revenons à Sainte-Dorothée, un quartier de Laval qui profite le plus des programmes de relance de la construction résidentielle. Il y a presque autant de foyers (2 024) qui possèdent deux automobiles ou plus que de foyers qui en possèdent une seule (2 057). Près de 70% de tous les déplacements s'effectuent en automobile, contre 17% en autobus et seulement 1,66% en train, bien qu'il y ait un train de banlieue quotidien qui relie ce quartier de Laval au centre-ville de Montréal. Pour les fins de l'enquête Origines-destinations, le territoire de Sainte-Dorothée, comprenant aussi Laval-sur-le-lac, avait une superficie de 22,45 kilomètres carrés où habitaient 14 201 personnes (3,26 personnes par logis).

Dans le Plateau Mont-Royal, juste au nord de la rue Sherbrooke, l'enquête Origines-destinations montre qu'une majorité des logis (20 748 sur 36 632) n'ont aucune automobile. Dans ce quartier du centre de Montréal, bien connu pour ses balcons et escaliers extérieurs, plus de 27% des déplacements se font à pied et 37% en autobus ou en métro, contre à peine 24% en automobile. Il y a moins de personnes par logis (2,23) au Plateau Mont-Royal que dans la banlieue de Sainte-Dorothée, mais il y a neuf fois plus de logis sur un territoire trois fois plus petit.

Contraste des comportements

Le contraste entre le Plateau Mont-Royal et Sainte-Dorothée est frappant, mais il n'a rien d'étonnant dans le contexte de l'agglomération montréalaise. L'un et l'autre quartier offrent des styles de vie urbaine bien différents et ne font pas appel aux mêmes valeurs culturelles. "Une observation plus minutieuse des motifs de déplacements et des destinations nous permet de croire que les valeurs ont une incidence sur le choix d'un lieu de résidence et que le lieu de résidence a un effet sur le choix modal" conclut Transport 2000, un organisme sans but lucratif voué à la promotion du transport en commun, dans une étude qu'il publiait cette année avec le concours du Secrétariat d'état du Canada (Stratégies de marketing du transport en commun, les facteurs influençant le citoyen du Montréal métropolitain dans le choix d'un mode de transport, janvier 1984).

Pour vivre à Sainte-Dorothée, il faut non seulement préférer les maisons unifamiliales, lesquelles constituent la quasi-totalité de l'inventaire des habitations, mais il faut aussi préférer l'automobile à tout autre mode de transport ou, tout au moins, se résoudre à la condition de navetteur...

La propriété d'une automobile dans le Plateau Mont-Royal devient un encombrement. Le territoire, construit densément (duplex et triplex dominent largement l'inventaire des habitations) au temps où le tramway suffisait à tous les déplacements hors du quartier, n'a, pour ainsi dire, pas de place pour les automobiles, même dans les ruelles que les résidants, encouragés en cela par l'administration municipale, transforment de plus en plus en espace vert (voir Habitat, vol. 26, nº 4, 1983, p. 36).

Le sondage de Transport 2000 permet de tracer le profil de l'automobiliste type et de l'usager du transport en commun. Le premier est le plus souvent un homme, marié, qui a de 9 à 12 ans de scolarité, dont le revenu familial se situe entre 18 000$ et 25 000$ par année; il s'agit le plus souvent d'un banlieusard, propriétaire de son logis. L'usager type du transport en commun se recrute le plus souvant parmi les francophones, les femmes, les célibataires, les personnes non-actives, à faible revenu, les jeunes et les résidents de la ville de Montréal et il est locataire de son logis. La population montréalaise reste, dans une proportion de 78%, locataire de son logis tandis que, dans la banlieue, la population, dans la proportion inverse, possède son logis.

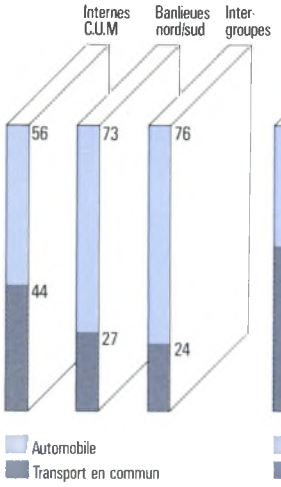
L'étude de Transport 2000, fondée sur les résultats d'un sondage d'opinion, montre que plus de la moitié des répondants montréalais était des usagers du transport en commun et que près de 70% des répondants de la périphérie voyagent en automobile. Les Montréalais, qui ne formaient que 58% de l'échantillon du sondage, comptaient pour 78% des usagers du transport en commun et pour 72% des piétons.

Ce résultat concorde avec les conclusions de la CTCUM. "Le transport en commun est beaucoup plus utilisé à l'intérieur de la Communauté urbaine de Montréal qu'à l'extérieur, affirme-t-elle dans son plan directeur pour les années 1984 à 1986. Les jours de semaine, 44% des déplacements internes à la CUM se font par transport public, tandis que les proportions sont de 27% et de 24% pour les déplacements à l'intérieur des autres groupes de municipalités et pour les déplacements inter-groupes.

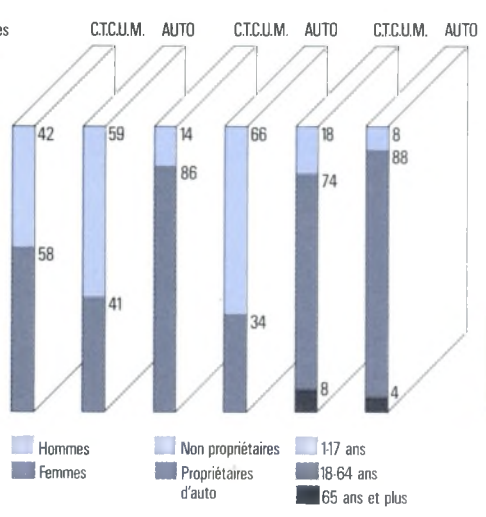
Mode de transport et style de vie

"Qu'il s'agisse des Montréalais qui aiment la proximité des activités du centre-ville ou des banlieusards qui apprécient la tranquilité de leur envi-

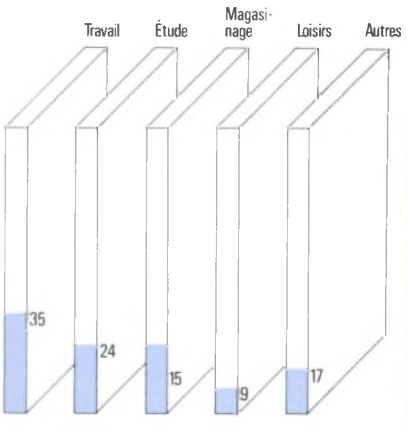
Distribution des déplacements entre l'automobile et le transport en commun (1982) En pourcentage (%)



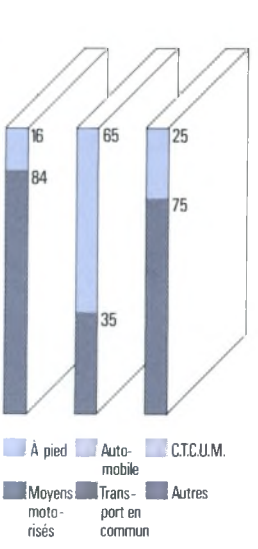
Répartition de la clientèle de la C.T.C.U.M. et de l'automobile (1982) En pourcentage (%)



Motifs des déplacements
En pourcentage (%)



Répartition des déplacements
En pourcentage (%)



Si plus de 70 % des banlieusards se déplacent en automobile, plus de la moitié des Montréalais utilisent le transport en commun.

Alors que les habitants du Plateau Mont-Royal se déplacent en métro, les banlieusards qui se rendent dans le centre-ville de Montréal en auto, stationnent leur véhicule dans un terrain de stationnement ou sur la rue.

À Sainte-Dorothée, un quartier de Laval, seulement 17 % des déplacements se font en autobus.

ronnement, peut-on encore lire dans l'étude de Transport 2000, le transport est pour chacun un moyen d'avoir accès au style de vie qui lui convient. Ce style de vie englobe les relations que l'individu établit avec sa famille et ses proches, son environnement physique, son environnement culturel et son travail."

Faudrait-il en conclure que l'accession à la propriété, dans l'esprit des gens, s'inscrit dans un schème de valeurs comprenant, entre autres choses, la possession et l'usage courant d'une automobile? Plus de 60% des répondants au sondage de Transport 2000 pensaient que les usagers du transport en commun n'avaient pas d'autre choix pour se déplacer.

Les constats de Transports 2000 et de la CTCUM se recoupent et donnent à réfléchir. À quelques minutes de marche d'une station de métro, dans le nord de Montréal, l'administration municipale a vendu à des entrepreneurs des superficies importantes de terrain où ils ont construit, surtout, des maisons unifamiliales à des prix accessibles à des catégories supérieures de revenus. On peut en déduire que la plupart des nouveaux habitants dans le vaste domaine Saint-Sulpice n'apporteront pas beaucoup de nouveaux clients à la CTCUM.

En comparant les résultats globaux de l'enquête Origines-destinations de 1978 et ceux de 1982, on constate que l'accroissement de l'offre de service en transport en commun, perceptible surtout en banlieue, n'a pas modifié les habitudes dans la grande région de Montréal. Le transport en commun, malgré les prolongements du métro, le service du train de banlieue et le régime de la carte mensuelle d'abonnement, beaucoup plus économique, ne compte toujours en 1982, comme en 1978, que pour un peu plus du tiers des déplacements. L'automobile, malgré la hausse de ses coûts d'utilisation, reste le mode de transport préféré.

"Toutes les études scientifiques concernant les facteurs qui affectent l'achalandage du transport en commun, affirme la CTCUM, ont montré que la tarification est moins importante pour la très grande majorité des clients que le niveau de qualité des services." Transport 2000 parvient à la même conclusion et y ajoute la perception que se font les gens de l'automobile, associée à la liberté et à la flexibilité, et du transport en commun, associé à des contraintes d'attente, de temps parcours et d'encombrement des véhicules.

Pour accroître leur clientèle, en périphérie des quartiers centraux et en banlieue, puisque c'est là qu'il y a le plus à gagner, les transporteurs publics devront s'initier à l'art de mettre en marché leurs services en faisant appel à des valeurs et à des perceptions semblables ou complémentaires à celles qui ont persuadé les citadins de déménager dans un pavillon de banlieue: disponibilité, facilité, rapidité, confort...

"Actuellement, affirme Transport 2000, des changements de valeurs s'opèrent dans notre société. Bon nombre d'individus sont davantage préoccupés de leur développement personnel et la culture, en général, joue un rôle de plus en plus important dans la poursuite de cet objectif. Le transport en commun, s'il veut prendre place dans le quotidien de sa clientèle devra tenir compte de ces nouvelles réalités. Le transport en commun, s'il veut se développer, ne doit pas être uniquement un moyen de se déplacer, au service d'une clientèle captive, il doit être, comme l'a été l'auto, un support aux divers choix qui composent le style de vie de chacun."■

Alain Duhamel est journaliste au quotidien *Le Devoir.*

Condominium Demand:

how the market evolved and changed

by Andrejs Skaburskis

In 1983, CMHC commissioned A. Skaburskis and Associates to carry out a major study of the factors affecting the market demand and the mortgage insurance risks associated with condominiums. The study carried out a number of tasks including the survey of condominium occupants in Halifax, Quebec, Trois-Rivières, Toronto, Mississauga, Saskatoon, Calgary, Kelowna and Vancouver. Interviewers contacted 3265 randomly selected occupants within a stratified (not random) sample of 195 condominium projects. The response was good with fifty-five per cent of the contacted households returning their questionnaires. Eighty per cent of the respondents were owner occupants.

The survey gained information on the owners' demographic, economic and housing characteristics. It found out why they left their previous housing, what types of housing they were looking for, what options they considered, why they bought a condominium rather than some other housing/tenure type, how satisfied they are with their purchase and what their future intentions are regarding housing purchases. The results of the analysis are described fully in Volume 7 of the *National Condominium Market Study: Demand Assessment*. This article presents a few of the key findings and shows how the condominium market evolved and changed during the 1970s.

Household Characteristics

The first national condominium survey was carried out in 1970, two years after strata-title or condominium units were first introduced in Vancouver and Toronto*. The survey covered the fifty projects occupied at the time and showed the typical owner as being the head of a young household with children and earning about the same as the average Canadian family. In 1970, eighty per cent of the buyers were under forty. In 1983, seventy per cent were over forty, half were over fifty and twenty per cent were sixty-four or older. As the condominium market evolved, the age profile of the owners shifted to include a much higher proportion of middle-aged and elderly households.

With the increase in average age came a reduction in the average size of condominium buyers' households. The 1970 average household had 3.15 people and this number had dropped to 2.18 by 1983. The large decline was, in part, due to a significant increase in the proportion of single-person households buying condominiums. In 1970, four per cent of the owners were single, but in 1983, one in four owners was single and three out of the four single owners were over forty years of age. The 1981 Census shows that only ten per cent of all homeowners were single and this statistic helps highlight the special needs met by the evolving condominium sector. During the 1970s, condominiums became the most attractive homeownership option for the older single-person household.

The increase in average age and the decline in household size of condominium owners was accompanied by a decrease in the proportion of owners that had dependent children living with them. Sixty per cent of the 1970 condominium households had children under 19 years of age but by 1983, the proportion had dropped to twenty-six per cent. The proportional decline, however, was accompanied by an increase in the absolute number of families (one or two adults with children) buying strata-title units. Condominiums can, therefore, still be considered suitable housing for some families. Some projects are still being designed to meet the needs of families being ground-oriented and providing more space than the average unit. The observed changes in demographic profiles are due primarily to the rapid absorption of condominium units by the elderly and over-forty adult households.

The observed changes in demographic profiles are due, in part, to changes in the type of condominium projects developers built and promoted. The shift in profile is also the result of differences in the rates at which older and younger households adjust and absorb a new housing option. Older householders are less mobile and take longer to reveal their demand for a new housing or tenure option. The survey found that homeowners over 45 lived an average of thirteen years in their previous dwelling before moving to their condominium. It should, therefore, take longer than thirteen years from the time condominiums are first introduced to a local market until the time the older cohort (age group) fully reveals its demand for strata-title units. The younger owners lived, on average, less than four years in their previous dwelling, showing that a new housing option aimed at this

*Murray Blankstein, et al., *National Survey of Condominium Owners*, Condominium Research Associates, Toronto, December 1970.

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group can become established in a much shorter time period.

The 1970s served as the introductory period for the condominium concept in most Canadian cities. The markets in Toronto and Vancouver where the concept first started have had enough time to mature and expand to include a broad range of households. Most of the condominium markets in the other cities surveyed have not yet reached maturity, a stage in which new condominiums can be absorbed only as a result of further changes in population size, housing preferences, income levels or prices. In most Canadian cities, the demand for condominiums will therefore continue to expand until all members of the older cohort have had a chance to consider the condominium option and reveal their demand.

Income and Housing Prices

The statistics in Table 1 show the nine condominium markets to vary significantly in price and income. The large variation precludes the characterization of a typical condominium buyer or market and illustrates the broad range of households that are accommodated by this sector.

A comparison of the purchase price, inflated to 1983 dollars, with the owner's estimate of their unit's current market value shows that condominium prices are quite stable in the surveyed cities. Price fluctuations that have been observed in young USA markets were not documented by the 1983 survey. The relative stability in condominium prices and market values suggest that most of the young Canadian markets included in the survey have broken through their introductory period and are on their way to achieving a stable long-term equilibrium between supply and demand.

The comparison of the owners' monthly outlays on housing with their income level shows that the condominium purchase is not placing a great financial strain on the buyers in most cases. While the average 18 per cent expenditure to income ratio has increased slightly since the purchase date because a sizeable proportion of the buyers retire after their purchase, the housing option is still affordable to most buyers. The relatively low expenditure to income ratios further suggest that the buyers did not have "their backs up against the wall" when buying their unit. Most could have spent more and still have had a reasonable amount of money left over for other expenditures. The purchase of a condominium is clearly not an act of desperation by households who believe they have no other affordable housing option.

Reasons People Buy Condominiums

The 1983 survey found out why people buy condominiums by asking about the events that took place at the time the household decided to move from their previous residence; why they decided to leave their previous dwelling, and why they decided to buy a condominium rather than some other housing/tenure option.

The findings show that changes in household size were associated with one out of every three condominium owners' decisions to leave their previous dwelling. Twenty-six per cent of the household changes were due to children leaving home, twenty per cent were due to marital separation, thirteen per cent were caused by a death, and eight per cent had just left their parents' home.

Other changes associated with decisions to re-enter the housing market were less prevalent: sixteen per cent of condominium buyers were affected by rent increases, ten per cent by job location changes, and another ten per cent had a change in income. Demographic changes are the most apparent factors determining condominium demand. Increases in the proportion of empty-nester households within a local market is the single most important indicator of imminent increases in the demand for condominiums.

Respondents were asked directly why they left their previous homes and re-entered the market as potential

Table 1
Average purchase price, market value, income and monthly housing expenditures for the nine surveyed cities

(all statistics in 1983 dollars)

	Purchase Price per Square Metre	Purchase Price	Estimated Market Value	Income of Buyers	Current Monthly Housing Expenditure
Halifax	$ 559.72	$ 60 204	$ 63 868	$ 34 678	$ 506
Quebec	688.89	72 054	73 178	52 940	728
Trois-Rivières	538.20	43 867	41 316	37 438	489
Toronto	1130.21	143 979	151 950	60 840	716
Mississauga	624.31	79 187	72 354	37 727	673
Saskatoon	699.65	80 910	81 334	35 251	671
Calgary	893.40	120 747	88 049	36 262	812
Kelowna	731.95	74 083	75 502	23 818	394
Vancouver	1011.81	112 587	123 766	43 031	562
Average	818.06	91 257	90 596	41 675	629
Number of responses	943	1 077	1 006	763	870

1 Spacious, ground-oriented row or townhouse units meet the needs of families.

2 More than a third of present owners bought a condominium because they couldn't afford a single-family house.

3 First-time home buyers who choose condominiums are highly price-conscious and concerned with housing quality.

4 Half of the owners interviewed considered their project's location as the single most important factor in their decision to buy their unit.

buyers, and Table 2 presents their answers. The desire to enter the homeownership market was the most frequently mentioned factor. It affected half of all condominium buyers. Changes in economic circumstances that stimulate the demand for homeownership tenure will increase the demand for condominiums.

The quest for fewer upkeep and maintenance responsibilities affected one in three condominium buyer's decisions to move away from their previous home. A large proportion of condominium owners' decisions to re-enter the housing market were affected by the availability of condominium attributes. This finding shows that the introduction of condominiums into a local market can by itself stimulate mobility and induce households to re-enter the housing market as potential condominium buyers. Developers are not only affected by shifts in demographic profiles and economic circumstances but they change environments and stimulate market activity by introducing new project types and increasing the scope of available housing options.

Table 3 tells why the survey respondents bought a condominium rather than some other housing/tenure option. The reduced upkeep and maintenance associated with condominiums attracted most buyers. Condominium facilities and amenities were important considerations for less than half the buyers. In addition to being attracted by reduced upkeep and maintenance, the attributes most often found in condominiums, many were attracted primarily by price considerations: more than a third of the present owners say they bought a condominium because they could not afford a single-family house.

The demand for condominiums is generated by two types of factors: by households wanting the convenience and physical attributes of condominiums and by buyers who want a single-family detached house and consider the condominium their second-best option. The survey showed that these buyers were still insisting on an improvement in their housing as a result of their condominium purchase. Although many bought condominiums because they wanted to become homeowners but could not afford a single-family house, they were not willing to reduce their housing quality in order to become homeowners. This explains why many say they could not afford to buy a single-family detached house despite the fact that some single-family houses could be found within the surveyed cities at prices below those of condominiums.

A review of the options households considered when they were last looking for a place to live and the analysis of data of the respondents' perception of choices within their market, support the conclusion that the first-time home buyers who enter the condominium sector are not only highly price-conscious but are also highly concerned with housing quality and insist on an improvement over their previous rental accommodation. The quest for homeownership is, by itself, not a sufficient reason tenants re-enter the housing market and buy condominiums.

Table 2
Proportion of owners listing the following factors as their first, second or third reason for deciding to leave their previous dwelling

1. Wanted to own rather than rent	50.0%
2. Wanted less upkeep and maintenance	34.1
3. Wanted larger unit	25.6
4. Wanted smaller unit	23.7
5. Wanted more security when away	21.9
6. Could afford better place to live	16.5
7. Wanted better neighbourhood conditions	12.7
8. Dissatisfied with previous unit/landlord/tenants	12.5
9. Wanted to be closer to work	10.8
10. Wanted to be closer to shops, theatres, services	10.6

Table 3
Proportion of owners listing the following as their first, second or third reason for buying a condominium

1. Less maintenance, upkeep, responsibility	79.4%
2. Wanted condominium facilities, amenities	44.4
3. Could not afford to buy a single detached house	37.3
4. Thought condominium locations better	30.4
5. Wanted condominium life style	26.3
6. Attractive financing available	21.8
7. Thought that better quality of units were to be found in condominiums	14.3

Housing Characteristics Sought by Condominium Buyers

Respondents were asked to rank the relative importance of location, investment value, project and unit characteristics when selecting their condominium. Half the owners interviewed considered their project's location as the single most important factor in their decision to buy their unit. Twenty-two per cent considered the likely investment value as the most important factor affecting their

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choice among condominiums. Twenty per cent considered primarily the unit features, and only seven per cent thought that project features were the most important consideration in selecting their unit. Respondents were also asked about the importance of specific locational, unit and project attributes and the answers are summarized in Tables 4, 5 and 6.

Satisfaction and Commitment

Most condominium buyers are satisfied with their purchase. Thirteen per cent of the respondents say their experience with condominiums turned out to be "much better" and another twenty-five per cent consider the experience "better" than the expectations they had at the time they bought their unit. Ten per cent were disappointed and say that their initial expectations were not satisfied. The analysis of the responses showed high-rise unit owners to be, on the whole, the most satisfied group.

Sixty per cent of the present owners would stay within the condominium sector should they have to move. The most committed owners were living in high-rise units with eighty per cent saying they would move to another condominium if they had to move out of their present unit. Only twenty-one per cent of the households with preschool children would buy another condominium and most of these households bought their unit because they could not afford a single-family house. Since a large proportion of families report high levels of satisfaction with their condominiums, their wanting to move out of this sector is related more to changing aspirations, needs and income levels than to particular problems associated with condominiums.

Table 7 lists the reasons that would make owners want to leave their present condominiums. The households using their condominium as a stepping stone were identified again as forty per cent say they would leave their condominium to buy their preferred option–the single-family house. A larger proportion, however, say they would leave their present unit to buy another condominium in a better location. The condominium market, therefore, appears to be composed of two quite distinct segments: one considering the condominium as a satisfactory "second best" housing option until a single-family house becomes affordable and another group considering the condominium option as best satisfying their current and future housing needs.

Condominium Sub-Markets

The answers to questions asking about the owners' demographic and economic characteristics, their housing preferences and present and past purchases, their search patterns, satisfaction levels and future intentions were examined simultaneously to reveal the principal components of the condominium market. The statistical analysis showed the market to be divided into two vaguely defined sub-markets. One will be called the "first-time home buyer" submarket even though it includes some households who were homeowners before buying their condominiums. The other sub-market consists mostly of the older, adult household who left their previous home to buy a smaller unit within a condominium project. Table 8 presents the key characteristics distinguishing the two sub-markets.

The *First-Time Home Buyer* submarket is created by the younger and larger households entering the homeownership market for the first time and buying condominiums primarily because they cannot afford

Table 4
Proportion of households identifying specific locational attributes as being their first, second or third most important locational consideration when selecting their condominium

1. Near work	41.2%
2. Near transit	36.0
3. Near shops	35.7
4. Near downtown	27.4
5. Scenic views	24.3
6. Life style	22.6
7. Near friends	21.2
8. Near school	18.5
9. Near parks	16.4

Table 5
Proportion of households identifying specific unit features as being their first, second or third most important unit features affecting their selection of their condominium

1. Construction	48.7%
2. Floor plan	43.5
3. Large rooms	26.7
4. Scenic views	21.6
5. Large patio	19.7
6. Room size	18.6
7. Laundry	15.2
8. No. of bathrooms	14.8
9. Fireplace	14.8
10. Storage	14.1
11. Unique design	9.0
12. Appliances	7.5

Table 6
Proportion of households identifying specific project attributes as being their first, second or third most important project attribute when selecting their condominium

1. Appearance	66.2%
2. Landscaping	41.5
3. Financing	24.4
4. Adult oriented	23.3
5. Recreation facilities	20.5
6. Parking	19.8
7. Security	18.2
8. Prestige	15.9
9. Investment	10.1
10. Developer reputation	9.8

Source: Survey data for owner-occupied units.

5 Only 21 per cent of households with preschoolers would buy another condominium; most of these households bought their unit because they couldn't afford a single-family house.

6 Residents of highrise condominiums considered these projects best satisfy their housing needs. Older home buyers tend to buy these units.

7 The older home buyer is attracted to the physical security offered by condominiums and their facilities and amenities.

single-family houses. They plan to move and buy their single-family house when they can afford it. Their reported satisfaction with condominiums does not differ from the satisfaction levels expressed by the older households.

The *Older Home Buyer* sub-market is created by the smaller and older household moving away from their single family homes. Most owned their previous home and are attracted to condominiums by the physical security offered by the projects and by condominium facilities and amenities. The owners within this sub-market plan to stay the longest in their present unit, and, should they move, they would most often go to another condominium in a better location.

The two sub-markets are not distinguished by the households' average income levels or the size of units they buy. The younger buyers, however, buy larger units than they previously occupied, and have greater monthly housing expenditures than the older households. The first-time buyers have the highest housing expenditure to income ratios. The older households use the equity developed in their previous homes to buy the more expensive condominiums. The older households, on average, buy $114 000 units with $68 000 downpayments. The younger households buy $79 000 units with $26 000 downpayments.

The main distinguishing characteristics of the two sub-markets are not due to price difference, but due to the building type preferences of the two groups of buyers: the "first-time home buyer" segment tends to focus on row and townhouse condominiums while the people in the "older home buyer" sub-market tend to buy high-rise units.

Conclusions

The early Canadian condominium market attracted primarily the younger households who were entering the homeownership market for the first time. The market demand generated by this type of household is highly sensitive to interest rates and to the price and availability of other homeownership options. A drop in the price of single-family houses or an increase in interest rates will significantly reduce the demand for condominiums within this sub-market. A relative drop in housing prices will further reduce the demand for new, medium-priced row and townhouse condominiums by increasing the number of existing units that are put up for sale by owners in search of their most preferred housing type–the single-family house.

The most stable condominium sub-market is created by the older households who decided to leave their owner-occupied single-family houses after their children have moved out or just before the main wage earner decides to retire. These households are attracted by the security and facilities offered by condominiums. They tend to buy units in high-rise projects and tend to be satisfied with their purchase. They plan to stay in their units, and if they have to move they will stay in the condominium sector.

Market demand for the higher density condominiums offering location, security and facilities should, therefore, continue to expand as the population ages and proportionally more households enter the empty nester stage in their life cycles. The high-rise condominium sub-market, once established and tested in a city, is the most stable and least risky of the condominium sub-markets.■

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Table 7
Reasons owners would move from their condominiums

1. Change location	51.6%
2. Buy a single family house	38.9
3. Realize increased value	34.2
4. Upgrade dwelling quality	14.9
5. Buy a larger condominium	14.0
6. Dissatisfied with condominium	13.2
7. Reduce housing cost	11.5
8. Buy a smaller condominium	9.2
9. Rent an apartment	6.8
10. Rent a single family house	3.7

Table 8
Indicators of sub-market composition

	1 Previous Homeowners Over 45 years Old	2 Moving to Become Homeowners	3 Sub-market Mix
Halifax	29	58	Young
Quebec	34	44	Balanced
Trois-Rivières	28	60	Young
Toronto	38	48	Balanced
Mississauga	22	61	Young
Saskatoon	41	53	Balanced
Calgary	30	47	Young
Kelowna	53	29	Elderly
Vancouver	41	46	Balanced

Le marché du crédit hypothécaire à l'habitation au Canada:

un marché de plus en plus concurrentiel

par Henri-Paul Rousseau

Le marché du crédit hypothécaire à l'habitation a connu au cours des années récentes des transformations radicales. La demande est plus faible et plus prudente qu'auparavant. Plusieurs produits nouveaux sont apparus. Le contrat hypothécaire typique n'existe plus. Il a été remplacé par une diversité de contrats. Les institutions sont non seulement en concurrence entre elles mais les prêteurs privés sont réapparus sur le marché. Les parts de marché des institutions se sont modifiées: Les banques et les caisses d'épargne et de crédit ont depuis dix ans réussi à augmenter sensiblement leur part de marché aux dépens des sociétés de fiducie et de prêts hypothécaires et des compagnies d'assurance-vie. La concurrence est vive et l'emprunteur a plus que jamais intérêt à magasiner. Voyons tout cela de plus près.

Une demande à la fois plus faible et plus prudente

Dans les années 60, et jusqu'à la fin des années 70, la demande pour le prêt hypothécaire a connu une très forte croissance. Le nombre virtuel d'acheteurs d'une première maison a augmenté à un rythme régulier au fur et à mesure que la génération de ceux qui sont nés pendant l'explosion démographique d'après-guerre a atteint l'âge de se joindre à la main-d'oeuvre active et de former un ménage. De plus, la croissance du revenu personnel a permis à ces nouveaux ménages de prendre des engagements financiers importants. La hausse des prix des maisons relativement à l'ensemble des prix des autres biens et services a permis à plusieurs d'encaisser des gains de capital importants et non taxables lors de la vente de leur propriété, au moment même où les taux d'imposition augmentaient. Dans les années 70, les faibles taux d'intérêt, compte tenu des taux d'inflation élevés, ont rendu l'emprunt hypothécaire attrayant. Enfin, les gouvernements des Provinces et du Canada ont à plusieurs reprises encouragé l'achat d'une maison. De 1960 à 1979, la demande pour le prêt hypothécaire a donc été soutenue. Par exemple, de 1974 à 1979, le taux de croissance annuel moyen de l'encours des prêts hypothécaires consentis par les principaux prêteurs a été de 20%.

Dès 1979, la demande a chuté parce que la plupart des facteurs positifs qui avaient propulsé la demande n'étaient plus aussi forts et parce que d'autres facteurs négatifs étaient apparus. En effet, le ralentissement de la poussée démographique d'après-guerre et la faiblesse de la croissance économique ont concouru à ralentir la demande pour le prêt hypothécaire. De plus, la récession de 1981-1982, l'apparition de taux d'intérêt élevés et très variables ainsi que le ralentissement de l'inflation ont incité plusieurs emprunteurs éventuels à retarder leur achat. La hausse des taux d'intérêt à 17% en avril 80 et à 21% en septembre 81 a facilement convaincu les emprunteurs hypothécaires de la nécessité et de l'avantage de payer plus rapidement leur dette hypothécaire en remboursant avant échéance ou en raccourcissant la période d'amortissement de leur emprunt. Les nouveaux emprunteurs ont eu tendance à augmenter leur comptant sur leur maison. En fait, de 1980 à 1983, le taux de croissance des prêts hypothécaires à l'habitation consentis par les institutions n'a été que de 6% en moyenne par année. *C'est 14% de moins que le taux enregistré entre 1974 et 1979.* De plus, ce taux aurait été plus faible encore si, au cours de la récession de 1981-1982, les gouvernements fédéral et provinciaux n'avaient pas soutenu la construction domiciliaire par de multiples programmes d'aide et de subventions.

Pour de nouveaux produits de plus en plus diversifiés

La demande pour le prêt hypothécaire n'a pas seulement ralenti, elle s'est également modifiée. Le marché du crédit hypothécaire à l'habitation n'a pas échappé aux innovations financières qui ont caractérisé les marchés financiers nord-américains depuis 1979. En fait, la déréglementation des institutions financières aux États-Unis, et dans une moindre mesure au Canada, le ralentissement de l'inflation en Amérique du Nord ainsi que la très grande variabilité des taux d'intérêt et leur niveau record à la hausse sont autant de facteurs qui ont contribué à l'arrivée de nouveaux produits dans le domaine du crédit hypothécaire.

D'abord, plusieurs emprunteurs ont été littéralement "coincés" par la hausse des taux d'intérêt en 1980 et 1981. L'effet de ces taux d'intérêt records sur les paiements mensuels était pour plusieurs insoutenable.

Les institutions ont imaginé plusieurs techiques pour réduire les paiements mensuels initiaux tout en augmentant la dette. Le contrat à paiements graduels, le contrat indexé à l'indice des prix, l'augmentation de la dette au moment du renouvellement du contrat sont autant de moyens qui ont été essayés pour retarder les effets de la hausse des taux d'intérêt sur le paiement mensuel.

De plus, l'affaiblissement de la demande, le comportement plus prudent des emprunteurs et l'apparition d'une multitude de nouveaux produits ont rapproché le marché du crédit hypothécaire à l'habitation des grandes tendances des marchés financiers nord-américains qui sont caractérisés par plus de flexibilité sur chaque produit et une plus grande diversité de produits.[1] Nous sommes très loin du contrat à taux fixe à paiements mensuels égaux pendant 25 ans. De 1969, année de l'entrée des prêts à cinq ans au Canada, à 1979, année du changement d'orientation de la politique monétaire américaine, un tout nouveau marché a été créé.

[1] Pour une analyse plus détaillée de la demande pour le crédit hypothécaire voir la Revue de la Banque du Canada du mois d'octobre 1984.

Sur un marché plus concurrentiel

Le tableau, publié par la Banque du Canada dans sa revue du mois d'octobre 1984, permet de constater l'évolution des parts de marché des principaux prêteurs de 1974 à 1984. Celle des banques et de leurs filiales de prêts hypothécaires est passée de 22,0 à 32,6%, résultat d'une croissance de 26% en moyenne de 1974 à 1979 et de 9% de 1980 à 1983. Celle des Caisses populaires et des "Credits Unions" a grimpé de 11,2 à 15,3%, résultat d'une croissance de 26% entre 1974 et 1979 et de 7% entre 1980 et 1983. Ces gains ont surtout été réalisés au détriment des sociétés de fiducie et de prêts hypothécaires et des compagnies d'assurance-vie. La part des premières est passée de 26,8 à 30,6% entre 1973 et 1984 alors que celle des assureurs-vie a diminué de 16,8 à 10,4% pendant cette même période.

Les raisons qui expliquent cette évolution sont multiples. Qu'il suffise de rappeler qu'au début des années 60 les banques étaient quasi-absentes du marché du crédit hypothécaire à l'habitation qui était alors largement assuré par les sociétés de fiducie et de prêts hypothécaires et les assureurs-vie. Vingt-cinq ans plus tard, les banques fournissent près du tiers de l'offre de prêts consentis par les institutions. Cette tendance à long terme trouve ses causes dans les revisions de la Loi des banques de 1967 et de 1980 et l'évolution de la capacité concurrentielle des banques au cours de ces vingt-cinq années. Il serait trop long d'énumérer ici l'ensemble de ces facteurs. L'évolution récente de 1979 à 1984 peut toutefois servir à illustrer comment les facteurs juridiques, fiscaux et financiers peuvent momentanément influencer la capacité concurrentielle d'un groupe d'institutions par rapport à un autre. De 1979 à 1984, la part de marché des banques et de leurs filiales hypothécaires est passée de 29,2 à 32,6% alors que celle des sociétés de fiducie et de prêts hypothécaires a diminué de 32,1 à 30,6%. Celle des Caisses populaires et des Credit Unions a grimpé de 14,8 à 15,3% alors que les assurances-vie ont maintenu leur part à 10,4% du marché. Les autres prêteurs ont vu leur part diminuer (Voir le tableau).

Encours des prêts hypothécaires à l'habitation des principaux prêteurs au Canada

		Changement annuel en %					Répartition en %		
	Millions de $ au 31 mars 1984	1974-79	1980-83	1982	1983	1984 Q1	Déc. 1973	Déc. 1979	Mars 1984
Sociétés de fiducie ou de prêt hypothécaire (non compris les filiales hypothécaires des banques à charte)	30,7	18	5	2	8	7	36,8	32,1	30,6
Banques à charte (y compris leurs filiales hypothécaires)	32,8	26	9	1	10	10	22,0	29,2	32,6
Total partiel	63,5	21	7	2	9	9	58,8	61,2	63,2
Caisses populaires et crédit unions[1]	15,4E	26	7	1	20	13	11,2	14,8	15,3
Compagnies d'assurance-vie	10,4E	11	7	5	10	– 7	16,8	10,4	10,4
Caisses de retraite	7,8E	22	5	3	2	7	7,5	8,2	7,8
Sociétés de placement	1,2	27	– 5	– 15	11	12	1,3	1,8	1,2
Sociétés de financement ou de prêt à la consommation[2]	0,7	14	– 7	– 5	– 13	– 13	1,8	1,3	0,7
Sociétés fiduciaires de placement immobilier	0,2	21	– 26	– 44	– 39	– 23	0,7	0,8	0,2
Autres institutions financières[3,4]	1,2	18	– 1	– 10	3	21	1,8	1,6	1,2
Total	100,5E	20	6	1	10	7	100,0	100,0	100,0
SCHL	7,8	6	– 1	–	– 1	– 3			

[1] Comprend les institutions locales et leurs centrales.
[2] Depuis le dernier trimestre de 1981, les filiales des banques à charte ne font plus partie du groupe des institutions de financement des ventes ou de prêt à la consommation.
[3] Comprend tant les prêts hypothécaires à l'habitation que les autres prêts hypothécaires.
[4] Comprend les banques d'épargne du Québec et les compagnies d'assurance-biens et d'assurance contre des risques divers.

Source : *Revue de la Banque du Canada*, octobre 1984.

En novembre 1980, le Gouvernement du Canada a adopté la nouvelle loi sur les Banques qui était attendue depuis 1977. Cette vaste réforme a eu pour effets, entre autres, de réduire le coefficient de réserves de liquidité des banques et de leur permettre de créer des filiales de prêts hypothécaires. Avant novembre 1980, les banques, lorsqu'elles consentaient des prêts hypothécaires, ne pouvaient pas "librement" inclure ces prêts hypothécaires dans le bilan de leurs filiales. Lorsqu'en 1980 la loi a été changée, les filiales des banques ont alors commencé à "acheter" le portefeuille de prêts hypothécaires de leurs banques-mères.

Or, bien que les sociétés de prêts hypothécaires gardent des réserves de liquidité en contre-partie des dépôts qu'elles acceptent du public, ces réserves, contrairement à celles des banques, ne sont pas maintenues en billets de la Banque du Canada ou en dépôts à la Banque du Canada qui ne rapportent pas d'intérêt. Au contraire, les réserves de liquidité de ces institutions rapportent des intérêts. Ainsi, en déplaçant le portefeuille de prêts hypothécaires de la banque-mère vers la filiale, les banques ont pu réduire le coût de leurs réserves de liquidité. De plus, en confiant la gestion du portefeuille de prêts hypothécaires à une institution spécialisée, les banques pouvaient le considérer comme un centre autonome de profits et atteindre un meilleur appariement des échéances entre les éléments de l'actif et du passif de l'institution. Enfin, la vente du portefeuille de prêts hypothécaires, en 1981 et 1982 et 1983, a pu être faite à des périodes où les taux d'intérêt élevés ont permis aux banques-mères d'enregistrer des pertes de capital importantes. Ces pertes de capital de la banque-mère au profit de sa filiale ont ainsi assuré aux banques la possibilité de différer des impôts et de réduire leur taux effectif de taxation. Donc, ces raisons juridiques, financières et fiscales expliquent pourquoi le portefeuille de prêts hypothécaires des banques et une partie du portefeuille de leurs concurrents se sont déplacés très rapidement vers des filiales des banques. L'encours des prêts hypothécaires des filiales des banques est passé de 7,9 milliards de dollars à la fin 1980 à 27,2 milliards de dollars à la fin de 1983! Il a été multiplié par quatre.

Au total, ces nouveaux avantages juridiques, financiers et fiscaux ont haussé la rentabilité des prêts hypothécaires pour les banques en comparaison de la rentabilité plus faible de leurs prêts internationaux (la crise de l'endettement international) et de leurs prêts à certains secteurs industriels et commerciaux canadiens (le secteur pétrolier par exemple). Les banques ont donc trouvé dans le crédit hypothécaire un débouché rentable pour leur fonds. Cette nouvelle rentabilité leur a permis de mieux concurrencer leurs compétiteurs et probablement d'innover plus rapidement afin de satisfaire la demande changeante des emprunteurs.

De leur côté, les sociétés de fiducie et de prêts hypothécaires non bancaires ont connu une croissance de leurs prêts hypothécaires moins rapide que celle des banques parce qu'ayant un actif plus spécialisé dans le prêt hypothécaire, elles ont en général été lourdement frappées par la plus grande variabilité des taux d'intérêt. En 1979, 1980 et 1981, plusieurs institutions de fiducie et de prêts étaient davantage préoccupées par leur problème de non-appariement de leur actif et de leur passif que par la nécessité d'offrir rapidement des nouveaux produits. D'ailleurs, la recherche d'une meilleure rentabilité força plusieurs d'entre elles à maintenir des taux d'intérêt moins concurrentiels que ce qu'elles auraient souhaité.

Les Caisses d'épargne et de crédit ont réussi à augmenter légèrement leur part de marché parce que, contrairement aux sociétés de fiducie et de prêts, certaines d'entre elles ne sont pas spécialisées dans le prêt hypothécaire, de sorte qu'elles n'ont pas subi avec la même ampleur les conséquences d'un mauvais appariement des échéances des deux côtés de leur bilan. De plus, contrairement aux banques, elles n'étaient pas impliquées dans les problèmes d'endettement international et dans le secteur pétrolier. De plus, elles possédaient depuis toujours l'avantage de toucher des intérêts sur leurs réserves de liquidité et de faire face à des taux de taxation plus faibles que les institutions non coopératives. Enfin, le programme de 6 et 5% du gouvernement fédéral a permis à plusieurs caisses de réduire leurs coûts en main-d'oeuvre qui avaient eu tendance à augmenter très rapidement dans les années 70. Les programmes gouvernementaux comme Corvée-Habitation et la subvention de 3 000$ du gouvernement fédéral ont sûrement aussi contribué à l'augmentation de leur volume d'affaires, à tout le moins au Québec.

Où l'emprunteur a intérêt à magasiner

Il faut retenir de tout ceci qu'en 1984, les principaux prêteurs hypothécaires font face à des contraintes juridiques, réglementaires et fiscales beaucoup plus semblables que ce n'était le cas dans les années 60 et que, devant l'arrivée des nouveaux produits et une demande plus faible et plus prudente, le marché du crédit hypothécaire est de plus en plus forgé par les forces du marché où le rôle de l'État y est plus faible. La concurrence se fait entre institutions et prêteurs privés sur plusieurs variables (taux d'intérêt, terme, amortissement, frais, etc...) et l'emprunteur a plus que jamais intérêt à magasiner. C'est à cette condition qu'il sera gagnant dans cette nouvelle conjoncture.■

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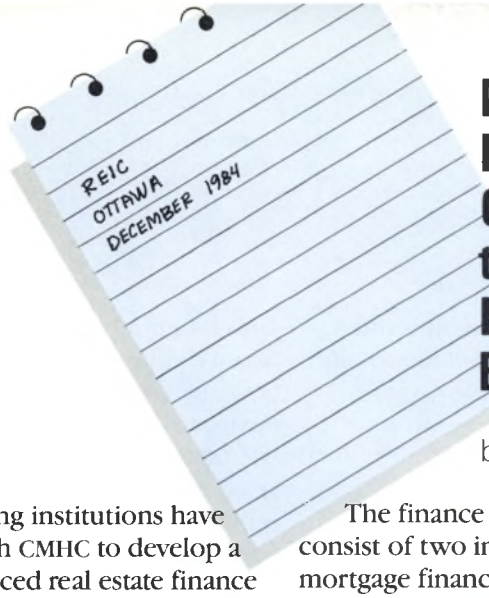

New Finance Courses to Expand Lenders' Expertise

by Vivian Astroff

Canada's lending institutions have teamed up with CMHC to develop a series of advanced real estate finance courses. The finance courses are part of a national educational program for real estate practitioners leading to certification by the Real Estate Institute of Canada (REIC). Those who have successfully completed the education program, satisfied the experience qualification required by the Institute and agreed to abide by its code of professional standards, will be awarded the designation Certified in Real Estate Finance (CRF).

Development of a certification program has had the wide support and participation of the various sectors of the mortgage industry including banks, trust and life insurance companies, credit unions, and the Mortgage Insurance Company of Canada (MICC). An advisory committee consisting of representatives of various lending associations has been co-operating in the establishment of both the educational program, and the CRF designation as the national standard for professionals involved in real estate finance, mortgage underwriting and administration.

Members of the Finance Program Advisory Committee are: Ted Stella, (Committee Chairman) Morguard Investments; Phillip Armstrong, Royal Trust Corporation of Canada; Ron Fenwick, Canadian Imperial Bank of Commerce; John Gare, Canada Mortgage and Housing Corporation; Dick Hatlelid, Credit Union Central of Ontario; Don MacLennan, Life Insurance Institute of Canada; Al Munro, MICC; Clair Shoemaker, MICC; Frank Watts, Prudential Assurance Company and Betty Smith of the Trust Institute.

The finance courses currently consist of two intensive courses in mortgage financing and investment, with a third course, focusing on case studies, scheduled for the winter of 1985. Funding for course development was provided by CMHC; administration of the educational program is being carried out by REIC, and the development of course content is supervised by a curriculum sub-committee made up of representatives appointed by the various Canadian lending associations, under the chairmanship of Clair Shoemaker, MICC.

Why courses in real estate finance?

Stated simply, the finance courses fill an important need. Clair Shoemaker explains: "There are other courses dealing with appraisal, leasing, and property management, but no courses available elsewhere designed specifically for mortgage underwriting. The program includes a heavy emphasis on the mathematics of finance as related to underwriting, and places a certain amount of stress on legal procedures." Mr. Shoemaker also sees the program's importance as a common qualification for professionals in the underwriting field. The CRF designation would indicate a professional level of expertise to a potential employer.

The educational program has its beginning with REIC, a non-profit organization dedicated to real estate professionalism through training, education and research. In 1981, representatives from the Institute approached CMHC with plans for a specialty recognition program in real estate finance. Drawing heavily from real estate courses successfully given for many years by the University of British Columbia, REIC developed and offered several finance seminars during 1982. Then, with critiques from the first batch of students, the seminar contents were reshaped into two in-depth courses.

At the initiative of CMHC, representatives from the major lending associations and institutes were invited to examine the relevance of the course material in serving their particular needs. A Finance Program Advisory Committee convened in 1983. After a series of meetings to study the finance program rationale and curriculum, the committee decided to adopt the REIC educational model as part of the CRF designation program, subject to some recommended changes. The decision was also taken to establish a curriculum sub-committee in order to review various aspects of the program, particularly the course content, in greater detail. Although the curriculum has been set, committee members stress that the content will be monitored on an on-going basis to keep it current with the needs of the lender-participants, and to protect the professional status of the CRF designation.

Don MacLennan, a member of the program advisory committee with 20 years' experience in mortgage administration in the insurance industry, comments, "I think the program was needed for many years. Although courses can't replace knowledge learned on the job–expert underwriting still requires many years of experience–they will help people to develop their skills in mortgage lending more quickly.

The curriculum

The first two finance specialty courses are the work of three British Columbians with experience in both teaching and real estate. Stanley W. Hamilton is associate professor of urban land economics at the Univer-

sity of British Columbia (UBC); David Baxter is a real estate consultant and president of Daedalas Investments and their collaborator, Daniel D. Ulinder, is head of the real estate option in the Business Division, British Columbia Institute of Technology, as well as president of Dancorp Investments Ltd. Hamilton, Baxter and Ulinder have written several textbooks on real estate finance and designed a correspondence course on the subject for UBC. The REIC courses have been developed largely along the same lines as those offered by UBC, using the UBC textbook along with student and faculty manuals specially written for the courses by Hamilton, Baxter and Ulinder.

Finance I is a five-day course focusing on the theory of real estate finance. The content and method of instruction are geared to practitioners' requirements, and were developed with extensive participation by the real estate industry. This introductory course examines a range of advanced technical aspects of mortgage finance including application of daily interest adjustments, the analysis of equity investments, and in the context of investment analysis, the concepts and applications of commonly used approximation measures. Successful completion of the course is required for enrollment in Finance II.

Finance II is a four-day course designed to examine the practical applications of the analytical techniques introduced in Finance I. Study includes the many aspects of market analysis–one of the most important, yet ignored, facets of mortgage investment. Participants consider topics such as appraisal for mortgage lending purposes, the detailed components of commercial and residential mortgage underwriting, the variety of repayment arrangements currently available, and the financial analysis of refinancing methods. Both courses are concluded with written examinations, and limited registration allows participants ample opportunity for discussion.

Who should take the courses?

Phillip Armstrong, a member of the program advisory committee and vice-president of mortgages for Royal Trust Corporation, recommends the finance courses primarily for those at the more senior levels of underwriting. He points out that the trust companies through the Trust Companies Institute offer courses in residential underwriting and administration, and that the REIC program is a progressive step in that educational process. He comments, "A candidate out of university with a major in real estate would find the courses a natural evolution. However, they are not intended to circumvent experience, and I strongly recommend that people do not embark on this program unless they have a reasonable amount of experience."

Fellow committee member Al Munro agrees. "The whole program would be of interest to relatively few people, but a great number could benefit from parts of a course." Mr. Munro, vice-president of marketing for the Mortgage Insurance Company of Canada, points out, for example, that a mortgage administration officer might want to expand his or her knowledge of arrears collection and advancing funds; a residential underwriter might like to know more about underwriting principles.

In fact, Finance I and II may be taken purely for interest. Those wishing to attain CRF certification, however, must qualify through a combination of experience and university level courses in economics, real estate law and appraisal. The REIC program is not intended to replace existing mortgage industry courses, and will acknowledge those suitable for the CRF designation.

Dick Hatlelid, manager of human resources development for the Credit Union Central of Ontario, sees the finance courses' value in their coverage of the broader economic environment that influences real estate financing. "You have to understand the trends that go beyond the immediate environment. In Alberta, for example, a lot of financing was done as part of the oil boom psychology. If they had taken into account that the environment can change, they might have taken a more cautious approach to real estate financing and made contingency plans for an economic turndown."

Although Mr. Hatlelid believes the courses are more suitable for professionals dealing with larger, more complex forms of mortgage financing agreements than those handled by the average officer in a credit union, he predicts a need for such expertise in a few years' time. "Credit unions are moving into a more complex lending environment, and in about three years, the very largest credit unions across Canada and their centrals* could benefit from 25 to 50 people with that level of training."

As far as CMHC is concerned, Bill Mulvihill, director of the Corporation's underwriting division, envisions the program as a boon to the standard of underwriting in both the public and private sectors. "By setting the norm for educational requirements within the industry, the REIC program will improve the standards for risk assessment in CMHC and the industry as a whole."

Further information on the curriculum, schedule of courses given across the country in 1984-85, and course fees may be obtained from: The Real Estate Institute of Canada, 99 Duncan Mill Road, Suite #300, Don Mills, Ontario, M3B 1Z2. Telephone (416) 449-9980.■

Vivian Astroff is a freelance writer living in Ottawa.

* The central bank and trade association for provincial credit unions.

Neighborhood Change and the Postindustrial City: A Multinational Perspective

by Dennis E. Gale, Lexington Books, Lexington, MA and D.C. Heath and Co., Toronto, 1984, pp. 208, $28.95.

Neighbourhood decline and the appropriate public sector responses have long been debated–but the private revitalization gaining momentum in major cities during the 1970s both here and abroad was unanticipated. As recently as 1965, few would seriously have expected many urban neighbourhoods to revive, let alone to do so on their own. Yet, as Dennis Gale documents so well in his multinational perspective, *Neighbourhood Revitalization and the Postindustrial City,* over the past two decades it has become an international phenomenon. As Gale notes, "Neighbourhood revitalization is best understood as a process of competition for urban space between social classes. In all nations revitalization differs from the earlier, publicly led urban renewal approach to neighbourhood regeneration, arising instead predominantly from the private sector".

Often emerging strongest in cities with dynamic economies based on international business and tourism, this private revitalization of existing homes and conversion of apartments now already flourishes in post-industrial settings dominated by white-collar service jobs and cultured tastes. The evidence presented by Gale suggests that the nature of the local economy as well as imbalances between housing supply and demand are more important than recent housing policies in encouraging this apparent reversal of past trends.

The actual extent of revitalization in central cities of the advanced industrial nations varies enormously. In some–for example London, Paris, Washington, and San Francisco–it shows promise of transforming major parts of the social, economic and physical fabric; in others, it can barely be detected or has yet to appear. Because neighbourhood deterioration had advanced further in many U.S. cities than elsewhere, Urban America had more to gain from the benefits of revitalization. In the U.S., this turnaround has been met with a shower of media attention, a host of academic and government studies, and, on balance, with considerable enthusiasm by both the electorate and public officials alike.

Gale's achievement in bringing together perspectives from Australia as well as Europe and North America can inform the policy debates about urban decline and recovery, but it also generates new questions. What does this apparent independence of revitalization from state and local housing policies suggest about their relevance? The hopes that neighbourhood revitalization can painlessly save entire residential areas seems unwarranted. However, the fears that the cultural charms and richness of the past will be swept away–open air markets, festivals, and street fairs, butchers, bakeries, and musical instrument repairmen–also seem premature.

Many cities in fact seem headed towards greater diversity at the neighbourhood scale. This diversity is shaped primarily by the types of new homeseekers and their educational attainments, spurred by local excesses of housing demand over supply.

In democracies where the private market provides the bulk of the housing, concerns about displacement must be taken seriously, since the newcomers most often appear to revitalize those urban neighbourhoods where there already are housing shortages. Here, without new policy interventions, private neighbourhood revitalization is more likely to harm than help the disadvantaged. Costs will rise as the available lower cost stock is taken over and converted–and too little will remain to shelter those previously occupying hand-me-down housing.

To address these needs, Gale urges a four point response: 1) a housing information system, 2) dispersing middle-class demand for older urban housing, 3) creating mechanisms to retard displacement, and 4) establishing a displacement relief fund involving tax increment financing. These responses could be faulted as "not enough". However, even milder calls to timely action have gone unheeded in the past–until crises mount.

Perhaps, as more critical shortages emerge, politicians and policy-makers will shift from their preoccupation with tokenism in adding new units, and actually begin to grapple with the market forces spurring adaptive reuse of the existing supply. Perhaps cities will create parcel-based information systems and use them to fashion more effective policies to channel market dynamics. Perhaps. Because it seems evident, reading between the lines of Gale's book, that the futility and inadequacy of most past public programs regarding housing will soon be revealed by the extent of private revitalization occurring in a host of countries under widely different urban policies.■

Rolf Goetze

Rolf Goetze, Boston's former Director of Housing Revitalization Programs, has been a student of neighbourhood dynamics and new housing patterns for years. As a consultant based in Belmont, Mass., his latest book is *Rescuing the American Dream: Public Policies and the Crisis in Housing,* Holmes & Meier, 1983.

NHA 5735 Trouble-Free Windows, Doors and Skylights

Doors and windows draw more complaints from home buyers than any other component of a house. But more than 50 per cent of callbacks could be avoided if windows and doors were installed more carefully.

The reason for the complaints is that Canadians expect a lot from their doors and windows. They want their windows to be robust and durable, a barrier to intruders and insects, airtight, well-insulated and easy to operate. They also want them to provide plenty of ventilation and an unrestricted view.

Doors are expected to possess the same qualities as windows, and also allow easy exit and entry. Skylights, in addition to their primary role, must function as an integral part of the roof membrane.

This booklet is not intended to replace the individual instructions provided by manufacturers with their products, instead, it goes beyond describing general installation techniques to lay out the principles underlying the successful performance of window, door and skylight operation. Used in conjunction with manufacturers' instructions, this booklet should indeed ensure trouble-free windows, doors and skylights.

45 illustrations. 65 pages.
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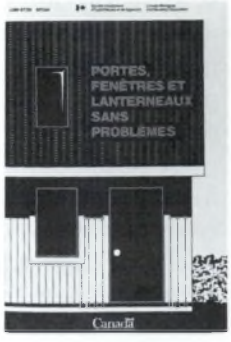

LNH 5736 Conseils pratiques pour l'installation des portes, fenêtres et lanternaux

Les portes et fenêtres font l'objet de plus de plaintes de la part des acheteurs de maisons que tout autre élément de la construction. Plus de 50 pour cent des rappels pourraient être évités si l'installation des portes et fenêtres était faite plus soigneusement.

La raison de ces plaintes est que les Canadiens attendent beaucoup de ces éléments. Ils veulent que les fenêtres soient solides et durables, qu'elles arrêtent les voleurs et les insectes, qu'elles soient étanches à l'air et bien isolées et qu'elles soient faciles à ouvrir et à fermer. Bien sûr, ils veulent aussi qu'elles assurent une bonne ventilation et une bonne visibilité.

Les portes doivent avoir les mêmes qualités que les fenêtres. On doit en outre pouvoir entrer et sortir facilement. Quant aux lanternaux, en plus de leur fonction essentielle, ils doivent faire partie intégrante de la toiture.

Ce livret n'a pas pour objet de remplacer les instructions spéciales fournies par les fabricants. Il décrit les techniques d'installation et explique aussi les principes à appliquer pour assurer un fonctionnement efficace des portes, fenêtres et lanternaux. Utilisé de concert avec les instructions du fabricant, ce livret devrait assurer un service sans problème de ces éléments.

45 illustrations, 66 pages.
153 × 228 mm
Prix: 5 $

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Printing: Litho Associates Inc.

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