HABITAT

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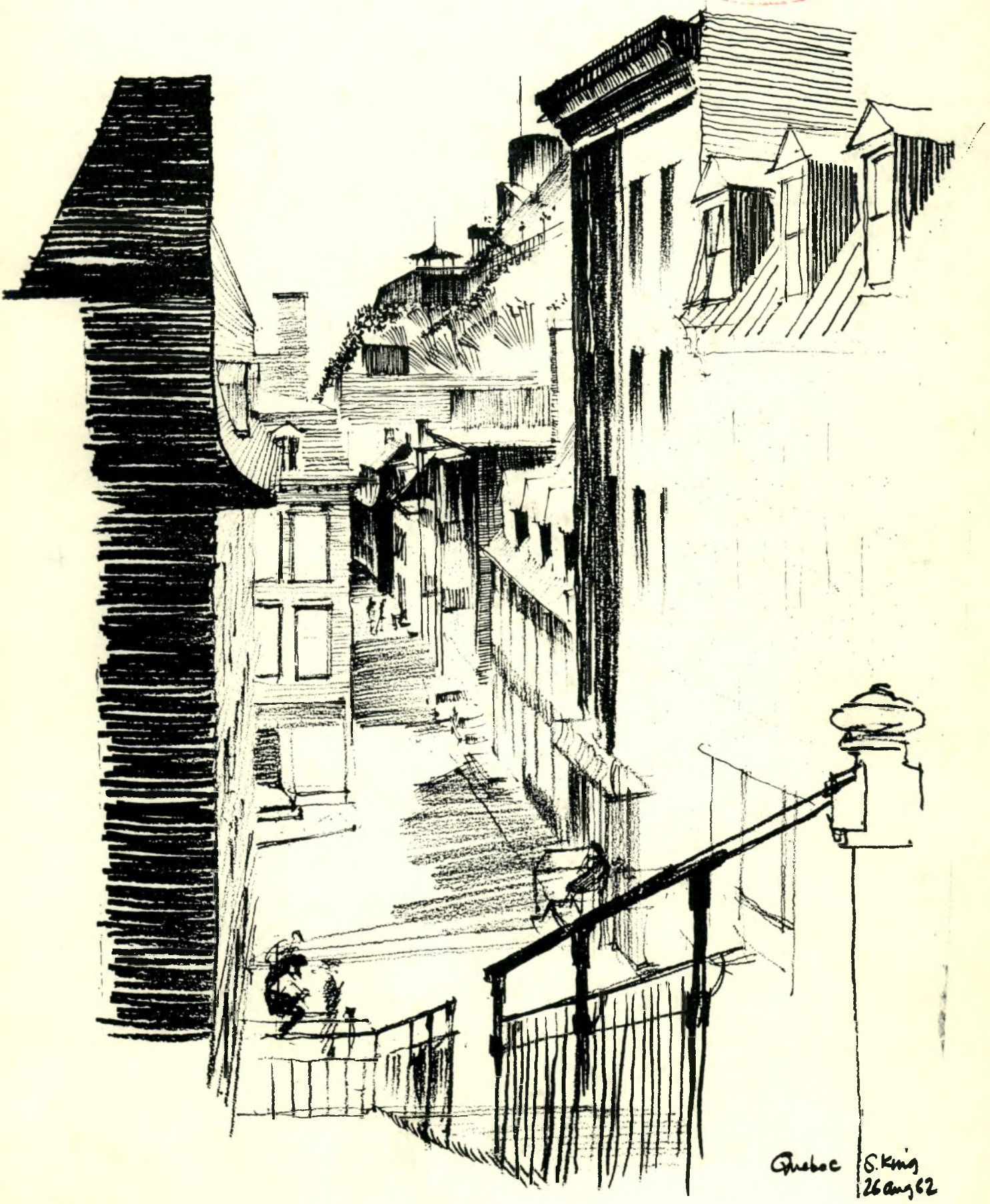

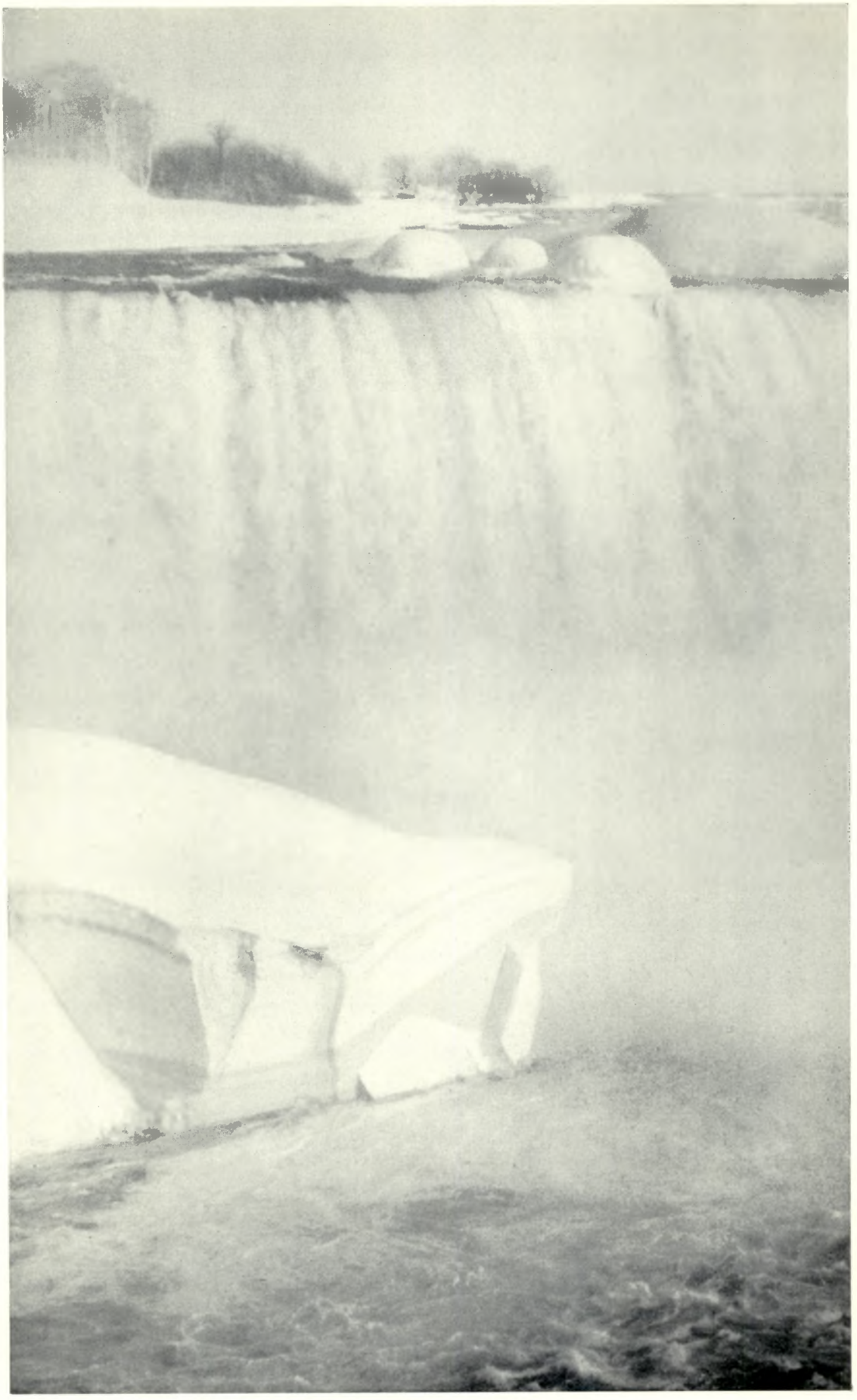

HABITAT

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FRONT COVER: *The cover sketch of a street in Quebec City is by Stanley King whose "Revival" is on page 18. Mr. King has worked with Central Mortgage and Housing Corporation and later with consultants preparing the Frobisher Bay New Town Report; he then joined Peter Dickinson's office as Assistant Chief Architect on the Bank of Commerce Skyscraper in Montreal.*

INSIDE COVER: *This unusual winter scene of Niagara was taken by Tibor Gatszegi of the Architectural and Planning Division of Central Mortgage and Housing Corporation.*

NEW TITLES

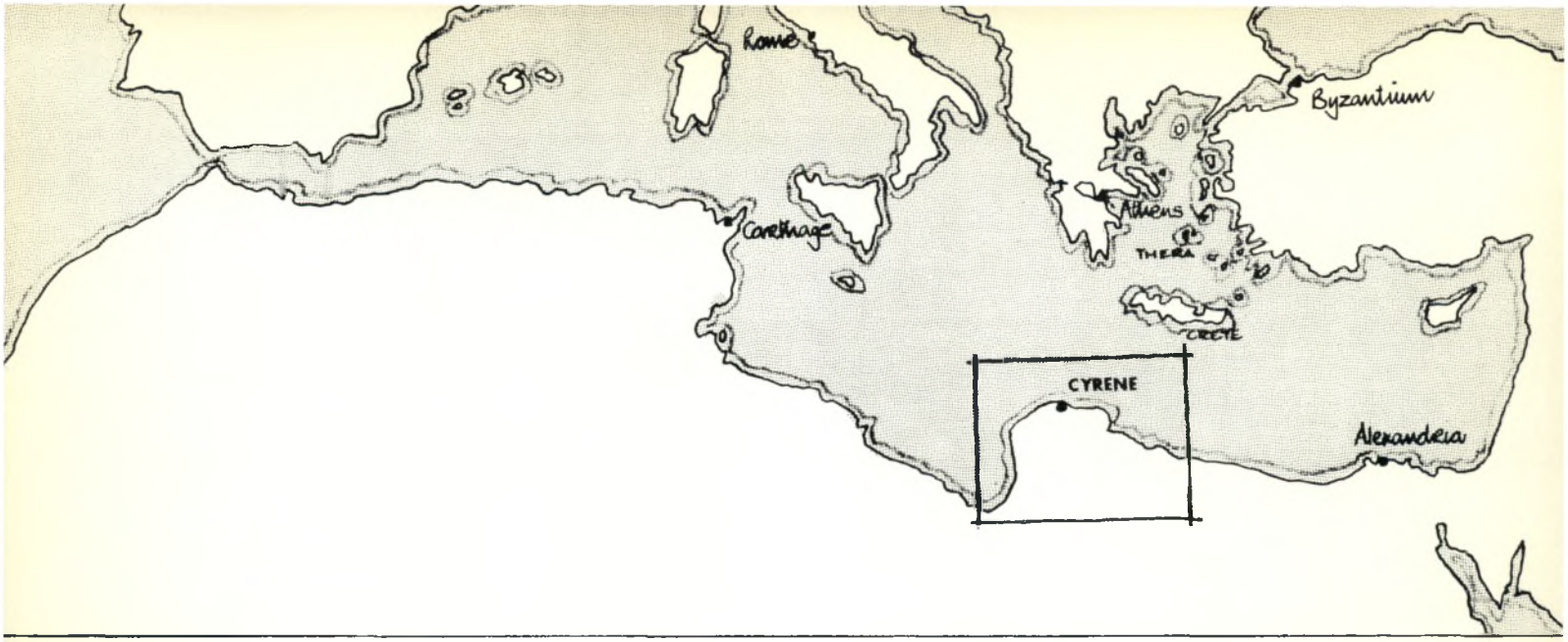
Books that deal with housing and planning matters are generally slanted towards and too frequently read only by those who participate directly in this work. Two new releases, *Cities in the Suburbs,* by Humphrey Carver from the University of Toronto Press and *The Court-Garden House* by Schoenauer /Seeman from McGill University Press should have a much wider response. Both are well written, excellently illustrated and there is an absence of professional language that often restricts the audience for such publications. Anyone who has an interest in the future form of the Canadian living environment will find either book a useful addition to his library. Mr. Carver's book is reviewed on Page 16 of this issue by Dr. J. S. Hodgson.

Messrs. Seeman and Schoenauer are well known to readers of this magazine — the September-October 1962 issue contained a preview of the subject under discussion. The book itself deals entirely with the Court-Garden concept of housing and gives admirable reasons for the validity of this style of architecture on the Canadian urban scene. The authors trace the court-garden style of construction through the early world-wide history of human habitation to its present popularity on the European continent. They then outline the case for a much wider use of the concept in Canadian cities.

Climatically it is suitable; it presents a degree of privacy often not obtainable in our present free-standing houses on small lots and is, perhaps, one answer to the ever-rising land costs in our urban areas. As an inward-looking single-storey structure, it is a building-type inherently adaptable to mixed housing development. It complements, rather than detracts, from high-rise construction. Because it provides for densities much greater than those achieved with conventional single-family dwellings, it allows without extravagance, reservation of open land for public purposes.

The authors do not hold up the court-garden house as a panacea for all our urban living problems. But with the aid of grants from CMHC for study and the Canadian Housing Design Council to publish the book, they have examined all facets of the concept and in a very beautiful book give one solution to the monotony of our urban and suburban environment.

✦ ✦ ✦



CYRENE: History and Town Planning

by P. J. H. Barratt,
Architectural Division, CMHC

LOCATION

Cyrene is located inland from the coast of North Africa south-west of the Island of Crete. It is some 10 miles from the sea situated on an 18,000-foot escarpment overlooking a narrow coastal plain.

The environmental factors which recommended the site as suitable for habitation were its climate, the presence of running water and its strategic position. The climate of this part of Northern Libya is nearly ideal since it enjoys a relatively cool year-round temperature. Also, because of the greater rainfall of North Africa in antiquity, luxuriant vegetation flourished around Cyrene which, even in Arab times, was significant enough to cause them to name the plateau: the Gebel Akdar (the Green Mountain). The ethereal atmosphere of the plateau afforded an admirable setting for the Greek settlers to demonstrate their highly developed perceptive qualities and this attribute was later to be manifest in their urban design and sculpture.

Defence was an important consideration in the siting of ancient cities and, though not necessary initially, in the case of Cyrene, it became vital in the quarrels and wars that followed the reign of the third king. The city commanded a fine view of the plain and could be easily fortified on all sides. It also effectively controlled east/west movement on the coastal road. The presence of a gushing spring which could supply the city in time of siege was another important factor.

However, because of the geographical position of Cyrene at the edge of an escarpment cut through by two valleys running NW-SE, the site did not lend itself to regular planning. Wadi Belgadir, in fact, effectively prevented the spread of the settlement to the south and only one building of any size was constructed [the Temple of Demeter *(A-Page 6)*].

The limestone rock from which much of Cyrene was built was of quite poor quality and has eroded badly through the centuries. The task of the archaeologist has been hampered by subaereal erosion in addition to natural catastrophies and pillage.

MAN[1]

Libyan Era

Before the Greeks arrived in Libya it is unlikely the indigenous Libyans occupied the site of Cyrene. The abundant resources of the coastal plain would have given the Libyans little incentive to leave for the cooler climate of the plateau.

Of the original Greek colonists we have little information except that a series of bad harvests forced the inhabitants of the Aegean island of Thera (modern Santorin) to institute compulsory emigration. Accordingly, about the middle of the seventh century before Christ, a party of 200 Greek migrants landed on the island of Platea off the Libyan coast. Dissatisfied with their sojourn on this barren island, the Libyans directed them to the site which later became the city of Cyrene.

The Greek Monarchy[2]

The immigrants transplanted a high level of Greek culture and, although they intermarried with the Libyan women, it is unlikely that they were influenced by the culture of the primitive inhabitants.

The Greeks were very religious and twice consulted the famed Oracle of Apollo at Delphi. It is no surprise therefore that Apollo (whose oracle had recommended the colonists settle in Libya) was revered as the founder of the city. Likewise the tomb of the first king, Battus I, who led the party to Cyrene, was venerated. During the reign of the first kings of Cyrene, Battus I and his son Arcesilaus I, the relations between the Libyans and the settlers were good. However, after the succession of the third king of Cyrene, the friendly entente ceased. During his rule many new immigrants arrived from all over Greece and the Libyans were driven from their lands. Political troubles date from this time and the monarchy was overthrown about 440 B.C.

The Republic

The republican era in Cyrene's history was marked by a series of inter-city alliances on the Hellenic model.[3] With the establishment of democracy, new political institutions were formed and these, as we shall see later, found expression in the public open spaces of the city. The settlers' love of sport and public spectacles also made necessary the building of numerous theatres in Cyrene.

Ptolemaic Period

Shortly after Alexander the Great's conquest of Egypt in 332 B.C., Cyrene was ceded to the Ptolemaic domain and its importance waned. The five towns of the Pentapolis of the Gebel Akdar were nevertheless well fortified during this period and never outgrew their defensive walls.

It would seem that Cyrenians were little influenced by Ptolemaic culture. Possibly the new cities of Ptolemais and Bernice (modern Benghazi) became the only recipients of Egypto-Hellenic culture in Libya. The Cyrenians still cherished their pristine Greek heritage and viewed Alexandria as something of an imposter. At least it is fair to say that in Cyrene, there is little evidence of the egyptianized art forms one might expect to see in a city which witnessed two centuries of Ptolemaic rule. Numerous dynastic squabbles took place over the next two centuries between the Pentapolis and Alexandria and the dehabilitated Libyan domain eventually became a Roman province about 96 B.C.

Roman Suzerainty

By the time the Romans were entrenched in the Pentapolis a large Jewish colony had grown up in the region.[4] In their monuments they utilized both the Hebraic and Greek languages. However Gray[5] suggests they were not too well assimilated:

> "The arresting feature in the epitaphs is the high proportion of names which are undoubtedly Jewish, together with others which are natural Greek translations of common Jewish theophorics."

But interesting as it might be to speculate on the influence of the Jews on the institutional structure of the city at this time, it is clear that they were sufficiently well accultured to have had little effect on the physical form of the city.

Cyrene was sent a Roman Quaestor in 74 B.C. which marked the beginning of Cyrenaica's history as a Roman province. The Romans typically superimposed a highly efficient, centralized administrative organization on Cyrene and public monuments and institutions were immediately constructed.

In the second century after Christ, the Jewish community rioted and Goodchild tells us that they indulged in such an orgy of destruction that most of the public buildings were destroyed. However under Emperor Hadrian the reconstruction of most of the buildings was almost completed, with the notable exception of the Temple of Zeus (B).

The Eastern Empire

In 324 A.D., Byzantium became the new capital of the Roman Empire with Christianity now the official religion. Cyrene nevertheless lagged behind in accepting the new monotheistic religion and remained for some time an important outpost of paganism. Then in 365 A.D. a fearful earthquake struck the city which was looked upon by the inhabitants as a sign from God. Much of the city

was destroyed and those buildings which were still standing after the cataclysm were demolished or solemnly burned out as an act of purification.

However, the site was not vacated and the Cyrenians set about rebuilding the city. It was inevitable that the debris from the earthquake should be used for such new buildings as were constructed, thus making the task of contemporary restoration difficult. The rebuilding was of a surprisingly high quality despite the marauding desert tribesmen and some late Roman houses, such as that of Jason Magnus (C), show a marked degree of elegance. But Cyrene was never properly rebuilt and apart from two small churches, the city remained a shadow of what it had previously been.

The Arab Conquest

In 643 A.D., Amr ibn el Aasi moved into Libya from the Nile and probably found little resistance from the Christian garrisons. Not for the first time were the inhabitants weary of war and political unrest and so they soon capitulated to the Arab forces. Of this new Arab domain Amr ibn el Aasi wrote: "If my possessions were not in the Hejaz, I would live in Barqa (Cyrenaica) and never leave it because I know of no land more peaceful." But the Arabs did not found any great centre in Cyrenaica and so Cyrene gradually became deserted and remained unknown to European civilization until it was noted by a French traveller in 1705.

View of Temple of Apollo

THE SETTLEMENT

Greek Town Development

The first settlement in Cyrene was near the spring which later became the Fountain of Apollo (D). It was located in the valley to the west of the site near the lip of the escarpment. "Valley Street" (E), as archaeologists have named the route which runs through this valley, is one of the most picturesque parts of present-day Cyrene. The historic attempt to embrace naturalism into Greek planning can still be seen there today and brings to mind the romantic lithographs of the early 19th century.

In the course of time, the original settlers probably found the bottom of the valley rather too muddy and the settlement pattern veered southward up the knoll to become the Acropolis (unfortunately still unexcavated). From this early development we can conclude that no regularity of plan-form existed and it is the next period which introduces some regularity in the plan-form.

After Battus I died, he was buried to the east of the Acropolis (F) on the ridgeline of the southern hill in what may have been the first *necropolis* and a circular monument erected in his honor. (Goodchild suggests the chamber below his tomb may indicate that the shrine fulfilled some oracular function.) Later, an Agora (G) was laid out around the shrine and became the core of the early Greek city.

A regular layout of streets began to appear in the Greek world about the end of the 5th century B.C. and the lining up of the ridge street from the Acropolis to the Agora and eastward roughly parallel with the extension of Valley Street was in accordance with this trend. This route, in some studies, has been called the "Street of Caryatids" (H) but this name is misleading as it suggests a continuous avenue of caryatids which was probably not the case.

Permissive "use zoning" is evident from the separate grouping of the institutional centres, the Acropolis and the domestic areas. No clear block pattern seems to emerge although we note that buildings were lined up with the ridge street. Of particular interest is the orientation of the temples of Demeter (A) and Apollo (J) which also follow this line and

do not face a point of the compass nearer due east as might be expected of Greek temples of this period. In the Fountain and Sanctuary area to the west of the site a particularly heterogeneous arrangement of institutional buildings, fountains, shrines and even a grotto is to be found. Such an arrangement may have been an intentional foil, as Buttle[6] suggests, or it may appear more complex to us today because of the partial restoration of eight centuries of building which historically was never extant contemporaneously.

Development under the Ptolemies

The Ptolemaic period followed very closely the Greek pattern of development. With natural increase coupled with immigration, Cyrene expanded to embrace an area some 3,600 feet east of the original settlement. Because of the turbulent political climate of this era, the city was encircled with a wall which included even the great Temple of Zeus (B) on the opposite hilltop to the north. The provision of this wall shows extreme optimism on the part of the Ptolemaic planners, and it is most unlikely that the acquisition of space within the bounds of the fortified walls was ever a problem. Instead, one may imagine that gardens were cultivated within the city walls which would have been available for the growing of vegetable produce in time of sustained siege.

In one study, a discussion of the alignment of streets suggests that Cyrene was influenced by Hippodamian town planning. Though certainly not clear, there seems to be a conscious attempt at regularity in the two main NW-SE streets, but any deviation is understandable in light of the topography of site. On this point the study concludes: "The important consideration to the student of classical town design is the obviously willing acceptance of a limited '"picturesqueness" of effect within the framework of a regular plan pattern."[7]

Roman Influence

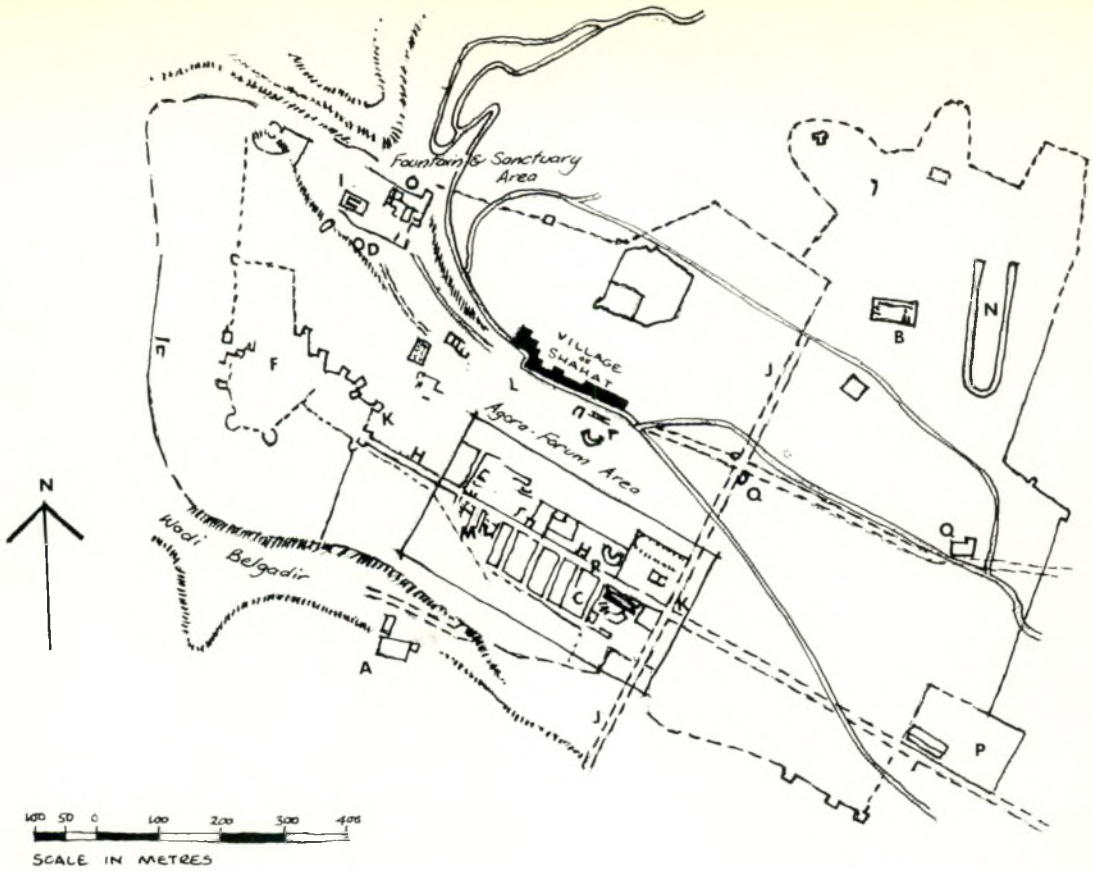
It has been shown that the Ptolemaic Period introduced two regular main streets, of which the most southerly was in all probability, the principal one. In Roman times a road at approximately right angles to these was built on a NE-SW axis and this might be considered as the *cardo* (J) while the Valley Street (sometimes called the Sacred Way) constitutes the *decumanus* (E). The crossing of these streets was probably intended by the Romans to be the geographical centre of the city. Four gates to the city were provided in the north, south, east and south-east at the approximate extension of the principal roads, but, because of the escarpment to the west, traffic to the coastal plain would enter via the north gate.

During this period, some positive steps were taken toward regularizing the street network and a definite block pattern emerges in the Agora-Forum area. The blocks are rectangular—about the proportion of a double square—and are built off the south side of the ridge street. A hierarchy of streets for the first time appears and, it is of interest to note, that the feeder streets are of lesser dimensions than the main thoroughfares. With the recutting and draining of Valley Street by the Romans, the ridge street became a monumental avenue from which all commercial traffic was probably barred. To add to its monumentality, *propylae* (K) were built at either end to demarcate this lineal civic strip, the new "core" of the city.

The Roman era ushered in a whole series of institutions which were juxtaposed with the buildings of the preceding periods. Greek theatres were converted into Roman amphitheatres, temples were rededicated to Roman deities and a Hippodrome (N) was built on the northern hill. In the Agora-Forum area there is evidence for the first time of a *prytaneum* and a records office.

Besides works to make Valley Street free from perennial flooding, the Romans also constructed extensive baths (O) in Trajan's reign and built a waterworks (P) near the southeastern gate. Although the Romans utilized arcuated structural forms for these engineering works, elsewhere they adhered to the trabeated post and beam method of the Greek builders.

It was this "romanizing" of Hellenic forms, as well as the superimposing of Roman culture over that of the Greeks, that gives Cyrene its peculiar Graeco-Roman flavor. The newer, more scientific



Cyrene — General Plan. See legend attached.

A Temple of Demeter
B Temple of Zeus
C House of Jason Magnus
D Fountain of Apollo
E Valley Street (Decumanus)
F Acropolis
G Agora
H The "ridge street"
R Byzantine Tower
I Temple of Apollo
J NE-SW Cardo
K Propylons
L Prytaneum
M Record Office
N Hippodrome
O Baths
P Waterworks
Q Christian churches

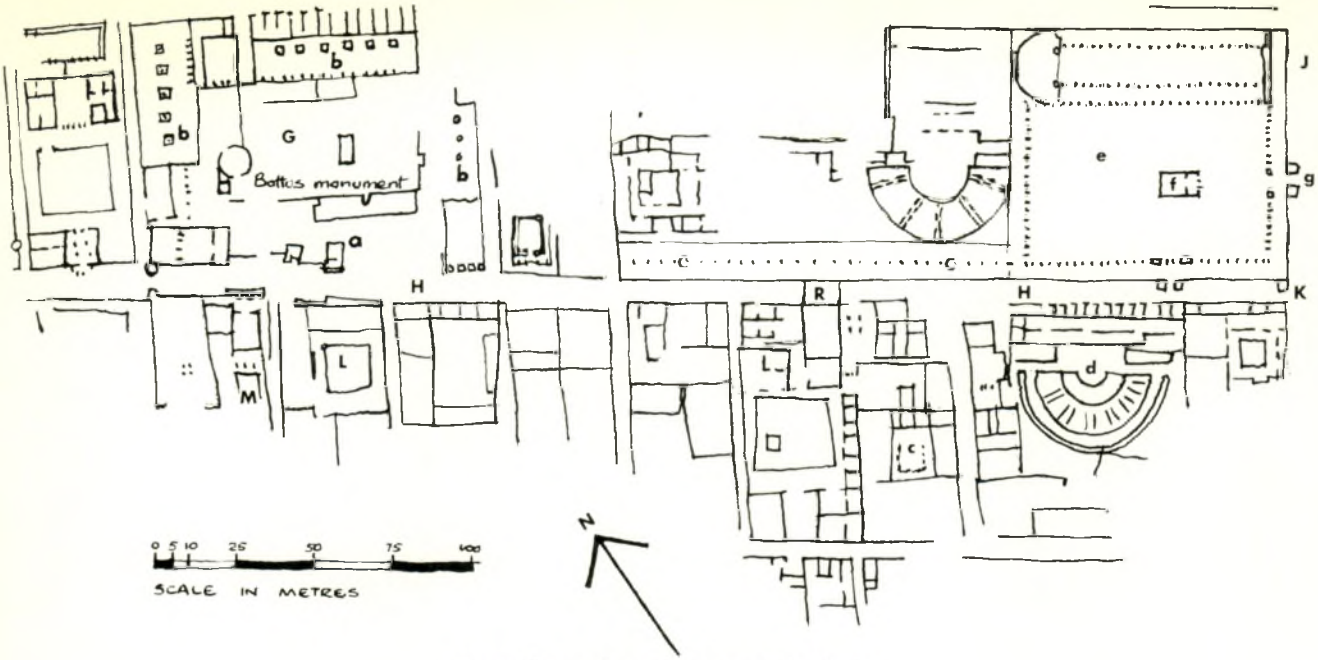
technology of the Romans was utilized in the reconstruction work, but the outward form remained unchanged, consequently many of the tenets of comparison between Greek and Roman architecture used by architectural historians[8] are strangely misleading. For examples, we may briefly cite the Roman use of "orders" of the Greek Doric and Ionic type. Also, the Romans in the orientation of their temples seem to follow the Greek precedent of facing their temples eastwards and not towards a public open space. A legacy of interest from the Greek period is the surprising absence of simplicity in plan-form and the presence of "utilitarian" buildings.

Byzantine Era

The riots of the Jews and the later earthquake have been discussed in the portion dealing with man's historic role, therefore it is after 365 A.D. that we take up the description of Cyrenean planning.

After 365 A.D. the city was, for a time, completely vacated and the historian Ammonas, writing in about 375 A.D., describes Cyrene as "an ancient but deserted city". But the uprooted citizens one by one came back and some basic decision-making seems to have been effected: Can we rebuild the whole city? Can we fortify it? Can we expect to encourage other people to join us in our rebuilding plan? The answer to all of these questions, presumably was negative and so they set about rebuilding that part of the city which lies westward of the *cardo* contained within the Ptolemaic defences.

Christian churches (Q) are the only new additions to the already vast inventory of buildings in the



Agora-Forum Area. See legend attached.

a	Naval victory monument	G	Greek Agora
b	Greek stoas (markets)	H	The "ridge street"
c	Stoas of Hermes & Hercules	J	NE-SW Cardo
d	Theatre	K	East propylon to street
e	Roman Forum	L	Prytaneum
f	Temple dedicated to Caesar	M	Record Office
g	East propylon to Forum	R	Byzantine Tower

city and of these, two surprisingly are outside of the new fortifications. A Byzantine tower (R) was built in the middle of the ridge street and there is evidence of lime kilns in the old Sanctuary area. But apart from these structures, few completely new buildings were constructed or indeed, at this time, necessary.

The Necropolis

In an urban settlement which has existed for eight centuries, the city of the dead will most likely exceed in size the city of the living. The necropolis of Cyrene covers many square miles circumferential to the city walls forming a kind of "funerary green belt". This necropolis contains some 1,200 tombs and several thousand sarcophagi.

The principal interest in the tombs, from the viewpoint of urban history, is the insight given into the culture of the time. In the architecture of the tombs, Greek forms—as might be expected—predominate. The style is interesting also, with columns having crude incised Ionic volutes and entablatures cut out of the living rock. From the legacy of monuments to the dead at Cyrene, it would seem fair to conclude that the Cyreneans favored the vernacular Greek style as a funerary monument to the current vogue of "architectural order".

THE ARTIFACT

The artifact refers to the city as a large scale work of art (it should not be confused with the anthropological definition of the word). It is a three —perhaps four[9]—dimensional entity, the aesthetic evolution of which must of necessity be subjective. Because of the dynamic time element, the artifact was continually changing — being built, expanded, demolished and rebuilt again. Accordingly in the description that follows, we turn our attention to a single point in time and study the best preserved quarter of the city which also typifies the dual culture of the settlement — the Agora-Forum area. To set the stage, the time is the middle of the fourth century after Christ as might have been seen by a visiting citizen of Rome.

Most visitors to Cyrene in antiquity would have approached the city from the north following the road from Apollonia which also joins the coastal

route from Egypt. The Acropolis (F) would probably be the first element to come into view, standing on the raised ground to the east of Wadi Belgadir. Next, on the opposite hill, the beholder might catch a glimpse of the ruined Temple of Zeus (B) enshrouded in trees. After that the Sanctuary area and North Gate would appear, silhouetted perhaps against the late afternoon sun.

It is unlikely that the visual effect on first seeing Cyrene could be compared to first seeing Athens or Bernice. There would be no dramatic Acropolitan hill as at Athens; no shimmering city seen as though it were floating on the sea as at Bernice, but instead Cyrene would appear as a city integrated into the foliage of the Gebel. (The background color of the landscape would be identical to the limestone from which Cyrene is built). Occasionally, a brightly colored fresco or finial of one of Cyrene's many temples might catch the eye, but the total effect would be one of repose—a city at unity with nature.

On closer examination, a series of autonomous districts might appear. There would be the Acropolitan fortifications standing as an aloof sentinel on the southern hill; the well-ordered Agora-Forum area; and, serving as a matrix to these land uses, hundreds of domestic dwellings which by virtue of their scale and form would add grandeur to the institutional edifices. A visitor would enter the North Gate and, leaving the medley of the Sanctuary complex on his right hand, might walk down Valley Street, with its luxuriant vegetation clinging to its clifflike sides, and thus on to the Greek Baths. Here he mounts the slope to the south and joins ridge street near the entrance to the Acropolis from the east.[10]

Having arrived in the vicinity of the Agora the urban concentration to the east would demand attention. Thus, leaving the Gymnasium to the west, some statuary might strike the eye. It is an impressive monument to a Greek naval victory (a). Now the spectator's eye having once been guided in this direction would fall upon the space beyond: the Greek Agora (G).

The Agora is enclosed on three sides by *stoas* (or markets) (b) which would be full of people bustling to and fro. In the near corner some curious people may be visiting the pagan shrine dedicated to the founder of the city. A person new to Cyrene would most likely be drawn to this historic relic where he could see the famed oracle (in operation in all probability since Cyrene was still largely pagan at this time). After leaving the shrine he might inspect in greater detail the open area which formed the centre of the city in the Greek era. The scale of buildings and the informal linkage of the *stoas* would make him aware of the human element in his surroundings and the almost clumsy placing of the buildings "out of square" with different cornice heights would seem surprisingly vernacular to a sophisticated Roman eye.

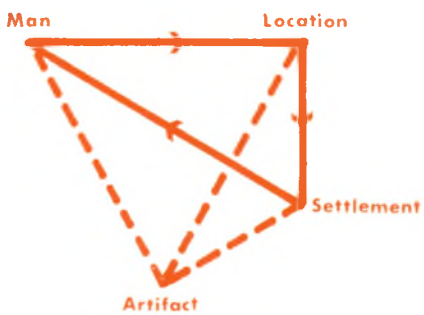
Leaving the Agora, the visitor would pass down the monumental way, pausing for a moment perhaps to admire the expressionless faces of the caryatids and the vacated *stoa* of Hermes and Hercules (c) (vacated because the civic dignitaries complained of the odor). Here the *stoa* is now a conveniently shaded sidewalk. The fast receding perspective would compel the visitor to move on quickly—the monumental way is the life artery of the city and no place to idle and gossip. To the right he may be aware of the murmur of a large assemblage; two clear voices rise over the crowd as though in conversation with some deity; a play is being enacted in the rebuilt amphitheatre. Of the buildings seen so far, marble, when in evidence, has been used sparingly, but at this end of the monumental way, the buildings are clad entirely in marble. The traveller has now arrived in the vicinity of the Forum (e).

Once past the side entrance to the amphitheatre he enters the monumental gateway to the north into the Roman Forum. Here the observer's view is closed by a small temple in the middle of the Forum dedicated to Caesar (f) (it was previously thought to be a Temple of Baccus). Now, once fully inside, the Forum takes on its intended form. It is larger than the Agora and quite uniform on all sides, being surrounded by a Roman Doric colonnade. It is a monument to Roman sophistry. The Forum is in the

proportion of a golden rectangle, but a subtlety is introduced into the space by the siting of the small temple. The eastern face of the temple faces a *propylon* (g) or entrance gate which, as was seen in entering from the ridge street, prevents an outside observer from witnessing the total spatial experience unless he is admitted into the Forum.

Let us now ponder for a moment what a visitor might feel are the salient features of the City of Cyrene. First, the variety of types, construction materials and age of the buildings that compose this complex would be uncommon in comparable Greek or Roman cities. Secondly, despite the heterogeniety of building, the essential harmony of the environment is evident. This, in large part, is due to the uniting element of the rough textured road and the romanizing of the "adopted" buildings with shrines, cartouches, plaques and the like. Then he might be impressed by the peculiar character it derives from its Libyan setting, the city provides more screening from the sun than is normal in most other cities of comparable size, also the people are unique, being largely of foreign or hybrid race (that is, of only part Greek or Roman blood). And last, the quality of artistic works strikes him of being worthy of Periclean Athens. The mosaics, the *bas relief* (such as the one of the nymph Cyrene being crowned by the Goddess Libya) and the numerous sculptures make Cyrene one of the highlights of Greek and Roman culture. Such a city an observer might reasonably conclude was a fitting monument to the fusion of two of the greatest cultures the world has ever seen. ✦✦✦

A NOTE ON METHODOLOGY[11]



The method employed in this article can be expressed in the form of a simple four-part model as follows:

1. MAN is the catalytic agent in the model. It is man through his efforts to construct shelter, build monuments and undertake works for the good of the community that creates the city. His achievements will mirror his: religion; nationality; economy; political organization; scientific knowledge and aesthetic sensitivity.

Man and the state of the arts therefore is the primary element in the model.

2. LOCATION, or the focus of enquiry, is any point on the surface of the globe at which man decides to settle. Such a decision may sometimes be due to a carefully conceived plan, sometimes it may be established by factors outside his control and other times he might simply desire uncoveted residual land (the Mormon settlement of Utah, for example). The factors to be borne in mind in studying location include such considerations as: ownership; topography; defensibility; accessibility; water; climate; fertility.

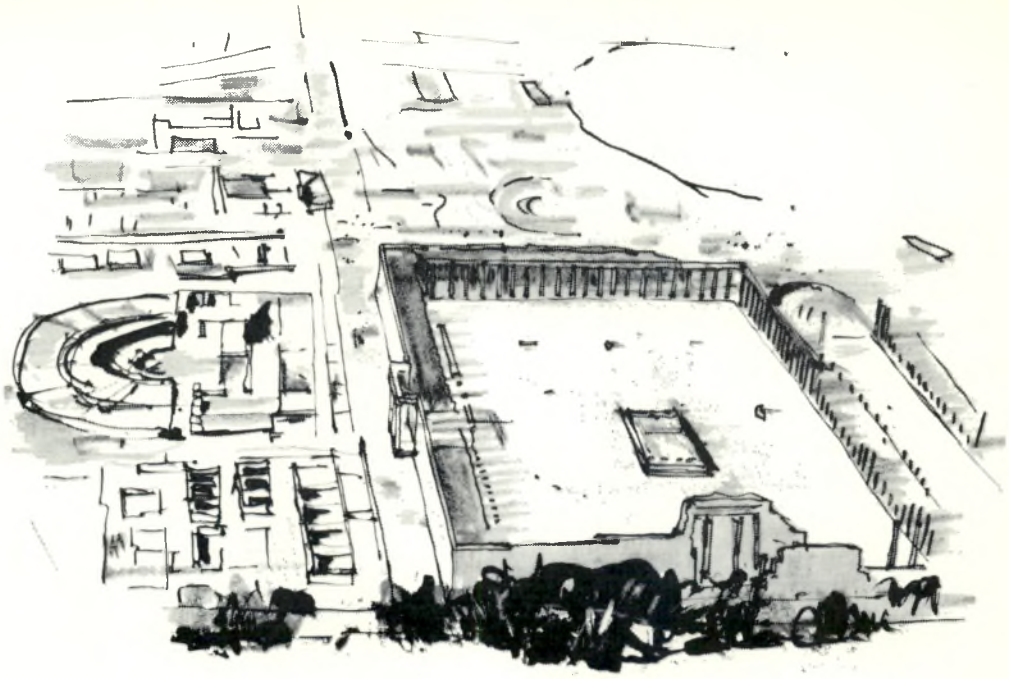
In short, location qualifies and directs the efforts of man: it sets his frame of reference.

3. SETTLEMENT refers to the physical arrangement that develops from the action of man on a location ("location" later becoming "habitat"). It can be expressed in terms of bulk, physical site and the sensitivity of the builder to the dictates of the site.

It may be seen in the city's: envelope; block pattern; morphology; zones; linkage; land use; construction; traffic routes.

The settlement is a physical expression of man's capacity to build.

It will be apparent that there is a degree of



View of Forum area.

reciprocality in the three main elements discussed so far, which might be summed up by the truism: "man shapes his environment, his environment shapes him". And so a line can be drawn from SETTLEMENT back to MAN, thus completing a kind of triangle of forces—the cycle of the city in history.

4. The artifact is the settlement seen not as a physical fact but as a work of art. The description of the artifact will always be subjective, but the viewpoint may vary by being shifted backwards or forwards through the perspective of time. Its description might cover such matters as: enclosure of space; articulation; proportion; rhythm; light and shade; dominance and foil; texture; color; surprise.

The artifact as an aesthetic analysis of the settlement cannot be reduced to the easily measurable quantities of the three other elements we discussed above since it will sometimes use the imprecise language of the plastic arts.

Since the artifact is derived from all the above elements it is shown linked up with them in the model by dotted lines.

[1]I am indebted to Mr. Richard Goodchild for allowing me to use his publication, *Cyrene and Apollonia,* Antiquities Dept., Benghazi, United Kingdom of Libya, 1959 for much of the background material used in this article.

[2]For additional information on the Greek monarchy see: Francois Chamoux, *Cyrene sous la Monarchie des Battiades,* De Boccard, Paris, 1953.

[3]See: Thucydide's *Peloponnesian War,* Dent, London, 1933.

[4]Their influence was felt as far away as Jerusalem: we read in the Bible of the man who bore Our Lord's cross: ". . . a man of Cyrene, Simon by name . . ." Matt. 27 v. 32, and of the apostles who were intelligible to the multitude in their own languages, including those Jews who were from: ". . . parts of Libya about Cyrene . . ." Acts of the Apostles 2 v. 10.

[5]Rowe, Buttle and Gray, *Cyrenaicia Expedition,* University of Manchester, 1956.

[6]*ibid*

[7]*ibid*

[8]See for example: Bannister Fletcher, *A History of Architecture on the Comparative Method,* Batsford, London, 1950.

[9]The fourth dimension being "enclosed volume".

[10]The linkage of the districts is not at all clear from the excavations to date. Quite possibly the city was honeycombed with paths for the predominantly pedestrian movement about the urban settlement. This would certainly explain the peculiar absence of a direct linkage between the Agora and the Sanctuary areas.

[11]This model is a development of a construct originally outlined by Professor Tunnard.

Le FILM . . . et La SCHL

par Eric Minton, Division de l'information,
traduit par le Département de traduction, SCHL.

L'un des phénomènes les plus extraordinaires des années mil neuf cent soixante est l'usage considérable des moyens de communication aux masses. En effet, de nos jours, la population du Canada a l'occasion de recevoir plus de renseignements et d'éducation ou de formation culturelle que jamais auparavant. La télévision est vue dans 86 p. 100 de tous les foyers canadiens; quant à la radio, on l'écoute dans presque 100 p. 100 des foyers.

En vue de répondre à cette demande croissante d'éclaircissements, la production cinématographique se répand aussi rapidement au Canada. Chaque année, plus d'un millier de films sont réalisés pour le compte de l'industrie, du gouvernement, ainsi que pour des fins éducatives et pour la télévision. Le film est maintenant devenu un important moyen de publicité, de promotion des ventes, de formation en vue de la production, d'éducation et de relations extérieures. De nos jours, le film est employé au Canada comme moyen de communication par plus de 10,000 organismes ou associations — écoles, collèges, club féminins, clubs sociaux, associations agricoles et de travailleurs et associations religieuses.

Le film est l'un des plus importants de tous les moyens de communication. Contrairement à l'opinion populaire, l'avènement de la télévision n'a pas eu un effet adverse sur l'industrie du film. Au contraire, la télévision a en réalité donné un nouvel essor à la production du film. En même temps, le nombre de nouvelles salles de cinéma en voie de construction est aussi à la hausse.

La production du film éducatif remonte au tout début de l'histoire du cinéma. En effet, les frères Lumière mirent au point leur cinématographe en France, en 1895. A partir de ce moment, un flot constant de courts métrages d'intérêt, tournés partout dans le monde, furent expédiés à Paris. Le film de nouvelles, comme nous le connaissons maintenant, fut inauguré en France en 1909 par Charles Pathé. Ces premiers films de nouvelles nous font voir une grande partie de l'histoire des premières décennies du vingtième siècle.

Au Canada, alors que le cinéma était encore une nouveauté, Thomas Edison envoya une équipe de caméramen pour photographier les Rocheuses canadiennes. Et longtemps avant la première guerre mondiale, la compagnie Massey-Harris commanda un court film sur le labour—un des premiers exemples du film commandé par une entreprise privée.

Robert Flaherty, un pionnier dans la réalisation de films, au début des années mil neuf cent vingt, exerça très tôt une influence sur le film canadien. Flaherty, dans son film tourné au Canada et intitulé "Nanook of the North" (1920), aborda d'une nouvelle façon le problème de la réalité dramatisée. Dans ce film et dans des films ultérieurs, il transporta son auditoire dans des coins reculés du monde, non pas d'une façon impersonnelle, mais d'une façon intime et avec beacoup d'imagination. Ses films représentaient la réalité teintée de romanesque, une technique directoriale qui plut immédiatement au public simple de l'époque.

En même temps, les cinéastes français comme Cavalcanti, un Brésilien, laissèrent entrevoir la possibilité que la méthode de dramatiser la vie réelle adoptée par Flaherty, pourrait bien s'appliquer à la scène contemporaine. Dans son film intitulé "Rien que les Heures" (1926), Cavalcanti choisit les rues de Paris comme scène pour faire une étude impressionniste de la vie de tous les jours.

Cette façon d'envisager la production cinématographique avança d'une autre étape au cours de la décennie suivante, par ce qu'on a appelé le mouvement anglais en faveur du documentaire. Le chef de ce mouvement, John Grierson, voyait dans le film "un moyen de combler les énormes lacunes de compréhension et de sympathie dans la société complexe de notre époque". Il s'efforça de "rendre vivants" pour l'homme moyen les services du gouvernement et de l'industrie en les décrivant sur l'écran en fonction des valeurs humaines. Afin de réaliser ce projet en Grande-Bretagne, il s'efforça d'obtenir une aide financière directe à la fois du gouvernement et de l'entreprise privée.

Dans sa création du film commandé, Grierson, exerça une influence universelle avec des productions comme "Song of Ceylon" (1934) et "Night Mail" (1936). En 1935, deux des adjoints de Grierson, Arthur Elton et Edgar Anstey, réalisèrent "Housing Problems", un film qui fit oeuvre de pionnier en ce qui concerne les maux que représentent les taudis et les remèdes à y apporter; ce film est caractérisé par des entrevues personnelles et des dialogues non répétés d'avance.

Une scène du film "Nanook of the North".

En France, à la même époque, on réalisait un certain nombre de documentaires d'avant-garde qui traitaient de problèmes sociaux courants avec force et réalisme. Les films "A Propos de Nice" (1929), de Jean Vigo, et "Terre Sans Pain" (1932), de Luis Brunel, constituaient les meilleurs exemples de reportages filmés.

L'intérêt du gouvernement canadien dans le film animé remonte jusqu'à l'année 1914, alors que l'Office du film animé fut établi à Ottawa. Les premières réalisations servaient à inciter les auditoires à "acheter des obligations" et à venir en aide à nos soldats "outre-mer". Plus tard, en 1919, les caméras du gouvernement furent braquées sur le jeune Prince de Galles qui venait pour la première fois visiter notre pays.

Toutefois, le film documentaire comme nous le connaissons aujourd'hui n'a pas été réalisé au Canada avant l'année 1939. Cette année-là, le gouvernement canadien adopta la Loi nationale sur le film, qui prévoyait la production et la distribution de films "dans l'intérêt de la nation". L'adoption de ce bill témoignait de la nouvelle attitude officielle à l'égard du film documentaire. John Grierson fut nommé le premier commissaire du film au Canada.

A ce moment-là, le premier Office du film du gouvernement canadien, avec un personnel de 29 employés au total, fut installé dans une scierie abandonnée, située dans une petite rue de la Capitale. Mais à la suite de la formation du nouvel Office national du film, et dès le début de la deuxième guerre mondiale, la production de films parrainés par le gouvernement se développa rapidement au Canada. Le film intitulé "Churchill's Island" se vit

décerner un prix spécial par l'"Academy of Motion Picture Arts and Sciences" à titre de meilleur documentaire, en 1941.

Alors que les Canadiens prenaient graduellement conscience de l'existence du nouvel Office national du film, grâce à la présentation à des fins commerciales de sujets comme "Canada Carries On", un grand nombre d'autres films de l'ONF furent réalisés pour être présentés à des groupes spécialisés. Il s'agissait de courts métrages en 16mm parrainés par divers ministères du gouvernement; les premières réalisations en 16mm comprenaient des films variés comme par exemple, un métrage sur la construction de la grande route de l'Alaska; une analyse du fonctionnement et de l'oeuvre des coopératives de crédit ou caisses populaires; et "Chants Populaires", un film sur les chansons du folklore canadien-français.

Vers 1946, l'Office national du film était bien formé pour remplir sa tâche de réaliser des films documentaires, et bon nombre de ministères du gouvernement avaient compris la valeur de ce nouveau moyen de communication aussi bien à des fins d'instruction qu'à des fins d'information.

John Grierson définissait l'auditoire de films spécialisés parrainés par le gouvernement lorsqu'il déclarait dans sa Politique du film pour le Canada— "des projecteurs de films en 16mm peuvent être déplacés à volonté. Là où vous avez un groupe de personnes réunies au nom d'une profession particulière, d'un club social, intéressées aux affaires civiques ou aux questions éducatives, vous avez un auditoire tout prêt pour ces films consacrés à des besoins et à des intérêts particuliers".

Depuis sa constitution en corporation en 1945, la Société centrale d'hypothèques et de logement, avec l'aide de réalisateurs de films commerciaux et de l'ONF, s'est toujours adressée à des auditeurs qui s'intéressent particulièrement aux problèmes du logement et aux solutions qui leur sont proposées, en vertu de la Loi nationale sur l'habitation. Ces films de la Société servent aussi à renseigner les auditeurs du monde entier, sur ce qui se passe au Canada, dans le domaine du logement.

Les premiers films que la Société a réalisés, furent tournés par la Crawley Films d'Ottawa, l'une des compagnies privées de production cinématographique qui a le mieux réussi, parmi toutes celles qui se sont formées après la guerre.

Les tout premiers films, comme "Pride of Possession", "On to Fortune", "Houses in Jig Time", "Integrated Housing" et "A Tale of New Cities", traitaient des problèmes fondamentaux de logement, au cours des années immédiates de l'après-guerre.

Les films qui suivirent, traitèrent de sujets beaucoup plus vastes. La rénovation urbaine fut un des plus importants. Vers l'année 1960, les projets de réaménagement étaient déjà en bonne voie de réalisation dans un certain nombre de cités canadiennes, et afin d'enregistrer sur pellicule le changement qui se produisait sur la scène urbaine, l'Office national du film, à la demande de la Société, réalisa au cours de l'année 1961, trois courts métrages sur le réaménagement.

Ces films qui s'intitulent "Regent Park South", "A Report on Redevelopment", "Les Habitations Jeanne-Mance" et "New Course for Halifax", traitent du réaménagement réalisé dans trois centres canadiens, soit à Toronto, Montréal et Halifax. On y illustre la façon dont les gouvernements municipaux, provinciaux et fédéral, ont joint leurs efforts pour donner un renouveau de vie à certains secteurs résidentiels délabrés au centre de ces cités. Ces films mettent en contraste le caractère désuet des vieux quartiers avec les nouveaux centres où des maisons d'appartements avec ascenseurs, des maisons en rangée et des aires réservées au jeu ont pu être construits et aménagés grâce à l'aide financière obtenue en vertu de la LNH.

A Halifax, on a abordé d'une façon différente la question de la rénovation urbaine. On a déblayé au coeur même de la cité, une zone qui comprenait dix pâtés de maisons pour la réserver à des fins commerciales. Les familles délogées par suite de ce programme de déblaiement, furent relogées dans un secteur suburbain, connu sous le nom de Mulgrave Park, où les gouvernements fédéral, provincial et municipal avaient construit un projet de logements

Une mise en scène du film "On a Day Off" réalisé par l'ONF pour la SCHL.

Vue d'ensemble du projet "Les Habitations Jeanne-Mance" à Montréal.

à loyer modique. De cette façon, un secteur d'une grande valeur devenait libre au centre de la cité, pour des fins commerciales et industrielles.

Ces premiers films avaient donc pour sujet les deux plus grandes cités du Canada et un aperçu du réaménagement tel qu'il se pratique dans les provinces maritimes. Les caméras se tournent vers des travaux de réaménagement qui sont en voie d'exécution dans deux autres centres du pays.

"The First Step" porte sur la construction de nouveaux logements dans un vieux secteur de la cité de Windsor. A cet endroit, un programme d'importance modeste mais de première nécessité a eu pour résultat la construction du projet Glengarry Court qui comprend 296 nouveaux logements. Le nouveau film traite d'une façon complète du problème de la rénovation comme il se présente dans une cité d'importance moindre, et de la solution à y apporter.

On a commencé, au cours de l'été de 1962, à tourner un film en couleurs qui a pour sujet l'histoire d'un projet de réaménagement dans la cité de Vancouver. Il s'agit ici d'un programme de vingt ans qui est en voie d'être réalisé, en vue de restaurer une grande partie du secteur central de cette cité; le programme comprend des travaux de rénovation à l'aide de fonds privés et publics. Le nouveau film traite de la première phase des travaux et appuie sur la nécessité de réparer et de rénover les maisons existantes; on y montre les logements fédéraux-provinciaux de "McLean Park" et de "Skeena Street" qui sont en voie de réalisation en vertu de la LNH. Ces projets serviront à loger les familles qui devront être délogées par suite du programme de rénovation. Une version anglaise et une française de ce film seront mises en circulation au cours de l'année 1963.

On a également tourné des métrages dans des régions réaménagées de trois autres cités canadiennes —St - Jean, Terre - Neuve, Saint - Jean, Nouveau-Brunswick et Sarnia, Ontario. Plus tard, des équipes de caméramen filmeront le progrès réalisé en rénovation urbaine dans ces cités.

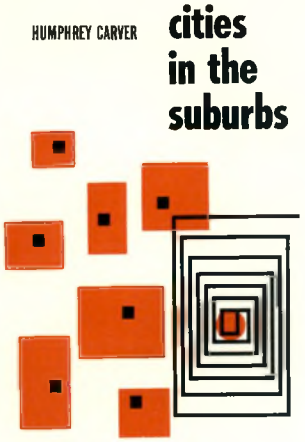
En 1960, la Société mit en circulation un court métrage particulier sur les coopératives de logement. Ce film, intitulé "On A Day Off" fut tourné dans les Maritimes; il a pour sujet une histoire d'intérêt humain, celle d'un homme à revenu limité, et la façon dont il peut construire sa propre maison en étant membre d'une coopérative de logement. La construction de maisons suivant la méthode coopérative n'est pas encore bien répandue au Canada, et on croyait que l'expérience des Maritimes intéresserait d'autres groupes de population du Canada.

Les films réalisés récemment par la Société ou pour son compte ont été conçus pour expliquer et mettre en évidence des articles particuliers de la Loi nationale sur l'habitation. Ils étaient destinés à des auditoires restreints.

On constate, cependant, beaucoup d'intérêt de la part du public dans l'activité générale de la Société. C'est pourquoi, l'Office national du film réalise présentement un film en couleurs pour le compte de la SCHL, en vue d'encourager une plus grande prise de conscience des diverses formes d'aide qui sont maintenant disponibles en vertu de la Loi, et la façon dont ses avantages peuvent être mis en oeuvre pour développer une façon plus vaste et plus équilibrée d'aborder les problèmes du logement au niveau local. Ce film, qui sera mis en circulation en 1963, aura une version française et une version anglaise; il servira à démontrer l'importance du logement dans notre société ainsi qu'à illustrer les diverses formes d'activité du gouvernement fédéral dans ce domaine.

Tous les nouveaux films de la SCHL ont été projetés en beaucoup d'endroits devant des groupes intéressés à ces questions, et ils ont aussi été montrés à la télévision.

De nos jours plus que jamais auparavant, le film documentaire peut rendre un service très important en nous aidant à comprendre les complexités de la vie moderne. Ce fait est reconnu à la fois par le gouvernement et par l'entreprise privée. On a déjà beaucoup accompli dans ce domaine et on peut être assuré qu'à mesure que de nouveaux besoins d'information se présenteront, on aura recours aux films commandités pour jouer un rôle encore plus important dans l'interprétation du fonctionnement de notre société et de ses problèmes. ✦✦✦



TOMORROW'S SUBURBS

CONFORMITY OR EXCELLENCE?

Dr. Hodgson is a graduate of McGill University. As a Rhodes Scholar he received his Doctor of Philosophy from Oxford University. During wartime, he served more than four years with the Royal Canadian Navy and retired with the rank of Commander. He joined Central Mortgage and Housing Corporation at its inception, January 1, 1946 and held many senior staff positions. He was appointed an Executive Director of the Corporation in May 1956. Dr. Hodgson left CMHC to become Assistant-Secretary to the Cabinet in the Privy Council.

by Dr. J. S. Hodgson

"Cities in the Suburbs" is an important book and Central Mortgage and Housing Corporation is to be congratulated for having sponsored it. In a mere 120 pages Mr. Carver makes many wise, and some provocative, statements about life in the suburbs, as it is and as it might be. His style is lively and vivid, his choice of photographic illustrations excellent—including a dozen refreshing black-and-white drawings by Zoltan Kiss. To encourage the reader he has eschewed footnotes, appendices or even a foreword. He offers many pungent expressions, for example when he suggests that University Avenue in Toronto "has the emotional impact of two rows of stuffed shirts."

The book is not primarily a factual description of recent urban growth in Canada, but a work of social philosophy. It contains hardly any systematic data because it presents a viewpoint rather than a history. It does not pretend to contribute directly toward the solution of familiar urban problems such as sprawl in suburban neighborhoods, metropolitan and regional government, urban renewal, pedestrian and vehicular traffic or municipal finance, but focusses attention on another problem that may be fully as important—the shapeless emptiness of the typical new suburb.

In presenting his case the author explains how the streetcar, and later the automobile, influenced the pattern of city growth. He shows how Ebenezer Howard, Frank Lloyd Wright, Le Corbusier and Clarence Perry have each contributed to the idea of the city.

"The ultimate purpose of a city," he says, "is to be discovered in a quality of heart and mind." He believes the future suburbs should be made more urbane by being "nucleated" around their social institutions. The Town Centre would help to build the sense of community in the City in the Suburbs. "Only at the scale of a town, rather than at the scale of a neighborhood, is it possible to provide a syste-

matic arrangement of living communities. The town is the essential component part of which the metropolitan city must be constructed." The Town Centre would include not only the shopping centre, but also the high school, churches, community centre, art gallery and government offices.

Canada would need about a hundred new Town Centres every ten years. Mr. Carver offers strong reasons to support his view that their creation should be the responsibility of a public authority rather than of private enterprise. Because the municipality will not yet exist, in most cases, at the time when the site for the Centre must be acquired, he recommends that the senior governments act as bankers by acquiring and holding the land until it is needed by the local authorities. He mentions the land assembly provisions of the National Housing Act as a possible instrument for this purpose.

Few will deny the author's basic criticism of our formless suburbs or reject his view that a more satisfactory alternative must be found. Since the War, Canadians have been building houses and projects rather than towns. "Everyman Acres" should be more than a series of dormitories and elementary schools. Whether or not Mr. Carver has the final answer, he is assuredly right in asking whether the piling of subdivision upon subdivision, with or without a Greenbelt, will ever lift up our hearts or those of our children.

Some features of the proposal might be queried. In this automobile age, must the neighborhoods be arranged around the social institutions as the book suggests or may they sometimes be arranged in linear fashion and served by a common throughway? Apart from architectural convenience is there any compelling reason why the high school, the town hall and the principal shops must be situated close together? Is it really desirable that the churches be herded together into one street or square?

More difficult and unanswered questions arise on the methods of bringing the Town Centres into being. The NHA permits federal-provincial partnerships to acquire land "for housing purposes" and land for community purposes may be included incidentally. The book seems to propose either that every new suburb should begin with a federal-provincial land assembly project including land for both the housing and the future nucleus or that the law be amended to authorize the governments to acquire only the future Centre. Either version raises important questions of public policy. Should the senior governments become solely responsible for the initiation of all new suburbs? Should the federal government provide 75 per cent of the financing of such a programme? What would happen to the investment if the future local government would not or could not take over the reserved Centre site from the senior governments at cost? How would subdividers be prevented from developing in other areas, leaving the reserved site derelict? If the contribution of the senior governments is confined to the site for the Centre, how will the public domain recapture some of the value thereby bestowed upon the surrounding land? Perhaps one or two pilot projects will provide the answers.

The chief values of this book lie in the fact that it offers an inspiring ideal and in the many questions it raises by implication. Some readers may disagree on particular points. This reviewer, for example, would not agree that young families should generally be discouraged from purchasing new houses simply because their demand produces small and cheap houses. Also most new housing projects seem to me to err more on the side of confused variety rather than of monotony.

But in the perspective of the book these are details. The book deserves to be widely read and should be discussed among all those who are concerned with the future of our Canadian cities—and which of us is not? ✦✦✦

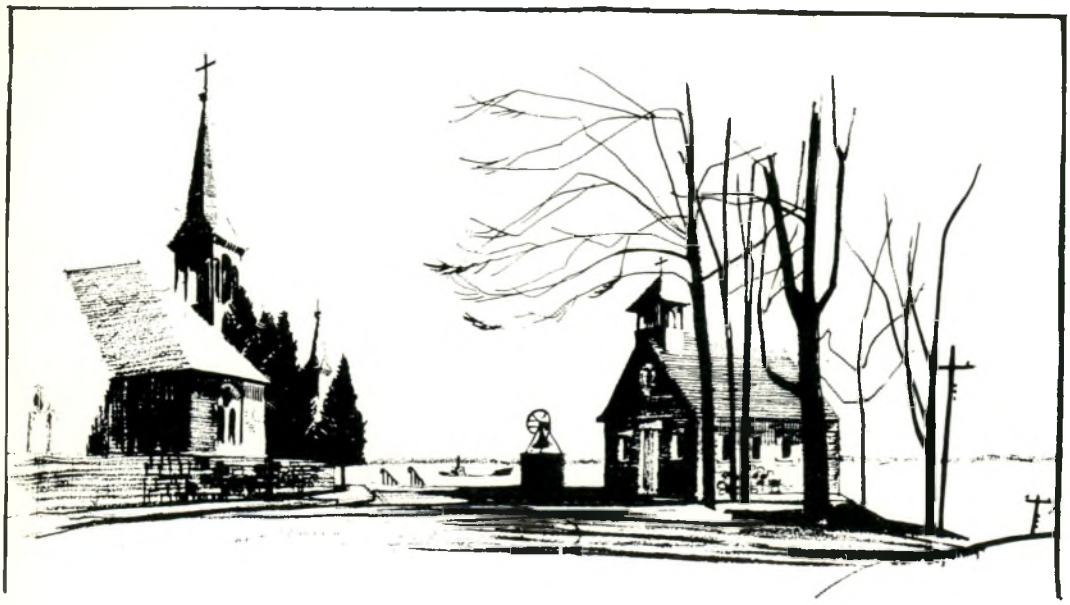
REVIVAL

by Stanley King

While discussing my drawings, I find people anxious to try to preserve any view that shows charm or character. It is an emotional response without discrimination. I am never asked why I like the views I draw. Love for a street is so vulnerable and beauty can be suddenly destroyed without regard for the opinions of people who made it their environment.

This is so different from conversations on separate houses and their interiors. It is a tragedy that the relation between consumer and producer should vary so much inside and outside the lot line. Inside the lot, people have a sense of participation in raising standards of beauty and opinions are well-informed. Outside there is no sense of participation and very little knowledge.

We of the architectural profession must help. Commerce can no nothing, for streetscape is not immediately for sale. We have been trained to create towns and we know townscape as environment. We know how art, mathematics, physics, geology and geography are used in the fabric of towns and the different settings in history and literature. All these are school subjects. We should go to the schools with talks and illus-



trations. We should show pictures of different streets at home and abroad and blank off key buildings to show their effect. This is not a specialized subject. A child of six knows more than we do about ground texture and the space of a gas station. This awareness must be sharpened before it is lost. We must remove the barrier between expert and lay. There was no such barrier between the public and the Renaissance Architect whose finishing school was a tour of the world's best contemporary cities. Much of Renaissance London, Bath and Edinburgh was built to conform with the public's taste. Our status of skilled servant is much the same as it was, but a large gap has grown between the architect and the public. It is entirely up to us to bridge the gap. ✦✦✦

LA POLLUTION DES EAUX ET LEUR ÉPURATION

par Paul Vézina,
Division de l'information, SCHL.

"Aux termes de la Loi nationale sur l'habitation, la Société centrale d'hypothèques et de logement peut consentir un prêt à une municipalité ou à une corporation municipale de système d'égout, pour aider à la construction ou à l'agrandissement d'un projet d'épuration des eaux-vannes. Un tel projet doit faire partie d'un plan d'ensemble dressé en vue d'éliminer ou d'enrayer la pollution des cours d'eau et du sol".

Voilà un relevé de communiqué de presse qui apparaît fréquemment dans les journaux et les bulletins de nouvelles qui tiennent le public au courant des problèmes qui nous affrontent tous les jours. La pollution des eaux et les mesures à prendre pour remédier à ce problème sont aujourd'hui le sujet de nombreux articles publiés et de discours prononcés. Ce problème est compris par quelques municipalités et ignoré par plusieurs.

Nous expérimentons une explosion de la population dans tous les pays et le Canada n'en est pas exempt. Le problème ne se trouvera pas une solution par lui-même et ne fera que devenir plus aigu à moins que les autorités compétentes consentent à prendre des mesures radicales pour placer le bien-être de la population en général avant tout.

Qu'est-ce que la pollution? La pollution est l'évacuation dans le réseau d'alimentation de matières qui altèrent la qualité de l'eau au point d'empêcher la collectivité de l'utiliser à ses plus grands avantages. Il existe également la pollution du sol qui est normalement causée par l'usage des fosses septiques dans les régions suburbaines de nos villes. L'usage excessif de cette méthode, maintenant presque inusitée dans nos nouveaux projets d'habitations, a néanmoins causé de graves ennuis sanitaires à notre population. L'histoire contemporaine des fosses septiques dans nos villes remonte aux années d'après-guerre où le besoin immédiat d'un grand nombre d'habitations a créé une poussée dans la construction suburbaine et nécessité par conséquent l'usage de ce système d'évacuation des déchets humains et domestiques. Ils ont ainsi minimisé la valeur de la santé et du bien-être d'une génération croissante.

Il serait difficile de les condamner. A cette époque il s'agissait de définir quel projet d'ordre social méritait une considération immédiate.

Aujourd'hui nos gouvernements sont appelés à effectuer la correction de plusieurs maux causés par l'expansion rapide de nos villes.

C'est ainsi qu'en produisant une législation et un programme social d'épuration des eaux, la pollution du sol deviendra un danger auquel une solution sera moins problématique et l'épuration se fera graduellement. La politique restrictive de la Société centrale d'hypothèques et de logement envers l'usage des fosses septiques est un premier pas vers la solution des problèmes de pollution du sol.

L'eau étant tellement reliée à nos besoins quotidiens, nous sommes portés à sous-estimer son importance primordiale. Peu de problèmes sont plus caractéristiques de notre société moderne que la lutte contre la pollution de l'eau et les remèdes qui existent pour en entreprendre l'épuration.

L'eau pure est indispensable à la vie et est également nécessaire à l'expansion industrielle et agricole de notre pays. La conservation et l'ex-

ploitation des nombreuses ressources naturelles qui font notre richesse dépendent largement des mesures qui seront prises pour enrayer la pollution croissante de nos eaux courantes.

La situation est assez paradoxale: au milieu d'une aisance et d'une sécurité de plus en plus grandes, au milieu d'une surabondance de commodités et d'inventions visant à rendre notre existence matérielle plus heureuse, la menace que fait peser sur la vie elle-même la pollution de nos sources d'eau s'accroît de jour en jour.

Les dangers que représentent pour la vie humaine la rareté et la pollution de l'eau dont se servent l'homme et les animaux, est un problème dont le monde entier s'inquiète. Pour ce qui est du manque d'eau, il a déjà été constaté qu'en certains endroits on puise l'eau du sol mille fois plus vite qu'elle n'est remplacée par les pluies, d'où la nécessité d'employer la même eau à maintes reprises.

Les eaux du Saint-Laurent captées par les services d'eau de maison et des usines, ont été utilisées et rejetées par des centaines de villes. Les distances qui séparent les décharges d'égout des prises d'eau diminuent constamment par suite de l'augmentation de la population et de l'accroissement des nouvelles agglomérations commerciales, industrielles et résidentielles.

Il n'y a rien de criminel ni même de moralement mal dans cette multiplication des industries et des villes. C'est là le résultat des efforts incessants que l'homme déploie pour adapter son milieu matériel à l'évolution des besoins économiques et sociaux. Ce qui serait mal, ce serait de continuer à considérer l'eau comme un don gratuit et à ne rien faire pour réparer les dommages que nous causons. Il nous faut apprendre sans tarder à mesurer et à enrayer le danger qui nous menace. La question ou le problème que nous devons donc nous poser est "Comment pouvons-nous mettre un terme à la pollution."

Les eaux d'égout ménagères et les déchets industriels constituent les deux éléments principaux de pollution. En plus du péril qu'il fait courir à la santé, ce fléau nous dérobe nos poissons et nos baignades naturelles; il diminue la valeur de nos terres, dont il amoindrit l'apparence et l'utilité, il rend notre eau potable désagréable au goût et répand des odeurs nauséabondes.

Il est déplorable de penser que la population des régions industrielles n'a rarement vu le moindre cours d'eau complètement exempt de pollution d'origine humaine.

Jusqu'à présent, nous nous sommes fiés à la nature pour nous protéger, mais n'est-ce pas trop exiger d'elle?

Avant l'essor démographique et industriel de notre pays, la pollution ne constituait pas un problème sérieux, car les déchets de chaque ville étaient dilués par l'eau courante, oxygénés par les bactéries, utilisés comme engrais par les plantes aquatiques et filtrés par le sable et le gravier des rivières, de sorte que l'eau parvenait aux autres consommateurs riverains dans un état relativement propre.

La multiplication des villes et de leurs points de déversement a introduit dans l'eau une quantité intolérable de poisons provenant des usines et des eaux ménagères. La pollution est l'évacuation dans le réseau d'alimentation de matières qui altèrent la qualité de l'eau au point d'empêcher la collectivité de l'utiliser avec le maximum d'avantages.

De quoi se composent ces matières? Elles se composent principalement des déchets de l'organisme et des autres eaux usées des établissements qui pourvoient à nos besoins. Voilà comment chacun de nous contribue d'une façon personnelle à la pollution. Il y a en outre les déchets industriels, comme les acides et les produits chimiques qui émanent de nos industries.

Pendant plusieurs années, il était accepté que l'eau qui n'était pas désagréable aux sens pouvait servir à n'importe quelle fin. Cependant l'eau amère, malodorante ou colorée était considérée comme impropre à la consommation. Grâce aux découvertes de Pasteur et d'autres hommes de science, nous sommes familiers avec les dangers que peuvent receler les eaux claires et inodores. Nous avons appris à dépister non seulement les microbes, mais aussi les virus qui contaminent l'eau. Il nous faut donc maintenant concentrer nos recherches sur les effets nocifs que présentent de nombreuses substances

chimiques capables de résister au traitement par les méthodes classiques. Toute analyse de la pollution chimique de l'eau, à l'heure actuelle, doit tenir compte des déchets de tous les nouveaux produits que sont les détergents, les insecticides de même que la radioactivité.

Aujourd'hui la question de la pureté de l'eau a autant d'importance pour le propriétaire d'usine que pour le consommateur ordinaire. Trop de collectivités insistent pour que l'industrie surveille ses eaux résiduaires, tandis que les municipalités elles-mêmes contaminent les cours d'eau en y déversant des eaux d'égout insuffisamment ou non traitées.

Au cours des 25 dernières années, l'industrie a généralement mis moins de temps que les municipalités à assumer ses responsabilités en matière de conservation de l'eau. Elle a dépensé plusieurs millions de dollars pour assurer la destruction des déchets et améliorer ses méthodes d'épuration.

On tend de plus en plus à faire entrer le coût des installations de traitement des déchets industriels dans les frais d'établissement des usines et à considérer l'opération elle-même comme partie intégrante des frais d'exploitation. Aux Etats-Unis, les entreprises de produits chimiques consacrent quarante millions de dollars par année au traitement de leurs sous-produits indésirables; les fabricants de pâte à papier ont affecté près de cent millions aux procédés d'épuration depuis dix ans et réduit ainsi de moitié leur taux de pollution par tonne de papier. Dans une usine du Québec, une machine à brûler les écorces détruit 150,000 livres par jour d'un agent de pollution qui serait déversé dans la rivière.

Nos ingénieurs s'efforcent sans cesse de decouvrir des améliorations. Il faudra trouver graduellement de nouvelles méthodes de destruction ou de traitement si nous voulons suivre les transformations de notre économie.

La pollution de nos rivières par les eaux d'égout a échappé à notre vigilance avant que nous saisissions toute la gravité du problème, et nous avons manqué d'initiative pour prendre les mesures nécessaires avant que le problème s'aggrave.

Les méthodes d'épuration des eaux-vannes ont été considérablement améliorées et sont jugées présentement adéquates. Une première opération permet de débarrasser ces eaux de 35 pour cent environ de leurs impuretés par voie de tamisage et de sédimentation. Une seconde opération en élimine au moyen de filtres ou du procédé des boues activées les déchets qui y sont en solution ou en suspension. C'est grâce à ce double traitement qu'il est possible de retenir près de 90 pour cent de la matière organique présente dans les eaux polluées.

Pourquoi ce traitement n'est-il pas généralisé au Canada? Il y a au moins deux raisons à cela: le besoin en a été sous-estimé et le coût semble prohibitif.

La raison énoncée en premier lieu reflète un public non averti du problème; la seconde raison, quoique normale du point de vue du contribuable devient sans fondement si on se rend compte que le coût du programme proposé, réparti sur une période de 50 ans, coûterait moins d'un cent par jour par résidant canadien.

Un programme public d'éducation devrait être institué afin de faire comprendre à la communauté la nécessité des mesures proposées par les gouvernements fédéral et provinciaux et adoptées par plusieurs municipalités. Plus de 335 municipalités canadiennes se sont prévalu des avantages de la Loi nationale sur l'habitation pour emprunter une somme globale de plus de 79 millions de dollars afin de procurer à leur population un système d'épuration des eaux-vannes.

Voici la nomenclature des prêts, par province: Terre-Neuve 5, Ile-du-Prince-Edouard 6, Nouvelle-Ecosse 3, Nouveau-Brunswick 7, Québec 18, Ontario 124, Manitoba 18, Saskatchewan 93, Alberta 30, Colombie-Britannique 31.

Alors que le gouvernement fédéral avait approprié une somme de 200 millions à cette fin, il reste encore une appropriation de 125 millions à la disposition de la SCHL pour répondre aux demandes constamment soumises par les municipalités.

Quel qu'en soit le coût, il semble que les autorités publiques à travers le Canada désirent placer la sécurité du public au-dessus des considérations pécuniaires.

A qui incombe en définitive la responsabilité de l'épuration des eaux-vannes? La réponse est bien simple et bien adaptable; chaque ville, petite ou grande, chaque industrie, a le devoir de réparer le mal qu'elle cause en polluant les eaux. L'épuration des cours d'eau exige également la collaboration de tous les riverains.

La lutte contre la pollution des eaux a sa place parmi les buts de la plupart des services municipaux, des entreprises commerciales et industrielles.

La science et la technique nous ont donné les moyens nécessaires pour combattre ce fléau et nous pouvons en attendre des instruments meilleurs encore. Tout ce que nous avons à faire c'est de nous mettre au travail avec ardeur.

Aucune province n'a été plus largement choyée par la nature que la province de Québec. On l'a déjà appelée, et avec raison, la province lacustre à cause de ses nombreux lacs et majestueux cours d'eau. Cependant, devant l'industrialisation prolifique que subit Québec présentement, ces dons de la nature risquent d'être contaminés par la pollution des eaux. Les autorités provinciales ont confié à la Régie d'épuration des eaux la tâche presque surhumaine de légiférer afin de sauvegarder le caractère des cours d'eau et de prévenir ou de guérir toute pollution éventuelle. Depuis l'incorporation de la Régie, des mesures ont été légalement préconisées afin que la "belle province" puisse remédier aux dommages déjà causés et éviter la propagation des effets nocifs de l'industrialisation suburbaine. Aux termes de cette nouvelle législation, il appert que la Régie désire peu à peu amener les villes et les municipalités à payer localement, avec l'aide fédérale, la réalisation graduelle d'un vaste programme destiné à mettre un terme à toute pratique qui pourrait être une cause de pollution.

Il existe également un devoir que la population ne doit pas renier et c'est celui de vouloir contribuer à l'appui financier de toute expansion moderne de nature à bénéficier à la communauté. Nous vivons dans un temps où la marche du progrès ne peut être arrêtée. Les contribuables devront bientôt apprendre à faire la part des choses et admettre qu'un projet d'épuration des eaux-vannes contribue au bien-être de la population en général et qu'ils doivent être prêts à accepter une certaine augmentation dans leurs taxes municipales.

Considérant les avantages de la Loi nationale sur l'habitation et à condition que les municipalités consentent à s'en prévaloir, il n'existe pas de raisons pour que le fardeau financier ne soit pas réduit à un minimum.

Aux termes de l'assistance qu'offre le gouvernement fédéral par l'entremise de la Société centrale d'hypothèques et de logement, une municipalité ou corporation municipale peut emprunter pour une période n'excédant pas 50 ans, au taux de 5⅛ p. 100 l'an, une somme ne dépassant pas les deux tiers du coût du projet, qui est défini dans un contrat passé avec la S.C.H.L. En vertu d'un amendement récemment apporté à la Loi nationale sur l'habitation, si les travaux sont terminés au plus tard le 31 mars 1965, la S.C.H.L. peut renoncer au remboursement de 25 p. 100 du principal des prêts LNH accordés aux municipalités et à 25 p. 100 de l'intérêt couru ou payé en rapport avec ces prêts, à la date de parachèvement du projet. Voilà brièvement la structure de la législation sociale que le gouvernement a approuvée afin de permettre aux municipalités, quelle que soit leur importance, de faciliter et d'encourager la construction de projets d'épuration des eaux-vannes. Il convient donc aux administrateurs municipaux de faire un examen approfondi de la situation dans leurs localités et de ne laisser aucune pierre non tournée qui pourrait retarder l'adoption d'un programme d'ordre primordial.

L'épuration des eaux est un problème auquel il faut attacher une très grande importance sous peine de voir nos rivières se contaminer et nos eaux devenir graduellement inutilisables. Il faut se faire à l'idée que les déchets ne doivent pas aller tout simplement aux rivières, mais aux usines d'épuration. Sans doute ce procédé, plus rationnel, comportera des dépenses. Mais les administrations municipales ne doivent pas s'en effrayer outre mesure. Leurs difficultés ont été prévues par le gouvernement à l'échelon supérieur.✦

HOUSING and the 1961 Census

by Frances T. Chambers,
Economic Research Department,
CMHC.

The results of the 1961 Census, which deal specifically with housing, are beginning to appear. In total, the figures will provide an up-to-date picture of Canada's housing stock in terms of both quantity and quality together with a picture of the manner in which the population makes use of that stock. It will be possible, from the results, to assess the adequacy of the housing stock for the purposes it must serve, in geographical, social and economic terms.

Not only will the Census results indicate the geographical areas of concentration of poor housing conditions, but they will also show the extent to which those in the lower-income groups, particularly special groups such as the aged and those in large families and perhaps the new immigrants, bear the brunt of the inadequacies of our housing stock. Some of these inadequacies arise from the physical condition of the dwelling, its age, its state of repair and its plumbing facilities. Inadequacies of another sort arise from overcrowding and the consequent loss of privacy for the family unit or its individual members. Often the physical inadequacies and overcrowding go together to compound the problem. The 1961 Census will, it seems, provide more information than

ever before on these matters. It will, for example, for the first time show the extent to which the inadequacies listed above tend to go together. It will, for the first time, deal specifically with the housing conditions of the aged and will show how the housing conditions in which immigrants live vary with their period of residence in Canada.

Already some of the preliminary results have shed light on these questions. The number of dwellings reported to be in need of major repair declined from 457,570 in 1951 to 255,414 in 1961, or from 13.4 per cent to 5.6 per cent of the occupied housing stock. These results need careful study to allow for the effect of changes in definition and the introduction in 1961 of a new category—dwellings in need of minor repair. But if these totals mean what they appear to mean, there was a significant improvement in the physical condition of the dwelling stock over the past decade. One of the more interesting statistics, however, shows that even in 1961, nearly 20 per cent of the occupied housing stock lacked hot and cold running water. Nor were these conditions limited to rural areas. Even in the central parts of some of our larger cities there were significant numbers of dwellings lacking basic amenities in 1961.

Much of the improvement in the quality of the housing stock is, of course, the result of the high volume of residential construction in the post-war period. The 1961 Census reported that over 44 per cent of all occupied dwellings had been built since 1945. The replacement of substandard dwellings with newly-built modern houses and apartments is, however, a slow process and the Census indicated that 30 per cent of all dwellings in 1961 were more than 40 years old.

Canada has relied very largely on the so-called "filtering process" for the improvement of its housing stock. In this process, as new and better houses are added to the dwelling stock, they are taken up by those in the higher-income groups, while the dwellings vacated are occupied by those in the next lower-income group. By this method, the process filters down, and with some luck helps to raise the housing conditions of those at the lower end of the income scale. In the second half of the past decade, the number of new dwellings built was very much in excess of the formation of new families. Presumably the absorption of these dwellings into the occupied dwelling stock set in motion this filtering process. In doing so it presented us with an opportunity to examine the effectiveness of the process and to ascertain how far down the economic scale the impact of additions to the dwelling stock exceeding family formations was felt.

There will be other questions for which we will be seeking answers. How were some of the special groups, mentioned above, affected? Were the effects different in rental dwellings compared to owner-occupied dwellings? Not only are these matters important to the formulation of opinion and policy on public housing, but they also provide some indications of the working of the housing market. This is of particular concern to those trying to predict house-building activity.

The Census will provide other data relevant to housing market analysis. For example, there will be information on the relationship between the value of houses and the incomes of their owner-occupants. A comparison of this relationship and the corresponding relationship for purchasers of new houses will provide one indication of the potential upgrading that could take place in the housing market. Some of this corresponding information for purchasers of new houses is available from NHA records, but the Census also may provide broader information. Insofar as the statistics relate to the purchasers of houses financed outside the NHA, and to tenants, it will probably be the first time it has been available. As an experiment, the Census Division of DBS will tabulate information on the characteristics of owners and tenants who changed their residence within the twelve months prior to the Census. They will try further to subdivide these groups in order to distinguish between those who moved into newly constructed dwellings and those who moved into older dwellings.

The Census will also provide more detailed information than we have had in the past on the

characteristics of non-family households. The formation of these households, the unmarried person occupying a small apartment or the older person keeping on his or her home after the death of the spouse rather than living with other members of the family, was an important factor in the housing market in the second half of the 1950's. Preliminary data suggest that non-family household formation averaged a net figure of close to 25,000 per year between 1956 and 1961, double the rate of 12,400 between 1951 and 1956. Presumably, with rising real incomes, demand from this source will continue to play an important part in the housing market. The more detailed information on these households from the Census will make possible improved estimates of their future importance.

The Census will provide the basis for a very considerable improvement in our knowledge of the housing market activity of the past decade. It will be of particular benefit because an estimate of future trends must rely in a great measure on the understanding of past trends. On the one hand, it should help to formulate a basis for revising the estimates of house-building activity yielded by the intercensal surveys and, on the other hand, it will provide some insight into changes in the use made of the existing housing stock over the past decade.

It is apparent, from studies carried out in the USA, the housing stock is much more flexible than is generally supposed. In times of housing shortage, for example, apartments over stores may be put to the use for which they were originally constructed. As housing conditions improve, however, these apartments may revert to use as storage rooms for the stores below. Similarly, the basement or attic apartment may revert to the use of the owner of the house in which it is situated, not as a separate dwelling, but merely as an enlargement of the parent dwelling. Because data on changes of this sort are rarely available, while data on conversions involving structural changes, and demolitions, are of dubious quality, the reconciliation between the Census results and the intercensal surveys of house-building activity cannot be definitive. Nevertheless, if the reconciliation makes use of all available information and is done separately for relatively small geographical areas to reduce the possibility of offsetting errors, useful results should emerge. A start has already been made on this reconciliation by DBS.

There are many reasons why the intercensal surveys may have undercounted new house-building activity in the intercensal period. For one thing there are differences in concepts. No attempt is made, for example, to include summer cottages in the intercensal surveys, but these are included in the Census when they are occupied at the time of enumeration. It is probable, also, that certain types of new dwellings which are included in the intercensal surveys tend to be undercounted, as for example, the dwelling designed for the janitor of a new church, or apartments over new stores. Then, too, there will be sampling errors in the rural areas where house-building activity is estimated on the basis of a quarterly sample. It was not until 1958 that the statistical sample used in these areas was designed specifically for housing purposes.

Two very important innovations in the 1961 Census were the inclusion of questions relating to the pattern of migration within Canada and questions on family incomes. Previous Censuses have provided information on earnings but the information available from the 1961 Census will include income from other sources as well. These other sources of income are particularly important in the lowest income ranges where family allowances, pensions and welfare payments may bulk large in the total family income while investment income may be an important component of the total at the upper end of the income scale. While estimates of family income are available for some recent years these have been largely on a provincial basis. From the Census separate data will be given for the larger urban centres.

There is no doubt the 1961 Census will prove to be a very important event for all those actively concerned with housing matters. It is hoped that the wealth of material that will be available will engage the interest of many who have not previously been concerned with these matters. ✦✦✦

The 1962 Canadian Housing Design Council Awards

In ceremonies at Government House, Ottawa, His Excellency, the Governor-General presented the 1962 National Design Awards of the Canadian Housing Design Council. These awards are a continuation of the Council's programme to encourage the improvement in design of Canada's housing.

National Design Awards were presented for 12 Single Family houses selected from more than 200 entries and to nine Multiple housing projects from 25 submitted entries.

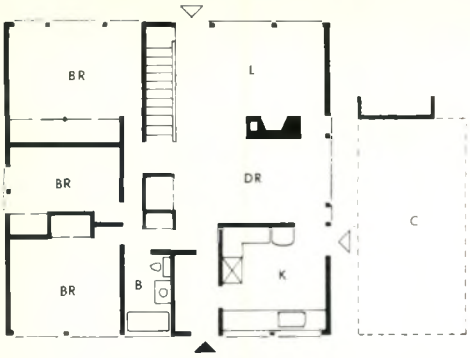
The entries for single family houses were in two classifications. One class open to bungalows up to 1,200 square feet or split levels and two storey houses up to 1,400 square feet. The other for bungalows over 1,200 but not exceeding 1,600 square feet and for split level or two storey units up to 1,800 square feet. The entries were judged for the general architectural character of the house, simplicity of treatment, workability of the interior plan, the efficient use of space and the appropriate use of materials.

The Multiple Housing awards were offered for designs that included row housing, maisonettes and apartment buildings not exceeding four floors. The competition did not include duplexes or high-rise apartments. The judging for these entries was done on the basis of the general architectural character, the plan of the living units, landscaping and relationship between units and buildings and siting and the use of materials.

For single Family houses the Jury was: Dr. Thomas Howarth, Ph.D., F.R.I.B.A., F.R.A.I.C., Director, School of Architecture, University of Toronto; Bruce Meikle, Managing Director, A. & B. Construction Ltd., Nanaimo, B.C.; Mrs. G. A. Gillespie, Fort Garry, Man.; Jean-Louis Lalonde, A.D.B.A., M.R.A.I.C., Montreal, Que.; Douglas Shadbolt, Director, School of Architecture, Nova Scotia Technical College, Halifax, N.S.

The Multiple Housing Jury included: Gordon Adamson, F.R.A.I.C., Gordon Adamson & Associates, Toronto; Benoît J. Bégin, M.T.P.I.C., Directeur, Institut d'Urbanisme, Université de Montreal; Erwin Cleve, M.R.A.I.C., Central Mortgage & Housing Corp., Ottawa; G. A. Golden, Superintendent of Mortgages, Sun Life Assurance Co. of Canada, Montreal; Burt Stovel, Frank R. Lount & Son Ltd., Winnipeg.

SINGLE FAMILY HOUSES:

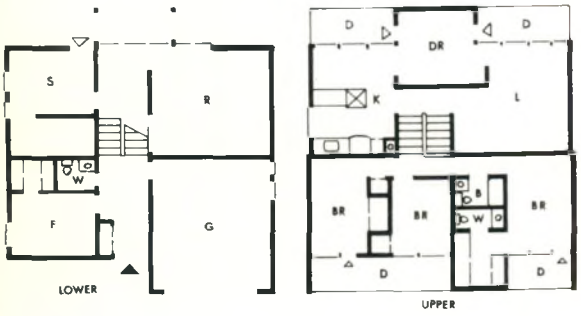


Builder: Trans-Canada Construction Co. Ltd.,
579 Grande Côte,
Rosemere, Que.

Designers: Papineau, Gerin-Lajoie, Leblanc,
Architects,
4412 St. Catherine W.,
Westmount, Que.

Location: 3 Rue d'Epinal,
Lorraine, Que.

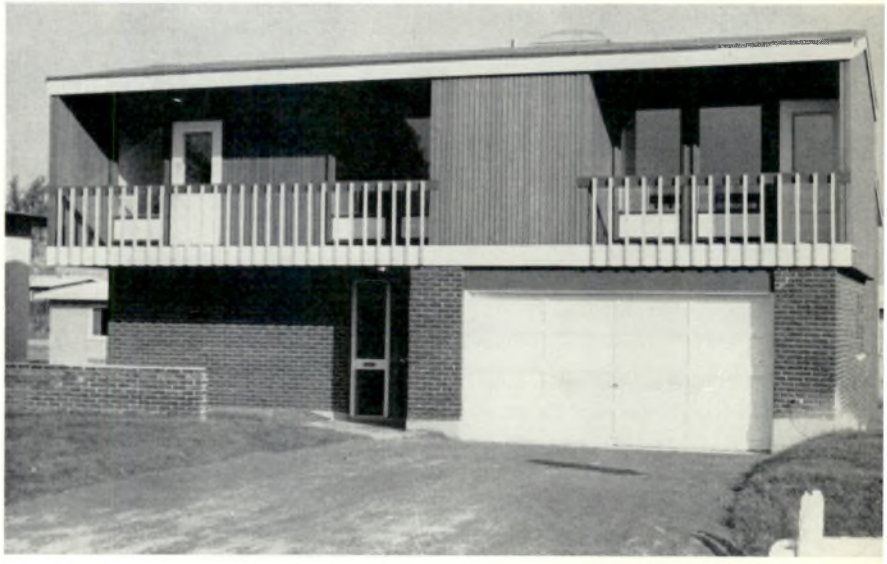
The designer has succeeded in achieving a good sense of space in this small house with the separation of the bedroom wing from the main living area and the kitchen door is well located in relation to the carport. The jury admired the efficient planning and the straightforward zoning of the house, although there would be some problems of sound transmission.



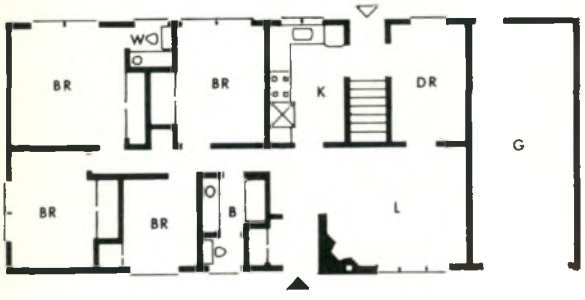
Builder: Willart Construction & Housing Co. Ltd.,
50 Leger Boulevard,
Pont Viau, Que.

Designer: Denis S. Deskin, Architect,
1745 Cedar Avenue,
Montreal, Que.

Location: 6 Bar le Duc,
Lorraine, Que.



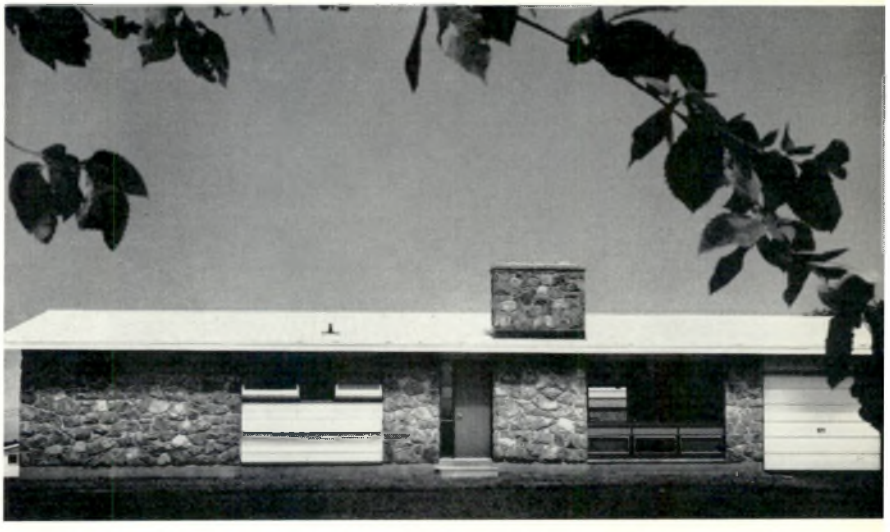
This unpretentious, compact house makes maximum use of space. The balcony treatment is interesting and provides an extra dimension in the living qualities. The circulation is good although the Jury thought that the living-room was unnecessarily reduced by an internal wall which could be easily corrected.



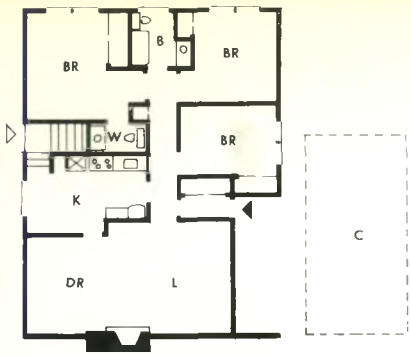
Builder: Minto Construction,
P.O. Box 223,
Ottawa, Ont.

Designer: Minto Construction,
P.O. Box 223,
Ottawa, Ont.

Location: 23 Herrington Court,
Crystal Beach,
Ottawa, Ont.



The builder-designer has used a simple, economic basic plan form and achieved very pleasing proportions externally. This four-bedroom house provides both a main bathroom and a powder room off the master bedroom. The Jury had reservations about the dominating chimneypiece in the living-room and the use of a profusion of materials on the exterior.

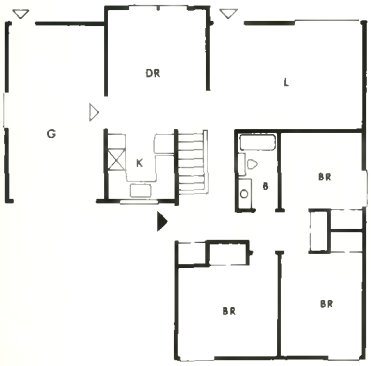


Builder: Minto Construction,
P.O. Box 223,
Ottawa, Ont.

Designer: Minto Construction,
P.O. Box 223,
Ottawa, Ont.

Location: 30 Cleadon Drive,
Crystal Beach,
Ottawa, Ont.

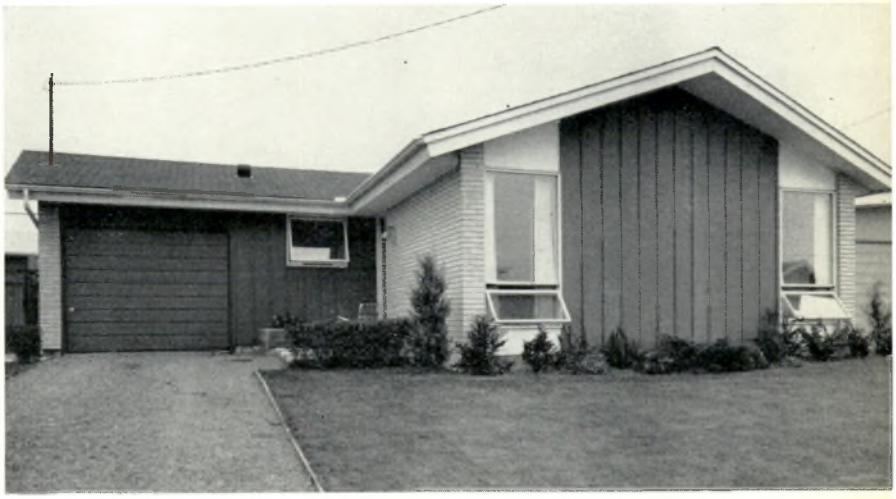
This is a very good plan with admirable restraint being shown in the use of exterior materials and in the elevation treatment. The kitchen is large enough to provide an eating area, but the Jury had some reservations about the location of working surfaces away from natural light. The large covered entrance court could serve as a play area in rainy weather.



Builder: Grisenthwaite Construction Co. Ltd.,
Box 128, Postal Station "D",
Hamilton, Ont.

Designer: N. W. Dobell, Architect,
989A Fennel Ave. E.,
Hamilton, Ont.

Location: 15 Westaway Place,
Westchester Park,
Hamilton, Ont.



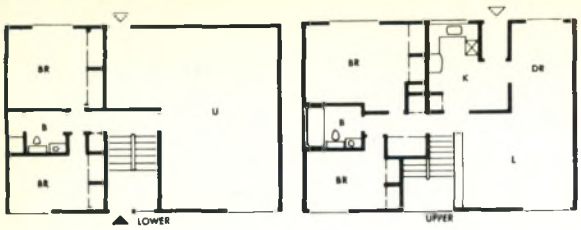
This house has a workmanlike plan, notable for an unusually generous dining area and for excellent segregation throughout. The house is designed for rear-yard privacy and living, with doors opening out from the living-room and garage for this purpose. The Jury thought a folding wall across the kitchen might be a convenient and useful feature.

Builder: William M. McCance Limited,
R.R. No. 3,
Sarnia, Ont.

Designers: Venchiarutti & Venchiarutti, Architects,
194 Wilson Ave.,
Toronto, Ont.

Location: 524 Lakeshore Road,
Woodrow Shores,
Sarnia, Ont.

The designer is to be especially commended on the selection and use of materials for the exterior, on the siting and on the preservation of trees and landscaping. The split stairway provides a good division between living, sleeping and basement areas. The Jury had reservations concerning the fire-place which seemed to be heavy and clumsy in contrast to the nicely designed storage wall.

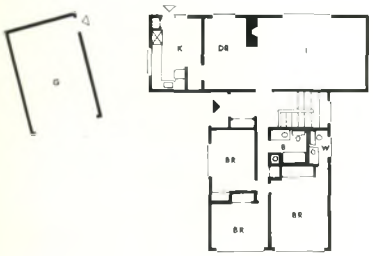


Builder: Metropolitan Construction,
1800 Winona,
Transcona, Man.

Designers: Libling Michener & Associates, Architects,
368 Main Street N.,
Winnipeg, Man.

Location: 449 Ralph Ave.,
Transcona, Man.

This is a simple, straightforward treatment of the split-level plan type distinguished by the good proportions of the exterior. Carefully designed details and the studied relationship between light and dark areas gives a distinctive urban quality to the building. The plan arrangement in the living area permits a variety of decorative and spatial arrangements.



Builder: Engineered Homes,
340 50th Ave. S.E.,
Calgary, Alta.

Designers: John Dyer & Associates,
Engineered Homes,
Calgary, Alta.

Location: 1242 Lansdowne Ave.,
Calgary, Alta.

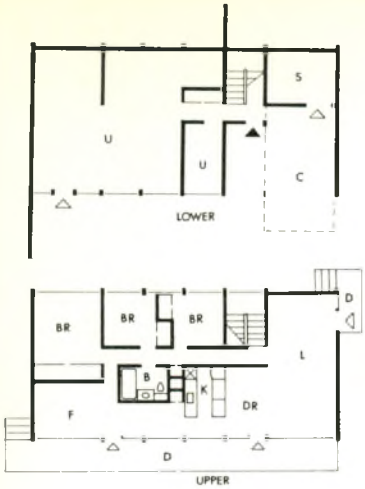
This is a well-planned and attractive house with good separation of living and sleeping areas. There are good bathroom facilities and the staircase is conveniently located. The house has been placed on the site in a position that ensures a degree of privacy and maximum use of outdoor areas with excellent landscaping.

Builder: Craftex Homes (Western) Ltd.,
Box 128, Postal Station "D",
Hamilton, Ont.

Designer: N. W. Dobell, Architect,
989A Fennel Ave. E.,
Hamilton, Ont.

Location: 404 Evergreen St.,
Sherwood Park,
Edmonton, Alta.

A workable and well-zoned plan with a clear separation of living and sleeping areas. By facing the living areas towards the back of the house, maximum advantage can be taken of outdoor living. The Jury would have preferred a more appropriate balustrade for the internal stair and a greater emphasis on the roof overhang to provide more overhead shelter.

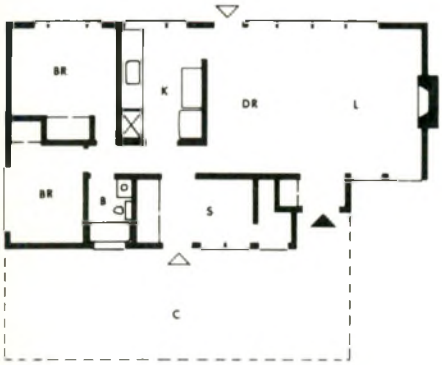


Builder:
R. R. Wilson,
854 Bernard Ave.,
Kelowna, B.C.

Designers:
Hartley & Barnes,
Architects,
318 Bernard Ave.,
Kelowna, B.C.

Location:
1440 Glenaire Cres.,
Kelowna, B.C.

This house, simple in shape and structure, could be used in a number of different siting situations. The exterior is unpretentious with the vertical concrete block uprights relieved by the horizontal line of the deck and contained by solid-end block walls. The Jury thought that a direct access to the kitchen would improve the design.



Builder: **Arthur H. B. Dodd,**
Box 715,
Langley, B.C.

Designer: **Arthur H. B. Dodd,**
Box 715,
Langley, B.C.

Location: **1530 Kirkwood,**
Beach Grove, B.C.

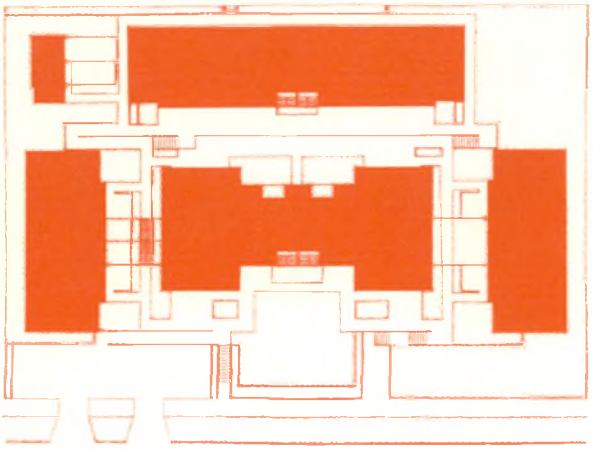
A very straightforward simple house built as a retirement cottage. The house is basementless and is of post and beam construction on a 4'0" module. There is good storage space and a large carport provides sheltered space outside. The Jury had reservations about the trivial wrought iron railing and post at the entrance.

Builder: **James Moebes Construction,**
2012 Jones Ave.,
North Vancouver, B.C.

Designers: **Hartley & Barnes, Architects,**
318 Bernard Ave.,
Kelowna, B.C.

Location: **4553 Lyons Ave.,**
North Vancouver, B.C.

An excellent two-storey house that is well planned and sited. Special attention has been given to the problems of indoor-outdoor living. The Jury thought the house a good solution for this type of construction. It was realized that further mature planting would provide an important degree of privacy for outdoor living.

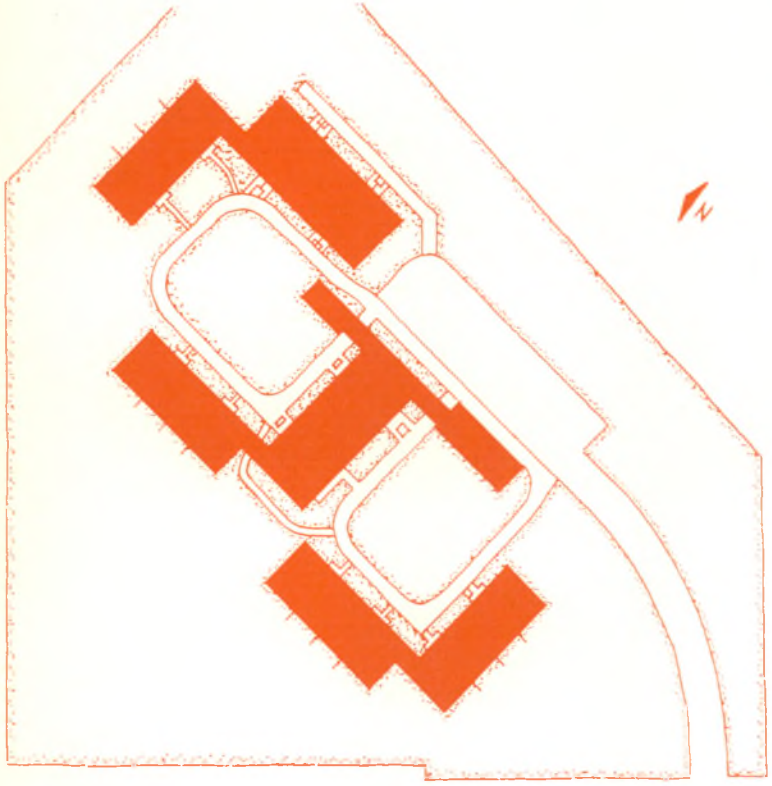


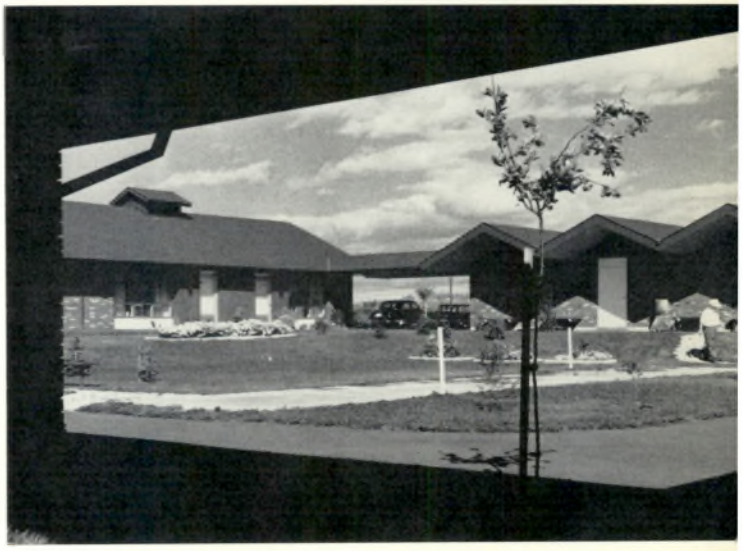
900 Humboldt St., "C.N.I.B. Villas", Victoria, B.C.

Architect: **Charles E. Craig,**
1010 Langley St.,
Victoria, B.C.

Developer: **Canadian National Institute for the Blind,**
360 E. 36th,
Vancouver, B.C.

The designers of this project faced a formidable discipline—a steeply sloping site in a project for blind persons. The problem was tackled with care and imagination. Every square foot of the area is planned with the special needs of the occupants in mind; low walls, fragrant shrubs, railings and paved areas with changing textures at strategic points to guide them. The designers have kept the purpose inconspicuous by using the typical elements of West Coast domestic architecture.



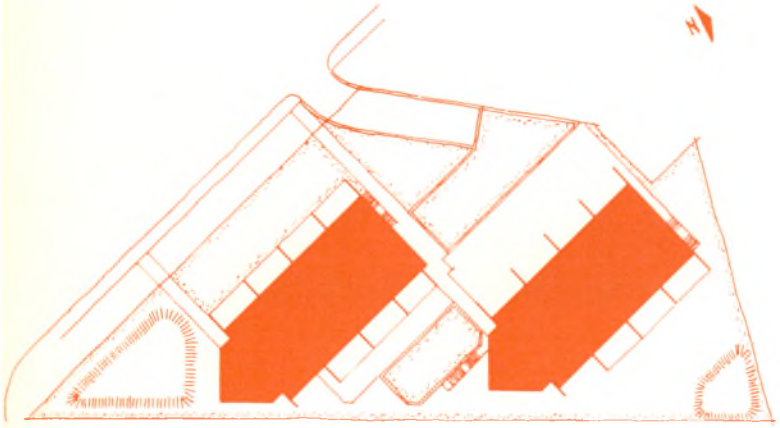


Hilliard St., Peterborough, Ont.

Architects: **Craig & Zeidler,**
2175 Victoria Park Ave.,
Scarborough, Ont.

Developer: **Kinsmen Club,**
Peterborough, Ont.

This project for elderly people, has a straightforward approach to a problem charged with emotional overtones. Its two well proportioned courtyards create an atmosphere of intimacy, self-identity and protection; at the same time, it remains in communication with the outside world through outward-facing windows. Automobiles are kept out of the courts but remain at a convenient distance. The project derives its pleasant character solely from the simplicity and good scale of its buildings and well-landscaped courts. The Jury felt the units were efficient, but suffered from the lack of storage space.

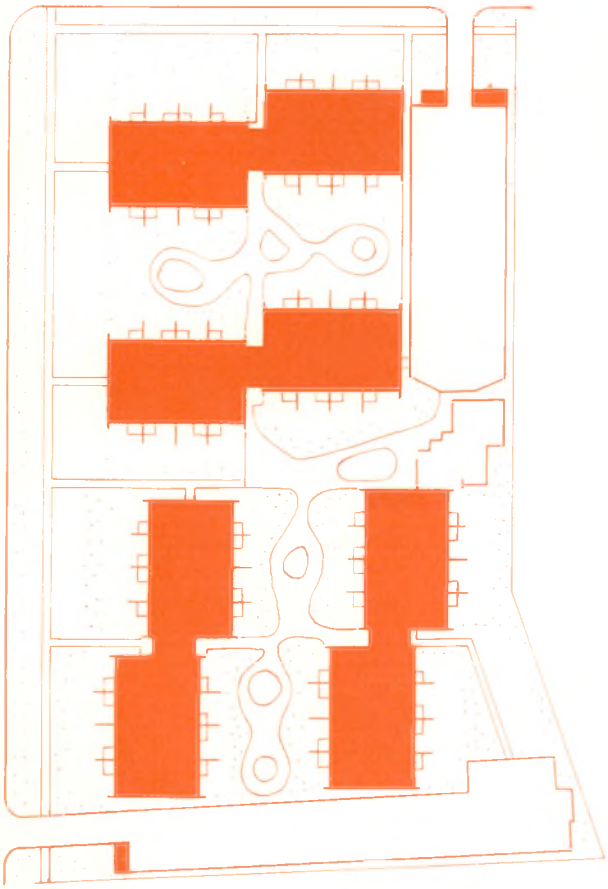


1 West Mall, Etobicoke, Ont.

Architects: Chapman & Hurst,
416 Moore Ave.,
Toronto, Ont.

Developer: Elsian Investments Ltd.,
10 St. Clair Ave. E.,
Toronto, Ont.

Intelligent site planning and well designed buildings have transformed a difficult site into a pleasant residential environment. By choosing a compact maisonette-system and by placing the tenants' parking garage underground, the designers have reclaimed a maximum of open space on a restricted site. The solidity of the brick walls is relieved by the use of natural wood on screens and balustrades. Only the shape of the bachelor apartment in the "bow", no doubt a result of setback restrictions, was questioned by the Jury.

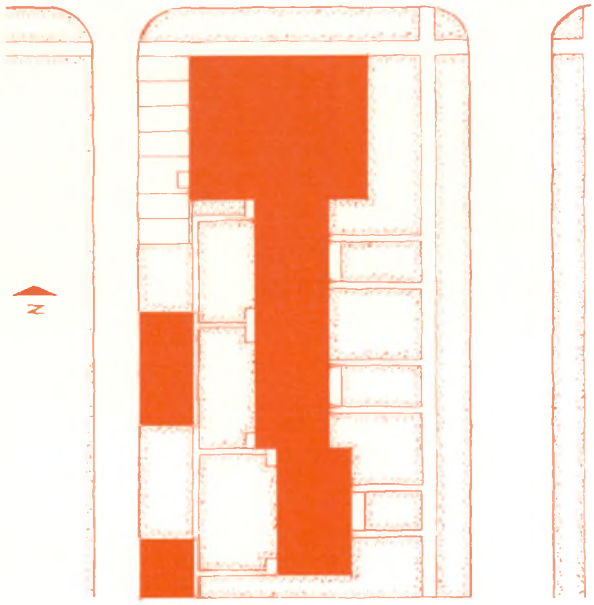


Victoria Park Ave., Clintwood Court, Toronto, Ont.

Architect: Henry Fliess,
224 Merton St.,
Toronto, Ont.

Developer: Cadillac Construction Association,
2171 Avenue Rd.,
Toronto, Ont.

This project employs two-storey maisonettes, arranged back to back, with each unit containing a screened terrace. Although rear yards are eliminated, many of the advantages of row housing over conventional apartments are retained. The buildings are well proportioned and crisply detailed and the projecting party walls provide a degree of privacy and shadow, as well as giving each unit a separate identity.

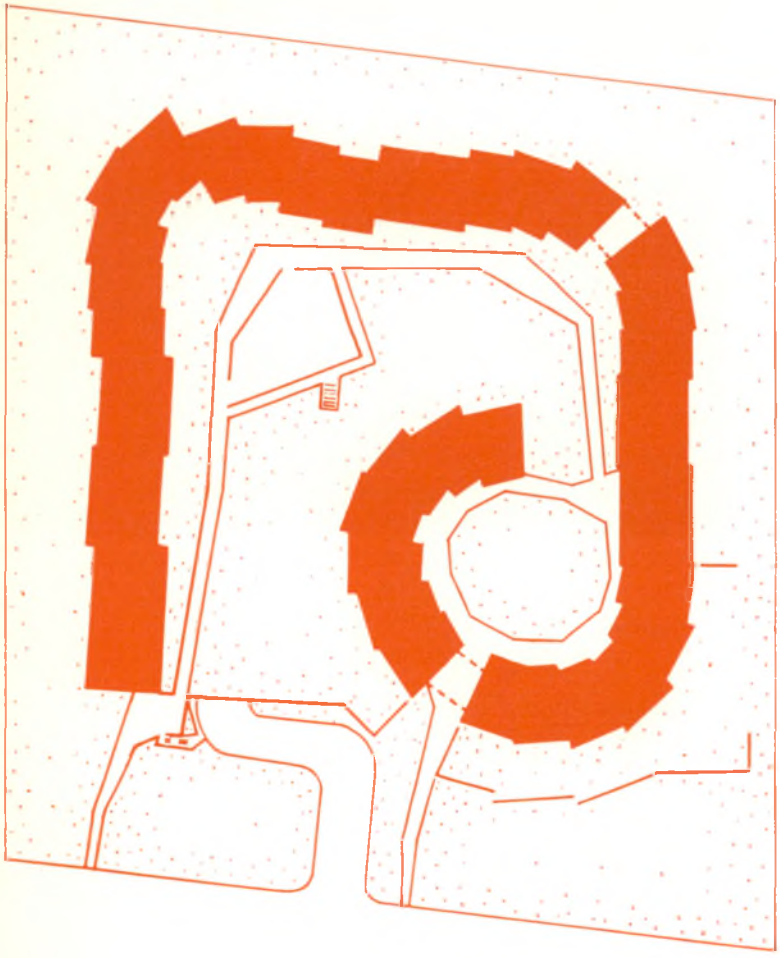


South-west corner of Centennial & Grant Sts., Winnipeg 9, Man.

Architects: **Blankstein, Coop, Gillmor & Hanna, 402 New Hargrave Bldg., Winnipeg 2, Man.**

Developer: **Wellington Investments Ltd., 499 Berry St., Winnipeg 12, Man.**

This project is interesting because it introduces row housing into a neighborhood of single and semi-detached houses where they can be an asset by relieving the visual and social monotony. The houses are well laid out, although some families may find the openness of the ground floor a disadvantage. There is, however, compensation in the generous room sizes and by such thoughtful extras as the storage wall next to the kitchen entrance.

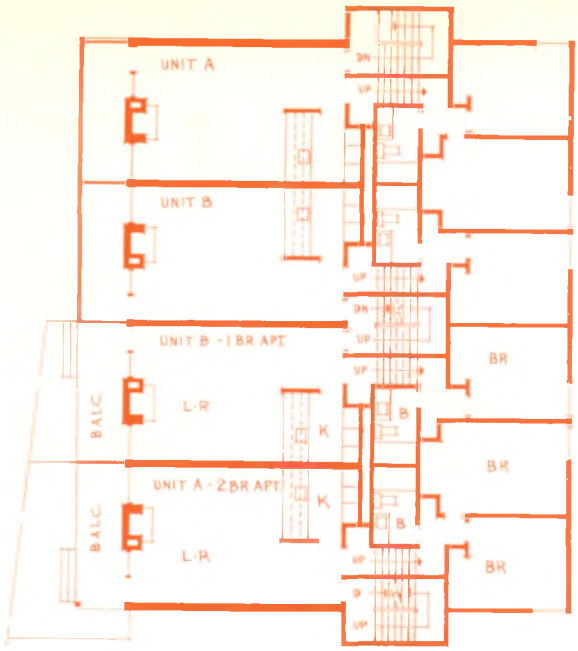


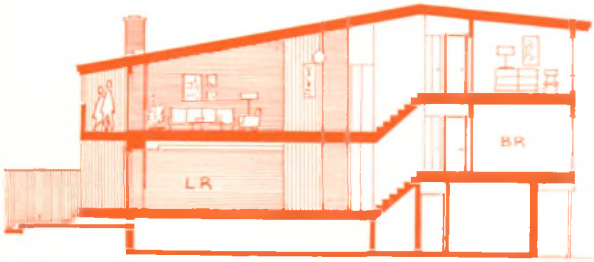
2265 Jane St., Toronto, Ont.

Architects: **Jack Klein & Henry Sears, 34 Prince Arthur Ave., Toronto, Ont.**

Developer: **The Rubin Corporation, 44 King St. W., Toronto, Ont.**

Only two house types are used in this project, one rectangular, the other pie-shaped. In dramatic combinations, with varying setbacks at different elevations, they achieve a sense of personal identity without being different from their neighbors. The interiors are well-planned, although the Jury felt the rectangular types with the interesting split-level arrangement, to be more successful than the pie-shaped counterparts.



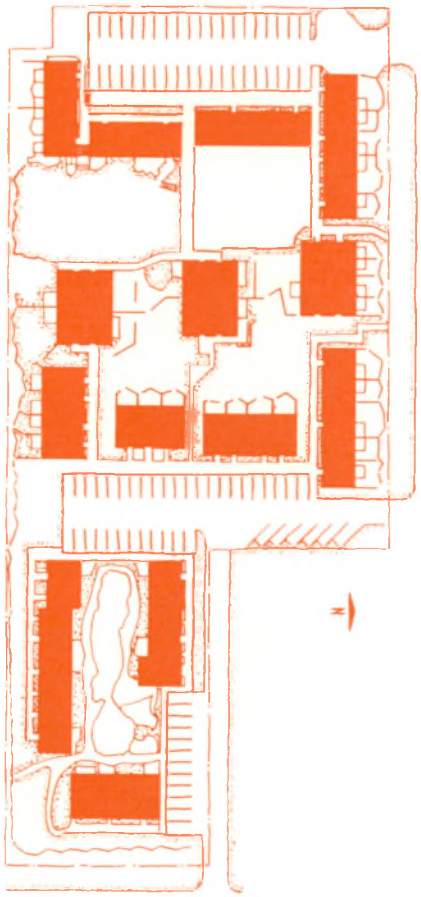


34 Alma Street, "The Townhouse", Dundas, Ont.

Architect: **Norman W. Dobell,**
989A Fennel Ave. E.,
Hamilton, Ont.

Developer: **Grisenthwaite Construction Co. Ltd.,**
Box 128, Postal Station "D",
Hamilton, Ont.

Built in an established urban area and mainly surrounded by large older homes, this multiple is designed to be in harmony with its environment without repeating the forms of neighboring houses. Each of the eight dwelling units in the building enjoys good orientation, cross-ventilation and considerable privacy with the lower four units having private patios, but the Jury felt a visual barrier at the entrance to the apartments would have been desirable.



777 W. Queens Rd., Delbrook Garden-Apartments, North Vancouver, B.C.

Architects: **Lund, King & Associates,**
152A West Fifteenth St.,
North Vancouver, B.C.

Landscape Architects: **Philip Tattersfield & Associates.**

Developer: **International Land Corp. Ltd.,**
1206 Marine Dr.,
North Vancouver, B.C.

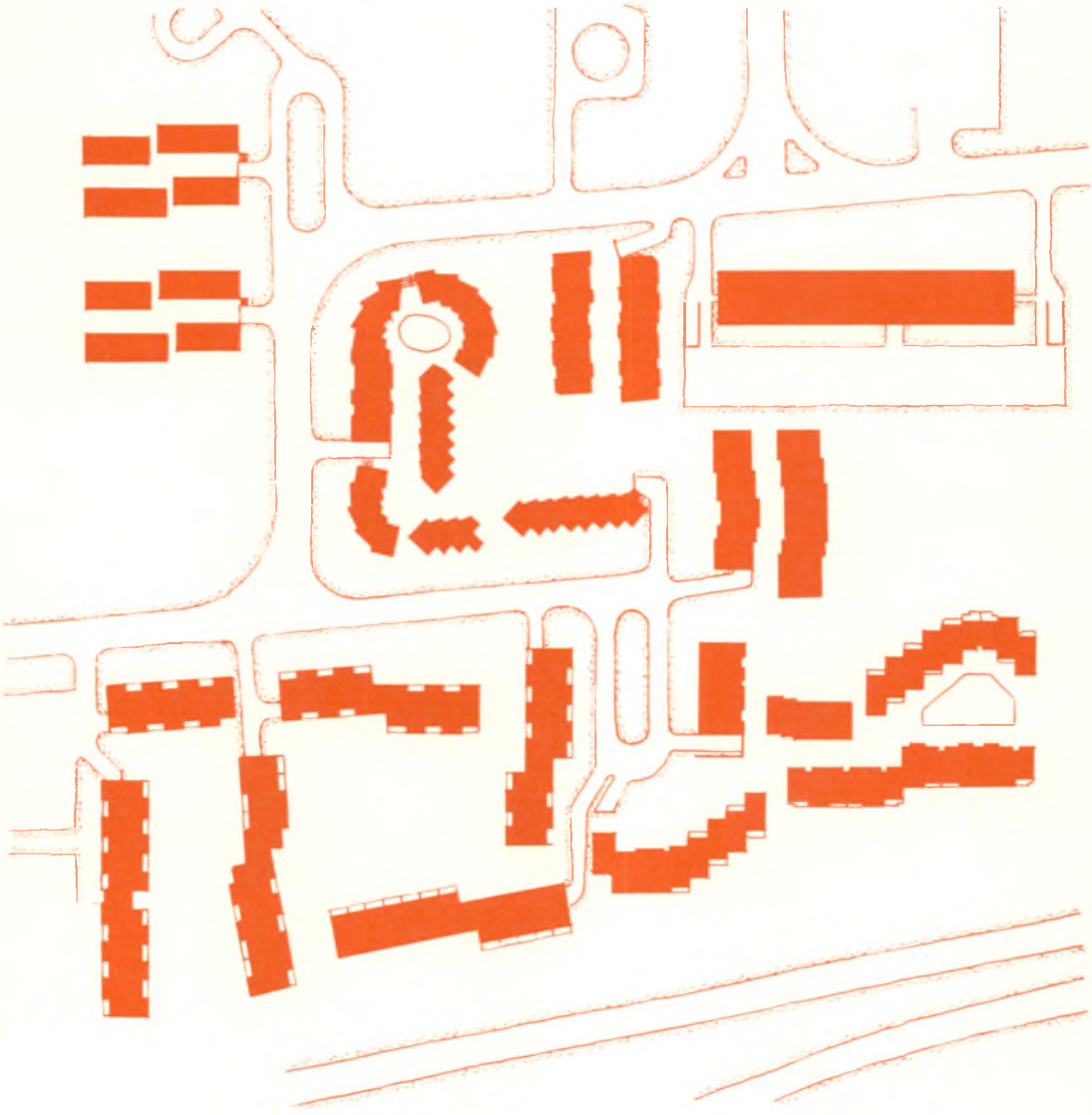
Complete and careful landscaping is the most fascinating aspect of this project but the relationship between the parking area and housing deserves comment. The row houses and apartments are well-planned, each having a private patio or balcony and useful storage space. The Jury questioned the studied effects of repeated use of artificial waterfalls, but the overall high quality of design is very evident.

Architect: Irving Grossman,
7 Sultan St.,
Toronto, Ont.

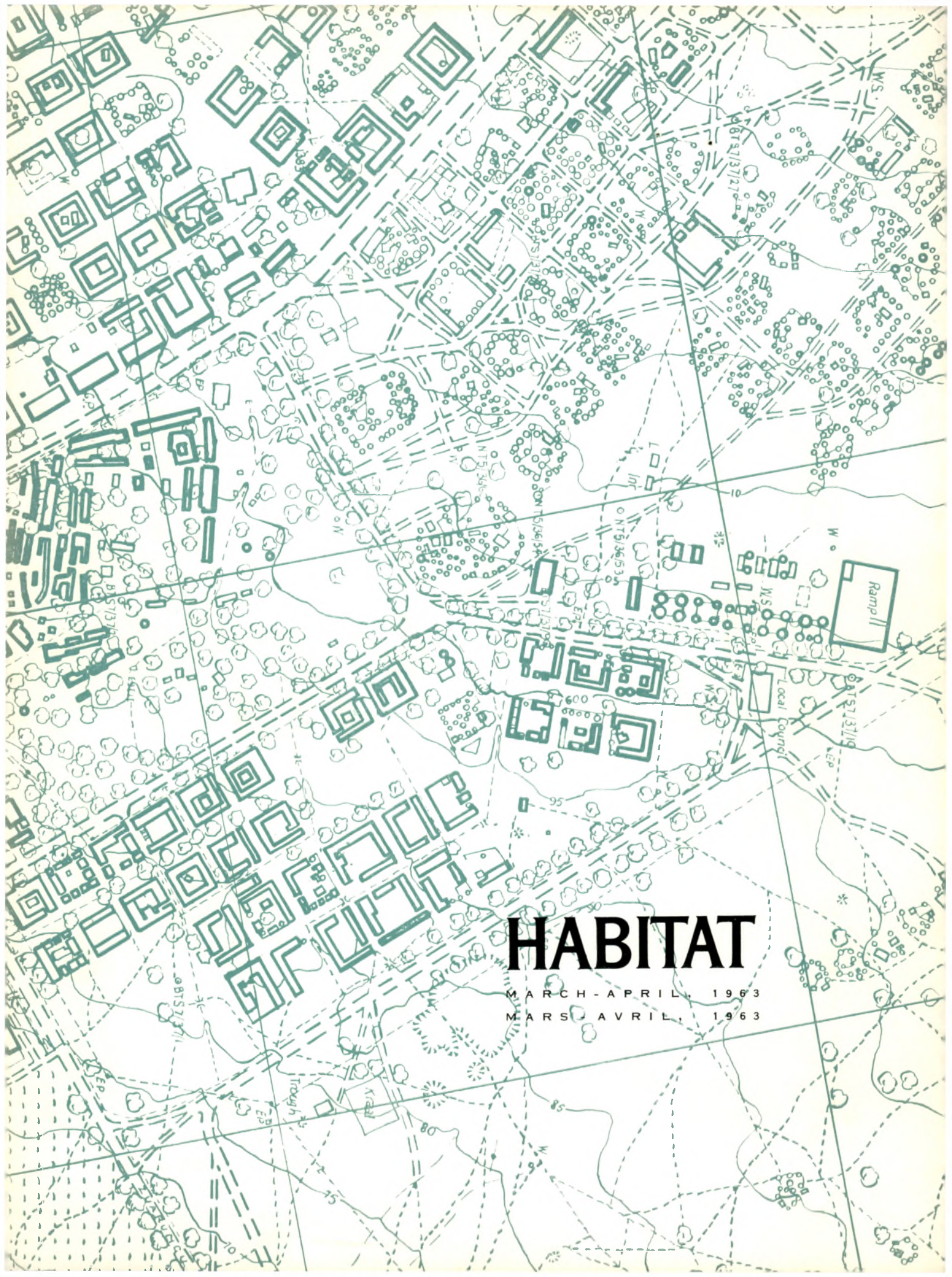
Developers: Webb and Knapp Communities Ltd.,
777 Don Mills Rd.,
Toronto, Ont.

Integration of the automobile, restoration of the pedestrian's rights to safety and visual experience, variety of accommodation and architectural expression within a unity of form; these are the most distinguishing features of this remarkable development. The environment thus produced is reminiscent of historic towns, but because of the advanced planning, belongs to the present. The Jury hopes that this significant example of urban residential design will find many followers.

Flemingdon Park, Toronto, Ont.



CENTRAL MORTGAGE AND HOUSING CORPORATION
SOCIÉTÉ CENTRALE D'HYPOTHÈQUES ET DE LOGEMENT
OTTAWA, CANADA



HABITAT

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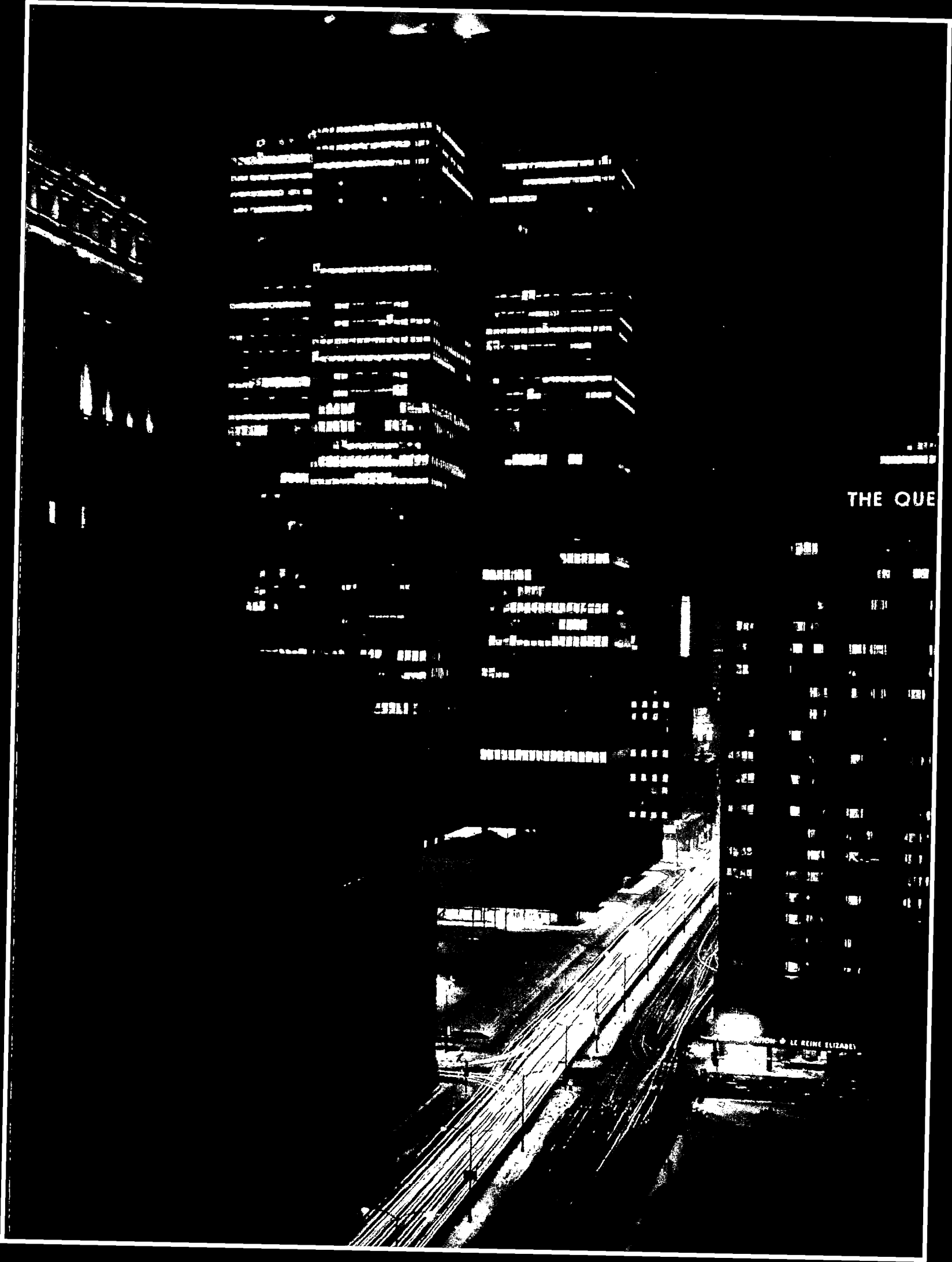
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NUMBER 2

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FRONT COVER: *is a part of a town map of Bolgatanga (see map of Ghana p. 3) drawn by Mr. Alfred Glover-Akpey, a student in the first class to enter the Institute for Community Planning at Kumasi.*

INSIDE COVER: *The Place Ville Marie at night. A beautiful study taken by Tibor Gatsegi, Architectural and Planning Division, Central Mortgage and Housing Corporation, of Montreal's new skyline.*

HOUSING INFORMATION

The 1962 edition of Canadian Housing Statistics published by Central Mortgage and Housing Corporation is now available. This issue contains a wider range of statistics on house building and related activities than was previously presented. There is a narrative report on Canada's Housing in 1962 and a section dealing with changes in policy and amendments to the National Housing Act. The statistical tables come under the main headings of House-Building Activity; Mortgage Lending; Selected U.S.A. and U.K. Housing Statistics; Population and Income; Building Materials and Labour; Building Costs and Dwelling Characteristics.

The results of the 1961 Census have provided some new insights into the factors that have affected the housing market. For instance, the Census data provide at least a partial explanation of the way in which the demand for new housing over the past few years has been able to exceed new dwelling completions by such a large margin, without excessive increases in vacancy rates. There are nine new tables comprising summary data from the 1961 Census.

All in all the 1962 Canadian Housing Statistics is probably the most comprehensive book on the subject ever issued by the Corporation.

Also released in March was the new edition of Small House Designs. This catalogue of houses, ranging from a 864 sq. ft. bungalow through split levels and one-and-a-half storeys to a two-storey of almost 2,000 sq. ft., contains 100 designs by well-known Canadian architects. Included in the book are about 35 designs that have never appeared previously. Working drawings for the designs appearing in the catalogue may be obtained from Central Mortgage and Housing Corporation.

✦ ✦ ✦

A group of Community Planning students at Lake Bosumtwe, the only fresh-water lake in Ghana. With the group are the author (left) and Mr. A. F. Rutter who was also sent to Ghana under U.N. Technical Assistance auspices.

PHOTO BY K. ALLOTEY-PAPPOE
—ALL OTHER PHOTOS ARE BY THE AUTHOR AND MEMBERS OF HIS FAMILY

Some notes on GHANA

by Alan Armstrong

Mr. Armstrong joined Central Mortgage and Housing Corporation in 1946. In 1961-62 he was in Ghana under United Nations Technical Assistance auspices to help in the training of local planning assistants at the Institute for Community Planning, Kumasi. He is now Executive Officer of the Canadian Council on Urban and Regional Research.

Ghana is a Republic of some 92,000 square miles (less than Labrador) with a population (1960) of 6.7 millions. It lies just north of the equator about midway on the north coast of the Gulf of Guinea. This coast is virtually a continuous beach with a heavy surf; except for the sluggish, marshy deltas of rivers, there are no natural harbors, and very few islands.

The land rises more or less gradually from the beach; no part of Ghana stands more than a few hundred feet above sea level. Dense tropical forest grows within sight of most of the shore. Typically 250 miles or so north from the sea, the forest thins out in favor of grassy savannah characteristic of the southern margin of the Sahara. The annual rainfall varies from upwards of 100 inches in the high forest, to less than 30 inches in the far north; because of evaporation, it takes two inches of rain in the tropics to have the effect of one inch in our climate. In the drier regions, long months pass with no rain at all. In the forests, as much as four inches of rain may fall in an hour.

THE PEOPLES

The peoples of Ghana have quite different spoken languages, each one familiar to only a minority; there were no written records prior to the arrival of Muslims from the North and Europeans on the coast. The indigenous groupings do not correspond with modern boundaries. The Europeans, sitting in Berlin in the 1880's divided West Africa among themselves by drawing lines on a map, determined by their various footholds on the coast rather than by knowledge of indigenous groupings.

To this day, the lines of communication run north from the coast, not east-west along it. A telegram from Takoradi in Ghana to Abidjan on the Ivory Coast (150 miles) goes through London and Paris. The drive from one city to the other is over 550 miles inland. Some members of the Brong tribe in the west, the Ewes in the east or the Hausas in the north of Ghana (all Commonwealth citizens), find their closest relatives in Ivory Coast, Togo Republic or Upper Volta (all citizens of the French Union). Language and ethnic divisions have to be overcome to establish a sense of Ghananian national identity.

As well as I could discover, the earliest forest peoples wore few clothes and ate fresh foods plucked in small quantities from time to time as hunger dictated; clothing and organized feasting were probably the monopolies of a great chief, his elders and priests, until the white man brought his example and preaching and the means for wider spread of these blessings. Even now, away from the cities, many Ghanaians shed their clothes on hot days or in the heavy rains and munch a few nuts whenever they feel hungry.

In Accra, the capital area of half a million people,

the majority of civil servants probably take most of their daytime food on the job or on the move; their regular, substantial meal is taken at home after dark. Even the cooked dishes (except in the southwest, where rice has been eaten for centuries) consist largely of vegetables introduced in historic times, covered with sauces spiced in somewhat Asiatic fashion. A fair imitation of a popular dish, ground-nut stew, can be made from a jar of peanut butter with condiments. Because of the tse-tse fly, there is little livestock in the southern half of Ghana; the population is under-supplied with proteins except where they catch fish in the sea. There is only one lake in the country. Big game, formerly abundant, is now hardly to be found except in game reservations. The only elephant in the Kumasi Zoo was a gift of the Government of India; the pair of lions in the same Zoo were born in Chester.

Human beings as well as animals suffer seriously

from disease. Probably the majority of West Africans have contracted malaria. Very widespread are afflictions from insects, deficiencies and parasites—like yellow fever, night blindness and bilharziasis. (The productivity of Africans is measurably lowered by this incidence.) These may formerly have plagued warriors and hunters in the bush more than their wives in the village, leading to polygamy which is still common.

Certainly the older cemeteries show that Europeans rarely survived in this environment for more than a year or two. This really was the white man's grave. Only since 1945 have any numbers of European wives been brought to West Africa, which is a reflection of the high degree of success in banishing health hazards, given suitable care and drugs. Education and modest funds can do the same for Africans. I was told by a senior physician (one of the handful of busy doctors) that more could be done for the economy of Ghana with diet reform and sanitary housing than by any other programs of comparable cost.

ECONOMIC HISTORY

Before about 1400 AD, there appear to have been large migrations towards central Ghana from the northwest and northeast. The name Ghana comes from an ancient kingdom to the northwest. These moves may have occurred with the gradual extension of the Sahara desert and the swelling power of the Moorish world. Trade in nuts, gold, ivory, salt and slaves then flowed northward. In the mid-15th century the Portuguese learned how to navigate the Guinea coast and how to land safely and bring off goods exchanged with the coastal natives. At times this trade was conducted silently—each side heaping its bid on the beach and withdrawing to see what the other side would pile up. When enough was offered to satisfy the visitors, they would take the offering and sail off. They had to tack half-way across the Atlantic to reach Portugal. One Portuguese ship was navigated by Christopher Columbus who later went west a bit further.

With the opening up of the New World, the main export from West Africa became labor in the form of slaves. Captives had long been used as slaves by the Africans; in many of their languages the term for anyone of another tribe is an impersonal word:

animal or thing. The Europeans did not introduce slavery into Africa; they made it more efficient and profitable. This commodity required the Europeans to build strongholds on the coast and to man them permanently, as the arrival of bands of coastal warriors with captives from the interior could not be scheduled. The high prices paid in firearms and spirits made for bitter rivalry among slave-capturing tribes. Meanwhile, Europeans were establishing rival forts on the coast (there were as many as 50 on a coastline of 300 miles) and these slaveposts changed hands among Europeans as their relative maritime power waxed and waned. Between 1500 and 1900 it is believed that many millions of Africans were thrust into European holds and shipped to the Western hemisphere. A great number of them were baptized as Christians on the way to the boats.

More than two thirds of the population of Ghana are now engaged in agriculture; most of them grow scarcely enough for their own needs, but a minority grow cash crops for export, chiefly cocoa. This plant was introduced about 90 years ago and so thrives in the shade of thinner parts of the forest that Ghana has recently produced up to two-thirds of the world's supply. Ghana wants to end its dependence on a single crop, subject to the vagaries of disease and world prices. The per capita yearly income in Ghana is estimated at over $200, second on the continent only to the Union of South Africa, and substantially higher than in the surrounding countries of West Africa. Such estimates should be treated with caution in countries where a cash economy is new and partial.

COLONIAL ADMINISTRATION

Apart from treaty rights in small coastal enclaves, the European powers made few claims to extensive colonial territories until the late 19th century. By that time Portugal, Spain, Denmark and Holland had been supplanted by Britain, France and Germany. The first British colony, centered on Cape Coast, was created by a Bond signed with native chiefs in 1844. Further west the French acquired similar rights and further east (in Togoland) the Germans.

As trading interest shifted from slaves to gold, ivory and timber, the inter-tribal warfare was seen to injure commerce. A British army penetrated some 100 miles into the jungle, dragging field pieces and stringing a telegraph line (the only known way to out-pace talking drums) as early as 1874 to defeat a warlike tribe. European efficiency that had built up slavery was then applied to quell it. There ensued British responsibility for the Ashanti Territory, which could be ruled by a handful of Colonial officers only by exploiting the traditional authority of the chiefs; 'indirect rule' was developed similar to that of Canada in the 1760's under General Murray. Meanwhile to the west and east the French and Germans were also pushing inland to avoid being outflanked; their administrations were tighter and more centralised, a characteristic still evident in the Republics of Ivory Coast and Togo. By about 1900, the European powers from the coast were prepared to halt at a line roughly 500 miles north of the ocean, which is today the north boundary of all three Republics.

To get some idea of foreign rule through native authorities, a notion of prevailing traditional customs and beliefs is needed. With variations, it may be said that the tribe identifies itself with peculiarities of speech; with (sometimes secret) lore as to its ancestry, exploits and crafts; and with a tract of land. This land belonged collectively to all members of the tribe—past, present and future. It could not be alienated from the tribe; but the use and fruits of the land could be allocated by unanimous decision of the living chief and elders acting as trustees, after suitable consultation with ancestors in tricky cases. The extant trustees, in order of rank, might exact some fees from the beneficiary of their decision. The transmission of the ancient customs and crafts through secret societies was the mainstream of education.

Head-men of villages would be elders to the chief of the district; he in turn might be a member of a House of Chiefs governing a confederacy and presided over by a Paramount chief. Royal or chiefly lineage was often traced through the female line, and the importance of the Queen Mother was then great in nominating the next candidate for chieftancy and in the (rare) instance where a chief was impeached or "destooled". The regalia of a royal house usually

Palace of Wana, Wa, northwest Ghana

Mammy-lorry bearing typical identification; these converted trucks are the chief means of transport for passengers and produce in Ghana.

included elaborately carved stools belonging to former chiefs; one stool in particular was kept near the chief but not sat upon, and was regarded as embodying the soul of the tribe or nation.

Each head-man or sub-chief had his appointed duties in ritual or in war and his people took up their stations with him. British indirect rule, in West Africa as elsewhere, made the most of these traditional lines of authority, subject always to an over-riding treaty with Her Britannic Majesty, enforced for her by her Resident or Commissioner.

INDEPENDENT GOVERNMENT

Because traditional affiliations perpetuated by British rule were so locally differentiated, the new state of Ghana has gradually had to weaken the role of the chiefs. Especially after 1951, when significant numbers of Africans were elected to the Gold Coast Assembly, and again after 1957 when Ghana became a self-governing dominion and 1960 when it became a Republic within the Commonwealth, the ruling Convention People's Party has reduced chiefly prerogatives. The chiefs' traditional sources of income were at first supplanted by national stipends and then these were discontinued for chiefs elected after 1961. Trusteeship of stool lands was taken over by the Government Lands Department and so on.

Yet the chiefs still represent substantial authority, especially among remoter populations who are mostly illiterate and whose fathers had never seen such marvels as the wheel. When the government was considering austerity budget proposals in 1961 (making a bottle of gin nearly as expensive in Ghana as in Ottawa) or the switch from driving on the left to driving on the right, the official views were relayed to the Regional Houses of Chiefs to be explained to the people and to be endorsed. The resolutions of endorsation also flowed back to Accra from such urban bodies as Party Committees and Trade Union locals; but with them, and not always the tardiest, were motions of support from the Houses of Chiefs.

In a country so rapidly urbanizing and diversifying its economy, a few needs are clamored for in almost every settlement—a piped water supply, street drainage, more schools and public loudspeakers connected to Radio Ghana as 'rediffusion boxes'. The government now claims that half the population is on public water supply—no mean achievement; where this is not so, water is fetched by women and girls who carry steel cans balanced on their heads, often walking miles in the dry season to the nearest stream or well. Africans are great washers: the bank of every body of water in sight is lined with women washing clothes or men and children bathing. Most traffic is on foot (there are about 9,000 Ghanaians for each registered vehicle) on loose gritty soil, which when worn in village paths can be washed away by the ton in a torrential rain; great care is needed to slow the run-off and to channel it into concrete ditches.

Many such ditches have been installed in villages by the local people with a little technical help from the Community Development Department of government (and often with the exhortation and example of the Village Chief).

INFORMATION SERVICES

When General Nasser was building the Arab federation, he took care to master the media of communication: a book, recording, poster, film or broadcast in Arabic is most likely to emanate from Cairo. Ghana may aspire, as the first country in tropical Africa to achieve independence, to establish a like pre-eminence as spokesman for the sub-Sahara region. The government has a film unit, travelling drama groups, its own daily press and a radio network. The latter has ultra-high-frequency relay stations throughout the country and shortwave stations beamed across the borders, from which frequent French language programs are broadcast. The whole system is said to be capable of transmitting television, which is already available in parts of Nigeria. Canadian experts have been lent to Ghana to help set up these facilities. The government Information Service has a depot in almost every village, where colorful posters and pamphlets on development measures and national events can be seen and where a loudspeaker gives out the national broadcasts from before dawn until mid-morning and again from noon until about 10:30 at night. Villages lacking such loudspeakers feel slighted and press vigorously for connection with the system.

The principal towns in Ghana have movie houses, which in the main exhibit American, British and Indian films. These are extra outlets, over and above the schools and union halls used for publicly-made news and documentary reels. The commercial theatres also show short advertisements on the screen, which are often the most original and lively items on the program. Africans have such totally different notions of courtship and marriage that the romantic passages in Hollywood productions and even most of *Romeo and Juliet* are utterly meaningless. But they respond as an audience most actively to brawls, gunfights and other kinds of violence, augmenting the sound track with their own groans and reports. Partly in consequence, the films restricted to adult audiences are those portraying robust action; a Brigitte Bardot film may be unrestricted as to audience, while *Lorna Doone* is for adults only.

TRADITIONAL CELEBRATIONS AND ARTS

As in most societies, the customary festivals relate to the seasons, the harvest, the commemoration of great events. But in the Ghanaian village everyone takes part, from the very youngest to the oldest—there is no audience, all are participants. The Ghanaian mother carries her young baby on her back, supported by a rectangular cloth of gay colors, which the mother wraps around her child and herself. Traditionally women dance with women, and men with men. It is usual to see half the women in a dance carrying young babies, whose heads bob up and down to their mother's rhythmic steps, while their big eyes stare to one side or the other.

Mothers also transport their young in this way when they go for the day to market, to work in the fields or while vigorously pounding plantain or yams or cassava for dinner. The infant is never far from his mother, is jostled to sleep as she works or walks or dances, is fed the minute he cries hunger. As soon as the youngster is put on his own feet, as when his little brother or sister is born, he will begin to join in the village dances, the motions of which are already familiar to him. Soon, too, he will be balancing things on his head to carry them and joining in the useful chores of the household.

The music for this dancing is almost all percussive, played on drums of various shapes made from hollowed logs, with calf- or goat-skin stretched over one or both ends. The smallest of these drums can be carried in one hand, the largest upright ones require that a man climb up to a platform in order to strike the head. The drumsticks are often bent so that the player can strike fairly on a membrane tilted away from him.

This bent stick is necessary with 'talking drums' so that their sound will carry far in the chosen direction toward which the drummer faces. Talking drums are in pairs—one lower-pitched and the other higher, called 'male' and 'female'. The basis of the languages

Mission of the White Fathers (Société des Missions d'Afrique) at Navrongo. Built by priests, who came from French Canada, in a European form but with African technique.

spoken in much of Ghana is also rhythmic and bitonal; many of the rhythms are too intricate to be set down by Western notation. The rhythm and tone-changes of a boldly declaimed phrase in Akan speech can be imitated on the two drums so that the similarity is quite recognizable even to non-African ears. The transmission of messages by drums is not, however, based on such direct imitation of original prose; instead, the drummer has first to master the words and drum-patterns for mythical refrains, oft-repeated allusions to allegorical legends and the like. Thus his reference to a crocodile in a drum message may not be the simple sounds for crocodile in the Fante tongue, but will be an excerpt from the drummers' version of a well-known fable about the crocodile.

The repertoire of ideas the drummer can transmit is limited mainly by his knowledge of a huge store of folk-tales in their strictest versions, so that he can beat out rhythmic snatches from them on drums, and the receiving drummer (who has also given his life to mastering the lore of his tribe) will immediately catch the references in order and be able to retranslate the throb of higher and lower notes into a meaningful message. It will be seen that drummed messages are in a sense coded for intended hearers only. Fortunately, a people with no written language were able to cultivate phenomenal aural memories; (some traditionalists object to literacy because it threatens to destroy the ability to store and to correlate a lifetime of experience "inside the head"—the European is lost without his bits of paper). This dependence on traditional stories as the verbal medium for transmitting urgent messages also accounts in part for the propensity of the African, when his feelings are running strongest, to reach out for metaphorical and allegorical expression, to make his point with an ancient fable; this tendency is noticeable in international conferences.

TRADITIONAL BUILDING

As with language and legends, the modes of buildings are variable over small areas in a developing country. Quite generally in Ghana, the buildings are of mud, dug on the site, mixed with water by the feet of the occupants and laid up in walls with very little specialized help. Probably over half of the floor-space being added currently is of this type. In the heavy rains such buildings deteriorate rapidly unless well roofed; the average life of a 'home-made' house is perhaps between a dozen and twenty years; houses are abandoned because they crumble apart or because the occupants moved away for better land to farm, a better water supply or better roads to market. Do-it-yourself building consumes a good deal of the country's time and energy.

To make buildings last longer, the mud may be reinforced with saplings, although these are prey to insects; unprotected timber is not a useful building material. A corrugated metal or asbestos cement roof may be substituted for the traditional thatch. The Ghana Housing Corporation has a distinct 'roof loan' measure for those who need to borrow cash only to buy such sheet materials. If the roof has sufficient overhang, it protects most of the walls from erosion by rain. The external surface nearest the ground may be protected from rain and splash by oily coatings. The mud surrounding the entrance is sometimes inset with seashells or bits of broken china, to help it resist the handling of those going

Detail of decoration north of Tamale.

Right, typical houses north of Tamale.

Compound, Northern Ghana.

Reservation in Accra under
Town and Country Planning Ordinance.
Notice prepared by
Department of Community Development.

in and out. Thresholds are raised several inches, both to shield against sudden rain-floods on the ground outside and to discourage entry of poultry and small animals. The mud wall surface may be given a patterned texture by the fingers as it is finished; occasionally a house boasts bas-reliefs of mythical animals or plants upon its walls. Decorative patterns in black and white liven the walls in certain districts.

In plan, most of the houses in far northern Ghana are composed of free-standing circular rooms. With weak walling, the cylinder is the strongest shell form; with only small sticks for rafters, it is the easiest to roof. A ring of such circular rooms is connected with a curved wall to form a compound. The largest room belongs to the head of the family, smaller ones are for other adults and their children, the smallest for animals and grain storage. Cooking and social life takes place in the central open circle. In the north, the long dry season makes for poor agriculture, but the population density may be very high—up to 500 persons per square mile. These families are distributed evenly in 'homestead' compounds a few

hundred yards apart on the land they till, with nothing like a concentrated village in the landscape.

In the forest areas of Ghana, to clear a site for building is more laborious. Families tend to live in rectangular houses clustered together on plots along village streets. This requires less clearing of bush for a given amount of building. Each house consists of an open court enclosed by rooms with their lengths running around the plot boundary and roofed on short rafters across the room widths. As in the north, there are but a few small openings from the rooms to the outside world; but in the forest houses the rooms may be largely opened up to the central court which is the centre of family life. An important man, with several wives, may have a compound built around more than one court. The town in the cover map contains both circular compounds at bottom right and rectangular houses at upper left.

MODERN BUILDING AND PLANNING

The susceptibility of timber to insects and rot have limited its use externally or structurally in Ghana, although export of hardwood logs to temperate climes is an important trade. Larger modern buildings, such as schools and offices, are of reinforced concrete slabs and columns, usually with concrete block infilling. Between the traditional techniques and those introduced by European engineers, there has been much encouragement to making of blocks on simple portable machines, the mix consisting of local sand slightly enriched with cement, to make 'sand-crete' blocks. Ventilation being of prime importance, ingenious varieties of pierced block walls have been developed in modern West African building.

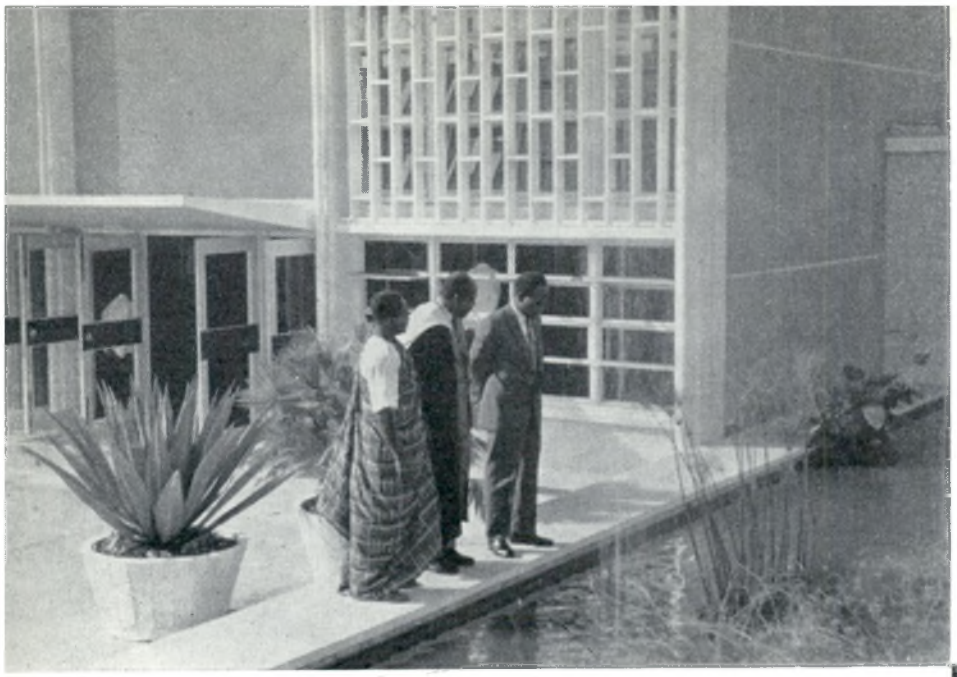
Near the equator, the time of sunrise and sunset and the angles of early morning, mid-day and late afternoon sun are less variable than in Canada. However, the sun can shine on either north or south elevation of the building. The prevailing winds tend to be off the sea or off the desert. The outcome of these factors is a preference to site buildings with their length running true east and west. The end walls will be unpierced, the side walls as open as possible for ventilation. The building is only one room thick. Access to rooms on all storeys is from open galleries, the floor of each gallery or roof overhang providing sun-shade for the rooms below; at almost no time does direct sunlight penetrate into the interiors. The usual glazing is in adjustable glass louvers, which have to be shut when the torrential rain is accompanied by much wind. Paperweights are at a premium in African offices.

Although about 70% of Ghanaians derive their living from the land, the country is urbanising rapidly and boasts over 50 towns ranging in population from 5,000 to about half a million. Until very recently, most jobs other than the most menial and nearly all educational opportunities were to be found in the larger centres. Only since World War II has a scheme for universal fee-free 7-year education been thinkable; it is now approaching reality, with rapid expansion of teacher training and the building of nearly 3,000 schools in the fiscal year 1961-62.

Most non-traditional building is done under central government auspices or on land made available and serviced by the government. Thus an important part of the Ministry of Communications and Works, the Town and Country Planning Division, is involved in site selection and civic design on a large scale. The Division maintains offices in regional capitals and its central and regional officers also advise the Minister on the designation of areas of rapid development and on adoption of comprehensive plans for such areas. The largest cities are creating their own competent permanent staffs and there is a tendency to delegate the issue of development permits for private work to the municipal administrations.

The Institute for Community Planning was established to train young Ghanaians and other West Africans to become supporting staff for these professional planning officers. The goal is to magnify the planning services available to rapidly-urbanising societies in the minimum time. African men and women with good general schooling are given a 20-month course leading to the Diploma in Community Planning; the first group will complete their course in June 1963.

Ultimately, working under each professional



Seen in the quadrangle of Queen Elizabeth Hall at Kwame Nkrumah University of Science and Technology are: (in business suit) Dr. Nkrumah, President of Ghana and Chancellor of the University; (in academic gown) Dr. Robert Baffour, Vice-Chancellor; and (in traditional kente) Mr. O. H. Owusu Afriyie, Chairman of the University Council.

Assembly Hall, Achimota School near Accra. (Fry, Drew and Partners, Architects)

planning officer in the service there will be a group of three to five Planning Assistants holding this Diploma. Those who serve well as Assistants are promised government scholarships after a few years to resume their education for full professional qualification. This alternation of education with practice has clear advantages for the hard-pressed public service, for the candidates themselves and later for the professional schools of planning. Two very keen groups of students have been admitted to the Diploma Course and are working with great enthusiasm under a staff now directed by a distinguished Ghanaian, Mr. Austin Tetteh. The course is established within the Kwame Nkrumah University of Science and Technology in Kumasi.

Planning Assistants are needed with special urgency in the next year or two because of the great changes to the country that will follow completion of the Volta River Project. A dam is now being built that will create a new lake nearly 300 miles long, and will give abundant power to smelt native bauxite into aluminum; incidental benefits will be a useful supply of fresh fish, water for irrigation and a bulk shipping route. More than 65,000 people will have to be re-settled in new villages and new ways of life, some 10 times as many as for the St. Lawrence Waterway. Our Diploma students have already helped in surveys of villages to be affected. Canadians have been interested in the Volta Project from the beginning and its chief executive, Mr. Frank Dobson, is on loan from this country. He is one of hundreds of Canadians working in Ghana.

It was an African priest, St. Augustine, who said "things are best known by their opposites". It has been a great privilege for me to become acquainted with Africans and their problems while helping in the establishment of one of their staff training facilities. In the past year and a half all the members of my family have also learned more than a little by contrast about the values and attitudes dear to North Americans. We are appreciative of the opportunity afforded by the United Nations, of the support by the University of British Columbia, and far from least of the understanding shown by CMHC that made this experience possible. ✦✦✦

VERS L'ELIMINATION DES TAUDIS RURAUX

par Jean H. Lagassé

On connaît bien les taudis qui existent un peu partout dans les villes canadiennes. Chaque centre urbain a une ou plusieurs rues aux maisons vieillies, mal entretenues, dépeinturées et débordantes de petit monde à l'allure également misérable. Ces taudis urbains, tel un mendiant au coin des rues, la veille de Noël, éveillent la conscience sociale; on s'attendrit au moins assez longtemps pour en discuter aux réunions des conseils de planification et d'assainissement qui siègent maintenant dans la plupart de nos grandes villes. Toutefois, on ne parle pas encore des taudis ruraux, bien que là aussi, il y ait des gens qui peinent et qui souffrent, derrière les rideaux de l'isolement, mais leur condition est aussi lamentable que celle de leurs cousins des villes.

Dans cette dissertation il s'agit d'un projet entrepris en 1960 par le gouvernement provincial au Manitoba en vue d'aider dix-sept familles indiennes et métisses qui habitaient tout près d'un petit village de 600 habitants, à 75 milles à l'ouest de Winnipeg, le long de la route transcontinentale.

Au début de décembre 1959, le gouvernement provincial prit connaissance de la mort de deux bambins chez une famille indienne non loin de la capitale provinciale. On demanda à l'auteur d'une étude récente sur les conditions dans lesquelles vivent les Indiens et Métis au Manitoba, de faire enquête et de recommander ce qui pourrait être fait pour aider. Dans un rapport de vingt-cinq pages, la situation de cette famille fut comparée à celle des seize autres qui habitaient au même endroit, et les conditions de cette agglomération comparées à celles de trente autres endroits dans la province où il existe des taudis semblables.

Le rapport se terminait par une recommandation suggérant que le gouvernement entreprenne un projet non seulement d'habitations, mais d'assainissement social. Cinq étapes y étaient prévues:

1. des allocations mensuelles assez élevées pour procurer les vivres et les vêtements dont chaque famille avait besoin;
2. la construction de nouveaux logements en deçà d'un mille de l'école du village;
3. des cours spéciaux pour ceux qui n'étaient jamais allés en classe;
4. un effort particulier en vue d'améliorer les relations sociales entre les familles qui habitaient les taudis et ceux qui habitaient au village;
5. un programme d'entraînement au travail et de placement pour les adultes.

Lorsque tous les maux sociaux semblent s'être accumulés au sein d'une agglomération, il est bien inutile d'essayer de les améliorer en ne s'attaquant qu'à une seule chose à la fois. Il y a une manière de vivre (on devrait dire "de survivre") dans les taudis comme il y a une manière de vivre dans les faubourgs de la classe moyenne. Celui qui a appris cette manière de vivre ne peut pas facilement apprendre à vivre d'une autre façon. Le problème des dix-sept familles indiennes et métisses n'était pas celui de la sous-alimentation, ni du manque d'éducation, ni du chômage ni encore du logement, mais bien celui de gens qui, depuis la tendre enfance, avaient appris à vivre ou à survivre d'une telle façon et qui depuis longtemps avaient cessé de chercher à apprendre à vivre autrement.

La première mesure que le Service de Développement Communautaire dut prendre fut d'aider les familles à désirer une condition meilleure. Il fallait leur inspirer la confiance qu'elles pouvaient s'aider à sortir de leur misère et que le gouvernement, qui dans le passé avait souvent promis d'aider, cette fois ne se déroberait pas avant que la tâche soit accomplie. Ce travail prit plus d'un an à s'accomplir. Néanmoins, au début de 1961, les chefs de famille commencèrent à

prendre au sérieux les visites de l'agent de développement communautaire et à rédiger un programme d'entr'aide.

Il va sans dire que depuis le début de 1960, l'assistance sociale accordée à ces familles avait augmenté suffisamment pour leur permettre d'acheter le nécessaire bien que trop souvent encore ces argents n'achetaient que le superflu. En même temps, une classe spéciale recevait les élèves qui n'allaient pas à l'école au début de ce projet.

Une famille de cinq personnes vivait dans cette cabane, le père, la mère et trois enfants. Deux autres enfants sont décédés en 1959 aux âges de trois mois et de trois ans, tous deux de pleurésie et de sous-alimentation.

Une mère et quatre enfants d'âge scolaire mais n'allant pas à l'école habitaient ici.

Il s'agissait enfin d'aider dix-sept familles à se construire une maison. L'agent de développement communautaire organisait des soirées deux fois le mois en vue d'aider à la réhabilitation sociale, et c'est au cours de ces soirées que le projet s'élabora.

Chaque chef de famille promit de fournir au moins 150 heures de travail pour la construction de sa maison. Le gouvernement promit d'acheter les matériaux de construction nécessaires pour ériger une maisonnette bien modeste. De plus, le gouvernement se chargeait d'engager un charpentier pour faire les travaux plus spécialisés. Il fut entendu que les maisons ne seraient pas finies immédiatement. Chaque famille se chargeait de les parachever au cours du premier hiver. Elle acceptait de plus de payer dix pour cent de son revenu mensuel pour une période de cinq ans afin de rembourser au gouvernement une partie du coût de construction. Au bout de cinq ans les maisons appartiendront à ces familles, pourvu qu'elles n'aient pas reçu de secours direct pendant au moins douze mois avant cette date.

Les maisons sont maintenant construites. Quel progrès a-t-on accompli durant ce temps? Quel travail reste-t-il à faire?

Il y eut six décès en 1959 dont quatre d'enfants en bas âge. Seulement une personne est décédée depuis 1959, bien que ce fût encore un enfant. Sur vingt-trois enfants d'âge scolaire, treize n'allaient pas à l'école en 1959. Aujourd'hui seulement les trois qui sont trop vieux pour s'asseoir sur les bancs des premières classes restent à la maison, mais même ceux-ci ont appris à lire et à écrire, aux cours spéciaux offerts la première année. L'assiduité en classe laisse encore beaucoup à désirer surtout chez deux familles, mais là aussi il y a du progrès. Les sept élèves de la troisième année qui quittent leurs parents chaque matin pour l'école du village sont peut-être une marque plus réelle du progrès qui s'est accompli chez ces gens que ne le sont les nouvelles maisons, bien que celles-ci servent à identifier le projet. Malheureusement c'est des maisons et non des bambins qui vont à l'école qu'on nous demande ordinairement de parler.

Le coût de secours direct s'est élevé de $3,000 en 1959 à $15,000 en 1962. C'est dire que le cinquième but

Trois des nouvelles maisons. Chacun a choisi les couleurs qu'il préférait.

énuméré plus haut n'est pas encore atteint. Sur vingt-huit adultes qui étaient libres de travailler en 1959, il y en avait dix-huit qui travaillaient moins de dix jours par année, cinq moins de trente jours et cinq moins de soixante jours. C'est parce que les gens n'avaient pas l'habitude du travail que l'on s'est contenté d'une promesse de 150 heures lors de la construction des maisons. Ailleurs, là ou les gens avaient l'habitude du travail on a exigé davantage.

Si le coût du secours direct a augmenté, c'est qu'il fallait d'abord habituer les familles à vivre sur un plan plus élevé. Tant qu'elles se contentaient de survivre en quémandant, il n'y avait pas de raison pour motiver de l'emploi. Aujourd'hui, on ne réussit pas à conserver l'emploi que l'on obtient, mais on cherche plus souvent. Une famille est déménagée à Winnipeg et le père travaille depuis deux mois. Un chef de famille et un célibataire suivent des cours spéciaux en vue de travailler plus tard. Enfin, une autre famille est déménagée à Portage la Prairie afin d'avoir plus de chance de se procurer de l'emploi. En tout, dix-huit personnes ont quitté leur domicile pour profiter de meilleures chances de se procurer de l'emploi. Ceci est un phénomène important puisque si ces familles étaient demeurées dans leur taudis, elles ne chercheraient encore rien de mieux. Une fois sur le chemin du progrès elles se sont montrées prêtes à faire le sacrifice d'une nouvelle maison afin de se rapprocher des occasions d'emploi.

Il y a encore beaucoup de problèmes que les familles devront résoudre, chacune à sa façon, dans la mesure où elles seront prêtes à le faire et au meilleur de leur connaissance. L'agent de développement communautaire continuera à les visiter toutes les deux semaines jusqu'à ce que leur niveau de vie soit sensiblement le même que celui des autres familles du voisinage. ✦✦✦

L'auteur, Jean H. Lagassé, est né à Gravelbourg, Saskatchewan. Il obtint un baccalauréat es Arts de l'Université du Manitoba (1947) et une maîtrise es Arts (Sociologie) de l'Université Columbia (1956) à New York. En 1959, il publia une étude socio-économique sur les Indiens et Métis du Manitoba. Les recommandations de ce travail de 500 pages furent acceptées par le gouvernment provincial qui établit ensuite un bureau pour les mettre à exécution. Depuis 1959, M. Lagassé est directeur de ce nouveau bureau connu sous le nom de "Community Development Services" du ministère du Bien-Être.

Easements

by Mr. G. Nordmann, the Chief Assistant Planner of Central Mortgage and Housing Corporation and a Member of the Town Planning Institute of Canada.

The expansion of urban centres throughout Canada has created problems derived from the number and complexity of the elements which form our cities and towns. Problems of providing power, transportation and communications are becoming more involved as these centres grow and as the density of land use increases. Services must be provided to the heart of the community to serve this growing demand and they must be protected by means of rights of way or easements from source to outlet.

The only way to secure this protection is to come to an agreement with the owners of the land which intervenes between source and outlet and either purchase or lease the right to pass over, under or on the ground. This right of way is complex and is a far cry from the simple establishment of the right of a pedestrian to cross a neighbor's property.

Although the right of way may give a company or agency certain rights over a specified area of ground, it should not be considered that there is absolute freedom to develop them as they please. Obviously the legal right is there, but there is a deeper, moral obligation to the community.

The siting of the rights of way, whatever their purpose, can inhibit the future development of an area by the severe disciplines they impose and the above ground paraphernalia that is often placed in them can severely mar the existing or potential amenities of that area. The convenience of the public is also affected by the rights of utility companies to service their equipment, particularly when their equipment is buried under public rights of way.

The town planner classifies rights of way into three major categories. The first and most readily apparent, is that which contains visible elements such as roads, railways, hydro and telephone. The second, less apparent but just as strong an influence on development, is those which are buried such as water, sewers, gas and oil pipelines and sometimes telephone and hydro. The third, although not termed rights of way or easements is the glide path requirements for airports which clearly affect any development in the vicinity.

ROADS

Roads and streets were among the first rights of way to be developed in this country and the early surveyors set them out in straight lines irrespective of use or topography. They were all of a standard width, 66 ft.—the length of their surveyor's chain. Unfortunately this traditional width is still being used arbitrarily throughout the country, without proper regard to the purpose of the road or the requirements of present-day traffic or development. Our modern highways have been widened to accommodate the wider pavements necessary for greater volumes of traffic and landscaped areas are often incorporated into the right of way. Most streets within the community are, however, still laid out with the standard width of 66 ft.

Streets having differing functions and traffic flows should be designed to different standards. The industrial street requires a wide pavement designed to carry heavy loads whereas a quiet residential street can have a much narrower pavement of lighter construction as it only has to carry the cars of residents and the trademan's van.

In a planned community, it is possible to establish a hierarchy of streets from the residential types which should provide safe and convenient access to the dwellings which abut them to the collector streets, which lead in turn to the major roadway system of the community. With these different conditions is it not appropriate to vary the widths of pavements and rights

A quiet residential street could have a much narrower pavement

of way? It would certainly make it easier to follow the street pattern of the community and make for increased traffic safety at intersections. There is also an aesthetic reason for reducing the general standard of 66 ft. in residential areas. When this dimension was originally adopted, the houses abutting them were generally two or three stories high and built close to the street line. In contrast, modern subdivision developments consist mostly of single-storey houses set back some 20 to 30 ft. from the street line causing a consequent loss of scale in relationship to the street.

Two of the arguments often used against any reduction below 66 ft. in residential areas are snow clearing and services. With a reduced pavement width, there is less snow to clear and this can still be accommodated within a 50-ft. right of way. It has also been demonstrated that, with careful design, all necessary services can be incorporated into a 50-ft. right of way, without having to put those services most likely to need repair under the pavement. This can be accomplished by compatible services sharing trenches, such as hydro and telephone and by water being placed above and to one side of the sewer.

Another criticism of street rights of way involves the overall design. The old traditional grid layout of streets has many disadvantages. For example, traffic is invited to move in all directions with equal emphasis thus multiplying traffic hazards at the numerous intersections. It is an expensive system because all streets must be constructed to take heavy traffic loads. A carefully designed layout, incorporating varied street widths and using curved streets, culs-de-sac and loop roads is a practical solution, is safer and is more pleasing and convenient.

We are all familiar with the long straight roads and highways which cut through the countryside. Over long distances, safety can be improved by introducing curves in these highways thus reducing the risk of "highway hypnosis" and the sheer boredom of driving. The judicious use of curves would permit improved grades and allow the highway to be molded into the countryside.

RAILWAYS

In contrast to the flexibility of roads, railway rights of way must be designed to meet stringent engineering requirements. There is little opportunity to effect changes in order to safeguard the amenities of the areas through which they pass, whether these be in the open country or in developed areas.

Depending on the use of the land adjoining the railroads, the trains can be a source of nuisance to adjoining owners. Trains are regarded as essential to the economy of an industrial area, but they do have a detrimental effect on residential areas through which they may pass. Town planners must give

consideration to the distance which must separate housing from railway rights of way and the means whereby the nuisance can be lessened.

Some provinces impose restrictions on residential development adjacent to railway rights of way. For example, the Province of Ontario requires that all lots backing onto a railway right of way be a minimum of 150 ft. deep. Central Mortgage and Housing Corporation also gives consideration to the distance between railway rights of way and dwellings when plans for new housing developments are submitted for acceptance. The effects of railways on adjoining housing is reduced when the railway is in a deep cutting or if a wall or earth berm is constructed alongside the right of way.

Level crossings are of particular concern to town planners, especially if they are not equipped with warning signals. This source of danger to the users of the road rights of way is widely known and there is little disagreement that level crossings should be removed from all urban areas wherever possible. There is also the noise factor in residential areas. The sound of a train's warning signal, often starting half a mile from the crossing, is much greater than the noise of the train itself. These two criticisms are sufficient to urge the increasing use of grade separations between railway and road.

HYDRO AND TELEPHONE

The other two largely visual uses of rights of way are the hydro and telephone. It is unfortunate that in the urban context we have to consider them as visual elements at all. We are all too familiar with the widespread picture of wood poles, heavy black wires and even heavier black transformers. Certainly in the cities and towns the wirescape should be disappearing and many notable advances have been made in this field.

Within the urban and suburban areas overhead hydro and telephone easements should be designed to be as unobstrusive as possible. They should not be placed in the street allowance in normal subdivisions, but rather on rear lot lines. The design of the development should not be predicated on the locations of easements, but rather the location of easements which service the development should be decided in close collaboration with the project designer.

Hydro over long distances is a different question and underground installation is uneconomic even if it were desirable. Some attention should be paid, however, to the visual effect of rows of pylons on the landscape whether it be in the country or in the built-up area. All too often these towers stride over the landscape ignoring and destroying many fine views of scenery or buildings. Where this is likely to occur, consideration should be given to relocation. In fact, one of the objectives in addition to good engineering design should be the integration of these elements into the landscape.

UNDERGROUND SERVICES

The oft-quoted saying "Out of sight, out of mind" should not be the axiom of those agencies which bury pipes or cables underground.

The local underground distribution services can well be located in the street allowances, but the major trunk services such as high pressure gas pipe lines are worthy of comment. The widths of rights of way are normally determined by the degree of protection required for the installation and the strength of the pipe to be provided depends on the nature of area through which it passes.

Again the question must be asked, to what extent should development be restricted in the vicinity of a high pressure pipeline, particularly one which was installed to A.S.A. requirements for open country? Statistically, pipeline companies have a good accident record, but explosions do occur for a number of reasons and their effect cannot be contained within the width of the right of way.

When selecting routes for high pressure pipe lines, the greatest care should be taken to investigate possible future development of the area to determine the most appropriate alignment and in this respect the town planners can be of assistance to the distribution engineers. The line of least resistance is not necessarily the best for the community as a whole since development adjacent to the pipe line may be prejudiced.

Within the suburban and urban areas overhead hydro and telephone easements should be as unobtrusive as possible.

Trains are regarded as essential to the economy of an industrial area, but they do have a detrimental effect on residential areas through which they must pass.

VISUAL EFFECTS OF RIGHTS OF WAY

Major easements which cut a wide swath through built-up areas detract from the environment, especially in residential areas. Those with high pylons are most noticeable, but on a domestic scale the mere freezing of the land contained within an easement can produce an undesirable effect. Long lengths of poorly maintained rights of way cutting through areas of well-maintained properties are a common occurrence in the urban scene. The utility authorities have a legal obligation to keep the weeds down to a minimum standard, but is there not also a moral responsibility to the community they serve to make these areas more compatible with their surroundings? In many cases the rights of way could be used for community open space or adjoining owners given the right of access on the land in return for an undertaking to maintain. There are instances where shrub planting would be a tremendous improvement to the visual environment, but which would not reduce the effectiveness of the easement or access to it.

AIRPORTS

Airports must also be considered in a discussion of rights of way. The glide paths required by aircraft must be free of obstructions. Development is further influenced by the noise factor of aircraft landing and taking off. The effect of this noise is greatest on residential development and it is considered that no residential development should occur in areas which

Some attention should be paid to the visual effect of rows of pylons on the landscape whether it be in the country or in the built-up area.

would be subjected to a noise level in excess of 99 db. With modern commercial jet aircraft this zone of noise extends approximately four miles from the start of a runway over a width of 4,000 ft. The distances are less, of course, when propellor-type planes only are being considered.

This situation requires the greatest care to be taken in the selection of sites for new airports in order that the development of cities is not hampered, or alternatively, that the use of the airports is not restricted, a situation which exists at some of the international airports. Many of these same comments apply to the helioports which are gradually being established close to the centres of major urban areas.

GENERAL

Consistent with safety and appearance, every effort should be made to combine the utility rights of way. This programme is already in progress on city and residential streets where the hydro, telephone, watermains, sewers and low pressure gas service mains are installed within the road allowance. It could also be applied to the major highways. This approach, which requires a careful study of roadway sections, and some concessions on the part of each authority, has been largely ignored so far, but it could be a major factor in helping to reduce the number of individual rights of way which cross the landscape.

CONCLUSION

There is a growing evidence of a change in the form of housing being built today. More housing is being provided at higher densities and the old methods of supplying many of the services to housing developments by means of wooden poles and overhead wires are no longer satisfactory.

In our cities and towns, there is a premium on fully-serviced land and planners are concerned with the large areas of land sterilized by rights of way and consider that there is a need for more planning in the location and consolidation of rights of way. A greater co-ordination between the engineers and town planners could result in a more effective land use and be of benefit to both the companies and the communities.

As the cities expand, many more rights of way will be required and existing ones extended. The utility companies and agencies must take a more comprehensive view of the effect of their rights on those of the citizen. The latter demands the service, but he has a right to a pleasant community unsullied by a maze of wires or by swathes of apparently unused ground. If a broader view can be taken in the selection and development of rights of way, our cities and towns will become more pleasant places in which to live and the countryside will preserve its identity free of the elements of urbanity. ✦✦✦

BRIARCLIFFE

LAND DEVELOPMENT BY OWNER RESIDENTS

by W. E. Schreier,
a Senior Architect in the Architectural and
Planning Division of CMHC

More than a century ago, at the time of the Industrial Revolution, the first co-operatives were organized in Europe to find a solution to the great social problems that existed at the time. The movement has never gained great impetus in Canada, but there has been some significant co-operative development in agriculture and fisheries. Credit co-operatives, introduced to this continent when the first *caisse populaire* was formed at Levis, Quebec in 1900, have done a substantial amount of mortgage lending in the Province of Quebec to finance fishermen's boats, farms and homes in the urban areas.

Although housing co-operatives in Europe have had a great impact on shelter problems, in the years 1954-60, less than one-half of one percent of all National Housing Act loans in Canada were to home-owners building under co-operative programmes. However, in spite of this small percentage a comparison of the homes built under co-operatives with the characteristics of the average homes built under the NHA show some marked differences. Under co-ops the homes are larger than the average and are situated on larger lots.

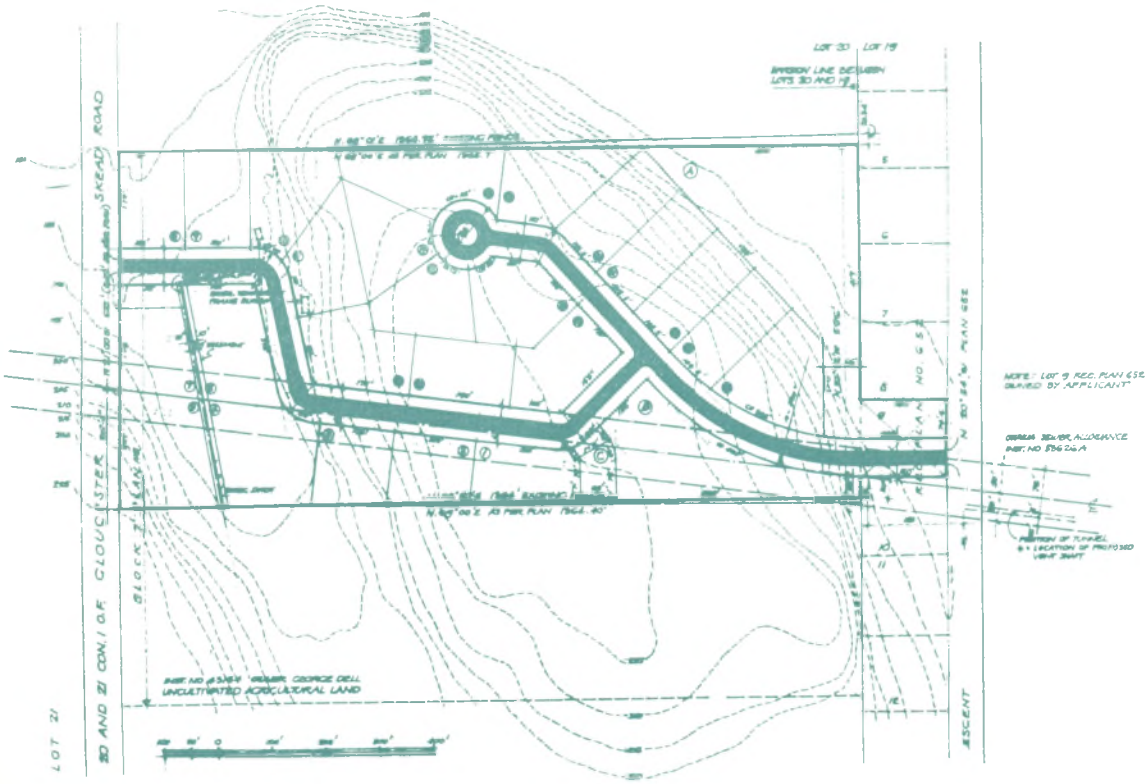
Co-operatives for housing may provide a variety of functions. Their purpose may be for financing, for building under co-operative or individual ownership or for the purchase of a tract of land. The following outlines experiences of a co-operative organized for the purpose of land development.

Early in 1959 four people formed a Partnership for the purpose of acquiring a parcel of land and developing it as their own small residential neighborhood. The Briarcliffe Partnership had primarily these objectives:

1. The acquisition of land.
2. The subdivision of the land and the subsequent distribution of quality lots to members.
3. The financing and building of roads.
4. The control of the designs of homes to be built.

It would be fair to state at this time the partnership consisted of members with professional skills which were contributed to keep expenses to a minimum.

In the initial stage, with ownership of the raw land as the only tangible asset, participating partners had to accept various risks. After purchasing the land, it was uncertain whether the Municipal and Provincial



The author's home set in the retained natural beauty of the landscape.

Because of the appreciable enhancement of the lot values as a result of development these custom-designed homes were built with initial cash outlays comparable to those required in commercial developments.

1

Planning Authorities would approve of a housing development because the area was unserviced. Second the development costs could only be estimated vaguely in the absence of a final plan, and the length and amount of rock to be blasted of the required road depended on the maximum road gradient acceptable to the township. Despite grave risks and uncertainties the original group expanded to twelve and this can be attributed chiefly to two factors: the physical attractions of the site and its close proximity to the City of Ottawa.

Eventually, when most of the risks had either been removed or reduced, the Partnership expanded further to eighteen members and limited itself to that number. The step-by-step development of the project is shown in a chronological account included in the statistics at the end of this article, but the planning aspects and the background to the design philosophy are illuminated in the following paragraphs.

The land, comprising 20 acres, is located in Gloucester Township immediately adjacent to the eastern boundary of the City of Ottawa. It is a rocky shelf which forms the lower part of an escarpment extending several miles parallel to the south shore of the Ottawa River and is fairly well covered by a mature stand of trees. Although the site was most attractive, encumbrances made its development difficult and to a great extent predetermined the road pattern.

1. The site was sealed off along its eastern boundary by registered lots. Fortunately one had not been built on and could be purchased for the purpose of providing through access from west to east.
2. A 100-ft. wide easement extending from west to east through the site, provides legal access to the Ottawa outfall sewer located 100 feet below the surface. At the eastern boundary, access to a temporary construction shaft and later to a permanent vent shaft—an elaborate form of manhole but wholly inoffensive—was required.
3. The land to the south faces only one public street, namely Skead Road. The Partnership regarded it therefore as prudent planning policy to facilitate the eventual development of the neighboring land, by providing a link for future road connection.
4. Last but not least of the stumbling blocks was the cliff-like topography which limited access to the high lying land to two points and made the road construction costly.

Fortunately, the sewer tunnel contractor—whose operations coincided with the development of Briarcliffe—built the road at a reasonable cost and in strict accordance with township regulations and with plans and specifications prepared by an engineering consultant. Both the tunneling operations and the road are now completed.

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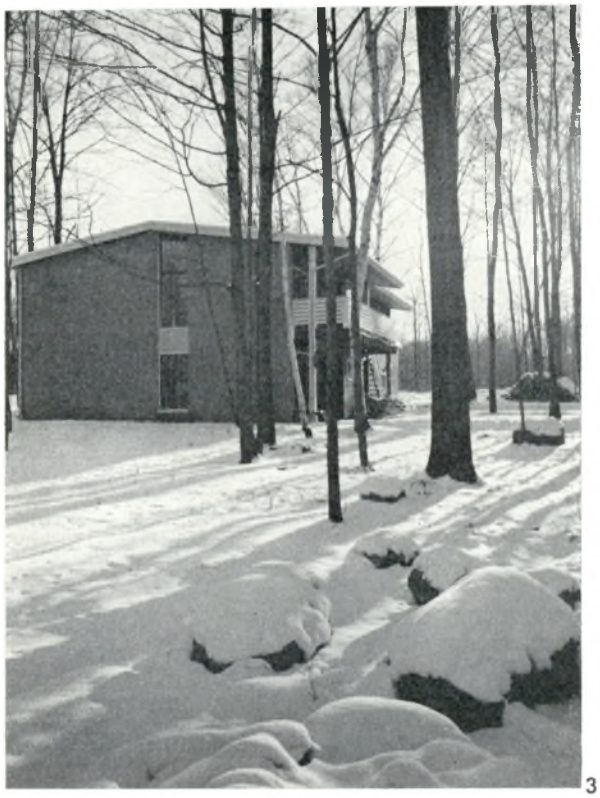

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4

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The Briarcliffe residences of:

1. Mr. and Mrs. E. Schreier
2. Mr. and Mrs. C. Campbell
3. Mr. and Mrs. Roytenberg
4. Mr. and Mrs. C. Keith
5. Mr. and Mrs. R. Nantais

In planning the subdivision, the disciplines of planning practice in Ontario as established by the Act were followed and close co-operation with the Township and the various planning agencies was maintained. Although a larger number of lots could have been obtained by restricting the lot sizes to the permissible minimum of 15,000 square feet, the overall number of lots was limited to 24 by establishing minimum lot areas of approximately half an acre. Thus, the Partnership demonstrated that temptations of a purely economic nature have been resisted wherever they were found to be in conflict with the desire to create an attractive neighborhood. The prime consideration has been the preservation of the natural beauty of the site whose heavy growth of deciduous and coniferous trees together with emphatic changes of ground levels, combine to make this one of the most attractive spots in the Ottawa landscape. It is perhaps symptomatic of the Partnership's attitude that the 5% parcel of land conveyed to the Municipality, as required by the Planning Act for public open space, is one of the most beautiful and valuable areas.

But the sound and generous planning could not prevent the installation of overhead wiring although it is confined to rear lot lines where it is at least hidden by trees; it could not prevent a minimum road width required by the Township of 66′0″ which is unsightly and attracts unnecessary traffic. Nor was the careful planning in itself a guarantee for a harmonious setting. It is true that the zoning by-law by requiring certain minimum areas for houses to be built here, almost predetermines that the homes be in either the medium or high-cost range, but it ignores the architectural quality of the houses and their relationship to one another. The Partnership, for obvious reasons, was very concerned with this aspect. It decided, to encourage good design and to exercise some control over such mundane things as garbage storage, laundry drying and car shelter, to name a few, and that certain guiding principles for the preparation of house designs should be established and incorporated in the form of appropriate covenants attached to the title deeds.

The covenants required (inter alia) that:

—House designs must be prepared by a registered architect;

—Designs are subject to approval by a development committee whose members are elected by the Partnership;

—Building materials are restricted to those listed in the covenant.

These covenants are intended to be protective rather than restrictive as the Partnership was not striving for uniformity but rather for an integration of individual dwellings each designed for varying family requirements, judiciously sited and complementing each other so as to create a pleasurable atmosphere of modesty and dignity.

It may be of interest to learn how financial commitments were shared and how lots were selected, as the method of lot selection and financial contribution by individual members follows the pattern of growth of the Partnership.

The original group of four had priority of lot selection as a token compensation for the assumption of initial risks. The following eight partners chose their lots by lottery and so did the third group of six partners. The members who joined at a stage when most of the risks had either been removed or reduced also contributed financial shares somewhat higher than those established for the first two groups. All eighteen members shared equally all other privileges and obligations of the Partnership.

When all lots were chosen, the Partnership still owned—in addition to land marked for future residential development—six lots which had to be disposed of, in order to ease the burden of development costs. Since the Partnership is a non-profit making organization it sold these lots well below book value to a builder who assumed the same obligation as all partners had done regarding the architectural control of the houses he would erect.

During the first building season after registration of the subdivision, only six partners were ready to build their homes. Five of these, some of which are illustrated on these pages, were built under one contract at an average cost of $12.00 per square foot. Houses vary from 1,400 square ft. to 1,700 square ft. They are equipped with 1½ or 2 bathrooms, fire-places,

balconies and patios. All houses have four bedrooms and are of mixed brick and wooden finish. At the time of writing five more houses are nearing completion, three of which have been built by the builder to whom the six lots were sold.

One of the results of the development—a by-product so to speak—was the appreciable enhancement of the lot values. This was recognized by the lenders and in some instances little or no further cash had to be added to loans because of the very high equities in the land. Some partners were thus enabled to finance their custom-designed and built homes with initial cash outlays comparable to those required in commercial development.

STATISTICS

Land was found	*early in 1959*
Enquiries regarding use of easement, potability of water, soil tests with a view to septic disposal, zoning regulations, school facilities,prior to	*July 1959*
Acquisition of land	*July 1959*
Preliminary approval by Township Engineer	*August 27, 1959*
Partnership approves subdivision design	*December 2, 1959*
Draft plan of subdivision completed and submitted for approval	*December 18, 1959*
Department of Planning in an interim report regards the development of this area as premature and recommends the preparation of an overall development plan for all undeveloped land.	*January 14, 1960*

Although a master plan would be required—and has still not been prepared — we could prove to the various authorities that our proposal would not prejudice but rather would facilitate future development.

Department of Planning approves plan	*April 14, 1960*
Engage Solicitor	*April, 1960*
Engage consulting engineer for the purpose of preparation of final plan of subdivision as required by the Planning Act.	*May 26, 1960*
Draft covenants	*June, 1960*
Complete partnership agreement including covenant.	*July, 1960*
Extend consultant engineer's services to include—	
Staking of lots, preparation of working drawings and specifications for the road.	*September 12, 1960*
Complete contract documents for road	*October 4, 1960*
Extend consulting engineer's service to include supervision of road construction.	*November 14, 1960*
Road construction starts	*November 14, 1960*
Selection of lots by partners completed	*November 30, 1960*
Completion of final plan of subdivision	*December 8, 1960*
Subdivision agreement with municipality	*April 25, 1961*
Approval and registration of final plan	*April 27, 1961*
Disposal of six lots	*September, 1961*
Final approval of road	*September 20, 1962*

FINANCIAL ASPECTS

These figures are only approximate.

Land cost	$40,000
Access lot	3,000
Road Construction	20,000
Consultant and Lawyer's fees	8,500
Miscellaneous	500
Contingencies	1,500
	$73,500
Land Sale	15,000
Approximate total cost	$58,500

LE RENOUVEAU DANS LA CONSTRUCTION A MILAN

Ceci est le premier de deux articles sur Milan.

par Roméo Mondello

Milan est la ville la plus industrialisée d'Italie. Par conséquent, n'ayant pu être déclarée ville ouverte au cours de la deuxième guerre mondiale (1939-45), elle a subi de durs bombardements, d'où la reconstruction considérable qui s'est effectuée dans cette ville, en plus évidemment de la construction nouvelle qu'on a dû réaliser pour répondre à l'essor d'une capitale commerciale toujours en progrès.

Voici d'abord un rapide portrait des caractéristiques particulières qui marquent l'ensemble de cette ville très moderne d'un million et demi d'habitants. Ensuite, nous verrons un peu de la construction récente de groupes intégrés d'immeubles de 6 à 10 étages, adéquatement isolés les uns des autres, c'est-à-dire entourés de suffisamment d'espace libre au niveau du sol, et de tours qu'on se plaît à appeler les gratte-ciel de Milan, elles aussi adéquatement isolées des édifices voisins et entourées de suffisamment d'espace libre au niveau du sol.

TRAITS CARACTÉRISTIQUES (l'Ancien Milan).

1. La cathédrale gothique en marbre blanc, appelée Dôme de Milan, située au fond de la grande place du Dôme, commencée en 1386 et à peu près terminée en 1858. Des générations d'artistes italiens, français et allemands y ont travaillé, d'où les styles divers que présente ce temple, mais qui s'harmonisent très bien quand même.

La cathédrale est surmontée de 135 flèches et compte trois acres de superficie intérieure sous cinq nefs supportées par 58 colonnes, un transept de trois nefs, et 4440 statues dont 2245 à l'extérieur. Elle contient l'un des trois clous de la croix du Christ et renferme également le corps admirablement conservé de saint Charles Borromée.

2. Le Théâtre de la Scala de renommée universelle, sérieusement endommagé au cours des bombardements de 1943, mais reconstruit tel qu'il était auparavant, et son Musée de l'Opéra, face à la petite place Leonardo da Vinci plantée d'un monument à cet homme célèbre.

3. La Galerie Victor-Emmanuel qui date de 1878, la plus vaste d'Europe et qu'on appelle aussi le fameux et traditionnel salon de Milan, trait d'union entre la place de Vinci et la place du Dôme.

4. Le Château des Sforza qui remonte à l'an 1386, reconstruit par Francesca Sforza en 1451, restauré en 1893, et présentement utilisé comme siège des recueils d'art de la ville.

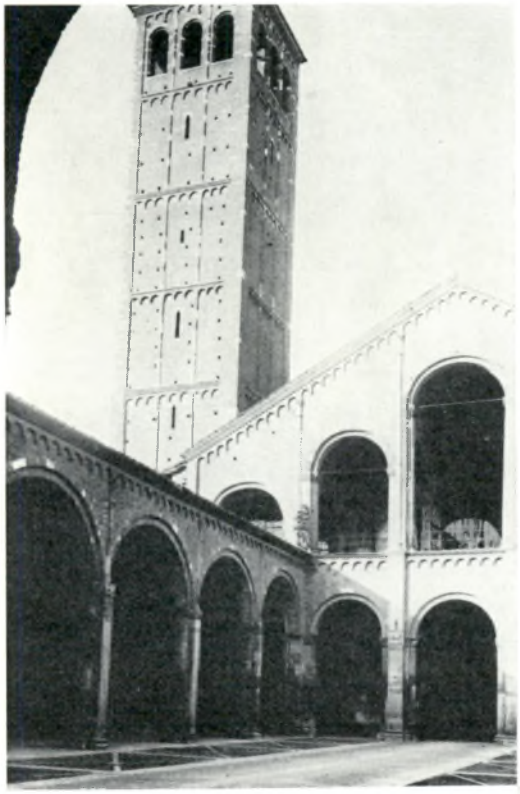
5. Le Cénacle Leonardo da Vinci, où se trouve l'original de la Dernière Cène de ce grand peintre, malheureusement endommagé au cours des bombardements de 1943. Ce cénacle a été détruit aux trois quarts pour être reconstruit par la suite, de même que, tout à côté.

6. L'église Santa Maria delle Grazie, qui date de l'an 1500, œuvre de l'architecte Bramante, elle aussi gravement endommagée en 1943 puis reconstituée dans le style original.

7. Le Cimetière monumental, universellement reconnu comme véritable musée d'art funéraire, œuvre grandiose de style gothique-lombard. A noter son Temple de la renommée et de nombreux monuments . . . environ 35,000 . . . dont plusieurs sont estimés à plus d'un demi-million de dollars aux prix d'avant guerre. Presque aussi remarquable que le Cimetière de Gênes.

8. La Basilique St-Ambroise (386) avec ses peintures, sculptures, mosaïques de grande valeur historique, et son autel en or sous lequel reposent les corps de sant Ambroise, saint Germain et saint Protasio.

9. La Piazza dei Mercanti, ancien centre du Milan moyennageux, qui réunit l'ensemble architectural constitué par le Palais des Jurisconsultes (16e siècle), le magnifique Palais de la Raison, la Loge des marchands (15e siècle), avec l'édifice contigu des Écoles palatines.



La Basilique St-Ambroise.

La cathédrale gothique Dôme de Milan.

Le Théâtre de la Scala.

L'église Santa Maria delle Grazie.

Le château des Sforza.

La Piazza dei Mercanti.

10. Le Musée Poldi-Pezzoli (riche collection d'Art varié), et le Palais Brera (1571-1651), galerie de peintures de valeur inestimable.

TRAITS CARACTÉRISTIQUES (le nouveau Milan).

Abordons maintenant les réalisations récentes de la construction milanaise. D'abord les Tours, puis, les ensembles.

TOUR VELASCA

A un quart de mille de distance au sud du Dôme se dresse la "Torre Velasca", toute récente, au centre d'un secteur de 95,400 pieds carrés antérieurement occupé par de vieilles maisons et villas presque complètement détruites par les bombardements de 1943.

Elle fut terminée en 1957, mais construite dans un style extérieur médiéval, s'alliant bien à l'utilité et au coût raisonnable qu'on a voulus d'une telle entreprise.

Les 18 premiers étages sont loués comme bureaux d'affaires à des compagnies moyennes et petites, par opposition aux grands bureaux qui retiennent beaucoup plus d'espace dans la "Torre Galfa". Les 9 étages au-dessus des 18 premiers sont loués en logements de 2, 3 et 4 pièces. Cette occupation mixte de l'édifice est certainement à recommander, afin d'éviter le plus possible d'éloigner les dortoirs urbains

Le campanile de l'Eglise St. Gothard, et la Tour Velasca à droite.

de nos "DOWNTOWN" ou "Bas de Ville" financiers et commerciaux, qui sont devenus des déserts, la nuit.

Pour plus de précision, disons qu'il y a deux sous-sols dont le plus bas, pour les installations de mécanique; *le deuxième* pour la mécanique également, l'entreposage et les boutiques; *le rez-de-chaussée* pour le négoce ou les établissements commerciaux; *le premier étage* pour les bureaux, les salles d'exposition et autres établissements de commerce; *le 2e étage* pour les bureaux, jusqu'au 10e inclusivement; *le 11e* pour des habitations et des bureaux de professionnels, jusqu'au 17e; le 18e ou dernier étage de la tour étroite pour la mécanique et les logements du personnel de service; enfin les 8 étages de la tour élargie, soit du 19e au 26e, pour les habitations de la classe aisée ou bourgeoise.

Cette Tour Velasca a donc été localisée au centre d'une place où le trafic n'a pas accès, étant protégée de 3 autres édifices neufs dont un à l'arrière, et un de chaque côté, de façon à ouvrir la place sur une seule rue, la Via Velasca.

Les véhicules-automobiles peuvent donc stationner sur la place en question et à l'intérieur de celle-ci, dont la superficie de 61,480 pieds carrés peut accommoder facilement 300 véhicules, de même que dans un garage de 500 véhicules, qu'on a aménagé directement au-dessous de cette place, ce qui répond aux besoins de stationnement de tous les édifices constituant la place.

Ce complexe d'édifices peu nombreux, et par conséquent bien dégagés au sol les uns des autres, constitue un ensemble rationnel, fonctionnel, hygiénique, de beaucoup supérieur à l'implantation qui existait des nombreux édifices d'avant-guerre; implantation non coordonnée et coupée d'une rue aujourd'hui disparue.

TOUR PIRELLI (édifice à bureaux)

C'est le premier gratte-ciel en béton précontraint construit à Milan; un édifice à bureaux de 32 étages, le plus haut édifice à bureaux d'Europe, dont l'architecte a été GIO PONTI, et l'ingénieur de structure PIER LUIGI NERVI, de renommée internationale.

L'édifice est en forme finie de cigare et ne comporte pas de section-module, de volumes unitaires, de parallélipipèdes. Son rapport de largeur-hauteur est très petit et sans précédent pour une solution de béton armé.

La tour se développe sur une place; en face il y a une ample étendue qui permet le stationnement, d'une durée moyenne de 30 minutes pour 800 voitures pendant l'horaire de travail. ✦✦✦

Monsieur Roméo Mondello, Ing. P., est actuellement le directeur du Service des permis et inspections de la Cité de Montréal. Il est diplômé en Sciences appliquées et Génie civil (1930); Sciences sociales, économiques et politiques (1934); Journalisme (1935); B.A. et licence en philosophie (1943) Maître es sciences en Génie sanitaire, Harvard, 1948; Bachelier en droit (1951). Il fut admis au Barreau de Montréal en 1956. L'année suivante, après sa nomination comme membre de la Société Royal d'Hygiène en Angleterre, il fut délégué en Tunisie par l'ONU en qualité d'expert de l'Organisation Mondiale de la Santé.

Aerial view of the potash mine, Esterhazy, Sask.

A Mine.. A Mill... A MILLION TONS

by C. G. Leclerc,
Prairie Region Information Officer of Central Mortgage and Housing Corporation.

Tension filled the hot Saskatchewan air on June 7th, 1962. Both hope and fear were reflected on the wind-burned faces of the men standing around the drill rigs. More than a half-mile underground lay the world's largest deposit of potash.

For five long years, shaft-sinkers had worked around the clock to reach the potash bed. From its early stages technical problems had beset the operation and once these initial difficulties had been overcome, nature provided almost insurmountable barriers for the engineers and technicians employed at the shaft. The project was regarded as the most difficult ever undertaken in the Western hemisphere.

On the following day at the Esterhazy project of the International Minerals and Chemical Corporation (Canada) Ltd., a $40,000,000 gamble paid off. Expectations were fulfilled. Miners had struck paydirt —potash!

During the past few years, Saskatchewan has witnessed a gradual change in its economy. Increasing industrialization based on the utilization of natural resources has tended to modify the agricultural base of the province's economic foundation. One of Saskatchewan's great natural resources is potash, a high-grade sylvinite ore, found in a great belt extending 340 miles across the central section of the province, from the Manitoba border to the Alberta boundary. Potash development in Saskatchewan began on a large scale in 1952 with the sinking of a mine shaft at the town of Unity and in 1954, work began on another mine and refinery near Saskatoon.

Esterhazy, a bleak and lonely region of the Canadian West prior to the first settlement in 1882, derives its name from Count Paul d'Esterhazy, a member of the Hungarian aristocracy, who in 1887, led 35 Hungarian families from the United States to the wheat-lands and the promise of a new life on the Canadian prairies. Today, 75 years later, potash is bringing new families and new promises to the area.

As a mineral, potash lacks the glamor of gold or silver, but as a natural resource its value is greater than these minerals combined. It has been estimated that the Saskatchewan potash deposits could meet the world demand for the next 2,000 years.

A prehistoric sea which once spread across the area 350 million years ago, left a thick layer of potash salts, stretching across Saskatchewan in a belt 50 miles wide. Composed mainly of potassium chloride, this layer originated through evaporation of the sea water after other compounds had precipitated out.

Geological probing revealed that the ore lay guarded by a strata that could only be penetrated by the most daring engineering. The potash was covered by 289 feet of glacial till, 2,726 feet of water bearing shale and limestone and finally 100 feet of rock salt.

Within the shale and limestone layer existed a

formation called Blairmore, a mass of violently fluid quicksand. This 200-foot deep formation, because of the irregular and explosive pressures, posed a constant threat to those engineers undertaking the project. All previous attemps to sink a permanent shaft had been blocked by the pressures exerted by the sandy mass, which rose as high as 475 pounds per square inch.

IMC engineers initially attempted to solidify the Blairmore through a conventional process—grout-pumping. Cement and water were pumped into the mass formation. The results were unsuccessful. The shaft was flooded twice and the future of the whole project was endangered.

It was finally decided to freeze the Blairmore, dig through it and install a permanent cast-iron shaft lining known as "tubbing". This technique, essentially a vertical application of vehicular tunnelling used under rivers and lakes, had never been used in this particular form in the Western hemisphere.

With great difficulty, 62 holes were drilled through the Blairmore and "freeze pipes" installed. A refrigerant, calcium chloride, was circulated through these pipes. However, as the quicksand began to solidify, it expanded. The pipes were smashed. New problems arose. The broken pipes had to be replaced. Pressures created by the expanding Blairmore had to be relieved. Because of the large quantities of calcium chloride which had escaped into the quicksand, a new refrigerant had to be found.

Engineers now had to freeze both the Blairmore and the calcium chloride. Another revolutionary method was attempted. Lithium chloride would be circulated through the new pipes at an icy -60 degrees. Despite the efficiency of this process, solidification of a 3,000,000 cubic foot lump of quicksand took more than one year.

By August, the freezing process had been completed over an area extending fifty feet around the center of the shaft area. Using pavement breakers, shaft-sinkers then began penetrating the frozen quicksand. The frozen sand wall was then braced every five feet with a ring of cast-iron, each ring being securely bolted to the section above it. This "tubbing technique" called for lining the 18-foot shaft with cast-iron casings in curved segments, that that weighed four tons each. Eleven segments bolted together formed a ring five feet deep.

Foot by foot, the job proceeded through the 200 feet of Blairmore, and in the interests of safety, for an additional 150 feet above and below the quicksand.

After water seepage problems had been solved in this section, miners then continued in their descent. Valuable time had been lost and in order to speed the operations, a Golloway stage was used to facilitate simultaneous mucking, lining of the shaft with concrete and installing of hoist guides, air ducts, electrical lines and telephone connections.

At the 3,132 foot level, miners finally struck potash on that memorable June day. Three months later, on September 20th, 1962, Canada's first potash mine and mill was formally opened.

The potash mine in Esterhazy has the distinction of being the largest and the most automated in the world. Operating at full capacity, IMC officials soon expect to reach a full production level of 1,200,000 tons of potash per year.

Replacing the conventional techniques of undercutting, drilling, blasting and mucking, mining is carried out by a modified room and pillar method. Goodman continuous-mining machines bore out sylvinite ore at the rate of almost three tons per minute. Six of these 52-ton machines have been assembled at the mining level and operate, chewing out the ore, picking it up and conveying it to the rear of the cut. Two 200 h.p. electric motors, operating on 4,160 volts, provide power for each mining machine.

Once the ore has been cut and moved to the rear of the cut, it is loaded into shuttle cars and carried to yet another conveyor belt which transfers the ore to an underground surge bin. From this bin, the ore is once again conveyed to an automatic weigh-type loading pocket and hoisted to the surface in skips.

The shaft is equipped with two 14-ton skips in balance on a double drum hoist. An auxiliary hoist operates a double-deck cage which transports men and materials to the mining level. Through a 66-inch air duct, 100,000 cubic feet per minute of fresh air is

In the foreground, a new 32 unit Motor Hotel complete with dining room, lounge and bowling facilities. Background, residences comparable with any located in our larger cities.

carried to the mining level and is directed to underground work areas by huge fans.

The potash ore, although considered a high-grade type, contains small quantities of impurities such as common salt and clay. To refine the ore, the raw potash is first crushed into minute particles. In this state, the particles are either salt or potash. The crushed mass is then treated with an oily reagent which selectively coats the potash. The potash particles are then separated through a process of floatation. Both the oily potash particles and the impurities are added to a brine solution into which air is injected. The air bubbles attach themselves to the oily potash flakes, floating them to the surface. The impurities sink to the bottom of the tanks while the potash is swept with the foam from the surface of the slurry. The potash particles are then dried and screened into four product sizes. When dry, the particles are either conveyed to the load-out area for rail shipment or to one of the four conical storage bins, each of which has a capacity of 35,000 tons.

These mining and refining processes demanded a skilled employee. With the knowledge that the mine and mill at peak production would require up to 500 employees, IMC representatives conducted a survey in the area surrounding the mine to determine the availability of labor. The survey found that while there was a lack of depth in certain skills, the common farming heritage had provided people with a versatile range of talents which could be developed successfully. The company then instituted a policy to employ local labor to the greatest possible degree and established a broad training programme for new employees.

Actual classroom training and on-the-job instruction paid off and today 94% of the mine staff come from the area immediately surrounding the mine.

The impact of the potash mine and mill operation on Esterhazy has been sudden and the economic boom it has created is still soaring. Construction, retail and service industries are enjoying a remarkable period of activity.

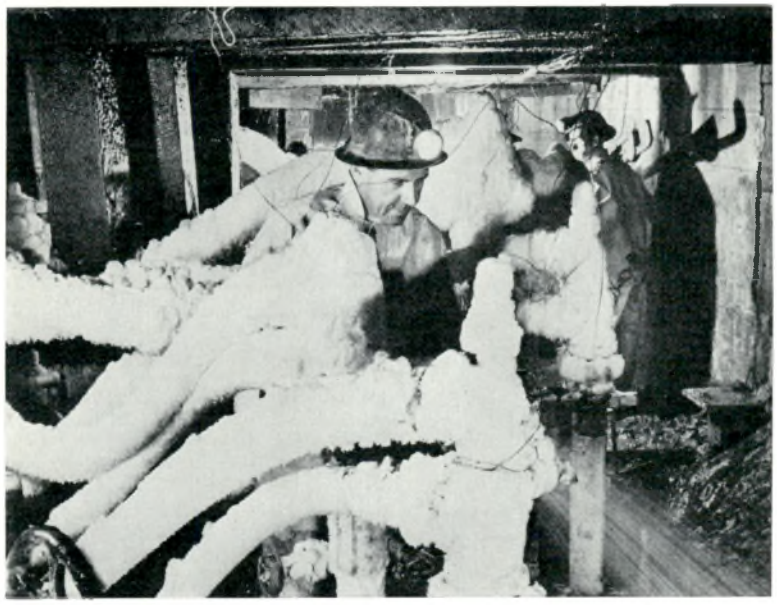
Faced with the problem of housing mine personnel near the mine site, IMC developed a subdivision in the town, and by supplying all services to this section, local residents were freed from additional property tax increases. In order to encourage company employees to become homeowners in Esterhazy, IMC made arrangements for them to purchase company homes on a conventional mortgage basis with a 6% interest rate. New homes can also be erected on the same arrangement and, to date, more than 40 new dwellings have been built. The mortgages are backed by the Company and the owners are guaranteed that their homes will be purchased at fair prices in the event of transfer. Each IMC employee is deeded a serviced lot, free of charge, when he buys a company house or decides to construct a new one. The value of the lot then can be used to apply on the 10% down payment required for a new home. Employees on every level of the operation are offered this service.

Non-employees may also purchase lots within the subdivision. Because of this freedom of development, the tract has successfully avoided the establishment of a "company town" flavor.

When a sewer and water system was constructed in Esterhazy, IMC aided the project by purchasing

Right, muscling a 4-ton segment of a cast-iron lining into position in the shaft of the potash mine. The lining sealed off a 200-foot layer of quicksand material.

Miners had to freeze a 200-foot layer of quicksand, located a quarter-mile underground, before they could safely sink a shaft through it.



The "Goodman" Continuous-Miner. Six of these machines have been installed in the Esterhazy mine.

bonds and by selling the facilities in the Company's development, to the town. A modern school has since been built on land donated by the Company and with financial assistance provided through the prepayment of taxes by the Company. A golf and country club, a swimming pool and tennis courts are being developed to provide the community with additional recreational facilities. To further extend these facilities, the additions of a new artificial ice arena and a community centre are being planned for construction.

Early in 1957, wheat was Esterhazy's economic foundation, but with the development of the potash deposits, the economic future of the town has radically changed. The growth of Esterhazy since 1957 has been startling. The 1961 census showed a population of 1200, nearly a 100% increase over the 1956 figure. Although this growth has brought pressure to bear on public facilities, the rapid growth has not caused drastic social alterations. Motels, schools, hospitals and small businesses are being extended and outside commercial interests have announced their enthusiasm in the town's future.

When peak production for the first stage of the operation is reached later this year, approximately 500 persons will be employed in the operation. A hint of the economic influence on the local and provincial economies is the estimate that the Company payroll will soon reach $2.4 million per year. Property taxes on the operation's lands will reach $125,000 and sales taxes on construction materials used in the area has soared to $100,000. Holders of mineral rights are to receive $800,000 in the coming year, of which the Saskatchewan government will receive $327,000.

The Company has already announced plans to sink a second shaft which could boost capacity production to an estimated 3 million tons annually. This additional development will mean steady employment over the next five years for approximately 150 construction workers, most of whom will be recruited from the local area. The Company's annual payroll is then expected to be more than 3 million dollars.

Ninety-five per cent of the estimated annual production of 1.2 million tons from the potash operation will be sold on the American agricultural market. The IMC operation in Saskatchewan has come into production at a time when domestic and overseas demand for agricultural potash is increasing at an average annual rate of about 6 per cent. Officials at IMC, however, expect the peak of supply in excess of demand to be reached in 1964-65, with a lessening variance until 1967 or 1968 when requirements for the product will again equal or exceed supply potential.

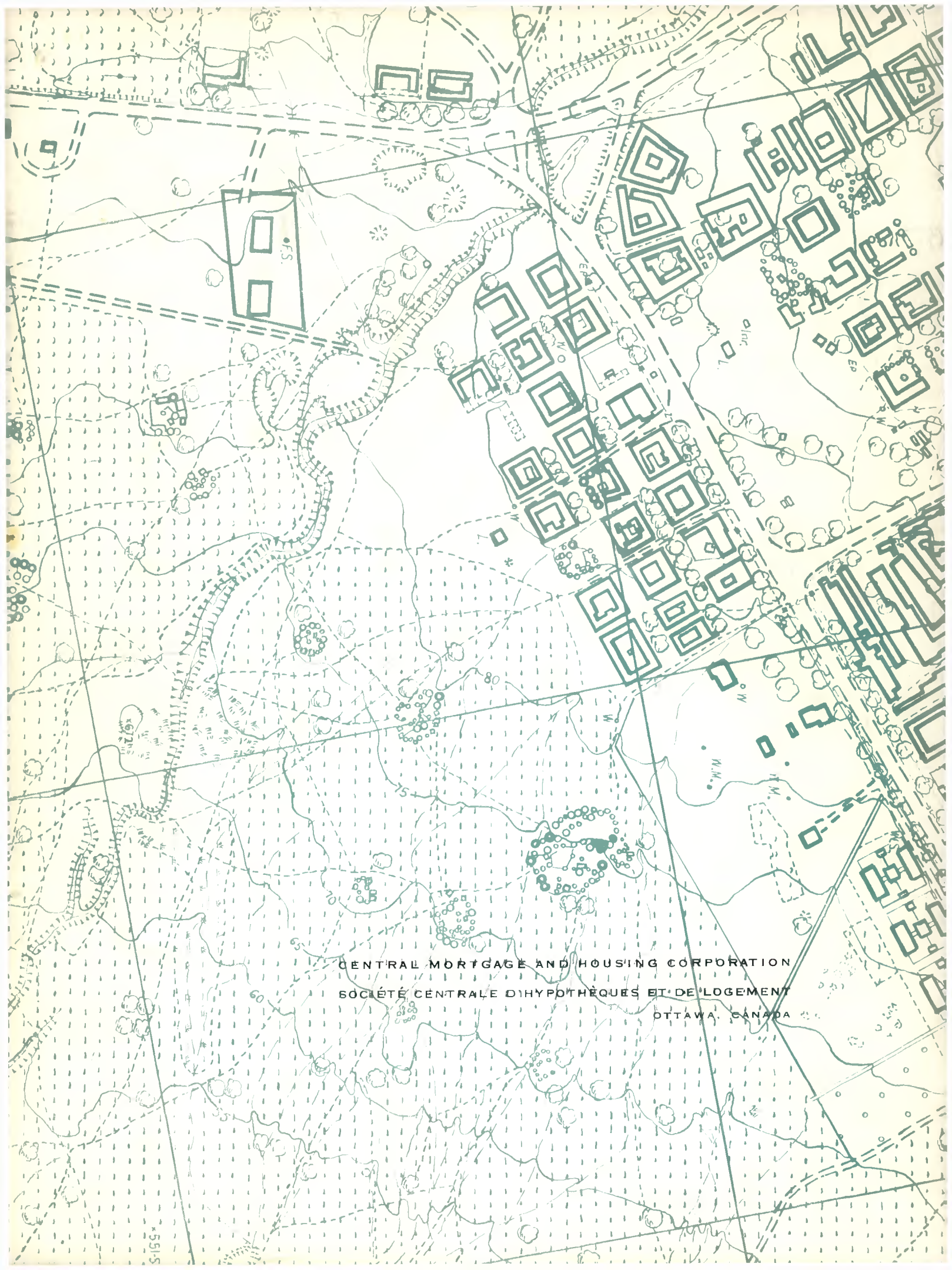
The multiple effect of the potash operation on the Canadian economy will soon be felt. Railroad revenues are expected to rise by $10 million each year because of the Saskatchewan development. Canada's balance of trade position will be strengthened as economists estimate the value of potash exports at $17 million per year. They also predict that within a very few years, potash will stand second only to wheat in Saskatchewan's gross product value as well as ranking sixth in Canada's total mineral production.

The future is bright for Saskatchewan's potash industry. With the gradual development of irrigation farming, the domestic demand for potash is expected to rise in the near future. Irrigation farming is a soil-exhausting process and fertilizers are thus needed to retain a constant maximum yield per acre. Soon the South Saskatchewan River Dam will give farmers the benefits of guaranteed water supplies but, in order to keep the productivity of their soils, they will have to turn to commercial fertilizers. Potash is the principal component in agricultural fertilizers.

Although at present, the bulk of the potash mined at Esterhazy is slated for fertilizer production, potash also plays an important role in industry. Television tubes, fabrics and dyes, cosmetics, soaps and detergents, etherical drugs and photographic supplies are only some of the products using potash.

By further diversifying and broadening the economic foundation of the province, the potash industry is making a significant contribution to both Saskatchewan and national industrial development and economic growth.

Today Esterhazy hums with activity. The hopes and expectations of the wind-burned men who stood around the drill-rigs on that warm June day have been more than fulfilled. ✦✦✦



CENTRAL MORTGAGE AND HOUSING CORPORATION

SOCIÉTÉ CENTRALE D'HYPOTHÈQUES ET DE LOGEMENT

OTTAWA, CANADA

HABITAT

MAY-JUNE, 1963

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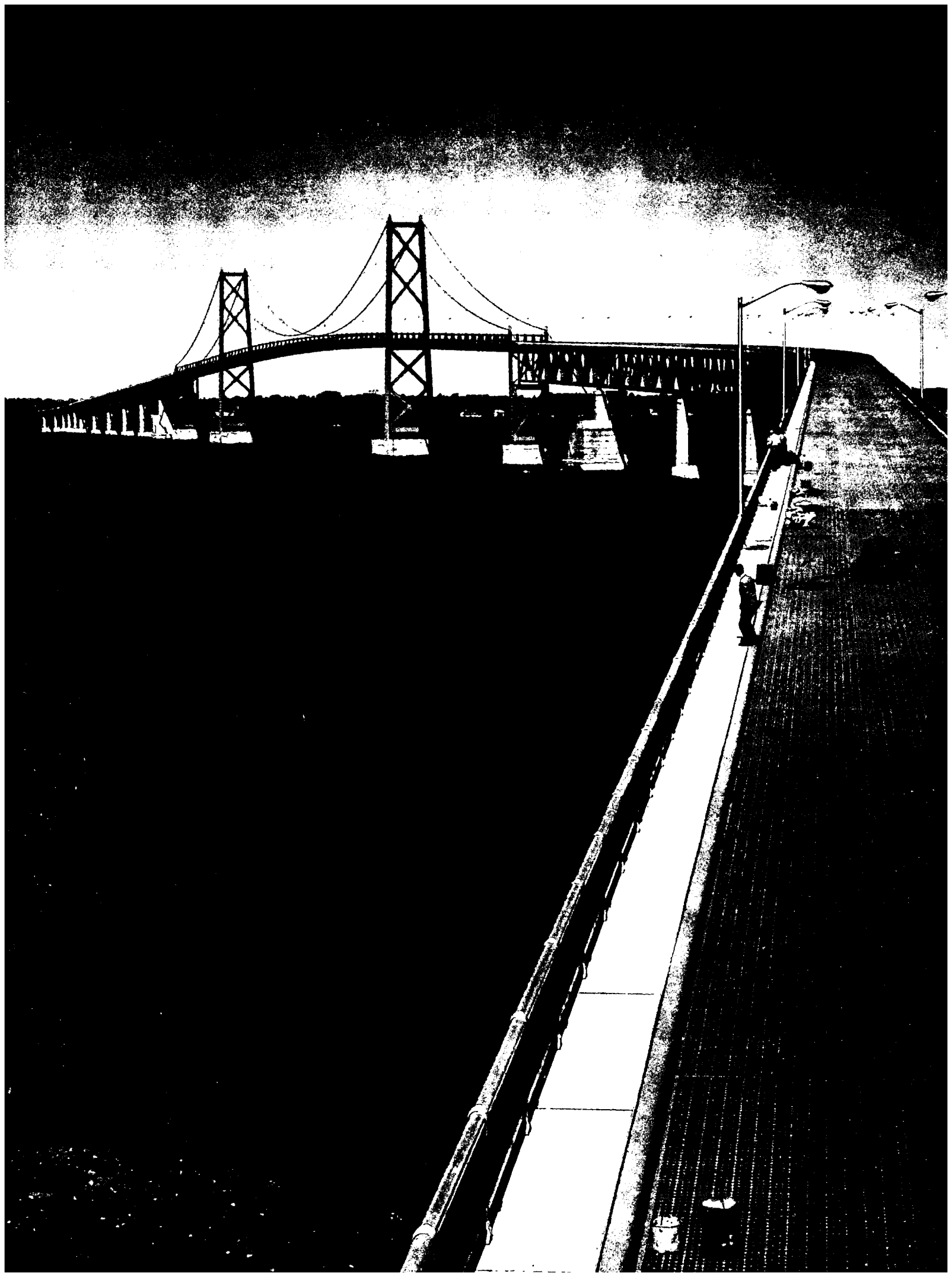

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FRONT COVER: *The design is by Mr. G. Switzer, Architectural and Planning Division, Central Mortgage and Housing Corporation.*

INSIDE COVER: *Workmen give the Prescott-Ogdensburgh Bridge over the St. Lawrence some final touch-up painting in readiness for its opening in 1962. This year it will again see a stream of two-way traffic as the vacation season begins.* PHOTO FEATURES

EDUCATIONAL GRANTS

Central Mortgage and Housing Corporation has prepared its schedule of educational grants for the academic year 1963/1964. The program is intended to encourage postgraduate studies and research in housing, community planning and related subjects at Canadian universities. The grants include:

(a) Up to 15 fellowships of $1,500 each for candidates registered for professional courses in community planning at the Universities of British Columbia, Manitoba, Toronto, McGill and Montreal.

(b) Up to five bursaries of from $800 to $1,200 each to assist university students to undertake post-graduate studies in the fields of housing, urban development and the management or operation of housing projects.

(c) Up to $12,000 for five travelling scholarships to undergraduate students in the Schools of Architecture at the Universities of British Columbia, Manitoba, Toronto, McGill and the Ecole d'Architecture de Montréal.

(d) Up to $7,500 for a senior fellowship to be made available to a person with outstanding qualifications to carry out advanced studies of housing design and management or urban analysis and development.

(e) Supplementary grants not to exceed $5,000 in total to be distributed among the five universities which now provide post-graduate courses in community planning, for the maintenance of adequate teaching arrangements and research staff.

Details of the entire program may be obtained from the Chairman of the Advisory Group, Central Mortgage and Housing Corporation, Head Office, Ottawa.

✦ ✦ ✦

Students of Rural Housing Course in Pasto, Colombia, 1962.

CINVA

by Paul M. Campbell

Many of Canada's compañero countries of Latin America are beset with acute growing pains, not the least of which is the improvement of the housing conditions for vast numbers of their citizens. The respective national governments are not taking long siestas —deferring problem solutions to mañana—but each member country of the Organization of American States has full cognizance of its particular housing needs and is seeking sound and lasting solutions.

There are natural obstacles which confront any national effort, but in Latin America and in the Caribbean the obstructions seem to come in larger doses. Housing and community development funds must wait their limited share of national income alongside demands for industrial and commercial development; elementary education; public health; transportation; public works and public utilities; agriculture and food supply increases; and the exploitation of natural resources. Some Latin American countries have enacted special legislation for housing programs to partially combat the financing obstacle. One member of the OAS, the United States, has sought to assist social and economic development in other member countries through a partnership arrangement and the creation of a social development fund of $500 million to be managed chiefly by the Inter-American Development Bank. Housing and community facilities are prominently included among the proposed social and economic advances of the joint endeavors.

However, each Latin American country realizes

that the ultimate key to progress rests in its own hands. With a constant struggle to combat an unfavorable trade balance and with a majority of the countries suffering from a serious depreciation of money, the financing of housing for low-income families is difficult. South America remains the major free-world area most afflicted with the inflation disease and in most countries the individual accumulation of savings for home ownership is very difficult, if not impossible.

The problems of financing accentuate the need for mobilizing human resources. Opportunities for this present themselves more lucidly in the areas of low-cost housing and in the development of community enterprises. An awareness is growing among Canada's more southernly neighbors of the social and economic benefits to be found in self-help and mutual aid forms and through group action in co-operatives and savings and loan associations. All of this dovetails with the concept of the Alliance for Progress in which certain financial support from the U.S.A. is allied with constructive self-development of Latin American nations.

The social problems of large population increases and movements compound the economic difficulties of Central and South America. The world-wide annual growth rate is 1.5% and Latin America is the highest on record with 2.4%. Current estimates show 40% of the urban population and 50% of rural families living in bad housing so the large annual growth rate does not alleviate the situation.

The migration of families to the metropolitan areas in search of something better compounds the urbanization problem. Where one shanty is eliminated through government housing achievement, two more homes of scrap lumber, tin and cardboard may well take its place overnight. This affords a simple index to the housing, health, education and general social problems facing each of Canada's Spanish-speaking neighbors. In estimating housing requirements for Africa, Asia and Latin America in February 1962, the United Nations found that the total house building in Latin America should be at least two and one-half million units per year; increasing to three million new units annually by 1970.

The Organization of American States convened an Advisory Committee on Housing in September 1961 to study deficiencies in the Latin American housing situation and to recommend immediate courses of action. A lack of clear-cut and comprehensive planning appeared to top the list and this is rooted in a shortage of highly-qualified housing specialists capable of translating socio-economic housing data into well-directed national plans. With national governments accepting more and more of the legacy of providing minimum decency housing standards for low-income citizens, the emphasis in housing is witnessing a shift from economic to social objectives.

The Department of Social Affairs of the Pan American Union which serves as the Secretariat of the OAS, operates an educational and research center in the field of housing for member countries of the OAS. This institution, the Inter-American Housing and Planning Center, is more popularly known as CINVA (Centro Interamericano de Vivienda y Planeamiento). Upon CINVA's shoulders has been placed the responsibility of producing trained housing professionals and, also, of furnishing informational guidance to Latin American countries for supplementary assistance.

Operating since 1952 in Bogota, Colombia, the Center was incorporated into the permanent structure of the OAS General Secretariat in 1959 and underwent reorganizational changes with respect to academic and policy matters. In 1961, the OAS engaged Yale University to provide long-term advisory services, technical policy and planning guidance, thus assuring a continual review and development of academic and research programs. The three principal functions of CINVA—education, research and documentation—have been consistently maintained since its inception.

Education and training in housing as an element of social development receives priority attention. Study methods include; lectures, seminars, library and field research, laboratory work, practical field-work internship and studio projects. The aggregate of courses encompasses three characteristic types; the Regular Graduate-level Course, specialized and extension courses on explicit aspects of housing and individual research fellowships.

The nine-month Regular Course, April-Decem-

ber, requires that candidates be university graduates (or the equivalent) and that they matriculate under the recommendation of competent technical or academic institutions. The basic aim of this work is to develop housing professionals who will return to their home countries and assume responsible housing roles with confident proficiency. To prepare trainees, the academic core curriculum comprehends the theoretical, physical, technological, design, economic, financial, social and administrative aspects of housing.

Each student is enrolled as an OAS fellow and, with the exception of Colombia, the host country, a fairly equal distribution of fellowships with stipends of $135 U.S. per month is made on a competitive basis, among the respective member countries of the OAS. Complying with the recommendation of the Council of the OAS, the number of fellowships was increased from 21 to 42 for 1962 and again increased to 63 for the 1963 course. A total of 259 fellows have received this CINVA training since the Center opened.

Like the student body at CINVA, the faculty is international. Professors are selected according to their specialty and experience in the field of housing and come from different countries. Visiting lecturers frequently supplement the regular instruction with specific housing or community development information.

In addition to classroom lectures and seminars of the normal university pattern, studio projects form an important complement to the curriculum material. These are designed to develop interprofessional teamwork of the technical, social and economic practitioners within the low-cost housing field. CINVA makes a stressed point of imparting the principle of professional coordination in planning, executing and administering housing programs by government bodies. The educational discipline of the studio projects, supplemented by required bibliographical and laboratory research, advances the student from the pedagogic, through the process of thinking out possible solutions and in conjunction with team-mates to arrive at sound conclusions. Faculty-member supervision of these projects is used to stimulate a broader horizon and to provide check points as to professional standard during the progress of the work.

Because of an additional shortage of qualified agencies for conducting housing research programs in many Latin American countries, CINVA includes apprenticeship training in this sphere to round out the trainee's vocational value to his native country. The OAS Housing Advisory Committee ascertained an absence of comprehensive planning principles in the patterns used to set up housing programs. Therefore, CINVA training subscribes to the theorem that "information" is the raw material of decision-making and shows where to gather data and how to translate it.

Through the medium of short extension courses and through specialized housing courses, the OAS General Secretariat seeks to amplify its service of training housing specialists for Latin American nations. In recent years the short-term courses have been focused upon the improvement of rural housing conditions and related community action to meet a pressing social need and to moderate the population drift to urban areas.

Usually of three months duration, these CINVA training programs are designed for persons directly engaged in rural housing improvement activity. They are carried out in localized rural areas, with local instructors and facilities, under the direction of a CINVA faculty member and CINVA coordination. Argentina, Brazil, Colombia, Mexico, Perú and Venezuela have provided host centers for the thirteen courses offered to date. Students from other countries which have conditions similar to the host country are granted fellowships in limited number in keeping with the international give-and-take which OAS fosters. Other extension courses have been conducted in self-help construction, technology, planning and financing. A total of 394 additional persons have received this more concentrated form of housing training.

A very important addition to the curriculum took place in the latter half of 1962 at the Center itself. CINVA undertook its first highly intensive and all-comprehensive course in the use of self-help techniques for house construction. Designed to put human resources to use and to capitalize on the social growth potential of group endeavor, the four and one-half months course took housing personnel from various

Latin American countries and taught them sound fundamentals of guiding people to help themselves.

Utilizing the team-work principle throughout, only the three-to-five member groups from official housing agencies were enrolled in the large class of 46. A different vocational background was required of each team member drawn from the technical, the social, the economic and the administrative occupations and from foremanships in the building craft. High standard academic work was pursued in each phase of housing that had bearing upon self-help action. Research training received its due emphasis.

Interior Court—CINVA, 1962.

A social worker discusses self-help housing with a group of future homeowners.

Weekly round-table discussions provided the opportunity for academic work and practical experience to meet in a free exchange of ideas. A very significant training aid consisted of actual field-work experience each week-end in working with the family participants of a co-operative program in Bogotá. The Colombian housing agency, the Instituto de Crédito Territorial, cooperated in making the internship training available within its 12,000-unit project known as Ciudad Techo. This opportunity for supervised field-experience under a large scale housing organization was congruent with CINVA's objective—teaching that self-help housing programs, when well-planned and well-directed, are capable of doing their share of reducing housing deficiencies in Latin America.

The successful training achievement has motivated a repeat of this self-help course for 1963, under a slightly expanded training schedule. The Inter-American Development Bank has requested CINVA to conduct a comparative course in self-help housing for its Latin American area supervisors.

Besides the regular, special and extension courses, the OAS generally awards six short-term research fellowships each year, intended for carrying out special research projects under the direction of CINVA's international faculty. This program which normally lasts from June to September is specially designed to provide graduate students with an opportunity to study solutions to the problems of low-cost housing, building and community planning being found in Latin America. Some 35 special fellows have conducted research under this plan.

The second broad function of the Housing Center is the conduct of a research program towards finding ways and means to facilitate low-cost housing programs in Latin American countries. These studies may be the work of CINVA's faculty, of the special research fellows, of the regular students or a combination of enterprises. Completed works of special merit and of benefit to OAS member countries are published and distributed by CINVA as a part of its regular publications programs.

The normal research project covers a two-year span. Among the studies are: the general and specific aspects of housing in relation to economic development; financing techniques for use in fast-growing population sectors; application of newly-developed techniques to housing construction; use of tools and mechanical equipment to cut down costs, time and labor in self-help construction; cost and efficiency of self-help construction as compared with traditional methods of construction; improvement of residential areas and their complementary services; better use and utilization of existing housing in Latin America; extension methods and techniques for rural housing; utilization of the energies and resources of city immigrants for housing improvement programs; housing programming and management; and research on educational techniques for housing specialists.

A dramatic result of the research was the design of a machine for simplified self-help production of durable building blocks of stabilized soil. This piece of equipment, the CINVA-RAM, is today serving thousands of self-help home builders in rural areas all over the world.

The third broad responsibility of the Center lies within the scope of documentation. The aim of this activity is the continuous compilation, analysis and correlation of all available statistics, data and information on housing and community planning and building—especially all general and statistical information indispensable to the study and analysis of the housing problem in Latin America.

Each year numerous publications are printed in Spanish and/or English and distributed to a wide variety of international institutions, governmental agencies and private individuals. Well over one hundred publications are the consequence of this important CINVA action. The regular monthly newsletter of CINVA, "Suplemento Informativo", attempts to keep its readers informed on current housing and community development news of the various member countries of the OAS. A sectional bibliography is appended to each issue, briefly narrating some of the CINVA publications available for distribution.

The research papers of the regular students or fellowship holders are permanently placed in the CINVA library for consultation. Augmented annually

by books, periodicals and other publications from around the world, the Center's library is perhaps the most complete in Latin America in the fields of housing, construction and community planning. The educational discipline requires very extensive trainee use of this facility.

Although CINVA is operated as a field activity of the OAS, co-operative support is received from a wide range of sources. The most tangible assistance comes from the host country, Colombia, which provides space and physical plant on the campus of its National University and contributes equipment, a local operating staff and utilities and maintenance services. Through the Colombian housing agency, the Instituto de Crédito Territorial, valuable in-service training is made possible in practical work within the housing programs current to CINVA's schedule.

The United Nations participated in the establishment of the Center and has contributed various specialists from time to time over the ten-year history of the school. The Pan American Sanitary Bureau, the Inter American Statistical Institute, the International Labour Office and the U.S.A. Housing and Home Finance Agency have all expressed their mutual interest in the OAS goals, principally through providing specialists for academic courses or lectures of specific character.

All 21 member nations of the OAS have sent trainees to the Regular Post Graduate Course. The United States benefits through student enrollment from Puerto Rico. Because of its extra financial contribution and because of the location of the training Center, Colombia can boast of the largest alumni, with Bolivia, Chile, Perú and Argentina slightly above other countries. In extension courses, Bolivia, Perú and Mexico have the most trainees after Colombia.

While seven non-member (OAS) nations have sent research fellows to CINVA for special study, the preponderant single source has been advance classes of graduate schools in the United States.

In democratic societies individuals enjoy a freedom of vocational choice. Slightly more than 20% of the CINVA Regular Graduates have gone into private practice or accepted employment with private concerns. The main proof of the pudding lies in the 65% of the CINVA graduates who are currently applying their skills in national or local governmental bodies. Some occupy crucial positions for their countries. Nineteen have moved into the educational field and are relaying social development principles through various Latin American universities. Seven are engaged in promoting housing through international agencies and several others utilize their housing abilities for private national or international agencies engaged in social advancement.

Each Latin American country is making strenuous efforts in its own way toward the solution of housing problems. At the same time, the member countries of the OAS put credence in the belief that the starting place for long-range solutions lies in well-trained housing professionals. The desire to increase their training and the keen interest of the many Latin Americans now engaged in housing, indicates a constructive compulsion to do a much more adequate job. Such alertness to the needs of the less fortunate citizens holds new promise for Canada's Latin neighbors. ✦✦✦

Mr. Campbell received his bachelor's degree in business administration at Westminster College, Pennsylvania, and his master's in applied social sciences at the University of Pittsburgh. He has lectured at the Carnegie Institute of Technology in housing aspects and joined the CINVA faculty in August, 1962. Except for two years' service as a Lieutenant in the U.S. Navy, Mr. Campbell has been engaged in the field of housing since 1934, with the Division of Subsistence Homesteads and the Resettlement Administration of the U.S. Government, as housing manager for the Pittsburgh Housing Authority and as United Nations Housing Advisor to the Government of Jamaica.

Ces deux photographies illustrent un exemple d'un lotissement monotone et des résidences dans une atmosphère esthétique harmonieuse.

MAISONS UNIFAMILIALES OU GRANDS ENSEMBLES

par Rodolphe Laplante

J'ai pendant des années exalté la maison unifamiliale, parce que c'était le cadre physique idéal pour l'épanouissement d'une famille nombreuse à qui il faut l'air, l'espace à l'intérieur de la maison mais surtout à l'entour de la maison.

Et les maisons unifamiliales ou semi-familiales se sont multipliées.

Les espaces disponibles dans des villes comme Montréal et Québec furent comblés. A vrai dire en ces deux villes il n'y a quasi plus de terrains à construire pour des maisons du type précité.

A Montréal, les maisons de type ancien, mais pouvant être rénovées et modernisées, furent cependant démolies, soit en raison de l'élargissement de la voie publique, soit pour faire place à de grands ensembles à logements multiples, soit pour la construction de locaux à bureaux.

Le point de vue que j'apporte ici en réflexions est celui non pas de l'architecte, de l'ingénieur ou de l'urbaniste, mais celui d'un père de famille, mêlé pendant plus de douze ans à la mise en oeuvre d'une loi de l'habitation familiale administrée par le Québec.

Nous favorisions alors la maison familiale d'un seul occupant ou la maison jumelée, ou encore la maison à deux logements superposés.

Notre opinion n'a pas varié: c'est le gîte idéal, mais ce n'est pas le logement le moins coûteux.

Après avoir ainsi exprimé notre conviction de l'avantage de la maison familiale, il nous sera permis d'apporter quelques ombres.

AUTRES MODALITÉS DE LOGEMENT

Les terrains disponibles sont de plus en plus coûteux et de plus en plus éloignés du lieu de travail, soit à Montréal, Québec, Trois-Rivières, Sherbrooke.

Les centres domiciliaires sont de plus en plus étendus. L'occupant est parfois situé loin de l'église. L'école ne semble pas constituer le même problème car il est assez facile d'organiser un transport en commun, les élèves devant circuler aux mêmes heures.

Ces agglomérations de maisons ont vu s'édifier, à proximité, des centres d'approvisionnement et parfois un centre coopératif comme près de Québec. Mais en Europe, comme aux États-Unis, et un peu

partout au Canada, en entend parfois la plainte que l'isolement étreint les occupants. On se plaint que la vie communautaire manque d'entrain car tous les résidants, ou presque, sont du même âge. En effet certaines initiatives communautaires ne peuvent être entreprises que si la population, contenue dans un territoire plus ou moins fermé, est d'âges variés.

Et ceci nous amène à nous demander si on a suffisamment exploité tous les genres d'aménagement de logements afin de satisfaire aux besoins de diverses catégories d'occupants.

Le centre domiciliaire avec habitations familiales doit être maintenu et encouragé et il faudrait, par des mesures appropriées, prévenir ou contenir la spéculation sur les terrains disponibles ou les espaces adjacents devant être éventuellement lotis et cadastrés.

Il est cependant toute une catégorie d'unités de foyers où il n'y a pas d'enfants, où il n'y en aura pas, où il n'y en a plus, la vie les ayant éparpillés. Il y a aussi le cas de célibataires de l'un ou l'autre sexe qui désirent occuper seuls ou à deux ou trois un logement, ou un local à une, deux ou trois pièces.

Et il y a les retraités ou les couples âgés qui ne goûtent plus la maison seule et qui préfèrent le logement chauffé, dégagé des tâches inhérentes à une maison unifamiliale.

Tout cet éventail d'occupants éventuels ne sont pas ou ne sont plus candidats à la maison isolée.

Et c'est ici qu'apparaît l'à propos du grand ensemble aux appartements de dimensions diverses. Il ne devrait pas toujours s'agir d'ensembles de luxe.

Un ou deux grands ensembles devraient être érigés au sein même d'une série d'habitations familiales. Outre que ces constructions à quatre ou cinq ou six étages rompraient la monotonie des maisons à peu près toutes d'une même hauteur, on allégerait ou répartirait plus équitablement les frais d'égout, de trottoirs, de rues, d'aqueduc. Un autre résultat heureux serait de réunir dans une paroisse ou communauté déterminée des citoyens d'âges variés, ce qui favorise l'échange de services communautaires.

La caisse populaire, le centre des loisirs, les diverses coopératives trouveraient au sein de cette population diversifiée, non seulement des clients, des adeptes, des paroissiens, mais aussi des gens d'expérience dégagés des exigences de la jeune famille en croissance. Il n'est pas juste que toutes les tâches d'intérêt collectif échoient aux seuls pères et mères déjà accaparés par les multiples tâches de l'éducation.

Une plus grande densité de la population sur un territoire domiciliaire fournirait aussi une clientèle plus nombreuse aux services de transport en commun dont la fréquence s'accroîtrait d'autant. Ce complément à l'habitat urbain de banlieue n'infirmerait pas les avantages de la maison seule, pourvu que les grands ensembles soient obligatoirement pourvus d'espace, d'air et de verdure raisonnable en plus des parcs de stationnement requis. On pourrait aussi prévoir que la circulation ne devienne pas un danger pour les enfants de ceux que ont désiré de l'air et de l'espace.

LA CONSTRUCTION EN HAUTEUR

Que l'on aime ou non la construction en hauteur elle s'imposera mais elle ne doit pas être exclusive. Il s'agit de ne pas rejeter ou de ne pas infirmer les avantages de la maison indépendante pour ceux qui en ont besoin et qui peuvent se l'offrir.

Les frais édilitaires auront tendance à s'accroître et à se traduire en taxes foncières ou scolaires. C'est pourquoi, afin de respecter les besoins de la famille en croissance, il faut deviser de formules complémentaires qui permettent d'y satisfaire sans écraser le propriétaire de la maison seule.

Les incidentes sociologiques que nous mentionnons ne doivent pas être perdues de vue.

Les coopératives d'habitation elles-mêmes pourraient s'occuper d'édifier de tels ensembles sans rivaliser avec les propriétés d'individus ou de compagnies de gestion immobilière.

L'occupant d'un espace dans un ensemble coopératif pourrait quand même viser à la maison seule, s'il est d'un âge peu avancé, ou si sa famille augmente ou si son revenu augmente et s'il tient à la maisonnette, avec pelouse et terrain agrémenté de fleurs, etc.

Des expériences faites en Angleterre, dans des zones rénovées ou reconstruites nous apprennent que les vieux couples s'ennuient sans de jeunes enfants dans un rayon accessible.

D'une part leur âge, leur santé, font qu'ils ne peuvent subir de façon continue le bruit et les ébats des enfants, mais d'autre part ils aiment généralement les jeunes, pour les garder pendant que la mère est en course ou en visite, mais ils tiennent aussi à la possibilité de se replier dans un gîte baigné par le calme et la tranquillité.

La question du logement est en rapide évolution. La formule idéale, ou tout au moins rationnelle n'est pas encore atteinte. Il s'est accompli depuis une couple de décennies un travail immense pour loger les populations de façon plus humaine.

La Société centrale d'hypothèques et de logement, le gouvernement provincial, depuis 1948, les coopératives d'habitation, les caisses populaires, les compagnies de fiducie ou d'assurance ont multiplié efforts et accommodations financières pour loger nos populations. Le pas franchi est immense. Il reste que pour les habitations construites en territoires vierges, le temps n'a pas encore fait son œuvre et fondu les populations réunies par le seul facteur du rapprochement.

Une maison c'est beaucoup mais il faut aussi qu'elle soit située dans une atmosphère chaude et communicative.

En bref, nous croyons que ces quelques suggestions pourraient avoir une conséquence bénéfique pour la maison seule construite au milieu de centaines d'autres du même type: conséquence économique qui peut en assurer la permanence; conséquence d'ordre social qui la fera jouer tout son rôle pour la famille et la société.

La revue L'Anneau d'or (Jean Onimur) publiait un étude reproduite par Le Devoir, le cinq janvier 1959.

L'auteur mentionnait précisément que la maison devait avoir une âme. La maison aura une âme non seulement par l'intérieur et par son cadre physique mais aussi par l'environnement. La maison a des racines, l'appartement en hauteur pas.

Mais si l'idéal est la maison unifamiliale, elle ne convient pas à tous, à tous les âges et à tous les revenus.

Jean Onimur rappelle, dans l'article précité, qu'humaniser l'immeuble à logements multiples fut le but de ce grand humaniste et urbaniste qu'est Le Corbusier. Selon ce grand bâtisseur moderne, si on veut que le grand ensemble s'humanise, devienne "maison" il faudra aussi qu'il devienne jardin, école, rue, centre commercial, en bref un petit village.

Si nous ne voulons pas que la maison à appartements, le grand ensemble s'impose de façon rigide, il faudra s'employer à sauver la maison unifamiliale ou semi-familiale. Et il ne faudra pas l'écraser sous des frais édilitaires, des taxes trop élevées.

Et le grand ensemble, inséré avec discernement au milieu de ces maisons isolées, allégera indirectement les charges qui deviendraient autrement prohibitives.

Et le grand ensemble, répétons-le, et ce n'est pas un paradoxe, peut aider à assurer la permanence d'ilôts de maisons isolées.

Jean Onimur n'oppose pas le grand ensemble à la maison seule. Il y a là un besoin socio-économique à satisfaire. Ce mode de logement ne devrait pas démolir la maison comme telle. Il devrait la compléter.

L'auteur cité écrit; "On s'efforce de construire des écoles heureuses et même des blocs administratifs heureux . . . mais les maisons heureuses réclament d'autres mesures".

La maison coûtera trop cher et une véritable vie communautaire ne pourra se constituer sans la collaboration que nous indiquons plus haut.

Encore un coup, ce mode de logement ne devrait pas tuer la maison seule mais lui créer une atmosphère ambiante, donner une âme au milieu, avec les avantages économiques que nous avons montés en exergue.

Les deux modes d'habitation doivent aller de pair.

Monsieur Rodolphe Laplante a fait des études à l'Ecole des Hautes études commerciales de Montréal. Il décrocha en 1926 un diplôme en Sciences sociales, économiques et politiques, en plus d'un premier prix en journalisme à l'Université de Montréal, et il fut mêlé au commerce, aux affaires bancaires, caisses populaires, journalisme, crédit agricole, etc., durant sa carrière. Il fut secrétaire général de l'Office du crédit agricole provincial de Québec et du Service de l'habitation familiale, régisseur du même Office de 1952 à 1960 et fut aussi secrétaire général de l'Office de l'Electrification rurale de 1945 à 1954.

TWO CITIES

by N. R. Bawlf

Mr. Bawlf was the recipient of one of five travelling scholarships awarded by Central Mortgage and Housing Corporation in 1962. The awards are made on the basis of one to each Canadian University which has a school of architecture. The scholarships enable outstanding architectural students in the graduating classes to make a study of North American housing. The following excerpts are from Mr. Bawlf's report on his tour.

The objective of the tour was that we, as a group of individuals, should investigate examples of "public" or subsidized housing in each major or urban area which we were to visit in the United States and in Canada, with the intention of exploring the "criterion of success" of community housing. When undertaking the tour, it had been suggested to us that we place particular emphasis on the sociological criteria in our study. One of the major reasons for this was that we would try to find out if the needs and the psychological make-up of the tenants determined the size of an "optimum" community group. Such an approach is feasible only if the observer can disassociate himself from an interest in the dominant aspects of the architecture of the "project" and concentrate his efforts on a comprehensive study of the tenants and their interrelationships both within the confines of the "project" itself and with the surrounding environs, from a purely sociological viewpoint.

At the beginning of the tour we attempted to follow this approach and found in the first instances that it proved very stimulating. However, we were unable, owing to limited time and hampered by our inexperience, to obtain much beyond a random sampling of tenants' opinions and thus found it difficult to formulate conclusions beyond those of a general nature. Admittedly, these attempts were often obstructed by our hesitancy in the face of reticent and often hostile tenants. As a result, during the latter part of the tour, we tended to gloss over this aspect of the study and to channel our efforts into the more obvious problems of housing which were blantantly evident and to question authorities about these problems in our interviews. Thus what knowledge we at first attempted to glean first hand we eventually ended up obtaining from second or even third parties or sources.

One further problem which seemed to affect the success of this very specific study was that each of us was interested not only in public housing, but in the nature and the life of each area we visited, above and beyond the study of a specific project. Speaking for myself, and I am sure for other members of the tour in many similar cases, I was fascinated by the comparative differences, physical, cultural and sociological, between each major center we visited. It will become apparent, from this report, that we developed two objectives on the trip; specifically to study forms and content of "public housing" and to see and experience each city as "selective" (I sincerely hope) tourists. At times the dominance of the former project frustrated us in our attempts to accomplish the latter. This was complicated by the obvious fact that it is much more pleasant, to an architectural student in any case, to explore a city than to assume the role of a sociologist or a case worker and sit talking to tenants and officials, no matter how dominant his conscience is, particularly if it is the first time he has seen such a city.

As the tour progressed one fact became quite obvious to us; while the nature of the environment, climatic, cultural, economic and social, dictated and resulted in a different way of life and methods of traditional building for each major urban area, the standards of public housing in the United States did not allow for such differences and resulted in a similarity of building and living values in housing projects across the country. This also resulted in the creation of similar

problems in each area. Thus while the environmental factors varied from area to area, public housing, to a large degree did not—it remained static. This fact tended to further compound our frustration. Each city presented a new aspect, in its entirety and individual components while the area of our study, "public housing", went marching on hampered by the same problems and short-comings and resulting in the same solutions (with a few notable exceptions) from city to city.

This interest in the total aspect of each city did aid us, however, in our specific studies of public housing. It gave us a good look at traditional forms of housing and the way people lived, worked and utilized urban life in each urban center. This gave us a good basis for evaluating the success or failure of the public housing, in part or in total, in these centers.

The most valid criticism I might make of our approach would be that under the circumstances, in considering the time element and our interest in the general nature of the city, we would have done better to de-emphasize our specific study of public housing and allow ourselves more time and scope for a general study of all the elements of the city, with particular regard to housing—*private* and public. In fact, towards the latter part of the tour this did occur, probably unconsciously more than intentionally.

An interesting phenomenon was that we seemed to be drawn in many cases to the older sections of each city. Time and time again we found ourselves being intrigued by the traditional residential areas: Telegraph and Russian Hills in San Francisco; the Vieux Carré and the Garden District in New Orleans; Georgetown in Washington, D.C.; Rittenhouse Square and Society Hill in Philadelphia; the tenements of the lower East Side, Harlem and the Bronx in Manhattan and New York and Louisburg Square in Boston. We were impressed and often captivated by the variety of life and the manner of living which seemed to be different in each of these areas. The buildings were always at least 50 years old and yet they seemed to exhibit more common sense and forethought on the part of their builders than did the newer schemes for urban residences, erected since their heyday.

Realizing the impossibility of giving a complete picture by attempting to include descriptions of every item we saw or experienced on the tour, within the scope of this report, I will attempt to give my view of each city, urban center or region by dwelling only on the aspects which I regard as essential and most important in my mind. The exclusion of some elements which someone else might regard as essential to a complete picture may result from either their omission from our tour or their relative unimportance in my own mind. If this is a biased picture I attempt no apology for I do not wish to give a resumé of a Cook's Tour or a travelogue, but rather my own total impression.

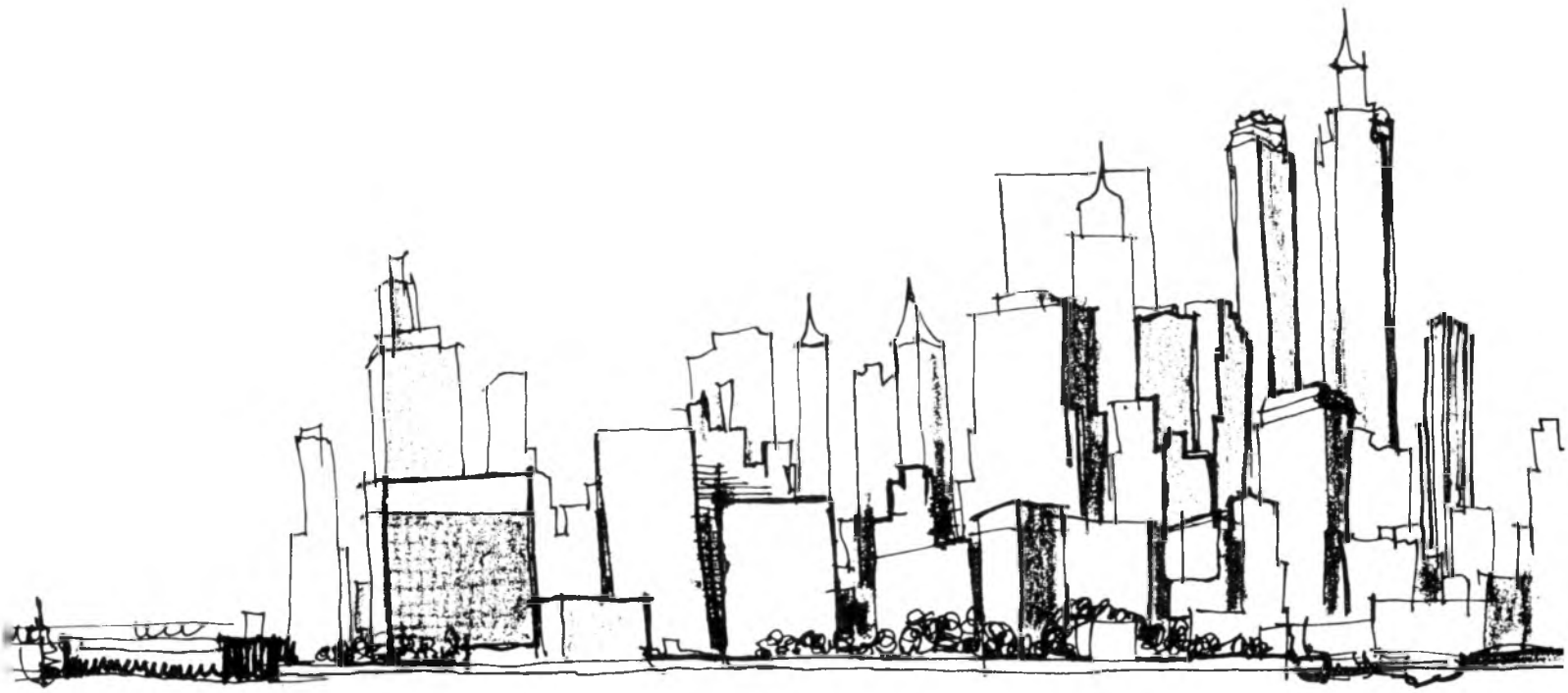
NEW YORK CITY

Creeping along the New Jersey Turnpike towards New York we felt like one insignificant insect in an endless procession of ants making our way diligently across a great checkered tablecloth toward some cryptic goal. Suddenly aroused from our lethargic summer dozing across car seats, newspapers and suitcases, we saw that goal like an ill-defined massive object in the distance, a low flat picnic cake across the tablecloth, with clumps of grey and brown candles protruding from it—Manhattan Island. Suddenly it seems to race towards us rather than we towards it. Looking across the steel-blue and mud-grey platter of The Upper Bay and the Hudson River, towards this massive evidence of man's ingenuity and folly, one wonders if there isn't some natural process involved in the conception and birth and death of these great cubes and rectangular structures, for they seem to be crowding each other towards the perimeter of the island, forcing each other into the water like some great horde of lemmings.

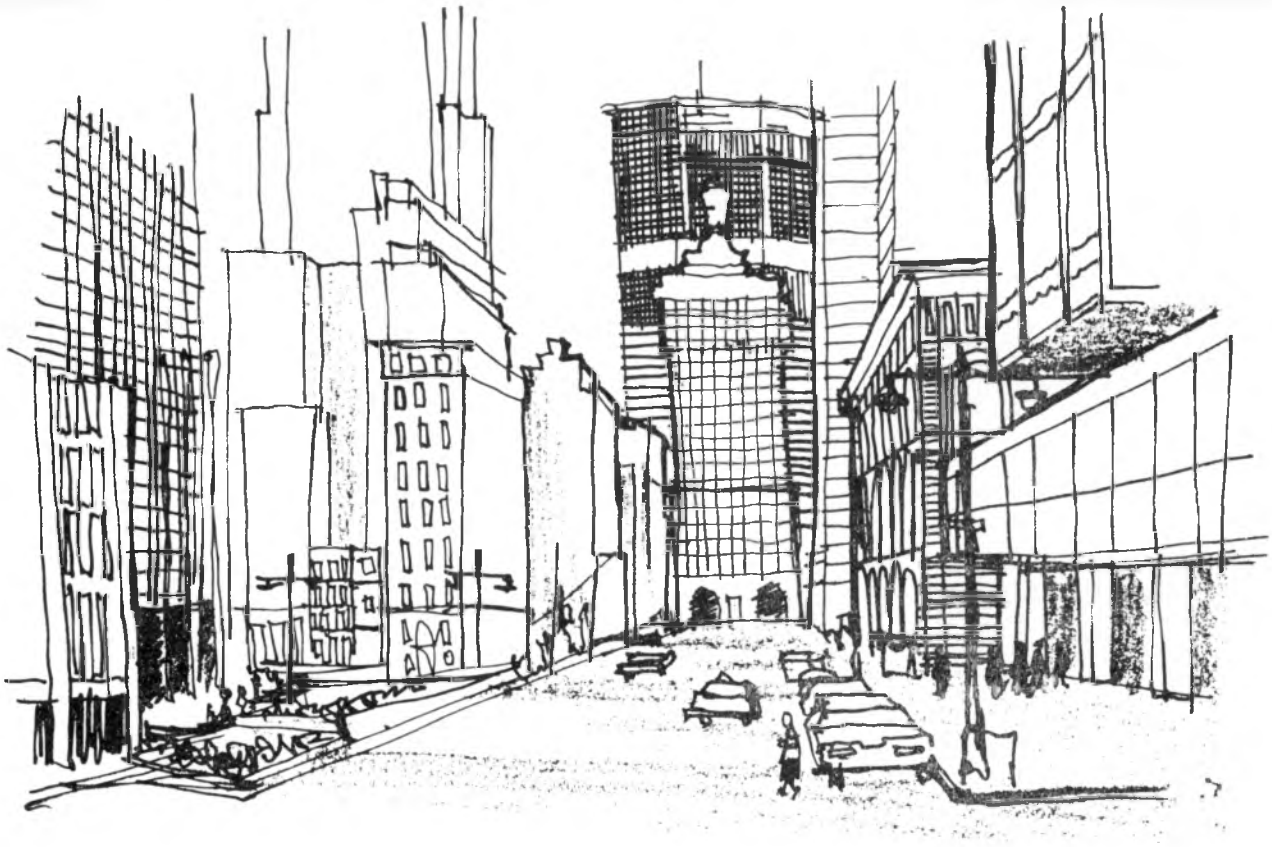
Before I go through the Lincoln Tunnel into the city I would like to circumnavigate the Island itself. This we did ourselves, but only after four days in the city. All of us found that after burrowing and winding through its intricacies for four days we still had no real idea of where the city began and ended; its sheer complexity, bulk and density suggested infinity. Unaware of each other's activities one afternoon, we had skulked off into the city in pairs to find later that evening that each pair had secretively taken the same har-

bor boat tour at different times. The tour was like a motion picture; each individual frame gave a specific view; the total—a panoramic vista; the finger-like liner piers at the foot of 42nd street; the Queen Elizabeth, the United States and La France towering majestically over rows of semi-trailer trucks and herded by officious, efficient snubnosed tugs; the orderly canyons running like spaces between teeth of a comb across the island; the wharves, the freighters and the ferries squatting at the shoreline; the canyons dissolving into dead ends as the streets become irregular at the foot of Manhattan; the Battery at the very end with its round fort like a big toe imbedded in a very small patch of green grass; the silver, steel and aquamarine glass of the Chase Manhattan Building rising squarely out of a jumbled mass of buildings: into the East River and under a succession of marvelous and vulgar bridges; the Staten Island Ferry swooshing by on the right; the docks and warehouses and kangaroo cranes of Brooklyn and Queens clogging the east bank. Steaming under Roebling's still magnificent Brooklyn Bridge, its cables radiating like spokes of a bicycle wheel from the massive arches, we see the first of an endless succession of mass housing sitting belligerently on the lip of the island—Governor Alfred E. Smith Houses.

They form a wall along the river, shoulder to shoulder, indistinguishable in their forms; a giant sibling has been playing with his set of building blocks, all of them extruded from the same set of dies, either cruciform or rectangular. It is difficult to tell which of these are "public housing" and which are privately rented, unsubsidized units. The names give a clue. The public housing projects bear the surnames of political pundits and national heroes; La Guardia Houses, Samuel Gompers Houses, George Washington Houses, Benjamin Franklin Houses. The apartment houses are characteristically named after original New Yorkers; Stuyvesant Apartments, Corlears Hook Apartments and Jacob Riis Apartments. From the river, the great cruciform bulks of Stuyvesant Town creates an impressive composition against the deep ultra marine of the evening sky. Only when one moves among these bulks does the terrible monotony and



The Battery and Lower Manhattan, New York City.



Park Avenue, New York City. Lever House, Seagram's Bldg., Grand Central Station, Pan-American Airways Bldg.

infinitude of the repetitious forms become oppressively apparent. While walking through one such development, in the evening, we became literally lost in a forest of similarity.

Up the East River we steam past 30 of these housing developments, some of them covering 10 city blocks; under 18 bridges, from the majestic Brooklyn Bridge to a tiny railroad drawbridge at the northern tip of Manhattan; past the islands covered with institutional buildings like those of Welfare Island, the vacant buildings in their lush green beds of trees and grass contrasting incongruously with the huddling structures of Manhattan, pushing and crowding each other as they maintain their precarious balance on the bank of the river. The river banks begin to squeeze us as we pass into the upper part of the river, past heaps of rusting automobiles, past groups of kids standing on the black wharves and pilings under the bridges, confirming a legend of the city as they plunge into the slough of the river, gleefully shouting, in their birthday suits. We twist around the northern tip of the Island and are spewed out into the vast Hudson River to stare at the uninterrupted wall of woods on the New Jersey Bank.

Down the Hudson, the building heights trace a line like a graph of a penny stock, the streets boring through the masses towards the East River like vertical coordinates and the Henry Hudson Parkway glides along like the base line.

Now the city; out of the Lincoln Tunnel we are in the Y.M.C.A., with its air of anonymity, its small stuffy rooms with cot, wardrobe, four hot walls, its cavernous washrooms, row on row of sinks, showers, urinals, and toilet stalls, with its symbol of dubious privacy—the room key.

The city has two basic components—the people and the buildings. Everything else is subservient; the ground, the pavement, the tree, the sky. These only emphasize or complement the two basics. Each is alternatively dominant or recessive; never are they entirely harmonious. Man has created and is still creating the buildings; the buildings create, even dictate, the spaces. It is almost as if these inert things grudgingly permitted the spaces to exist. Around Wall Street, on Park Avenue, along Fifth Avenue, the people are the recessive element. Necessary, vital—yes. Dominant—never! They seem to serve the buildings. In the tenement houses and flats of Harlem, of the West Side, the Lower East Side and the Bronx, the people and the buildings merge a little better.

If it were not for the sheer monotony of row on row of brownstone houses, cornices, tongues of stairs and construction of fire-escapes, the people would dominate. They nearly succeed. Here they form an anonymous, tenuous, vibrant network of sinews which seems to hold the neighborhood, the bricks and the stones together. The tendons knot at the corners around a pushcart whose owner, under a huge parasol, is dispensing "Italian ices" or hot-dogs to hordes of kids. The humanity swirls around the triple-parked cars out into the street. It lounges, leans, sits and grows out of windows, on steps, in doorways, on boxes and in front of stores. It is teeming; it is composed of the lower income brackets, the poor, the constantly changing ethnic groups of the nation's immigrants; it breeds social problems, admittedly, but it is the essence of what we call urban life and it has been fostered by our society.

Since the socio-political football of public housing was kicked into the arena, the city has been witness to a huge program of subsidized housing. The New York Housing Authority seems to be like a harrassed giant who is toiling unwittingly and unceasingly to someone's cries of, "build! build! build!". Certainly they have succeeded in providing a fantastic number of "safe and sanitary dwelling units for the largest number of families that can be accommodated within the limits of the funds available",* but they are nothing more. The economics of building and property costs prohibit the building of low-rise units, so the tenants are taken from their three-to-five storey walk-ups and placed in the sky and linked to the artery of their society—the street—by elevators. Often even the street is obliterated because of the custom of grouping such buildings in large "project" or "housing" precincts. The hallway and the elevator is intended to replace the street as a common ground. Instead it becomes a dirty thing, often a source of terror to the weak and the small. Children anxiously waiting to use the elevator which serves sometimes twenty units cannot wait. They urinate in the halls, and the foyer. Tenants steal the light bulbs in the hall, women are molested nightly. Teen-agers, discouraged by patrolmen from gathering or "loitering" on the streets, make the stair-halls and the elevators their domain; they requisition the elevators, rig them and watch their handiwork confuse and injure unsuspecting tenants. Parents are often afraid to allow their children the freedom of the ground because they are too far away to supervise, so they play in the halls which only serve as sound tunnels.

Perhaps one justification for building such towers of dwellings is the Housing Authority's attempt to provide a modicum of open area at ground level for the benefit of the tenants' recreational activities. I strongly suspect, however, that this could quite justifiably be interpreted as a rationalization to cover the fact that it is more economical to build these complexes of dwellings. However, even if this is not true, the Authority is constantly faced with the perplexing problem of how to utilize this space and even more crucially, how to maintain it. Above all, they want to provide the relief of some natural growth even if it is only a few shrubs, but to accomplish this end they

* "*The Significance of the Work of the N.Y. City Housing Authority*," *Committee on Housing, N.Y. Chapter, A. IA, N.Y., 1949, p. 6.*

11th Avenue, New York City.

Public Housing, Bronx, N.Y.

must erect chain fences and provide vigilant custodians to nurture these struggling greens. In doing so they must deny the tenants any physical use of the areas offering only a visual compensation. We often asked the authorities about this enigma, always to be met with the same answer, "Can you imagine how long the grass would last if we let the kids on it?" Truthfully . . . yes . . . a week.

Manhattan is, again, an image composed of a series of impressions of people, for they, not the steel and the concrete, hold it together. In their absence, the city seems strangely surrealistic. On a Sunday afternoon we saw Lower Manhattan. After shoving our way through New York's "Chinatown", an island of Chinese in the Italian district of Lower Manhattan, we came suddenly into the serenity of narrow canyons between walls of grey, dirty buildings, like midgets in a petrified forest. The quiet, serene repose of these buildings at this time seemed to belie the image of a bustling, avaricious Wall Street, its banks, the "Curb Exchange", the Stock Market, the brokers' offices now quiet, but still giving an impression of latency. A cat went streaking across an otherwise empty street. We stood in the center of a narrow street, peering up between the shafts to see where the cornices came together to form a star of sky above us; shouting so that we could hear our voices go bounding about in the canyons 'till they eventually made their way to the top and were swallowed by Manhattan's sky. We break out on the toe of the Island, surprised to find ourselves, now late at night, in a belt of green grass and trees, surrounding a relic of the past, a massive old fort—the "Battery". We walk along the promenade between rows of park benches, a few occupied by writhing couples or solitary, lonely humans . . . thinking still of the canyons, of the stark, pure form of the new Chase Manhattan Building in its clearing among the grey stone giants, so much more effective than the glass pundits of Fifth Avenue. We are excited and relieved. We watch the ferries go gliding off down the Bay, like overturned Christmas trees.

Down into the subway, we see another human. Among the dark, dingy recesses in the tunnels is a wicket. It is strapped with steel and barred like one of Houdini's escape cages. A dim yellow glow comes from within its depths and as I drop a coin into the hand-worn wooden tray, the cage's occupant, craggy and silent, grunts and tosses a token into the depression of the tray and retreats into his shell like a recluse into his hermitage.

BOSTON, MASSACHUSETTS.

Because of the brevity of our stay in Boston, the majority of our time was devoted to two pursuits: the perusual of the City's architecture, traditional and contemporary; and browsing in two of the 30 institutions of higher education which thrive in the area. We devoted only a small portion of our itinerary to

Louisburg Square, Boston, Mass.

public housing. I might say that the latter, at best only a dreary repetition of the same dull concrete and brick buildings which we had been seeing for nearly four weeks, repelled and disgusted us. The singular lack of imaginative design, both in the buildings and their siting, bespoke of the lack of tolerance which the jaundiced eye of the general public, including the architects, allows public housing. In one project, enshrined in the center of a dismal slum area, we found the only entrance to the high-rise apartment units was through dingy basements, past boiler rooms and murky corridors, their walls scratched with obscenities and the floors reeking of urine. The pitiful remnants of grass sat in the middle of dusty plots of dirt. The tenants, most of them negroes, somehow managed to retain a bit of jocularity amidst this dismal atmosphere. How they did this defies comprehension.

In disgust we turned to the older areas of the city, to Beacon Hill and Louisburg Square and buildings like Henry Hobbs Richardson's Trinity Church to absorb some measure of solace.

Louisburg Square we found delightful. Unlike areas like Georgetown and Society Hill, the Square has never experienced a marked decline of popularity. Since its genesis it has remained the property of prominent and judicious citizens. No traceries of fire-escapes have ever marred the gentle undulations of the bowed façades of the row houses. The garden in the center of the square, with its enclosing cast iron fence, seems inviolable, conceived and forever maintained as a visual adjunct to the town houses. It is no wonder that public taste and preference turns towards areas such as these in a nostalgic reaction to contemporary efforts to create new urban forms for living. In contrast with the latter they seem far superior.

But there are few examples of such successful residential areas, either in Boston or the eastern cities "in toto". We must realize how much public opinion and apathy has to be pricked, how far architects, planners and housing authorities have to go if they hope to come apace with these efforts of a century ago. We seem to have lost the facility of creating human environment, with a scale that satisfies man's physical and psychological exigencies. ✦✦✦

EDMONTON'S CIVIC CENTER

by E. T. Clegg

EDMONTON AND THE FUTURE

The City of Edmonton, Canada's fourth largest city, this year will inevitably record a population of more than a third of a million people within the legal confines of its present municipal boundaries. It is one of the youngest cities of this size in the world and is a dynamic, vibrant, youthful community with a booming economy that has utterly defied the recent regional recessions that were felt in varying degrees throughout the rest of Canada.

The economic outlook for Edmonton appears to be one of continued prosperity and expansion. With an economic base that is broad, diversified and stable, the future prospects for the area do indeed appear very bright. Recent growth in Edmonton has been due largely to primary industrialization, however, the City now stands on the threshold of the secondary and tertiary industrialization stage.

The City of Edmonton is located in a vast economic region stretching as far north as the Arctic Ocean. The City has been truly called the "Gateway to the North" and the "Crossroads of the World". Within this great region are some of the richest deposits of natural resources known to man. The Athabasca tar sands, for example, contain the largest known oil reserve and extensive rich deposits of lead-zinc ore, iron ore, coal and many other minerals are known and are waiting for active development. The Peace River country and parts of the nearby Northwest Territories contain the largest areas for agricultural development in the world. What other hidden resources still remain locked away in this northland vastness? To Edmonton's north lies a true frontier which needs considerable exploration and pioneering. The completion of the Pine Point Railway now underway, as well as the extension and improvement of northern roadways, should initiate a chain reaction throughout the entire northwest which will be felt to some extent in Edmonton. Such is the state of this rich, expansive and relatively wild region to which Edmonton is the capital city. It is within this setting that the City has put forth its Civic Center Plan.

EDMONTON'S URBAN STRUCTURE

Edmonton's urban expansion has a compact circular form that bulges slightly to the northeast and southwest. The growth can be described on the basis of a series of rings and sectors and there is no major obstacle to hinder the expected spatial enlargement. The City is located on what can be precisely described in geographic terms as a uniform young, stream-eroded, lacustrine plain that is broken only by the wide meandering valley of the Saskatchewan River which in some places is as much as half a mile wide and 150 feet deep. The river valley has been maintained in its natural green state and a number of tributary streams have incised the riverbank's edge creating beautiful treed ravines, making the area one of Edmonton's most attractive natural features. Stretching beyond the central urban core, on both sides of the river valley, is a series of neighborhood residential units that have been designed in the modern concept which utilizes our best planning knowledge to provide an environment as close to the ideal as possible.

The heart or central core of Edmonton has many parts; a central business district, a government center, a civic center and the beginnings of a high-rise residential area. Each part is related to and influenced by every other part, with one of the most vital elements in the core—the Civic Center Area.

WHAT KIND OF CIVIC CENTER?

The use of the words "civic center" should always be followed by a definition. The words government center, civic center and administrative center are sometimes used interchangeably and often include

different buildings in one city as compared to another. The functional definition of a civic center would include all the city's civic activities that are functionally related. That is, the architectural space relationships would be determined by the functional and operating relationships of the components. For example, a police department should be near the courthouse and a welfare department should be near the health department.

The historic definition of a civic center is usually an area that contains cultural and government buildings that often face an open civic square. This classic, traditional concept of a civic center should contain buildings that house all activities that esteem to be a good measure of the City's cultural eminence such as art galleries, music halls and libraries as well as the essential civic center ingredient—local government buildings. Edmonton's Civic Center is designed to contain basically the historic elements of both government and culture.

THE FEASIBILITY OF A NEW CIVIC CENTER

Edmonton's Civic Center area is an ideal site and the area available is large enough and compact enough to give the Civic Designer every opportunity to produce a good plan. It is centrally located. It is accessible to the large numbers of people that travel downtown to work or shop. Traffic planning is consciously including facilities to make the area as open as possible to all types of traffic; pedestrian, automobile and transit; by means of pedestrian malls, direct road access to the downtown together with good parking facilities and the careful location of present and future public transportation stations and lines. The plan is economically feasible because the City owns a large part of the land and what will be acquired does not contain large, expensive structures. Moreover, the City is in a sound financial position and many developers have an active interest in the plans.

THE HISTORY OF THE CIVIC CENTER PLAN

The idea of a Civic Center in Edmonton is at least a full half-century old. There have been many plans. The Detwiler Plan of 1950 provided a series of buildings for business, shopping, professional,

Aerial view of downtown Edmonton.

social and public services between 100th and 99th Streets and from 101A Avenue to 104th Avenue. A more comprehensive plan was prepared by Edmonton's Planning Advisory Commission in 1961, with Commissioner Hamilton as Chairman of the Civic Center Committee. Commissioner Hamilton together with a Civic-Center-conscious Mayor and Council have been primarily responsible for the subsequent progress and success that has been achieved with the Civic Center Plan.

In 1962 Webb and Knapp, in co-operation with I.M. Pei and Associates, prepared a plan based fundamentally on the Planning Advisory Plan. The City has since prepared its own plan utilizing the desirable elements of them all. It is currently studying the cultural complex, the civic park, the coliseum and the public market with the view to possibly relocating some of these functions on more desirable sites or distributing the buildings in a more desirable pattern. The planning of the Civic Center is a dynamic process with changes evolving in the light of any new and better knowledge as it is revealed. The objectives of the final plan were: to enhance City Hall with a fine Civic Park, lending beauty and dignity to the center of Edmonton; to house governmental and cultural agencies on sites best suited to their growing needs, their purpose and their importance in the community; to strengthen the existing downtown retail activity and encourage its expansion; to realize the full potential for commercial development within the framework of ordered growth; and to create a dynamic urban center, giving form to the City and a richer life to its citizens.

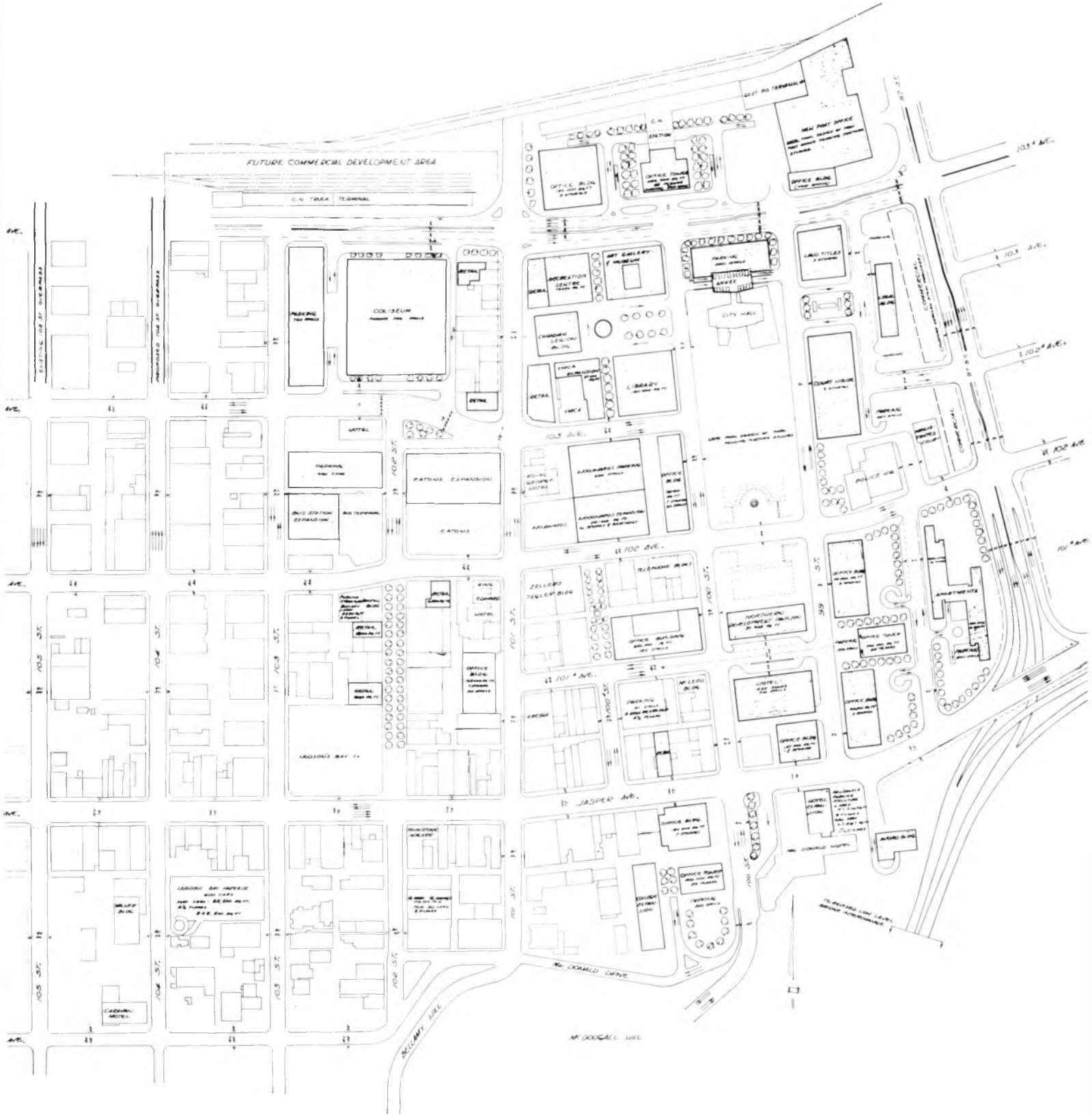
Public participation in the planning process of Edmonton's Civic Center has been an outstanding feature from the very start. In addition to the fact that Edmontonians have been thinking and talking about civic centers for about 50 years, the recent plan has received a particularly thorough treatment in the way of public participation. City departments examined the plan in detail and then made suggestions and criticisms. There was a great deal of personal contact and interchange of ideas among representatives of concerned commercial enterprises and civic officials. The Chamber of Commerce was an excellent medium for such exchanges and in fact sponsored a Civic Center Seminar dealing with general aspects of the plan—financial, legal, real estate and development. Inland Cement sponsored an Architectural Seminar that featured such prominent speakers as Bertrand Goldberg, Premier Manning and I.M. Pei.

Implementation of the plan appears to be assured. One high-rise building should be constructed this summer and another two are in the contract stage. The Provincial Government, Federal Government, Canadian National Railway, Woodwards Stores and others have agreed to begin construction of their respective buildings as soon as possible. Work has commenced on the new Post Office.

ELEMENTS OF THE FINAL CIVIC CENTER PLAN

The Civic Complex is the central element of the Civic Center Plan and the dominant building will be the City Hall. Its site was carefully established in relationship to the ornate civic park which is symbolic of the traditional town square. A civic square, with a cenotaph, has been sited at the south end of the park which will serve as a ceremonial center and as an appropriate setting for civic observances. A hemicycle of broad steps lead up to a terraced lawn on the north side. Located on the south side of the square are sparkling fountains and a broad basin of water. At the southernmost extremity, stands the Northern Development Pavilion which is a conference and exhibit center housing the tourist bureau and other activities. The Pavilion is meant to emphasize Edmonton's regional status as the heart of Canada's expanding northwest. To encourage redevelopment at the south end of the civic park, space is provided for a much needed Conventional Hotel of high quality.

The Legal Complex is located directly east of the civic buildings. The new and enlarged court house is centrally located facing the civic square and is an imposing building with great dignity. The new Land Titles Office will provide much needed room for expansion directly north of the Court House and in a most accessible position to the City Hall. The existing Magistrate's Court and the Police Station have been renovated and are located on the south side of the



Edmonton Civic Center Plan.

Artist's conception of the Edmonton Civic Center looking toward the new City Hall.

Legal Complex. A site was set aside for the legal profession in the form of an office building just east of the Court House. Ample parking and landscape areas are included as well.

The Cultural Complex consists of an Art Gallery and Museum, a Recreation Building, a Theatre, a Library and an expanded Y.M.C.A. building, surrounding a landscaped court. The new central library will be ideally located in relation to the proposed Coliseum and the Y.M.C.A. Building. Ample provision for recreation facilities in the downtown area was considered important in view of the many pressures regularly imposed on the urban dweller. An Art Gallery was planned to properly house art exhibits which now are largely held in storage and those exhibits which would be available on loan if proper facilities were extant. The Coliseum was planned just west of 101st Street. It was intended to invite a wide range of functions into the city center.

The area north of 104th Street contains the C.N.R. Station and yard; the new enlarged Federal Post Office and Annex; the office tower of the C.N.R.; and another office block on the C.N.R. property.

A number of miscellaneous elements are con-

tained in the Civic Center Plan. Agriculture has been the basis of Edmonton's economy for many years. The provision of a modern market center was envisaged as a symbolic line between the City and the agricultural industry. A number of minor office buildings are suggested at good locations where land is available throughout the Civic Center.

The Commercial Complex consists of an area for retail stores and office use, and to offset the large expenditures the City has made for Civic Center land, the remaining space will be offered for commercial use.

The plan intends to strengthen downtown retail sales by providing: expansion space for a number of major department stores; a new coliseum and other activities to attract the desired pedestrian concentration; suitable transportation facilities; and tree-lined pedestrian shopping promenades at several points.

Specifically the plan should introduce new growth in the Civic Center area by creating spectacular sites as prestige locations for company headquarters and others who need this type of accommodation. Less sophisticated office accommodation is also provided and there should be enough available to satisfy the rapidly increasing demand for office space in the near future. The Civic Center offers commercial office sites with a central location near the downtown retail areas. Such sites gain prestige from their location near important public buildings. The Civic Center also offers excellent building sites from a construction viewpoint. It is intended that there would be a reciprocal action whereby the office development and the retail area will each have a good influence on the other. Instead of having the public section lying idly beside the retail section, each will now be in a close relationship. By developing three high-rise towers for office accommodation, land values in the area will be raised considerably. Perhaps the most spectacular, daring and exciting part of Edmonton's Civic Center Plan is the provision for the three office towers.

The East Office Tower is located on the end of tree-lined 101A Avenue which ends suddenly and abruptly at the tower and forms the nucleus of the new office complex on that Avenue. It is flanked by two smaller office blocks and faces another on 101st Street. Three large apartment blocks lie to the east. The North Tower is located at the head of 100th Street which creates a dramatic culmination to the Civic Center Area in the north. The South Tower is in proximity to the major commercial area of Jasper and 100th Street with the spectacular view of the Saskatchewan River Valley.

One of the major entrances to the City of Edmonton is from the south by way of the Low Level Bridge. This access route to the Civic Center area should be one of inspiration and anticipation. From a good distance south, the three office towers thrust high above the skyline to announce the presence ofEdmonton's Civic Center. The winding approach up MacDougall Road in the shadow of the South Tower would be emphasized by a system of bastions and walls on both sides of the road. Although the South Tower is visible throughout the climb up the hill, it is only when the crest is reached that the full visual impact of the Tower Complex is felt. The South Tower to the left, the MacDonald Hotel to the right and the North Tower at the end of 100th Street, provide a dramatic vista containing the eye within the focal point of the Civic Center area.

Moving north along 100th Street, activity resonates between the downtown retail and business area and the Civic Center. The stately array of public buildings, the "piazza" (civic square), the cascading water fountains, the broad green expanse lead like a regal carpet to the central key structure in this architectural symphony—the City Hall. The Civic Center will be a striking, memorable image of the spirit of the Edmonton of to-morrow. ✦✦✦

Mr. Clegg, a native of British Columbia, attended the University of B.C. where he received a B.Sc.F. Degree and an M.Sc. Degree in Community and Regional Planning. He is holder of a Certificate in Municipal Administration from the University of Alberta and also a Certificate from the summer school of planning at MIT in Cambridge. A Member of the Town Planning Institute, Mr. Clegg was employed with Central Mortgage and Housing Corporation. He is presently Senior Research Planner in the Research Section of the Planning Department in Edmonton.

CHAPLEAU

by Richard G. Bucksar

Strategically located on the Canadian Pacific Railway, Chapleau lies 190 miles northwest of Sudbury and 381 miles east of Fort William, Ontario. The first settlement in the area came shortly after 1776, when a Hudson's Bay Company post was established at Brunswick House on Big Missinabi Lake. The local river systems served the Company as main arteries of transportation for furs and trade goods. Later, a winter post was established four miles north of the present townsite of Chapleau.

During the first century of existence, progress and development were slow. The awakening of the area took place in 1883-84 when the Canadian railway officials chose the future site of Chapleau as the regional point for the westward-expanding C.P.R.

Its location between the Nebskweshi and Chapleau Rivers provided an ideal spot as a divisional point as it met the requirements established by the Canadian Pacific Railway. These river basins provided adequate supplies of fresh water, ample stores of wood-fuels and easy access to the adjacent areas. As was true in other regions, prior settlement was not a factor in the final selection. The needs as established by the Canadian Pacific Railway were better fulfilled in this area than they could be in a populated region.

Until recent years, the railway and the bush air services provided the only method of transportation to the outside. In 1948, a highway was completed to Thessalon some 160 miles to the south, thus linking Chapleau with Highway 17. Plans to connect the northern communities with the East and the United States were discussed with increasing interest at this time. Finally in 1962, a portion of Highway 101 was completed joining Chapleau with Foleyet, Timmins and the East. Another section of this highway is currently under construction in a westward sweep toward the Town of Wawa. The completion of this link will serve to join a great portion of the Ontario Northland with the southern urban concentrations.

Aerial view of Chapleau. Note how the town has built up around the CPR shops.

After the completion of this system of roads, the town may continue to grow steadily as transportation facilities increase. It may well become a cultural and regional trading center as well as its historical role as a transportation center.

In the early history of Canada, the rivalry between Hudson's Bay Company and the men of Montreal brought the first white traders and settlers to this area which is known today as the District of Sudbury. As in other localities in Canada, it was common practice to establish a post wherever the fur resources seemed plentiful enough to warrant exploitation.

Contrary to general practice, where a Hudson's Bay Company post stood opposite a Northwest Company post, no records are available to indicate that the Northwesters' attempted any exploitation of this region. Perhaps the location of Brunswick House trading post, which was situated some 40 miles northwest of the present townsite of Chapleau, is a factor which might offer a simple explanation.

Brunswick House was established in 1776 on the northeast shore of Lake Missinabi. This lake, which serves as focal reservoir for the locale, is the headwater of the Missinabi River. The Missinabi River flows northeast for a distance of 265 miles to join the Moose River which empties into James Bay. (The drainage basin covers some 42,700 square miles.) These arteries offered fine routes of communication from deep inside "exclusive" Hudson's Bay territory.

THE AERIAL VIEW OF CHAPLEAU IS COURTESY OF THE ONTARIO DEPARTMENT OF LANDS AND FORESTS. THE OTHER PHOTOGRAPHS ARE FROM THE PRIVATE COLLECTION OF MR. VINCE CRICHTON OF CHAPLEAU.

Access from the south on the other hand, where the routes of the Northwesters' lay, was nearly closed.

Little is known concerning the operation of Brunswick House. Its success or failure as a fur-trading post remains a complete mystery. The archives of the Hudson's Bay Company do not reveal a separate status for this area. It is assumed, however, that Brunswick House did establish winter posts along rivers within a 50 mile radius. The post at Mulligan's Bay, near the present townsite of Chapleau, is believed to be one of these.

Throughout this entire period, only one mention is made regarding the population of the settlement. In 1891 Factor McTavish reported, "There were 30 families attached to the post who were fairly well off." The list indicates that these people were Europeans, Indians and Metis.

Increasing unrest and the desire for expansion, for mobility and for unity, brought about by the American Civil War (1860-65), The British North America Act (1867), the Fenian Raids (1870-71) and troubles which led to the Northwest Rebellion (1884), necessitated a westward expansion and a political union of all Canadians. The nearly three thousand miles of Canadian wilderness provided a formidable barrier against unification. After much deliberation, the westward expansion of the railway began.

In 1883, the Canadian Pacific officials began extensive plans to construct the railway to Fort William. The town of Bisco was to be the divisional point in this region, however, an alteration of plans—the adjustment of the divisional points—led to the selection of a site six miles west of the present town of Chapleau. Upon closer examination of the site, it was found to lack the basic essentials necessary for the operation of a divisional point.

Owing to adverse terrain, the railway had bypassed, by some four miles, the old Hudson's Bay Company winter post at Mulligan's Bay. Upon re-examination of the immediate area, it was found that the position between the Chapleau and the Nebskweshi Rivers was the ideal location for the construction of the divisional point. Fresh water was available in great abundance in the river, timber was plentiful for both wood-fuels and railway ties and the local river systems provided additional means of communication toward both the north and the south.

With the construction of the Canadian Pacific Railway in the vicinity of Chapleau in 1884, a corps of workers came there to man the shops, to build the railway and to service the newly established company town. Two streets, Stovepipe Street and Gosling Avenue, were laid out in close proximity to the shops. Boxcars were brought in for use as houses and they were lined up, side by side, on the two streets.

The town layout proved to be a hazard when in the spring of 1885 a fire destroyed the entire boxcar community. Although records do not indicate how the conflagration started, it is assumed that the furnaces of the shops may have been the cause.

Moreover, it seems that the initial selection of the townsite may well have been in advance of the survey. The location which had been used was probably the wettest sector in the vicinity and perhaps it was this factor which brought about the relocation of the town after the fire. The move was to a hill one-quarter of a mile distant, with the new location overlooking the shops and the newly established commercial district.

The new town took on a different character. Houses became individualized in ownership and in construction and the architecture reflected the culture of Europe. Although they varied in size, design and landscaping, in some neighborhoods of the present town similarity in construction can be noted, which probably reflects ethnic grouping.

The old HBC Post at Mulligan's Bay located about four miles from the present townsite of Chapleau (1886).

Chapleau—1906. Note varied construction of the houses. In the centre-back is the smokestack of the CPR shops.

As the town gained its individuality, merchants were attracted. Hudson's Bay Company, T.A. Austin and others established the first stores, but it is interesting to note the old-timers of the community preferred to shop at the old Company post on Mulligan's Bay. A number of them recollect travelling the four miles from town to trade, although there is no evidence that the prices differed at the two stores. Perhaps they felt that the old post was a nostalgic meeting ground between old and new.

The introduction of the coal burning engine in 1896 brought more changes to Chapleau. The wood-fuels industry was all but eliminated and those involved sought new occupations. The location of the old townsite became a coaling station.

Horses, which had been introduced at the earliest stages of development, took on a new importance beginning in 1919-20 when the Canadian National Railway began construction to the north of Chapleau. As many as 100 teams worked out of Chapleau delivering supplies to the Canadian National Railway crews and it was during this period that the town took on a new character—a transporter of supplies.

In the winter the horses were worked exclusively. During the summer months, boats carried great loads down the Chapleau River to the Eighteen Mile Dam, where they were unloaded and the goods hauled overland to Trout Lake to be shipped from that point on the Canadian National Railway. Throughout the early years, the horse played an important role in the development of the entire area.

Until 1915, the atmosphere of the town was similar to that of other towns in the North. The movement of trains through Chapleau and their periodic repairs in the shops patterned the life, but with the impact of World War I the tempo increased, only to revert to its former role in the post-war period.

CPR Engine 275—the first coal-burning engine to come to Chapleau in 1896.

The old businesses grew and new ventures proved profitable. The Smith and Chapple Store increased its employees from 6 to 16 between the years 1915-20, but within the next 15 years only two new employees were added to the Smith and Chapple staff. The depression of 1929 also had its effect in this area.

The entrance of Canada into World War II brought new money and business to Chapleau and the town expanded again. Smith and Chapple had a total of 35 employees by 1945. The end of the war did not mean a return to the normalcy of the post-World War I era. A new and even more lucrative business was coming to Chapleau—tourism.

While tourism itself did not bring wealth to the town overnight, the new industry did create new demands—demands which would eventually bring new roads to the town from the southern concentrations. Chapleau, once isolated and known only to those who travelled the railway, was about to be discovered. This discovery took place in 1948 when the Chapleau-Thessalon Kings Highway 129 was opened. Canadian and American tourists flocked to the newly opened region in search of the virgin hunting and fishing grounds, with a resulting upsurge in the

A load of railway ties being hauled from Nicholson to Chapleau in the Spring of 1919.

Horses were used for numerous things. Here is a grocery sledge in 1913.

economy. Although many of these tourists came only for short vacation periods, there were others who opened new businesses, built lodges and constructed summer homes. Lumber was needed for the construction of buildings and for the first time since the closing of the Mageau-LeBlanc Lumber Company in 1909, became an economic factor.

Closely associated with the discovery of the town and the renewal of the lumber industry is the beginning of Chapleau as a regional center of trade. With thousands of new tourists coming annually, employment opportunity arose attracting many settlers from other parts of the province and from Quebec.

As the tourist and lumbering trade grew, the trade area of Chapleau expanded. New lumber camps and mills were established around the town while tourist outfitters built new camps in the bush, but all were dependent upon Chapleau as the trading center for food and supplies. Consequently, the town grew and the railway economy ceased to be of primary importance. The transition of the long-established, singularly-based economy was viewed with suspicion by some, for the railway had been their entire life. But it was fortunate that the development of the town came when it did. Within a few years the diesel came on the scene and like the demise of the wood-burner, the passing of the steam engine marked the end of an era for the town.

The "Sudbury Daily Star" reported on August 29, 1953 that: "Chapleau becomes the Diesel Capital of the East". It described how the new methods would create more jobs on the railway and further that this new innovation would boost the local economy. The prognostication was correct—for a short while.

Six years after the article had been written, the diesels no longer required maintenance shops across the country. The new diesel was much more efficient than any of its predecessors and it did not need the constant periodic overhauls to keep it in operation. The switching of engines at divisional points became a thing of the past and only slight repairs were necessary. So progress disrupted the local economy. Of the 300 men employed in the shops in 1959, only 100 remained by the summer of 1962.

Much of the slack in the economy has been taken up by the development of local business and industry. Five lumbering companies (woods operations) are at work in the vicinity. Three lumber mills operate outside of town, one lumber mill and one planing mill operate within the township. It appears that the reforestation methods employed by these companies will keep them going indefinitely.

The close proximity of saw-mills to the townsite has created new problems. Shackers, while contributing to the overall economy, have greatly disturbed the local atmosphere. Shacktowns, in the vicinity of the planing mill and south along Highway 129 were until recently the distribution center for illegal beverage consumption and prostitution. Most of these locations were on the fringes of the townsite. Only one "madame" was known to be operating within the townsite limits.

Illegal activities no longer flourish in Chapleau as they may once have in the past. The establishment of a Provincial Police Post has dampened most of the open enthusiasm for such pastimes. Further, the recent acceptance of beer parlors and the affirmative vote on liquor have made these beverages readily accessible to the consumer.

The roads program initiated several years ago is making further impressions upon the settlements of Northern Ontario. The most recent innovation in the Chapleau area is the opening of Highway 101, which connects Chapleau with Foleyet. This road further connects Chapleau with the East by a more direct route and is consequently attracting more business from that sector. Opened in June 1962, in time for the tourist season, a great number of vacationers came to Chapleau. It is interesting to note that this year for the first time marked an increase of Canadian tourists to the extent that their number was greater than the number of Americans in the area.

Another section of Highway 101 is stretching westward toward Wawa. The road, which is now within 30 miles of Wawa, when open will serve to link a great sector of the Ontario Northland. The completion of this "Golden Route" will make connection with the "Lake Superior Route" and other arteries of the Trans-Canada Highway and will offer a number of "Circle Routes" to and from the north.

Chapleau is in a prime location for the development of these new lines of communication. It appears that before long Chapleau will become the regional trading center for a vast area of Northern Ontario. When considering all of these factors and comparing them to the population growth within the last 10 years, it is not difficult to assume a population of 10,000 within the next 20 years.

Many local merchants think that Chapleau can and will be "a fiery gem set into the necklace of the Golden Route". Its location is of prime importance to its future development. As in the past, present needs can be fulfilled in Chapleau better than they can be elsewhere in the immediate region. Consequently it can be assumed that the town will continue to grow and to expand on the basis of its central location. ✦✦✦

Mr. Bucksar began his writing career as a battalion historian in an American combat engineer unit during World War II where he served as a M/Sgt. He served again in the Korean War then returned to civilian life as a university student. He has attended Wayne State University, The University of Michigan and Eastern Michigan University, holding B. Science and M.A. (Geography) Degrees from the latter. Mr. Bucksar is a prolific writer with more than 50 poems, short stories, newspaper articles and professional papers published. His main interest is in the historical (developmental) geography of Canadian towns and he hopes to settle in this country.

LE RENOUVEAU DANS LA CONSTRUCTION À MILAN

by Roméo Mondello

TOURS RÉSIDENTIELLES DE MILAN

Ces deux tours, de 18 étages chacune, ont été mises en chantier dès 1959; elles sont aujourd'hui complétées et occupées:

La tour-résidence *FARA* qui est un immeuble d'appartements-hôtel (Casa Albergo), et la tour-résidence *FILZI* qui est un immeuble de bureaux et d'appartements.

Il faut distinguer à Milan les maisons d'appartements proprement dites (CASA-APPARTAMENTI) de ce qu'on appelle les appartements-hôtel (CASA ALBERGO).

Les maisons d'appartements sont des édifices résidentiels où demeurent des locataires sédentaires, c'est-à-dire à long terme de bail, comme dans la Torre Filzi. Ce sont en quelque sorte des Palais d'appartements dont la construction et la location coûtent cher.

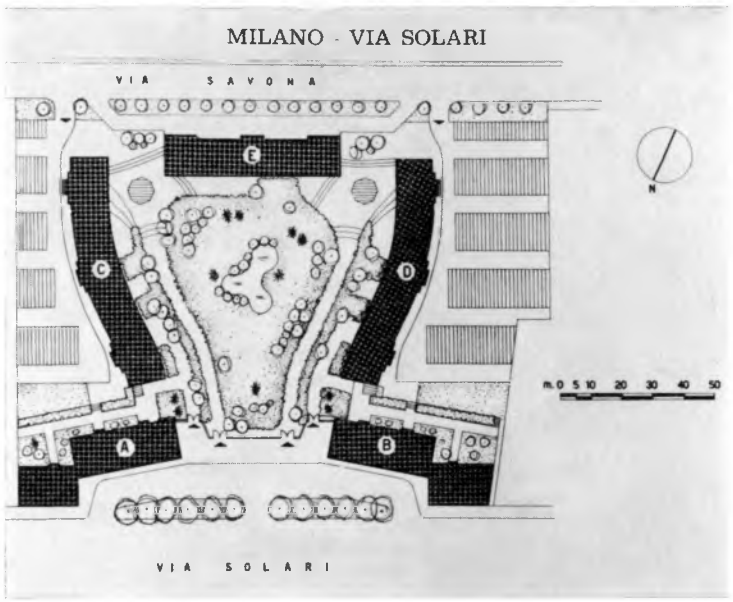
Les appartements-hôtel (Casa Albergo), comme la tour FARA, sont plutôt des édifices où l'on trouve des logements meublés, chauffés et climatisés, de une, deux ou trois pièces au maximum; le terme de location est court, soit pour 1, 2, 3 mois, comme à des locataires nomades. Cela correspond à notre "bachelor-apartment", et à nos petits logements de transition d'une seule chambre ou d'une suite de deux ou trois chambres, comme dans un hôtel. A Milan, ces appartements-hôtel coûtent meilleur marché, en égard à la durée relativement courte de location, que les maisons ou palais d'appartements.

Ces deux tours FARA et FILZI sont entourées par les rues FARA, FILZI et PIRELLI, à proximité de l'édifice (tour) Pirelli et de la gare de chemin de fer érigée en 1930, de style égyptien moderne. Ces deux tours-résidences comprennent ensemble dix unités de bureaux, 159 d'appartements répartis en 617 pièces, plus 7 établissements commerciaux; le stationnement disponible peut accommoder 120 voitures.

Il existe d'autres tours très importantes à Milan, comme la Torre Milano et la Torre Galfa pour bureaux, actuellement terminées et occupées, et la Torre Romana pour habitations présentement en construction. Nous passons maintenant aux ensembles d'habitations dont un certain nombre comprennent également des tours.

ENSEMBLE VIA SOLARI

Ce groupe de 5 bâtiments domiciliaires de 8 et 9 étages se situe et s'harmonise autour d'un grand jardin planté d'arbustes entre les rues Solari et Savona, près de la Place de Naples. Ce jardin et l'ensemble des bâtiments en question s'ouvrent sur la Via Solari, qui a été



Via Solari.
Ensemble résidential de 5 bâtiments de 8 et 9 étages.

élargie à cet endroit, c'est-à-dire vis-à-vis de l'entrée principale qui donne accès à ce complexe d'habitations.

L'implantation et la volumétrie de ce groupe de bâtiments, actuellement en construction et sur le point d'être terminés, ont été arrêtées par la régie technique de la Société Générale Immobilière, de concert avec les autorités municipales. La disposition particulière des édifices, autour d'une tache aussi spacieuse de verdure, constitue une réalisation peu commune dans l'intense développement de la construction urbaine à Milan.

L'ensemble du projet présente au total 246 logements répartis en 1272 pièces, 27 établissements commerciaux et 175 espaces de stationnement intérieur.

I. QUARTIER—JARDIN CAMPANIA et II. VIALE CAMPANIA-OUEST

Ces deux développements domiciliaires viennent d'être réalisés et sont présentement habités:

Le premier développement occupe au complet un grand quadrilatère de rues et comprend onze immeubles de neuf étages au maximum, disposés à l'intérieur et autour d'un jardin planté d'arbres.

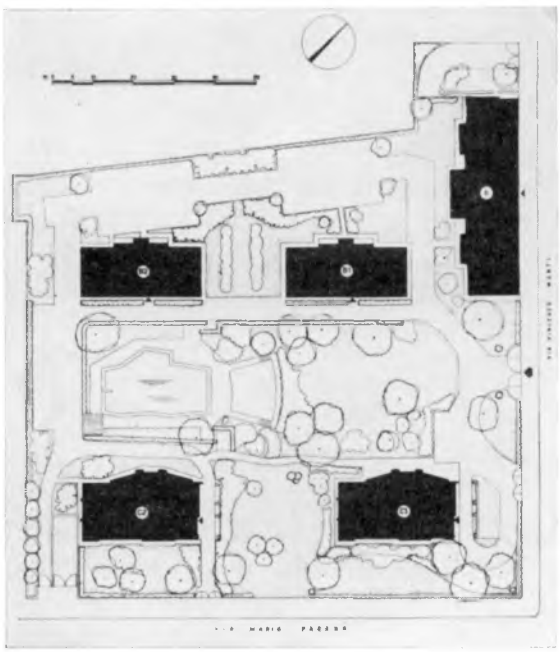
La façade principale de ce complexe, dominé par trois édifices qui en ouvrent l'entrée, donne sur la rue Sismondi où, de l'autre côté de cette rue, se trouve un vaste terrain de sport.

Cet ensemble d'immeubles domiciliaires comprend 431 logements répartis en 2097 pièces, 39 établissements de commerce, et 133 espaces de stationnement au sous-sol.

Le deuxième développement se place à l'angle sud-ouest de la rue Archimède et de la Viale Campania, soit à l'angle opposé du premier développement. Il est également disposé autour d'un jardin d'environ 17,000 pieds carrés et s'ouvre sur la Viale Campania. Il épouse la forme d'un "H" et constitue un bel exemple de disposition d'un ensemble de 7 et 9 étages à l'intérieur d'un territoire à peu près carré.

Il intègre 186 logements répartis en 822 pièces, 16 établissements commerciaux, et 119 espaces de stationnement souterrain, en majeure partie. Sa construction a requis à peine plus d'un an et elle articule bien une volumétrie d'ensemble agréable, eu égard à la

Viale Campania—Ouest.
Habitations autour d'un jardin.



Quartier-Jardin Monti-Pagano.
Ensemble résidentiel avec tours C_1 et C_2 de 19 étages.

Quartier-Jardin Campania. Groupe de 11 maisons dont G_1 à gauche et H à droite.

forme et à la hauteur des façades à revêtement de stuc, pierre artificielle et céramique, débouchant sur une ouverture de 105 pieds de largeur dans la rue Campania.

QUARTIER—JARDIN MONTI-PAGANO

Cet ensemble résidentiel, aujourd'hui terminé et occupé, réunit cinq bâtiments, dont deux tours de 19 étages, disposés autour d'un jardin spacieux (130' de largeur) de verdure et d'arbustes, agrémenté d'une piscine. Dans ce complexe on compte au total 130 logements répartis en 990 pièces, 12 établissements de commerce, et 127 espaces de stationnement au sous-sol.

Les deux tours sont finies extérieurement en pierre artificielle et céramique, mais on a utilisé principalement de la brique dans le fini extérieur des trois autres bâtiments.

Dans toutes ces maisons, chaque occupant est déjà ou deviendra propriétaire de son logement, après avoir payé pendant un certain nombre d'années, généralement 25 ans, un loyer qui comprend l'amortissement et l'intérêt du capital, en plus du déboursé régulier acquittant tous les frais de services.

NOTES PERTINENTES

Programmes d'habitation

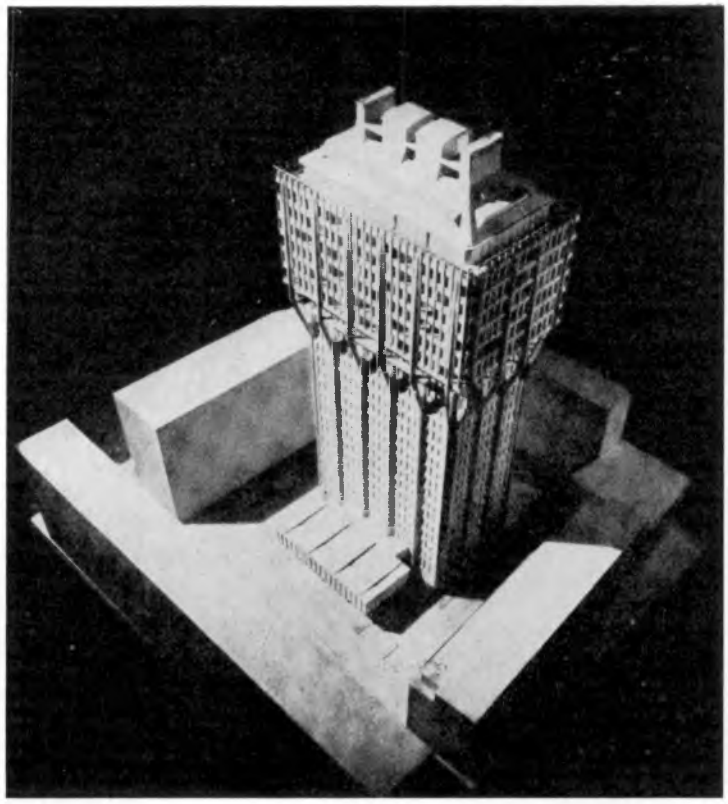
Les gouvernements ne contribuent pas encore de façon appréciable aux programmes d'habitation qui, dans le moment, sont plutôt réalisés par l'entreprise privée. Cependant la tendance actuelle est vers une aide accrue de la part des gouvernements.

Le préfabriqué

On a commencé à utiliser du "préfabriqué" dans la Tour Fara, mais comme la main-d'œuvre ne coûte pas trop cher, le marché du travail n'étant pas encore saturé, le préfabriqué n'a pas exercé jusqu'à présent beaucoup d'emprise sur le pays. On prévoit tout de même que dans un avenir rapproché il y aura plein emploi en Italie, de sorte que les salaires accrus d'une main-d'œuvre devenue rare vont inciter à utiliser davantage le "préfabriqué" dans la construction urbaine.

Retour de l'eau de puits dans la terre

Les tours, comme Velasca, Galfa, Pirelli, Milano, sont alimentées en eau potable par l'aqueduc municipal, mais l'eau utilisée pour les services de chauffage et de refrigération provient de puits de 80 à 100 mètres de profondeur, et circule dans un circuit indépendant, pour être ensuite retournée dans le sol, afin d'en empêcher l'asséchement et l'affaissement sous les édifices. La Ville de Mexico connaît bien ce problème et a déjà commencé d'y remédier de cette façon.



Tour Velasca. Planimétrie générale des édifices aujourd'hui construits de la Place et Tour Velasca.

Tour Galfa. Edifice à bureaux, 30 étages.

Filtration de l'air utilisé aux fins de climatisation

L'air de climatisation utilisé dans les tours doit être lavé et filtré, afin de le débarrasser de toutes saletés, suie et poussières, particulièrement de celles du naphte que ces édifices et 90% des édifices de Milan utilisent comme combustible pour le chauffage.

Ventilation extractive

L'extraction de l'air vicié dans ces logements se fait par un registre dans la chambre de toilette, qui épuise en même temps l'air vicié de la chambre à coucher, et par un autre registre dans la cuisine, qui épuise également l'air vicié de la salle à manger et de la salle de séjour (living).

Fini des planchers en marbre ou en bois

Comme il y a du marbre en quantité en Italie, et comme le bois est plutôt rare, on utilise celui-ci dans les chambres à coucher et le living ou salle de séjour; c'est avec du marbre qu'on finit les autres planchers.

Transport urbain

Il y a encore des tramways à Milan, également des trolleybus ou filobus et des autobus, mais il y a un métro en construction, commencé à l'automne 1960; un premier tronçon d'environ 5 milles de longueur devait être ouvert à l'automne 1962 ou au début de 1963. Le programme est d'avoir à Milan un métro de 30 milles de longueur, qui sera terminé dans une dizaine d'années, soit vers 1970. ✦✦✦

Monsieur Roméo Mondello, Ing. P., est actuellement le directeur du Service des permis et inspections de la Cité de Montréal. Il est diplômé en Sciences appliquées et Génie civil (1930); Sciences sociales, économiques et politiques (1934); Journalisme (1935); B.A. et Licence en philosophie (1943); Maître ès sciences en Génie sanitaire, Harvard, 1948; Bachelier en droit (1951). Il fut admis au Barreau de Montréal en 1956. L'année suivante, après sa nomination comme membre de la Société Royale d'Hygiène en Angleterre, il fut délégué en Tunisie par l'ONU en qualité d'expert de l'Organisation Mondiale de la Santé.

CENTRAL MORTGAGE AND HOUSING CORPORATION
SOCIÉTÉ CENTRALE D'HYPOTHÈQUES ET DE LOGEMENT
OTTAWA, CANADA

HABITAT

JULY-AUGUST, 1963
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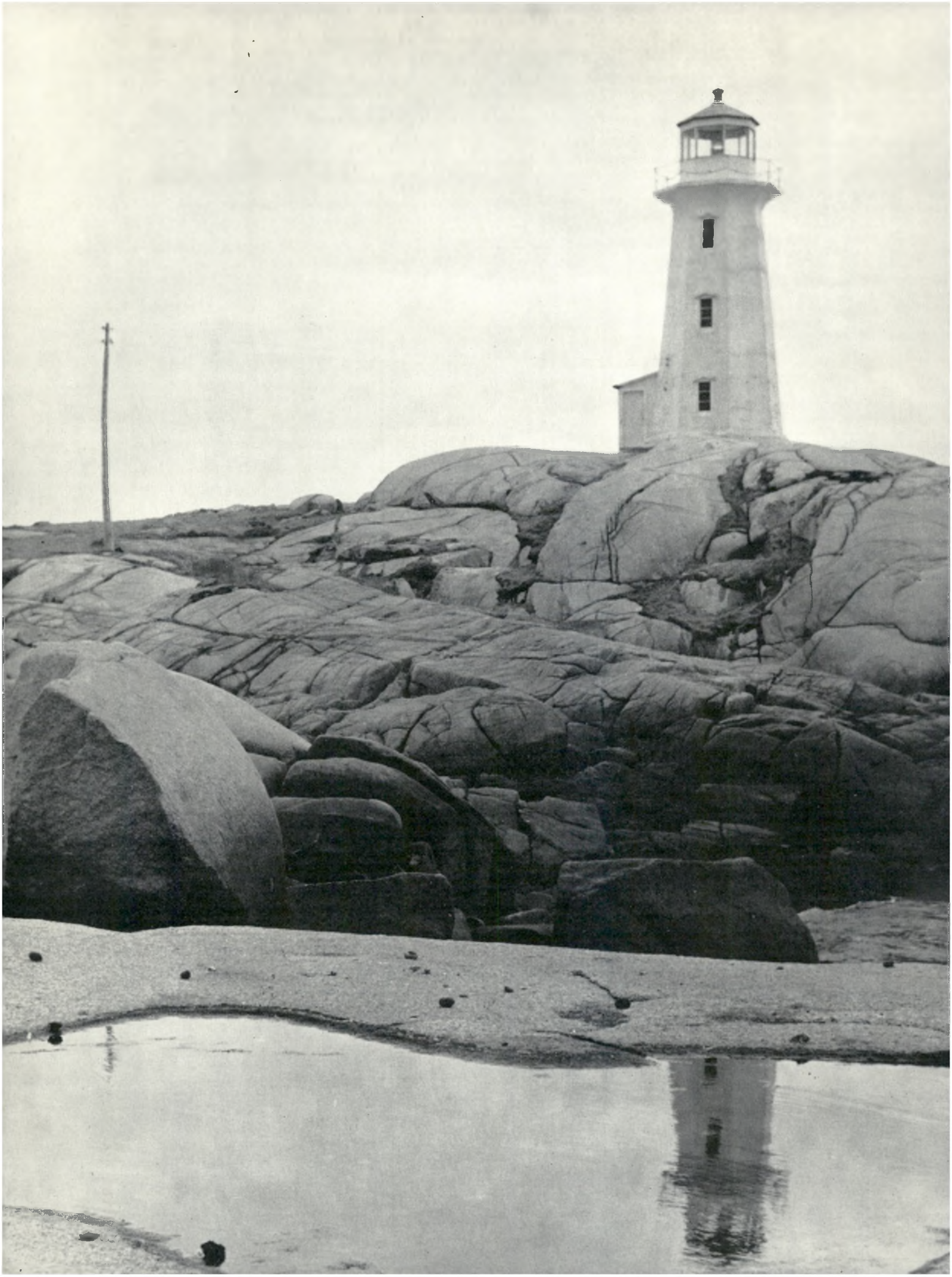

HABITAT

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INSIDE COVER: *A beautiful study of a much-photographed subject—Peggy's Cove, N.S., by Tibor Gatszegi, Architectural and Planning Division, CMHC.*

HOUSING MARKET STUDIES

Central Mortgage and Housing Corporation is launching a new set of reports, "Housing Market Studies". These reports, to be published as available, will be prepared by members of the Corporation's Economic Research Department and Regional Economists. The new releases are designed to make available, to a wider public, studies and data on housing and mortgage markets prepared within the Corporation. These will include local market studies, the presentation and interpretation of new statistical series and the examination of Census results dealing with housing matters.

The first study just released deals with the Metropolitan Toronto housing market through 1962. Topics dealt with include:

- House-Building Activity
- Types of Dwellings
- Source of Financing
- Location of Activity
- Housing Demand 1951-1961
- Market Trends in 1962
- Characteristics of NHA Borrowers and Houses

Copies of the first and other reports as issued may be obtained by a written request to the Office Manager, Information Division, Central Mortgage and Housing Corporation, Ottawa.

✦ ✦ ✦

ISLAND IN THE SUN

by F. F. Field,
Director, Information Division, CMHC.

This is not, of necessity, a study in depth. Rather, it is an attempt to combine the statement of a few facts with some personal observations made during a month's winter vacation in what has truthfully been described as a "sub-tropical demi-Paradise".

Because of the holiday spirit in which our casual explorations were undertaken, credit for any merit that may appear in the paragraphs that follow must therefore go to the many Barbadians who were kind enough to receive us in their homes and places of business with traditional Bajan courtesy and hospitality and who gave so freely of their time and knowledge.

Special thanks are owing to Mr. T. O. Lashley, Manager of the Barbados Housing Authority; Dr. Harold Johnson, Chief Medical Officer, St. Joseph Parish; Dr. Desmond Johnson, his son, whose talents swiftly gained added recognition when he was called into consultation during the illness of Lord Avon (formerly Sir Anthony Eden) earlier this year; Mr. Colin Goddard, one of nine sons of a famous father who, together with a sister, have long played a leading role in the professional, political and commercial life of the island; Mr. R. G. C. Pagett, manager of the Bridgetown branch, Royal Bank of Canada; Mr. Arthur Lamming, proprietor of the hotel in which we were so comfortable and became so much at home; and, most important, their respective wives for their unfailing charm and graciousness.

SMALL BUT BRILLIANT JEWEL

In the words of Mr. Louis Lynch, a former mayor of Bridgetown, Barbados is "one of the smallest but most brilliant jewels in the necklace of islands that stretches from the peninsula of Florida almost to the mainland of South America . . . ". Economically dependent almost exclusively upon the production and export of sugar and its illmated by-products—molasses and rum—Barbados is the most easterly "jewel" and the third most southerly, with only Tobago and Trinidad lying between it and the South American coast.

A population of 232,000 (1960 Census)—largely of African descent—lives on 166 square miles of land. For Barbados is a small island, barely 21 miles in length and 14½ miles broad at its widest point. Roughly pear-shaped, it has 55 miles of coastline—washed by seas that vary from the calm, blue-green waters off the south-west coast to the deep sepia and often angry surf to the east.

With the exception of the northern parishes—the Scotland district—the land is generally flat; indeed, the highest point—Chimborazo in the Parish of St. Joseph— is little more than 1100 feet above sea level. The Scotland district and the topography are not, however, the only reminders of another island. Even the nomenclature is often the same—Hastings, Worthing, Bath. The capital city of Bridgetown has its Trafalgar Square and its monument to Lord Nelson, while the harbor police still wear uniforms reminiscent of those affected by the British tars of that era.

The climate is acknowledged to be one of the world's healthiest, with the temperature rarely rising above 86° or falling below 70°. The dry season lasts approximately from December to May; and even then the sun is not oppressive owing to the easterly trade winds and ocean breezes that fan the island, constantly

but gently. Hours of sunshine are close to the maximum and the occasional welcome rains are restricted for the most part to short, sharp tropical downfalls that may last all of two or three minutes.

The island lies south of the West Indian hurricane zone and is seldom struck by these atmospheric monsters. A heavy loss of life and great devastation resulted from the hurricanes of 1780, 1831 and 1898, however, while Hurricane "Janet" in 1955 was a grim reminder to Barbadians that they are not entirely free from such unwelcome and disastrous transients.

For the purpose of administration, Barbados is divided into eleven parishes, with St. Michael, Christ Church, St. Philip, St. John, St. Joseph, St. Andrew, St. Lucy, St. Peter and St. James touching the sea. St. George and St. Thomas, on the other hand, lie snugly inland.

BRIDGETOWN

With a 1960 population of more than 11,000 living within a 1½-square-mile area, Bridgetown is reputed to be one of the most over-crowded cities in the world —a condition that is immediately and readily discernible to the visitor. At almost any time of the day, it presents an unforgettable scene. Within the narrow confines of Broad and Swan Streets, two of its main commercial thoroughfares, there passes in constant review a seething mass of people—colored and white, business men and women, shoppers, children, hawkers, tourists and the inevitable "characters". The streets are clogged, not only by this pedestrian traffic, but by private cars, taxis, buses, mule and donkey carts, trucks and bicycles. A favorite rendezvous—known in many parts of the world—is Goddard's verandah, where one may wait for friends at ease and in comfort and watch the busy, noisy, colorful sights below, meanwhile sipping a lemon squash or rum punch.

Bridgetown is built on Carlisle Bay, the island's only natural harbor. Because of fast-growing maritime traffic, the harbor was deepened two or three years ago to permit, so it is claimed, the berthing of the world's largest ships. Nevertheless, perhaps because the future tonnage of the "world's largest ships" was underestimated, we noted that the master of the *France*, on a Caribbean cruise, was unable—or unwilling—to enter the harbor and passengers were brought ashore to Bridgetown, as their predecessors had for decades, in small lighters.

Knifing through the very heart of Bridgetown is the canal-like careenage. Although it provides loading and unloading facilities for inter-island schooners and berths for small fishing vessels, the careenage still serves its original and primary function—the hand-winched careening of ships so barnacles and other growths may conveniently be scraped from their hulls.

The coast of Barbados is, of course, dotted by fishing villages, of which Oistins in Christ Church, Holetown in St. James and Speightstown (pronounced Spikestown) in St. Peter—all of them small ports of another era—have grown into tiny towns. But do not be misled, as we were, by the rambling reminiscences of an incurably romantic female correspondent for a Toronto newspaper who, after what must have been a long absence from the West Indies, wrote something like this: "Be sure to visit Tent Bay, where the fishing fleet puts out to sea soon after dawn each

The careenage, Bridgetown, where inter-island schooners discharge and pick up their cargoes and small fishing vessels find temporary berths.

PHOTOGRAPHS BY
BARBADOS HOUSING AUTHORITY
AND THE AUTHOR

An illustration of the variety of traffic on Broad Street, downtown Bridgetown. The modern building in the background houses the airline offices.

Swan Street, Bridgetown, a narrow but fascinating main thoroughfare, both sides lined by shops with a wide range of exotic merchandise.

morning, the vessels carrying sails in soft pastel colors that catch and reflect the rising sun's rays". There is hardly a sail left in the Barbadian fishing fleets; virtually every vessel is diesel-powered. The schooner is, however, still widely used in inter-island commerce.

In spite of the economy—and it is not an affluent economy by almost any standard—and the even poorer circumstances in which many Bajans live, they are a traditionally happy, friendly and hospitable people. There is always a bright "Good mornin', suh" from the men and a cheerful smile and greeting from the women. (It is not easy to reflect that slavery was abolished only 129 years ago—August 1, 1835.) There has nevertheless, been sufficient exposure to the crass commercialism of North America that they shy away from having their photographs taken — unless a little money changes hands!

It is the women who do much of the heavy work in the sugar cane fields and elsewhere and who still tote —in baskets or pails perched on their heads and with unusual ease and grace—their heavy (up to 75 pounds) loads of laundry, fruit, vegetables or water.

Local transit is, seemingly in this order, by foot, bicycle, bus, mule or donkey cart or car. We began our visit by engaging a taxi to take us the three miles from our hotel to Bridgetown. One day, we rode a bus—just for the experience. (It also costs only five cents as compared with $2.00 by taxi.) It turned out to be a happy thought and, from then on, the bus became our standard means of transportation on most occasions.

Because the island is a formation of white coral limestone, the soil is thin and great skill has been applied over the centuries to maintain its fertility. In 1960, nearly 70,000 acres of the total 106,000-acre area were under arable cultivation and deciding upon the most suitable use of land is a grave and ever-present problem, a ready explanation for the fact that sugar cane fields extend to the very edges of the roads. The chief objects of culture are, of course, sugar and ground provisions. The main exports in 1960 were sugar, molasses and rum (there are 20 sugar and molasses plants on the island and three rum distilleries); the chief imports—rice, flour, animal feed and meat.

The tourist trade—largely of Canadian origin—

is now providing a substantial and welcome additional source of revenue to the people and their government. The island—particularly the northern parishes—is still generally unspoiled and, from those with whom we talked, we gained a strong impression that every effort is being made to keep it that way.

Although one can live in a luxury hotel and buy expensive clothing and other merchandise, costs generally are not high by Canadian standards. This fact plus the favorable exchange can, however, lull the tourist into a false sense of affluence. Barbados abandoned sterling five or six years ago. Its currency is now the West Indian dollar which in March, 1963, was worth less than 65 cents Canadian.

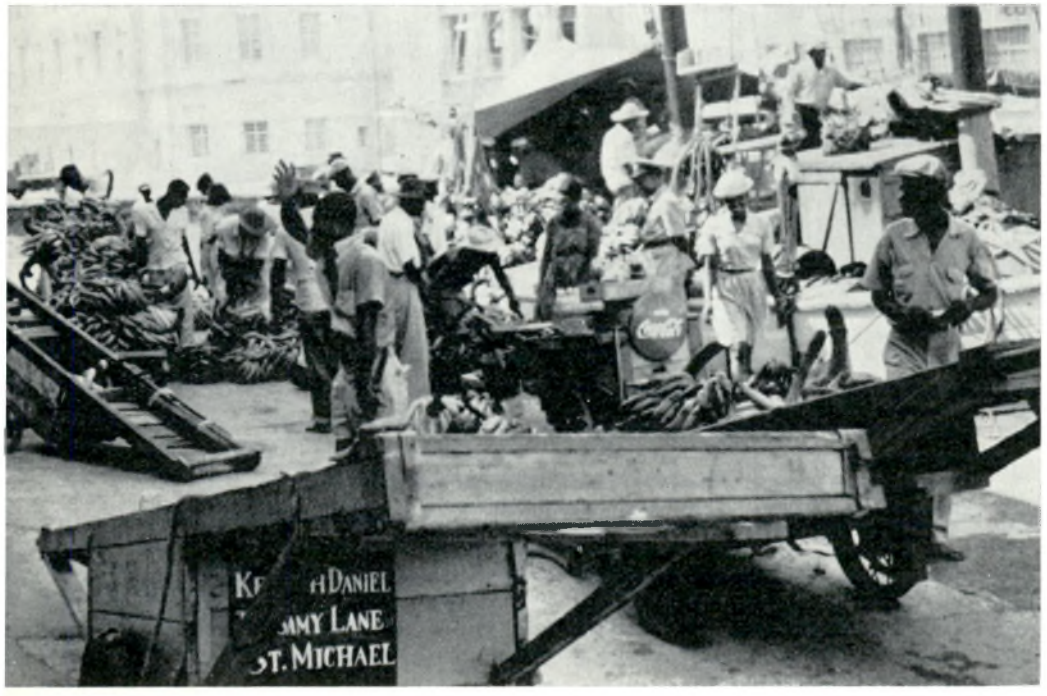
Transportation facilities to and from the island are excellent. Cruise ships put into Bridgetown once or twice a week during the season and TCA, BOAC, BWIA and PAN-AM all run regular jet and turbo-prop air flights from Montreal, Toronto, London, New York or Miami, while Leeward Islands Air Transport takes care of much of the inter-island traffic.

There are many attractions for the visitor. Long, lazy, sunny days may be spent on the white sands at Rockley or on one of the beaches on the St. James or Crane coasts. There are surf-riding, deep-sea fishing, golf, tennis, cricket and, on four successive Saturdays four times a year, horse racing at the Garrison track.

Evening entertainment is scheduled so that at least one of the major hotels has its own night each week for dancing to the irresistible rhythms of the steel band or the Calypso orchestra and for an exciting native floor show that ends in the inevitable but spectacular Limbo. And for those who seek something more subdued, there are regular concerts within sight and sound of the surf at Hastings Rock by the famous Barbados Police Band, a talented aggregation featured this year at the Canadian National Exhibition, Toronto.

FLORA AND FAUNA

The island is alive with brilliant color throughout much of the year. Even in March, the borders and hedges of flaming poinsettia and scarlet bougainvillea are startling sights to the uninitiated northern visitor. At that time of the year, too, the vivid Flamboyante, with its orange-red flowers, is already in bloom and the white or red blossoms of the gnarled frangipani and the violet-blue of the shapely lignum vitae are beginning their exotic annual display. The evenings are fragrant with the sweet aroma of the night-blooming cactus and the heavy perfume of jasmine.



Cargo of bananas being unloaded from schooner newly arrived at Barbados from St. Lucia, a two-day sail.

Amongst the shade trees is the cassia, with its foot-long, snake-like seed pods, which begins to leaf in March and a month later bursts into a bloom reminiscent of apple blossoms. A familiar sight in the gardens of Barbadians is the tamarind tree and one of the splendors of the landscape is the casuarina, or "mile tree" which often reaches the impressive height of 150 feet. Indigenous to the island, too, is the cabbage palm and the Barbados ebony, known locally as "Woman's Tongue". The fruit of the ebony, a flat papery pod, contains a few loose seeds that are rattled incessantly by the wind, thus provoking the comparison. Fringing the coast are, of course, the graceful cocoanut palms.

The waters around Barbados are rich in plankton. Upon this feed the famous flying fish, which have given the island the nickname of "Land of the Flying Fish". There are, too, snapper, bream, mackerel, dolphin, bonito, wahoo, turtles (one of our hostesses had kept a turtle as a pet for 43 years), crayfish and sea-eggs or sea-urchins, with their long, thin spikes ready to penetrate and break off in the unwary bare foot.

Late each afternoon in season, the cries of the hawkers—"Flying feesh!" or "Dolphin, dolphin!"—ring through the streets. One evening, after the street vendors had failed to appear, we were fortunate enough to be sent on an errand—to buy flying fish at the going price of 10 cents each from the fishermen as they returned to Bridgetown and home. The wharf was lined with workers, each anxious for his or her share of the succulent delicacy, and we quickly discovered the easiest—and perhaps the only—way to make a purchase was to hire somebody else to do it. Two of the small vessels had also landed shark and these were hoisted to the dock, butchered without ceremony, weighed and sold on the spot—meat and offal alike.

In the animal kingdom, apart from the inevitable goats and woolless sheep, a few cattle, mules and donkeys, there are some monkeys, mongooses, racoons, lizards, toads and whistling frogs.

Sparrows, blackbirds and doves are indigenous to the island and one is awakened each morning by the soft, fluted, mournful "coo" of the wood dove.

The spoken language of the Bajan is a soft sing-song, with many words and every sentence ending with a rising inflection. The words themselves are often strange and, when uttered in the customary close-mouthed drawl, they become virtually unintelligible to the unattuned ear. The double-negative is a favorite of the Barbadian ("Somebody ain't goin' get none") and the compound redundant (sow-pig, fowl-cock) is a firmly fixed habit.

There is no television in Barbados; radio is by rediffusion from Trinidad. The monthly rental is of the order of $3.75 and we were told many Barbadians, listening or not, leave the "box" on all day—just to make sure they get their money's worth. There are two daily newspapers, *The Advocate* and *The Daily Mail*, three weeklies (one, *Calypso*, went to press for the first time in March, 1963) and one bi-weekly. The calibre of reporting, typography and make-up is substantially below that of Canadian newspapers. Very little international news of significance is carried, and word of virtually no Canadian events. Indeed, only after a most painstaking search, one *may* find on the back page a quarter-inch item, reporting the results of a "National Ice Hockey League" game.

". . . AND OF THIS ISLAND"

Barbados has had a chequered history. Nonetheless, in spite of forays throughout the centuries by the Dutch, the French and the Spanish, the island has remained firmly in British hands since 1625 when a ship under the command of Captain James Powell touched its shores on a voyage to Guiana and landed some men near what is now Holetown. These men erected a cross and on a tree nearby inscribed "James K. of E. and of this Island". There followed bitter internal struggles and scandalous power intrigues, any one of which would take far too long to relate here.

The Legislature consists of the Governor (since October, 1959, Sir John Stow, K.C.M.G.), the Legislative Council and the House of Assembly. The Executive is vested in the Governor, the Executive Council and Executive Committee. The Legislative Council, consisting of a maximum of 15 nominated by the Governor and appointed by the ruling sovereign, owes its origin to the Council that advised Governors soon after settlement of the island.

Single-unit houses erected by the Housing Authority at Bagatelle, St. Thomas, Barbados. These single-unit houses (2 bedrooms, living room, kitchen, W.C. and shower) are now rented or leased to families of the working classes, but it is expected that the occupants will shortly be given the option to purchase house and land (freehold) by easy payments.

Newly-erected house near the deep water harbor, Bridgetown, to sell for $1,200 to $1,300 B.W.I.

The House of Assembly comprises 24 elected members, two for each parish and two for the City of Bridgetown in which it is located. The House of Assembly was constituted in 1639 and, after the Bermuda House of Assembly, is the oldest of Britain's colonial legislative bodies. The Governor may not attend sessions of the "Commons"; he summons the House to the Legislative Council Chambers for his Throne speeches. The Cabinet comprises members elected to the House and Ministers are appointed by the Governor, on advice of the Premier.

One hot March afternoon—under wide-sweeping, slowly-revolving tropical ceiling fans and with street sounds seeping through the open but shuttered windows—we had occasion to sit in the House and listen to Premier Errol Barrow, who leads the Democratic Labor Party, speak on the Estimates. With one exception—Mr. Fred Goddard—the occupants of both government and opposition benches are colored.

The West Indies were formally established as a Federation on January 3, 1958, when the first Governor, the Rt. Hon. Lord Hailes, C.B.E., was sworn in. At that date, the Federation comprised: Antigua, Barbados, Dominica, Grenada, Jamaica, Montserrat, St. Kitts-Nevis-Anguilla, St. Lucia, St. Vincent, Trinidad and Tobago. The seat of government was in Trinidad and the first premier was Sir Grantley Adams, C.M.G., Q.C., now retired and living in Barbados.

On September 16, 1961, Jamaica withdrew from the Federation; Trinidad refused participation in any

Small houses owned by cane workers in interior of island. Note clothes drying in hot sun on cactus. Houses are owned by occupants but are usually on rented land.

group of the eastern Caribbean islands; Barbados and the Leeward (Antigua-Barbuda-Redonda, St. Christopher-Nevis-Anguilla, Montserrat and the Virgin Islands) and the Windward (Grenada, St. Vincent, the Grenadines, St. Lucia and Dominica) Islands advocated a new federation amongst themselves. In these circumstances, the British Government on February 6, 1962, decided to dissolve the Federation of the West Indies but to ensure a continuation of common services. There is still a movement afoot to establish another and smaller federation but this is not likely, it is said, to materialize in the forseeable future.

HOUSING

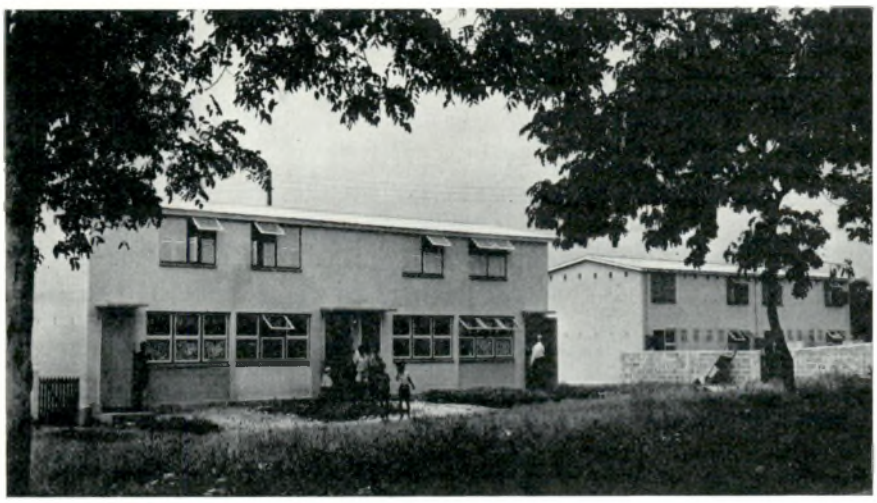
When it comes to housing, the problems confronting Barbados differ very little—except perhaps in degree—from those of most other countries; an exploding population and a steady migration from rural areas to the urban centres. Many of the considerations reviewed in the annual reports of the Barbados Housing Authority are strongly reminiscent of those that constantly occupy our attention in Canada.

Yet there are differences—and they are not subtle differences—that are readily apparent to even the most casual observer. Most striking perhaps is the virtual cheek-by-jowl combination of wealth and poverty. This condition is to be found, of course, in any nation; but more often than not, there are clear lines of demarcation between the two—a river, railroad tracks, even a highway. In Barbados, however, a fine old mansion or a modern new bungalow may literally be hemmed in on all sides by less pretentious dwellings. For some of the islanders, with a large staff of servants at their command, are able to live in almost tropical splendor; the laboring classes, on the other hand, must be satisfied for the most part with shelter we would immediately classify as slums or, at the very least, as primitive wooden shacks—their exterior finishes unacquainted with paint and left only to the vagaries of the weather. They contain none of what we consider to be basic amenities—such as running water or electricity. In the interior of the island, in particular, water is drawn and carried from stand-pipes that rise out of the ground at irregular intervals along the roads; it is not an uncommon sight to see men, women or children washing away the day's grime at the roadside.

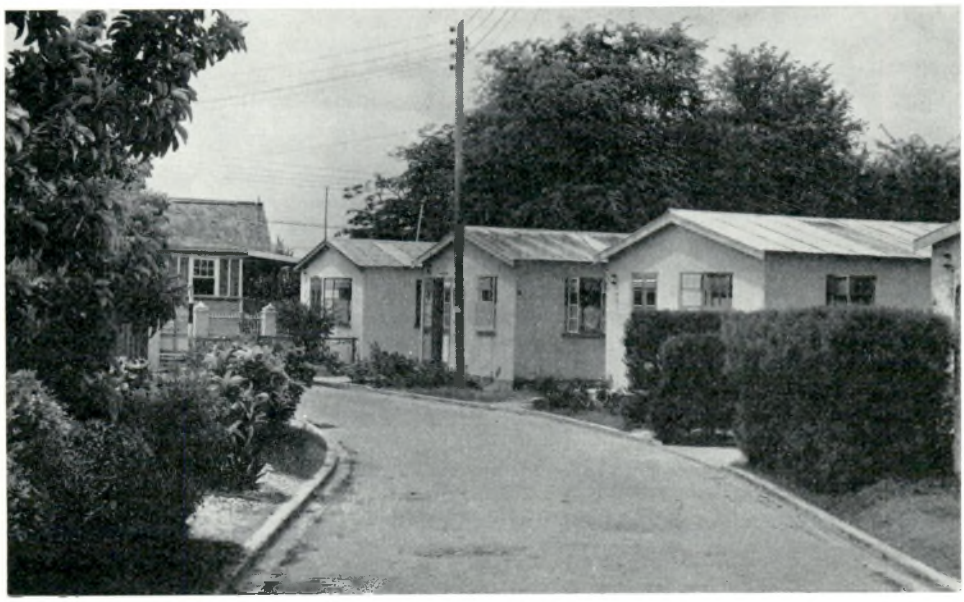
Having said these things, it is only fair to add hastily that an active and successful government housing program is and has been under way for some years. But can it ever overtake and keep pace with the population growth and movement in an economy that can ill afford to expend large sums of money on even basic shelter?

Governmental activity is carried out under provisions of the Housing Act, 1955. The Housing Authority established by the Act is, as the responsible agency, analogous in some ways to Canada's Central Mortgage and Housing Corporation. For example, subject to Executive approval, it has wide powers to deal not only with housing but many related matters. In some areas, the Authority has even greater scope than CMHC—including responsibility for such things as playing fields and day nurseries. At the same time—because of physical and economic limitations—its operations are naturally on a sharply reduced scale when compared with those in Canada.

The housing program in Barbados differs from



Unit of four houses erected by the Housing Authority at St. Stephens, St. Michael and rented to persons of the working classes (under $40 weekly income).



Aided Self-Help-Houses at the Bay Housing Estate, St. Michael.

Canada's in another important respect, or more properly, the Authority has—since its inception in 1956—been faced with a situation similar to that in which we found ourselves in the years immediately following World War II. Quite deliberately, it was decided that during the first five years of its life, the Authority's objective would be to produce more houses to accommodate working-class families, rather than to enter into schemes that would cause the demolition of a large number of units. In other words, quantity was the sole criterion from 1956 to 1961; the island could not afford the loss of urgently needed dwellings through slum clearance operations.

"Along with this," according to the 1962 annual report of the Authority, "a program of making available suitable house spots to accommodate houses removed from congested and other unsuitable areas, particularly in the City of Bridgetown and in St. Michael, and the provision of loans for repairing and otherwise improving existing chattel houses, have had the effect of considerably enhancing many of the existing tenantries over the five-year period." A chattel house is a timber dwelling that can be moved from place to place. It is usually owned by the occupant; the land, or "house spot", however, is rented.

It is evident, nevertheless, that the road ahead will be a hazardous one when the Authority turns its attention to redevelopment during its second five-year period. For "basic information on living conditions and of the physical organization of townships is very meagre," it is reported, "and when it does exist it is seldom co-ordinated in intelligible and useful form.

Consequently, it is necessary to do considerable fact finding before giving any advice on major schemes of housing development and welfare."

Under the Housing Act, the Authority is empowered to acquire land for building; lay out housing estates; erect houses and ancillary buildings; clear slums and redevelop over-crowded areas; lend money for repair or alteration of existing houses, purchase or erection of houses; and let or lease land and buildings to persons of the working classes as defined in the Act: Those "whose income does not exceed an average of forty dollars a week, or such other sum as the Governor-in-Executive may from time to time prescribe."

To carry out these responsibilities, the Authority operates in many ways, as laid down in the various sections of the Act. One of these deals with the construction of permanent houses for sale. During the fiscal year ended March 31, 1962, a total of 224 one, two and three-bedroom houses was completed, while 22 were nearing completion. All permanent houses have "water-borne services, including W.C., shower, domestic taps, drain board and sink. Cubicles with shelves are fitted for hanging clothes and electricity is installed." Average cost of the year's production was $8.46 per square foot. Since April 1, 1956, the Authority has built 1,673 permanent houses.

To encourage the building of more houses by Self-Help or Mutual Aid Schemes, the Government and the Authority decided during 1959 to offer eventual free-hold ownership of a permanent house and the land to each individual member of all successful plans. To avoid speculation, freehold ownership is not given until after ten years of occupancy of the house. To date, 118 houses have been successfully completed under the Self-Help Schemes. Fifty-six of these were under construction when Hurricane "Janet" struck the island. Under the hurricane rehabilitation program, the damage was repaired by day labor. As only a few members of the teams continued to take an interest after the storm, the Authority was forced to complete the houses by paid labor.

During the year, 138 house spots were prepared to receive chattel houses removed from congested or otherwise unsuitable areas. Loans were made available to those persons who were in need of financial assistance to remove, re-erect and to put their houses in better structural condition. In the past six years, nearly 3,000 applications for the rental of house spots have been received by the Authority, while more than 800 families have been accommodated. In the same period, some 2,500 house spots were rented in the various housing areas.

During the 1961-62 fiscal year, 1,000 applications were received from persons of the working classes for the rental of houses on the various housing areas. Total since April, 1956 is more than 7,000 and the number of families accommodated in the same period was 2,300. Weekly rentals range from $1.42 for a bedsitting house type to $3.49 for a three-bedroom house.

It is interesting to note "the Authority is very concerned over the large number of tenants who are not honoring their Agreements and are in heavy arrears. This matter has had the attention of a special Committee and steps are being taken to institute proceedings against the worst offenders."

The Authority also advances loans to an agricultural laborer or sugar industry laborer for the purpose of purchasing or constructing, or carrying out alterations, additions or repairs to a house. Loans are restricted to an amount not exceeding $1,600 in the case of purchases, constructions, alterations and additions and, in the case of repairs, to not less than $48 and not more than $600; provided the loan does not exceed 90% of the value of the interest of the mortgager in the property. The loan is free of interest for the first 12 months and thereafter bears interest at the rate of 2% per annum. In the past six years, 18,300 applications for loans amounting to more than $8.6 million have been received; while 12,000 loans for $5.5 million were granted.

The Authority reports "the requirements that every loanee should produce a Certificate of Baptism and two small photographs, one of which is attached to the application form and the other to the Pass Book to be retained by the loanee, continued to work well during the year, and has proved to be of considerable benefit both to the Authority and to the loanee."

The Authority may also make loans to "general

Workers' houses in heart of sugar cane fields, Barbados. Most are shuttered against intense midday sun.

workers" for the construction or purchase of a house (defined as a permanent structure), the extension of an existing house or chattel house; essential repairs to a house or chattel house; the construction or purchase of a chattel house (provided the applicant is not the owner of the land upon which the proposed chattel house when constructed or purchased will be erected); or the removal of a chattel house from the land on which it stands to other land. Applications in the six-year period for loans of this kind have numbered about 5,250 for $2.5 million; while nearly 1,900 loans aggregating about $1 million have been advanced.

The Authority is also responsible for "Public Officers' Housing Loans". Under the Act, a "public officer" means "any officer holding an office established under and by virtue of the Civil Establishment Act, 1949, or any officer holding a post in the item 'unestablished staff' appearing under the various heads of the Annual Estimates of the Island." The definition was widened in 1960 to include "any officer or servant of the Peasants Loan Bank holding a pensionable office in the service of the Bank and any officer or servant of the Housing Authority holding a pensionable post in the service of the Authority." Public officers' loans approved in six years number about 1,200 for $3.4 million; of these about 1,100 for $3 million have been finalized.

The Barbados Housing Authority, it will be seen, has a highly complex task on its hands, a task that, in spite of hard work and devotion to duty, will not soon be completed. The Manager, Mr. T. O. Lashley, has spent a large part of his life in helping to improve the lot of his fellow citizens. In March, 1963 Mr. Lashley observed quietly and with only small mention in the Press his silver anniversary in government housing circles, having been appointed manager-secretary of the former Bridgetown Housing Authority on March 5, 1938. When extension of the Island's housing program spread beyond the confines of St. Michael, the present Housing Authority was established in 1956 with Mr. Lashley as Manager.

In May, 1945, following a house-to-house survey, Mr. Lashley completed a report on "A Housing Survey of Eight Slum Tenantries in Bridgetown". In 1946, he undertook an "analysis of 39 tenantry areas surveyed in the extended City of Bridgetown".

Mr. Lashley received his training in housing management in Britain in 1948 where he served with the London County Council and some district and rural councils. Following Hurricane "Janet" in 1955, he controlled the Hurricane Rehabilitation Program. He was awarded the Queen's Coronation Medal in 1953 and was made a Member of the Order of the British Empire in 1956.

To the visitor, Barbados is truly a "West Indian Eden", a strange and fascinating land. For the colored Bajan, life is not easy but, cheerfully and with a happy song, he continues the centuries-old struggle, sometimes against nature, often against the stark facts of a poor economy, always against prejudice.

In the words of Mr. Justice J. W. B. Chenery, "Barbados, with its long and uninterrupted connection with Great Britain, cannot boast of the diversified cultural, religious and racial background that makes some of the other islands so fascinating a study; but it possesses a rich and sturdy individuality which marks out its inhabitants from the rest of the West Indies and almost from the rest of the world." ✦✦✦

LE CONGRÈS DU FILM SUR L'URBANISME

L'article suivant relate une entrevue entre M. André Wogenscky, architecte et urbaniste parisien, et M. Georges Robert, urbaniste conseil de Trois-Rivières. Il a été préparé spécialement pour HABITAT pendant que M. Wogenscky prenait part à un séminaire de la succursale de Québec de l'Association canadienne d'urbanisme.

par André Wogenscky

1ÈRE QUESTION:

A notre époque, plus qu'à nulle autre, l'urbanisme doit-il être conçu pour l'homme, le bien-être de l'homme, peut-il être un urbanisme consenti, un urbanisme imposé?

RÉPONSE:

Je crois que nous sommes à une époque de véritable menace de la technique; le prodigieux développement des sciences a entraîné de prodigieux développements des techniques. Ces techniques nous offrent des moyens de plus en plus nombreux, de plus en plus vastes, de plus en plus puissants, il ne faut nullement le regretter mais cela présente un danger, tend un piège dans lequel il faut prendre garde de ne pas tomber. Le perfectionnement technique risque de nous conduire à une sorte de confusion qui consisterait à prendre le résultat technique comme but alors qu'il ne doit rester qu'un moyen. Les techniques, plus elles sont nombreuses, plus elles sont perfectionnées, offrent des moyens de plus en plus nombreux, de plus en plus perfectionnés, de réaliser, mais de réaliser quoi? Toute la question est là. Ce qu'il faut réaliser ce n'est pas ce qui est le plus perfectionné du point de vue technique, mais ce qui est le plus salutaire pour les hommes qui vont l'utiliser, et notamment en matière d'urbanisme c'est ainsi qu'il faut poser le problème. Et cela d'ailleurs ressemble à une vérité de La Palisse que de dire que si l'on fait de l'urbanisme c'est bien pour le bonheur de l'homme et non pas pour son malheur, si l'on fait de l'urbanisme, la raison profonde, la raison finale, le dernier objectif

à atteindre c'est bien d'améliorer l'organisation des villes, l'organisation de milieux physiques où vivent les hommes pour que ces hommes soient finalement plus heureux. Je crois que cette organisation a précisément pour but de diriger dans le bon sens l'action que le milieu exerce sur nous. Les biologistes ont montré que tout être vivant subit l'action du milieu physique où il est placé; ou, l'urbanisme consiste précisément à organiser le milieu physique de notre société par rapport à l'action que ce milieu exerce sur cette société, par rapport à l'action sur le comportement même des hommes. Vous demandez si l'urbanisme doit être consenti ou s'il doit être imposé. En réalité il ne doit être ni consenti totalement, ni imposé totalement, l'idéal serait qu'il soit consenti totalement mais l'expérience montre qu'on ne réussit jamais à réunir l'unanimité des suffrages. L'expérience montre que quel que soit l'effort de conviction, l'effort de compréhension que l'on a pu faire, il subsiste toujours une opposition, il y a toujours des gens qui ne comprennent pas, il y a même des gens qui, égoïstes, ne voient que leur intérêt particulier et se moquent totalement de l'intérêt général sans avoir compris que leur intérêt particulier dépend de cet intérêt général. Par conséquent, je crois que l'urbanisme comporte toujours nécessairement un côté d'imposition, que dans tous les cas un plan d'urbanisme doit finalement être imposé à la population pour qui il est fait, après en avoir naturellement discuté tous ses aspects, particulièrement avec les différents représentants que cette société s'est elle-même choisis; mais il ne faut pas que ce caractère de contrainte de l'urbanisme dépasse une certaine limite, il faut toujours s'efforcer de le restreindre le plus possible, et c'est pourquoi je crois que dans le travail de l'urbanisme il intervient à côté de tout le travail qui se fait sur les plans lorsqu'il crée, lorsqu'il étudie, lorsqu'il conçoit le plan même d'organisation de la ville, je crois qu'en plus de ce travail il a à faire un autre travail très important, très difficile à faire d'ailleurs de conviction. Pour réussir à convaincre il faut expliquer les raisons profondes pour lesquelles on propose tel ou tel plan d'urbanisme, il faut l'expliquer, il faut convaincre, il faut faire comprendre, il faut réunir le plus de suffrages et surtout il faut tâcher de réunir la population dans une sorte de mouvement d'ensemble, dans une sorte d'idéal. Lorsque chaque individu composant un groupe social aura bien compris que dans ce groupe social, quelle que soit l'importance de son propre individu, il en est un rouage qui dépend de l'organisation même de ce groupe social, peut-être participera-t-il à un effort collectif d'organisation.

2E QUESTION:

L'influence sur un peuple du milieu où il vit est incalculable, c'est une partie de son éducation, a dit Lord Latham en introduction au plan de Londres. Ne croyez-vous pas que ce soit là un ordre de penser auquel nul urbaniste, nul architecte ne devrait jamais se soustraire sans craindre de nier son rôle même et de ne pas remplir les fonctions qui lui incombent?

RÉPONSE:

Je crois que l'urbanisme est actif dans le sens qu'il consiste à organiser le milieu physique pour que ce milieu physique devienne agissant sur les hommes et pour que cette action soit bonne.

C'est bien dire que je suis intimement persuadé que l'influence du milieu sur un peuple est très grande. Je pense aussi, comme l'a dit Lord Latham, que cette action est si importante, cette action est si permanente, qu'elle devient une véritable éducation; je pense que des enfants qui naissent, qui grandissent et qui deviennent des adultes, continuent durant toute leur vie à évoluer dans un milieu, dans une organisation de l'espace, dans une ville, dans une agglomération; je pense que ce que tous les jours ils voient, la perception même de ce milieu et de son organisation devient pour eux une véritable éducation permanente, et je crois que la phrase de Lord Latham est une grande vérité. Il me paraît fondamental que les urbanistes et les architectes aient toujours à l'esprit le but même de leur profession qui est d'organiser ce milieu par rapport à l'influence qu'il exerce sur les populations, par rapport à l'éducation permanente qu'il leur procure. Pour bien remplir les fonctions d'urbaniste et d'architecte, je crois qu'il faut être pénétré de ce

Jardin zoologique pour les enfants en plein centre d'une grande cité.

point de vue, qu'il faut être sans cesse tendu dans un effort perpétuel d'organisation que lorsque nous étudions un projet d'urbaniste ou un projet d'architecte nous ne devons pas avoir d'autre objectif. On m'objecte quelquefois, lorsque je défends cette idée, que ce serait ramener l'architecture et l'urbanisme à une organisation strictement fonctionnelle. Argument inconsistant, car lorsque nous disons que nous voulons organiser l'action du milieu sur les hommes, nous ne disons pas que nous voulons limiter cette action par rapport à des points de vue matériels, nous ne voulons pas limiter cette action par rapport, par exemple, aux facilités que peut nous donner cette organisation. Nous voulons l'élever, l'accomplir, la parfaire jusqu'à ce que l'organisation du milieu soit telle qu'elle exerce sur notre pensée une action qui soit salutaire à notre vie psychologique et qui conduise notre esprit à son meilleur épanouissement.

3E QUESTION:

Que pensez-vous de la métropole, de la concentration humaine de plusieurs millions d'hommes; ne croyez-vous pas qu'un gigantisme conduit à la complication presque insoluble des problèmes de la circulation, à la sclérose du centre d'affaires et administratif, au resserrement dangereux du tissu urbain. Il a été dit que la métropole est dévoreuse de temps, qu'elle dénoue les liens familiaux, qu'elle isole l'individu qui devient un rouage anonyme, que les liens de la solidarité la plus élémentaire se distendent; quelle est votre opinion à ce sujet?

RÉPONSE:

Sans doute les dangers de la très grande métropole sont-ils très graves. L'idéal serait de pouvoir limiter les villes à un nombre d'habitants qui pourrait être étudié pour être optimum. Seulement nous assistons à notre époque à un mouvement d'organisation sociologique qui, il faut bien le constater, conduit à la concentration d'hommes très nombreux dans les grandes métropoles.

Peut-être faudrait-il envisager des mesures très sévères, très draconiennes, et qui par conséquent exerceraient une grande contrainte sur la société pour éviter ces énormes concentrations. Mais je me demande si c'est possible. On a essayé à Paris, par exemple, qui atteint maintenant plusieurs millions d'habitants surtout avec toute son agglomération, on a essayé de décentraliser Paris, on a essayé de prendre des mesures pour faire quitter Paris et implanter en province notamment de nombreuses industries installées tout autour de la capitale de la France. Ces mesures jusqu'à présent n'ont pas donné les résultats qu'on escomptait. Il faut bien constater que c'est parce qu'il y a quelque chose dans l'organisation de la société, c'est parce qu'il y a une sorte de force, une sorte de dynamisme dans notre organisation sociologique qui conduit à ce résultat. Je me demande d'ailleurs si certaines de ces grandes métropoles, n'arrivent pas à une sorte d'échelle, à une sorte de dimension dans l'espace qui serait le résultat de l'organisation collective qui, elle aussi, utilise une échelle de plus en plus grande. Reprenons le cas de

Maison d'appartements de luxe pour les plus privilégiés.

Paris, puisque c'est une ville que je connais bien, puisque j'y habite, si l'on voit Paris par rapport à la France, Paris est trop grand, mais si l'on voit Paris par rapport à l'Europe, son échelle n'est pas catastrophique. Il est très important de trouver la dimension, la taille que doit avoir une ville mais par rapport à l'ensemble du territoire géographique qui se trouve influencé par cette ville dont elle-même est en quelque sorte, l'épicentre. Voilà un aspect très important du problème d'ailleurs très difficile à résoudre.

Et puis ce qui va apparaître aussi, c'est que ces grandes métropoles sont tellement catastrophiques parce que dans leur état actuel leur urbanisme est extrêmement mauvais. Une ville comme Paris, de 7 à 8 millions d'habitants peut effrayer non parce qu'elle atteint cette population mais parce qu'elle atteint un mode de vie contemporain, parce qu'elle englobe des industries, parce qu'elle pose des problèmes de circulation automobile qui sont des problèmes de notre époque et que toute l'activité, tous ces aspects de l'organisation sociale sont enfermés dans une structure urbaine qui est celle du passé. Ce qui est grave, ce n'est pas tellement que Paris atteigne 7 à 8 millions d'habitants, c'est que l'on tente de faire vivre ces 7 à 8 millions d'habitants dans une structure urbaine qui est celle du siècle passé, dans une forme de ville qui est faite de rues avec des maisons qui sont enfermées dans un quadrilatère de rues-corridors avec une circulation automobile qui essaye de se frayer un passage dans des voies qui sont encore conçues pour la circulation des piétons et des chevaux. C'est là qu'est le problème, c'est là qu'est la gravité et c'est pourquoi l'urbanisme est tellement important. Si on appliquait aux grandes métropoles des idées d'urbanisme dont la doctrine existe aujourd'hui, si on transformait leur structure, si on en faisait des villes pensées, organisées, et dessinées par rapport à ce qu'elles doivent être aujourd'hui et par rapport aux idées les plus avancées de l'urbanisme contemporain, tous les inconvénients de la métropole, tout au moins les principaux inconvénients de la métropole disparaîtraient pour laisser certainement des avantages; car notre vie collective, notre organisation sociale et notre culture ne retirent pas que des inconvénients mais aussi des avantages du grand rassemblement des très grandes capitales modernes.

Vue sur un parc à l'intérieur d'une cité.

4E QUESTION:

Vous avez parlé d'un urbanisme dynamique, qu'entendez-vous par là, comment le définissez-vous?

RÉPONSE:

Lorsque je parle de l'urbanisme dynamique, je veux dire justement que l'urbanisme doit conduire à une organisation telle, que ce milieu qu'est la ville doive se charger de forces qui agissent sur toute la vie de la société. Je crois que lorsqu'on fait de l'urbanisme, on détermine des affectations de terrains, on décide du zonage, c'est-à-dire la répartition sur le sol des différentes formes d'activité mêmes. On fait des tracés de voies de circulation, on propose de construire sur le sol tout ce qui va contenir la vie de cette société, mais le fait qu'on évite le hasard et que l'on tente de faire une organisation bien pensée, bien raisonnée, va précisément charger le milieu physique qu'est la ville d'une sorte de force, je dirais même de nombreuses forces qui vont agir sur les hommes. C'est pour cela que l'urbanisme peut devenir dynamique. Il peut être tel qu'il devienne comme une sorte d'énergie qui continue dans l'organisation même de la ville, l'énergie qui va exercer des forces diverses, nombreuses, variées et compliquées sur la société. L'organisation d'une ville exerce toujours des actions sur la société qui y vit et l'urbanisme consiste précisément à orienter ces forces pour qu'elles soient salutaires. C'est donc arriver à se faire de l'urbanisme, de même que je me fais de l'architecture, une conception énergique. Pour moi l'urbanisme et l'architecture ne sont pas faits de matière mais ils sont faits d'énergie dont on réussit à charger la matière pour qu'elle agisse sur les hommes d'une manière qui leur soit salutaire.

5E QUESTION:

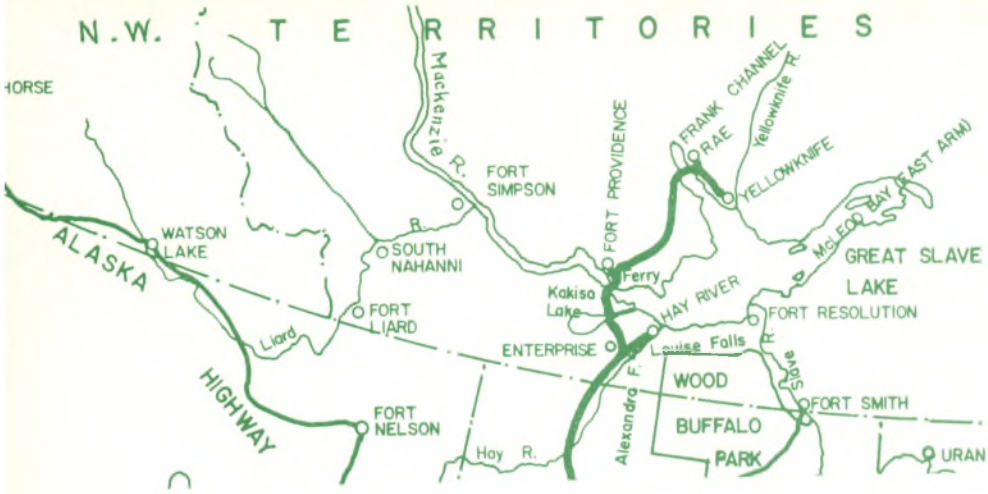
A votre avis quel est le rôle de l'urbanisme dans le temps?

RÉPONSE:

Vous me posez là une question très intéressante, et sur laquelle on n'attire pas assez souvent l'attention

du public et des hommes qui ont la charge, la responsabilité de la conduite de nos sociétés. En général, on commence à comprendre quelle est l'importance de l'urbanisme et quelle est la nécessité de ne pas laisser nos villes évoluer au hasard, c'est-à-dire sous l'influence des intérêts individuels et privés, mais d'organiser et d'orienter leur évolution. Cela conduit à tout ce travail d'étude même de l'agglomération, à tout le travail de conception du projet d'urbanisme que l'on va proposer pour la ville considérée. Mais lorsqu'on est arrivé au stade d'avoir fait le projet d'urbanisme, lorsqu'on est arrivé au stade de l'avoir fait approuver, il reste encore tout un travail qui est très important et que l'on oublie trop souvent, ce travail plus administratif de faire appliquer petit à petit le plan d'urbanisme et d'orienter toutes les constructions, tous les travaux, toutes les transformations de la ville dans le sens même prévu par le plan d'urbanisme. Cela nécessite un travail d'administration; dans une ville qui a un plan d'urbanisme et qui veut l'appliquer, il est nécessaire que la ville elle-même possède une administration, qui n'a pas besoin d'ailleurs en général d'être bien importante, un service administratif, dont la tâche est l'application même du plan d'urbanisme et, par exemple, ne serait-ce que le contrôle des différents permis de construire, pour que l'on ne donne les permis de construire qu'en accord avec le plan d'urbanisme. Il est nécessaire malgré tout que l'urbaniste, auteur du projet, continue de travailler en étroite collaboration avec ce service administratif. Ici nous touchons du doigt un autre aspect du problème qui me paraît lui aussi très important, c'est qu'un plan d'urbanisme, un bon plan d'urbanisme ne doit pas être un cadre rigide qui s'oppose dans l'avenir et dans l'écoulement du temps à des modifications et à une évolution. Je crois qu'un projet d'urbanisme doit comporter un plan directeur qui donne les grandes idées directrices, les grandes lignes-forces de l'organisation de l'agglomération, et je crois que ce plan directeur, après avoir été étudié, critiqué, modifié, et lorsqu'il est finalement adopté, doit être absolument impératif. Il doit être pensé par l'urbaniste de telle manière qu'il permette une certaine mobilité à l'intérieur même du cadre qu'il impose. Une ville évolue sans cesse, c'est quelque chose qui est animé, presque comparable à un être vivant qui grandit et tout particulièrement une ville dont la population augmente, et qui par conséquent s'étend sur le terrain et grandit dans l'espace comme l'être vivant en période de croissance. Il y a une évolution perpétuelle, les modifications ne se font pas tout d'un coup, mais petit à petit et au fur et à mesure d'une évolution; de plus, il peut intervenir des éléments nouveaux, des faits imprévus, qui, facteurs neufs, viennent conditionner cette évolution. Un exemple: l'installation dans la zone industrielle d'une ville ou près d'une zone industrielle prévue au plan d'urbanisme, d'une grande usine qui emploie un grand nombre d'ouvriers. A partir du moment où cette usine sera construite et installée, se produira tout à coup une sorte de mutation brusque de la ville comme on observe en biologie des mutations brusques. Cette mutation doit certainement se faire dans le cadre rigide et impératif qui aura été prévu par le plan directeur, mais à l'intérieur même de ce cadre, cette mutation brusque va peut-être provoquer des modifications de détails, des adaptations nécessaires, il faut que l'urbaniste soit présent, capable d'intervenir, capable de faire le détail d'une partie de la ville toujours dans les cadres de son plan directeur. C'est dire que l'intervention de l'urbaniste se déroule dans le temps, l'urbaniste doit suivre pendant de nombreuses années l'évolution même de la ville de manière à faire toujours et sans cesse coller son plan d'urbanisme à la vie de la ville elle-même. ✦✦✦

Monsieur André Wogenscky, architecte-urbaniste, naquit à Remireront (Vosges), France, le 3 juin 1916. Il fit des études à l'École Nationale Supérieure des Beaux Arts de Paris, à l'Institut d'Urbanisme de l'Université de Paris et chez Le Corbusier, de 1945 à 1956. Il est membre du Comité directeur des C I A M. De 1945 à ce jour, il a été invité par plusieurs organismes internationaux et appelé en consultation par divers gouvernements: Allemagne de l'Ouest, Belgique, États-Unis, Brésil, Egypte, Liban, etc.



HAY RIVER

The Hay River settlement is located in the Northwest Territories on the south shore of Great Slave Lake at the mouth of the Hay River. The census figure for the area is 1,300 but it is estimated the summer population is about 1,800 persons located in three separate communities; the main townsite on the east side of Vale Island, the largest of the delta islands; the fishing village on the west side of the island and the Indian Village on the east bank of Hay River across from the main townsite.

At present the settlement is accessible by road, air and water transport and in the near future by rail, now under construction. The community, situated on the only sheltered harbor within a radius of 100 miles, functions both as a fishing village and as a trans-shipment point for the Mackenzie River Transport System which primarily handles building materials and equipment heading north. This freight is brought in year round and stored until Great Slave Lake and the Mackenzie River are sufficiently free from ice to permit water-barge traffic. Because the source of the Hay River and its tributaries is south of Great Slave Lake, Spring break-up occurs prior to the break-up in Great Slave Lake and flooding to various degrees threatens Vale Island yearly. This spring a combination of factors resulted in severe flooding which forced the emergency evacuation of a large percentage of the population and brought severe ice and water damage to the main townsite and Indian Village.

To assist the Department of Northern Affairs in evaluating the resulting situation, Central Mortgage and Housing Corporation was requested to examine the community and to advise as to the future development of Hay River. Following a series of meetings with the Departments of Northern Affairs and Public Works in Ottawa, Messrs. Nordmann, Scott and Lithgow of the Architectural and Planning Division of CMHC flew to Hay River during the week of May 12th and there, with Public Works' representatives, met with Commissioner R. G. Robertson, and members of the Council of the Northwest Territories which had convened in emergency session at Hay River.

Initially every consideration was given to the possibility of safeguarding the existing community from future flooding and to consolidate all development within or adjacent to the existing main townsite. This would have allowed the development of a reasonably compact community, facilitated the provision of sanitary protective and social facilities, eased administrative difficulties, retained the value of existing capital investment and generally avoided many of the problems that have resulted from dispersed development in other northern areas. Because of serious misgivings expressed by engineers, however, regarding the excessive costs of residential development in perma frost ground conditions on Vale Island, and because of the difficulty of providing flood controls for the existing townsite in the immediate future, consideration was given to the establishment, on a voluntary basis, of a new residential community in an area where the risk of flooding would be at a minimum and in a location which would provide better soil conditions for building construction and the provision of water and sewer services.

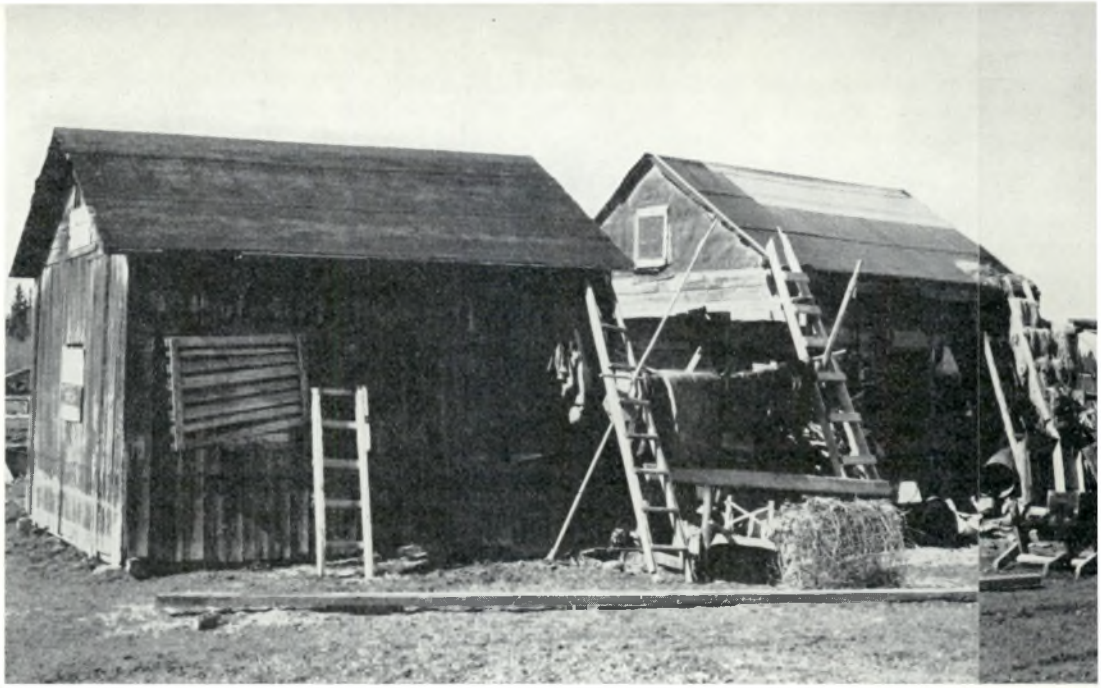
Two areas were examined while at Hay River and assessed as to their suitability and capability of being economically developed to ultimately accommodate the whole of the residential community. Subject to confirmation by soil borings now being taken, a location two miles from the existing townsite was selected. The site is located on the mainland immediately south of Vale Island, is well treed, gave no evidence of past flooding and early test borings and excavations indicated that it was free of perma frost.

Slave Indian Settlement. The Indians are members of the Dogrib Division of the Slave Tribe.

A preliminary report was submitted to Northern Affairs by Central Mortgage and Housing Corporation. This included recommendations for the location of the new residential area and brought forward implications which were inherent in any plans for voluntary relocation.

The respective governments had already taken measures to encourage relocation by offering compensation for flood damage to both residential and commercial properties which could be applied towards relocation and agreed to give a free lot of land in the new area in exchange for one on the existing townsite. Mr. Nordmann and his colleagues proposed measures for implementing a positive program of relocating residential, commercial and public buildings in the new residential area. Of primary importance was the rezoning for industrial uses by the municipality of all flood-endangered land which includes the whole of Vale Island, with existing residences and public buildings allowed to remain only as non-conforming uses. Ways and means of providing flood protection for the industrial area are now under study. These and other recommendations were brought forward to prevent both the old and new townsite developing as residential communities and thus complicating the provision of even minimal community facilities for each separate area. Suggestions were also made to bring both the Indian population and fishing village into a closer relationship to the new residential community. Residents of the fishing village would likely wish to remain on the shore of Great Slave Lake and it was suggested that consideration should be given to the construction of a new road which would provide a much closer link to the schools, shopping and community facilities in the new residential area. The Indians now living across the Hay River on the east bank would be given every opportunity and encouragement to relocate in the new residential area, but there are Indians who wish to follow their traditional way of life of fishing, hunting and trapping and for whom a standard residential subdivision would not meet their requirements. For these Indians, an area was recommended which would give them direct access to Great Slave Lake, yet still enable them to utilize the new community facilities.

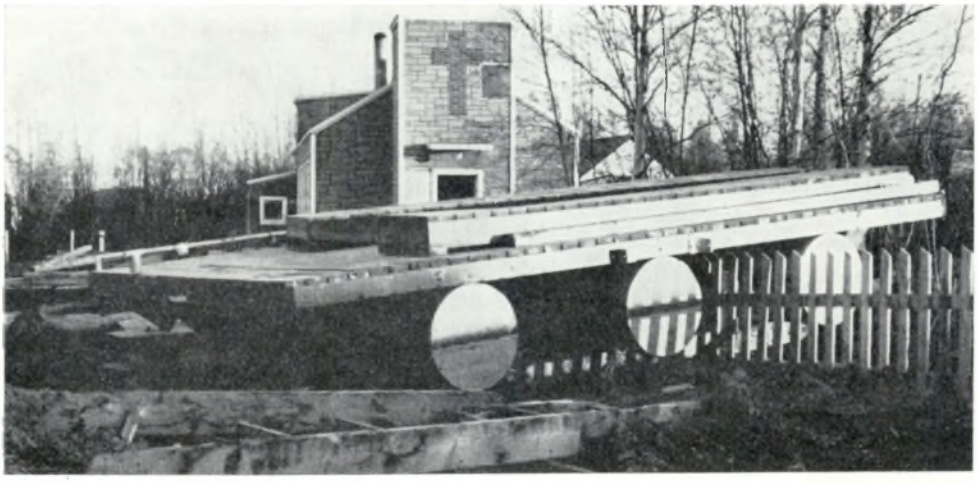
In order to provide surveyed lots in the new residential area as soon as possible so that residents could plan to relocate prior to the winter, it was agreed that the development plan for the new residential area would be submitted in stages. Within three short weeks after the field visit to Hay River, a plan was submitted to Northern Affairs giving the initial phase of development. This plan showed proposed roads, approximately 200 residential lots and set out in general terms areas for commercial development and public building. At the time of writing, a comprehensive plan for future residential and community development of the new townsite is being prepared by CMHC together with a report which will bring forward recommendations towards implementation of the principles of the development plan to help ensure the orderly overall development of Hay River on a sound economic basis.



The Mackay Homestead. This typical homestead in the Indian Village shows the requirements necessary for those who gain their livelihood by fishing, trapping and hunting—outbuildings for cattle and dogs, racks for drying nets and curing fish, plenty of space for wood-fuel and a system of collecting clear water from the roof run-off.

Gordon Scott of CMHC enters the town after the flood. Note fishing schooner left high and dry.

Ice wall composed of approximately 12 ft.-high blocks left by flood near existing harbor facilities.



One of the docks forced from the harbor right into the town by the pressure of the ice.

Ice blocks, left after the flood receded, are shown at the Townsite. A 50-ft. barrier of trees will be retained to prevent ice entering this area in the event of future floods.

This excavation on the new townsite indicates excellent soil conditions for residential development including basements and underground services. This is not possible where the old town is located on Vale Island because of perma frost.

CLIENT, ARCHITECT & ENVIRONMENT

Mr. Bray is a member of the Architectural and Planning Division of CMHC. This article is a paper he submitted while taking post-graduate studies at the University of Illinois.

by John F. Bray

In an era when technological achievements, the fruition of centuries of seeking, seem to have paved the way for a startling exhibition of man's creative ability, it may appear inconceivable that the fulfilment of these ideals may have to be subordinate to the achievement of something greater; the creation of an aesthetically pleasing and socially acceptable environment. The quest for these perfect physical surroundings and a more satisfactory way of life has been the subject of considerable attention by leading philosophers of the various epochs in both architecture and other fields of endeavor.

When Sir Thomas More wrote his memorable work, "Utopia", he was attempting to summarize all that to him appeared desirable in an ideal city and his theories closely reflect the political, social and religious beliefs of that time. The quest for this ideal did not end with More and is even now unresolved. In fact, it has become more complicated in that the increasing freedom of mankind and the decreasing power of the church and hierarchy since the Renaissance has created a strange enigma. Man can now build to satisfy his own needs, choosing his own expression and yet it is this attempted individualism which has created the current disunity in our urban areas. No longer can we indulge, as in the past, in ideal cities designed for the aggrandizement of the nobility or the defence of a state, but rather must we reorganize our concepts to create a city for Man. Such an entity will stem from the civilization which supports it and is the responsibility of all to contribute towards the attainment of this environment.

The importance of the client in the creation of the urban expression of any culture cannot be overstressed. Even a brief survey of the evolution of the town will convince one of the veracity of the statement that . . . "the history of art is as much one of patrons as of artists". Whether it be by a direct participation in the city development, or indirectly by their programs being translated by an architect into reality, the results of their requirements, ideals, fears and even whims can be seen in the legacies of earlier civilizations. Without a client to furnish him with a program, the work of the architect must remain without meaning since it is only through the satisfaction of a series of requirements that truly great and meaningful architecture can be produced. Beaudoin expresses the importance of this phase of the architect-client relationship when he says, "nos programmes expriment nos besoins; ils réflètent dans leurs moindres détails toutes nos exigences; conforts spirituels et matériels, soif et aspirations de tout ordre . . .". When stated in these terms, we can readily appreciate the influential character of the client in the shaping of our environment.

One of the significant periods in a discussion of this nature was the Renaissance when two factors contributed greatly to the changing character of the city. During the medieval period the will of the individual had been subjugated to that of the state and the church and this was reflected in the urban expression of the time. Architecture was largely

anonymous being the work of the master craftsman rather than the identifiable artist and consisted mainly of large scale buildings such as cathedrals and castles. The increasing freedom of expression, which was as integral a part of the Renaissance as was the re-awakening of classical ideology, coupled with a reduction in the power of the church and its increasing secularization, created a new type of architect and a new patron.

Rich princes, who formed the most important single element in terms of influence within the new hierarchies, could afford to indulge in creating for themselves, through the medium of an architect, buildings which emphasized their status and wealth. This architecture for the nobility ignored as completely as the earlier eras the sociological aspects of the town—even Vitruvius, whose work was rediscovered during this time largely due to the work of Fra Giocondo, ignored the high buildings which are known to have housed the workers of Rome. As with his later counterparts, his interest was not in Man, but in the creation of a city which reflected the glory and power of the Emperor.

Fortunately, two elements existed to restrain the architects of the time and produce some degree of urban unity. They were a limited technological knowledge and a firm conviction in the desirability of following Classical principles and a high level of taste amongst the nobles. These two factors applied a subconscious restraining influence and helped to produce the unified piazzas which are so highly praised today. Unfortunately, these squares formed isolated nucleii within the overall framework of the city and even the work of the noted architects of the time was critical in this respect. Michelangelo and his Campidoglio is a case in point. Such projects

The Piazza of St. Mark's in Venice.

The Vanderbilt Mansion, New York.

were reserved for emphasis and effect to create interest and impression—such as the Piazza del Populo at the entrance to Rome.

Concurrent with these examples which may be considered to be civic in character, there was an increase in the number of isolated works of architecture for its own sake. Buildings in the round, such as the later Villa Rotunda, were intended to reflect the social status and wealth of the owner and showed an increasing eclecticism and desire for effect. The architect, in designing for such a client, displayed little concern of the whole, and it is noteworthy that the later Renaissance and Mannerist palaces were less satisfactory than the earlier examples when considered in terms of the urban landscape. These buildings contributed nothing towards the creation of an environment for Man; they were too personal and individual in their requirements. Madame de Pompadour and the French courtesans aggravated this situation by emphasizing the importance of these country villas. The gradually decreasing concern for the whole and the increasing expression of the ego, so typical of this era, now became more marked.

The second important factor in the relationship between architect and client came with the Industrial Revolution in Europe. The power of the hierarchy was dwindling and wealth and influence were passing to the "nouveau riche", often men of little taste. The primary concern of these industrial barons was to emphasize their wealth, frequently with little discretion. With little education these men could hardly be criticized and the blame must be laid upon the architects who were only too willing to comply with their wishes. From this time, stems many of the problems which confront us today. If the architect of that era had been a man of greater taste and determination, then the resultant ugliness associated with Victorianism might have been avoided.

Contemporary architecture has done little to alleviate the dis-unity which characterizes the majority of our towns. The industrial influences which had begun in the eighteenth century gained momentum so that today it is largely the industrial or financial organizations which control the visual expression of our cities by their very wealth. The advertising value of a significant building is all too evident, and the encouragement given to the architect to design buildings possessing a unique character can be seen in many outstanding, often obtrusive, buildings which distinguish the cities of today. The Seagram Building, Lever House and the Pan-American Building are admirable examples of this trend towards the three-dimensional advertising tower and together illustrate how little regard is paid to the creation of the total effect. George Bernard Shaw once said, "money is indeed the most important thing in the world; and all

sound and successful personal and national morality should have this fact for a basis." However satisfactory this may be as an expression of a purely politico-economic ideology, it cannot but lead to discordance and an even greater deterioration in the urban environment. Advances in knowledge and technique have, moreover, made possible the creation of "solitary monuments of individual aesthetic significance" which have contributed little to the achievement of a unified whole.

Throughout history, the architect's primary responsibility has apparently been to design for the people in power, at first the titled nobility and then the industrialists. A study of architecture clearly reflects this bias, and not until the eighteenth century was there any noticeable awakening of social responsibility. The churches of the Middle Ages, the palaces of the Renaissance, and the factories of the Industrial Revolution contributed nothing to the raising of standards for man in general and it must be remembered that these buildings for clients numerically in a minority comprised the major part of the architect's work. The ideal city concepts which had been produced during the earlier periods remained for the greater part purely theories. Significant town design projects, such as Wood's scheme for Bath or Craig's at Edinburgh were still designed for the rich or the nobility of the period, but they do indicate a trend downward in scale from the palaces as the peoples became more democratic. The slums, a legacy of this so-called democracy, can be attributed to the lack of any architect-client relationship during this time—a lack of co-ordination between sociology and architecture which should be an adequate warning to us in our contemporary endeavors. Without an understanding of sociological ideals the slums of Chicago and Manchester, of Paris and Montreal will only be recreated.

In spite of these precedents, which should serve as warnings, many of the contemporary proposals for an ideal environment are vulnerable in the same respect in that they are attempts to superimpose an ideology upon a civilization. This can never succeed, and although the undirected product of a people can itself

The Pan-Am Building with Grand Central Terminal in foreground, New York City.

Three of Chicago's skyscrapers—the Lincoln Tower in foreground, Executive House and the Carbon Carbide Building.

produce something even more undesirable, an enlightened appraisal of the program requirements by the architect for his client—Man—can lead to a more satisfactory solution. Le Corbusier and Wright chose opposite extremes in their quest for a Utopia, but both ignored the essential sociological considerations. The former, for example, in attempting to create a "Unité d'Habitation" refuses to acknowledge the differences in cultural and social levels which do exist; whereas the latter in his Broad Acre City does not recognize that man is essentially gregarious and needs the city and all it can offer. Garnier, on the other hand, adopted a point of view which ignores the human aspect completely and in his proposal for a linear city places the emphasis upon industry.

All of these examples can be criticized on the grounds that they do not pay any regard to the client, in this case the public, but are an attempt to subject the whole to the ideals of one. It may be argued that it is upon such far-sighted concepts as these that the future shape of our cities may be determined and as Edward Phelps has said, "the man who makes no mistake does not usually make anything." But when the mistakes are of such a magnitude that they can subject man and fashion his environment, then one must treat them with caution on the grounds that they lack social awareness.

The task of the architect is not becoming easier as time passes, since the already existing problems which so plague our cities are ever becoming more acute. In very few instances has the architect really taken the initiative and in many cases is only content to follow the client, apparently satisfied with the opportunity to express his individual concept of architecture. That there is a real opportunity to lead is readily apparent, since at no time heretofore has there been a more widespread acknowledgement of the problem by the world at large. There exists, however, the anomaly of two clients, each distinct in character and requirements. On the one hand exists industry and commerce often seeking an individual expression purely as an economic consideration. Occasionally this search for the outstanding or unusual leads to an architect who may be acceptable in terms of current ideas of taste.

The other patron and by far the more important is Man, the ubiquitous being who represents us all, who desires a good, not ideal, environment in which to enjoy his life. The desire for the ideal has gone since the need to create a satisfactory environment is of paramount concern. If the architect continues to follow the lead of the first client, then our cities will reach an inhuman expression. It is essential for him to create an awareness of all the other values which are so necessary to the total and to take his position as the leader. As Gutton has said: ". . . les Architectes que nous sommes ont des devoirs et des droits. L'Architecte a des devoirs envers luimême et ses confrères, envers ses clients, envers ses concitoyens et sa patrie . . . ". When the conflict between the rights of the client and those of ths architect's fellow citizens does arise, then this must be resolved by the latter.

"Le plus grand devoir de l'Architecte est envers lui-même." ✦✦✦

The City of RED DEER

by Denis Cole

With its population of 22,500, the City of Red Deer is the largest centre between Edmonton, Alberta's Capital, and Calgary of Stampede fame. The two metropolitan areas of 295,000 and 270,000 respectively, represent 42.5% of Alberta's total population. Both are within 100 miles of Red Deer, in fact, 70% of the Province's citizens live within a 100-mile radius.

Until a few months ago, Highway No. 2, linking the two major cities, passed through Red Deer, but when the four-lane section from Calgary was extended 26 miles north of Red Deer, a by-pass was incorporated so through traffic can avoid the city. In another two or three years the 200-mile, four-lane highway will be completed from Calgary to Edmonton.

The City of Red Deer straddles the river of the same name and is surrounded by undulating parkland dotted and laced with spruce and poplar. It is in the heart of one of the most prosperous mixed farming districts in Canada and is located on both the CNR and CPR railways. In 1946 the population was about 4,000; in 1953, 9,000; the 1962 Census figure recorded 21,107; and today the citizens of Red Deer will number about 22,500. Building permits in 1962 totalled more than $10 million.

It is estimated that the trading area is now about 100,000, although these same people are also served by towns and villages in the area. A healthy agricultural economy, a strategic location for distribution and service and a regional road network, which has changed from poor to excellent in 15 years, have been the main factors that have contributed to Red Deer's unusual growth.

In 1946, Red Deer enjoyed a prosperity which had been well-ordered and well-governed. Its population had remained static at 2,000 from 1911 to 1931, and from 1931 to 1946 it slowly expanded to 4,000. Its sewer and water systems were more than adequate; its gravelled roads, wooden curbs and concrete sidewalks, together with the treed avenues and developed parks and gardens, all indicated a history of good and conscientious civic management and pride.

During the seven years that followed World War II, the tremendous population growth from 4,000 to 9,000 was welcomed by most, but caution was the watchword. "This can't go on" was the answer to all major proposals for expenditures. Everyone prepared for the "levelling off" which never came. No civic money was spent beyond immediate requirements and every existing utility and service was stretched to the breaking point.

By 1953, the water plant, with auxiliary pumps, was pumping water through at such a rate that it was unable to remove the suspended solids. There were no storm sewers in the city and consequently, low-lying areas had to be drained into sanitary sewers which in turn backed up into basements with increasing regularity and could be extended no further.

The increase in both the general traffic and heavy oil trucks travelling to and from the oil fields, deteriorated the gravel roads to such disrepair that in

Above, an aerial view of the City of Red Deer with the river upper left. Note the absence of sprawl and how well the treed ravine has been incorporated in the overall plan. The picture of the farmland is on the upper right of the aerial photo just below the set-back.

Right. The picture illustrates the planned use of land in Red Deer. The farmland bordering the residential area is utilized until required for expansion and not held for speculation.

wet weather, traffic was literally bogged down. Only two miles of road were paved and this was breaking-up—virtually no new pavement had been laid since the War ended. The one saving grace was, with very few improvements undertaken during this period of growth, the debt ratio of the city was quite low, placing it in an excellent financial condition.

In 1952, Mr. James Beveridge, professional engineer (now Commissioner in Moose Jaw) was hired as City Commissioner and Mr. M. B. Lawson (now Planning Director, City of Toronto) was engaged as the first Director of the newly-formed Red Deer District Planning Commission. It was clear to both men that the critical and urgent need was for a long-range expansion plan—particularly for the extension of services.

Top priority was the water supply and immediate instructions were given to the engineers to design a new water filtration and pumping plant adequate for a population of 25,000. It was anticipated at the time it would meet requirements for at least 20 years.

In 1953, Mr. Lawson moved to Toronto and I was engaged as Director of the Planning Commission. During the past 10 years I have had the fascinating task of developing the long-range plan—first with Commissioner Beveridge and later with two succeeding Commissioners. The City Engineer, Mr. N. Deck, and the City's Consulting Engineers, Messrs. Haddin, Davis and Brown, have borne the major work.

During the first two and a half years (1953-1956), and as the city grew to 12,760, the following facts and principles had been established and accepted by the Council:

1. It was not unreasonable to expect that the city would grow to 35,000 or 40,000 (three times its 1956 population) by 1976-1980 (20-25 years).
2. All services—water, sanitary and storm sewers and major roads should be designed, located and constructed to allow for the accommodation of 40,000 people.

3. No street should be reconstructed or paved until the trunk utilities designed to serve 40,000 were installed.
4. Every effort should be made to make new subdivisions as self-supporting as possible. This would free borrowing power for improving services in the built-up areas and for major items of general benefit to the community (e.g., sewage disposal plant, bridges and municipal buildings).
5. A large engineering staff should not be employed ("as you never know—things may slow up"), but engage consulting engineers for all engineering design and supervision.
6. The small Public Works Department should not be enlarged (probably for the same reasons), but tender all work in excess of what existing city crews could handle.

These six policies were not made in clear-cut resolutions, but were developed over the two to three-year period. Council and the public got used to them and most of these policies represented a complete reversal of previous attitudes.

On these foundations—and one other of great importance—the city has been built since 1956 and is likely to be developed at least until 1976. In fact, this is the story of a 20-year plan that is seven years old. The other cornerstones solidified gradually too, and this will be dealt with later.

During the study period, 1954-1956, a land-use map was prepared indicating the usage of every piece of land within the city limits and on the fringes, the number of persons living in each block and the number and location of all vacant residential lots on and off services. This made it possible to calculate approximately how many additional acres of land would have to be provided and serviced for residential purposes.

A table was prepared which resembled the following:

Population for overall plan		40,000
DEDUCT		
(1) Population already located on services	12,000	
(2) Population that can be accommodated on vacant serviced lots	1,500	
(3) Population that will be accommodated in central areas as a result of apartments, etc. (increase only)	3,500	17,000
		23,000
ADD		
(1) Population to be moved due to expansion of commercial area	500	
(2) Population now living in areas to be serviced	1,000	1,500
Number of persons for whom services must be provided by time total growth reaches 40,000		24,500

By allowing 14 persons per gross acre, including local commercial areas, schools, parks, difficult topography and shapes and informal layouts, it appeared that about 1,750 acres, 11 quarter-sections or three square miles would have to be serviced.

Meanwhile, with a 50% Provincial grant, aerial photography was obtained of the entire city and surrounding area and from these photographs contour maps were compiled. The city's consulting engineers were asked to examine these maps and, in consultation with the planning staff, advise on the relative merits of the different sections based on engineering, planning and cost factors. Areas for future industrial development were considered at the same time.

When agreement was reached on the land to be selected, the engineers were requested to prepare preliminary designs, with estimates of costs, for the major trunk sewers showing general location, size and approximate depth (based on the contour maps) and for the major grid of water lines with the location of necessary reservoirs or pumps.

At the same time the Planning Commission engaged Messrs. Stanley, Grimble & Roblin—a firm of traffic engineering consultants—to make an exhaustive study of the traffic and parking needs which the anticipated growth would generate with solutions and estimated cost. Particular attention was to be given to

the probable effects of the main highway by-passing the city a mile or so to the east or west which was considered an imminent possibility. This report has since proved to be one of the best investments made by the Planning Commission on the city's behalf.

So by 1956, we had established that we must plan for a population of 40,000; that 1,750 acres for residential land was needed, plus land for industrial use; and which lands could be most economically and suitably serviced with utilities and roads to accommodate the increase. Preliminary estimates of cost for the trunk mains and major roads were also available. It became clear, however, that as soon as decisions were reached on the order of development and the first major trunk sewers were constructed to the perimeter of the built-up area, land speculation could quickly wreck the plans for orderly and economic growth.

Considerable thought and deliberation by all parties concerned, particularly City Council, revolved around this difficulty. For the most part, land around the built-up area was held in large parcels and, through the Planning Commission, further subdivision was prevented except where services were available.

The total annual land need was not expected to exceed 30 to 50 acres per year for the first few years because of the desirability of encouraging "in-filling". In the event that a speculator or builder should get possession of, say, the first 100 acres of the 500 acres to be served by the initial major sewer (costing about $350,000), he could monopolize the entire market in serviced lots for several years or force the city into leap-frogging or constructing a second trunk line. Any one of these alternatives was considered contrary to orderly and economic development.

It was therefore decided the city should acquire quietly, as opportunity arose and finances permitted, certain strategic lands on the fringes. Where possible, it obtained long-term options on large tracts of land in the logical direction of development.

In the negotiations for these lands, the city had one trump card—the trunk services had not been laid. There were several choices as to which areas to service within the 20-year period under study and several alternatives as to the order of constructing major trunks. This created a competitive spirit amongst the land owners to sell or option land. The city's negotiators pointed out that development would go where land and service costs were most economical. All lands have been acquired by negotiation.

The land position was under control before the planning and engineering reports were finalized by Council. This, therefore, was the final cornerstone of the policy for expansion:

Red Deer shall, wherever possible, acquire the land for residential and industrial expansion to ensure the orderly and economic development of such lands in the interest of its citizens.

Now that the areas to be serviced were established, the order of development determined to a large extent and the fact that the city either owns or holds under option strategically-situated lands in relation to future development, the process of development in each area follow this approximate pattern:

1. One to five years in advance of need, city acquires land or options on land.
2. Subdivision is designed by district planning staff based on engineers' preliminary design for trunk services for 40,000 population and existing contour maps and photographs.
3. Design is forwarded to consulting engineers for comment, checking and suggested revisions.
4. Subdivision design completed and submitted to City Engineer and Council for approval.
5. Survey contracted out and engineers prepare detailed designs and estimates for all services, ready for calling tenders.
6. Tenders received for work, usually from 10 to 18 contractors, and contracts awarded.
7. Supervision by consulting engineers under overall direction of City Engineer.
8. Serviced lots made available to individuals for two weeks on first-come, first-served basis.
9. Balance of lots made available to house-building contractors.

It should be noted that, while subdivision and engineering designs are prepared for 150 to 200 acres at a time, only those lands required within a 12 to 18-month period are actually subdivided and serviced

at any one time.

In respect to the above points eight and nine and the sale policies of the city, some comments should be made. The sale price of the lots is based on the following costs and policies:

1. If the city constructs a $300,000 sanitary sewer through the built-up area to the edge of a 500-acre site to be serviced, each acre contributes $600 towards this trunk sewer or about $200 per lot. The same principle applies to the trunk storm sewers and any arterial roads and major thoroughfares on the perimeter or running through a subdivision. It has been found that the cost of these three "off-site" services amounts to approximately $7.50 per foot of assessable frontage and this is included in the sale price of each lot.

2. The sale price of each serviced lot includes a share of all services in the subdivision, including the provision of land and services for school sites and playgrounds—about 10% of the gross area. The total cost of services amounts to about $36.50 per foot of assessable frontage—there are no flankage charges. This cost or charge includes paved roads; concrete curbs; gutters and sidewalks; underground wiring for power, telephone and street lights; sanitary and storm sewers; water mains; mercury-vapour street lights on steel poles; gravelled lanes; and utility connections to property line. It includes all engineers' fees for design and supervision.

3. Land and survey costs amount to from $5 to $10 per foot, bringing the total price for off-site services, on-site services and land to about $50 to $55 per foot of assessable frontage. These prices have not changed in five years.

4. Not more than 10% of the lots made available by the city are purchased directly by individuals. The balance is acquired by house-building contractors on the following terms: one-third down, one-third in four months; and the balance in eight months with a provision that the entire price must be fully paid up before a building permit is issued.

5. All licensed house builders are invited to attend a meeting at which the lots are distributed. Their names are placed in a hat and each builder draws for his priority of selection. Lots can usually be selected from five to ten at a time, depending on how many are available. The builder who draws first choice picks five lots and then the second builder picks his five and so on until all have obtained an equal number. The selection then goes around again and gradually the smaller builders drop out followed by the larger until all are satisfied. This avoids a project appearance to the development and gives all builders an equal chance of a share in the best lots. Some difficulties have been experienced by builders wanting to arrange groupings of houses and this is a problem that has not yet been resolved.

6. Each purchaser of a lot is required to start construction within 12 months. The city holds the title and does not dispose of it until the approved lender makes assurance that a mortgage is arranged and completion of the building is guaranteed. If the building is not started on time, money is refunded less a penalty and transfers are not permitted until buildings are completed.

7. When disposing of multiple-family or shopping centre sites, it has been the policy to establish a sale price which is very attractive to developers and to allocate such sites on the basis of the best development proposal. This has produced a competitive effort towards quality.

With minor modifications and requirements, the plan, policies and procedures for expansion have been followed since 1956 and these benefits are now becoming clear:

1. The city now services some 300 lots a year at a cost of about $900,000 per annum. This sum is recovered within 12 months in cash and is reinvested the following year in more land and services. Expansion, therefore, does not involve any city borrowing.

2. At the time of the NHA construction, the capital cost of the installation of services is recognized by Central Mortgage and Housing Corporation and in the determination of lending value. Using the same ratios, which are made establishing insurable loan amounts for housing indicates that from 70% to 95% of the cost of services is financed by approved lenders on a long-term basis rather than by the city.

3. Owing to the fact that all contractors build at the same time in the two areas the city develops, all competition is concentrated on providing the best house for the money. The purchaser has a choice of homes built by 10 to 15 builders in each area.

4. The builders are happy with the arrangement as they do not have to tie up capital in land or services and they are assured of adequate serviced lots at no greater price than is paid by their competitor.

5. By city ownership of the land, more generous open space, parks and school sites can be provided and generally the opportunity for improved design layout cannot be underestimated.

In this connection it might be noted that the Council has, for the time being, been persuaded of the advantages of "integrated" neighborhoods containing as great a variety of housing types as the total city market will absorb. Apartments, row houses for sale and limited-dividend rental projects are found in the same neighborhood as luxury homes. It is, of course, necessary to site such developments within a neighborhood with care and the quality of such developments can change the public attitude one way or the other very quickly.

6. Through the city's large land holdings, 150 to 200 acres can be designed at a time and it is proving possible to bring about many desirable innovations which could not be achieved by regulation or by-law.

7. There seems little doubt that when the city does reach 40,000, it will have one of the most efficient and economical systems of services which could be devised.

8. Land speculation in the residential field has been virtually eliminated.

9. The growth has now engulfed almost all the earlier fringe areas and a clear line defines the boundary between the built-up, serviced urban community and the surrounding farm land.

10. Land is not out of agricultural use until needed for servicing and concentrated urban development.

11. The borrowing power of the city is now concentrated on improving the standards of services in the old areas and on other major public projects. In 1962 Red Deer built, for $230,000, the first stage of a $600,000 Recreation Centre. The design of this building was the subject of a competition open to the four western provinces. This year construction has started on the new $800,000 City Hall—the first building of a complete Civic Centre, the design for which was the subject of an all Canadian competition.

The land development policies have eliminated residential land speculation and also private development and it may neither be possible nor desirable to maintain this situation indefinitely. There is little doubt, however, that the critical situation of city services in 1953 necessitated drastic action and since then, the exceptionally rapid growth has seemed to justify the action taken.

No doubt greater things could have been done with the opportunities offered and greater controls could have been imposed on house types, groupings and on the design and finish of multiple-family projects. But the individuality of developments makes it clear that in each neighborhood, while its roads and land uses have been designed or planned, the builder has had a free hand in designing and grouping his buildings.

There is, however, substantial evidence that if growth continues at the anticipated rate and the present policies are continued, the City of Red Deer will compare very favorably with any other city of its size in Canada, insofar as its environment, amenities and tax structure are concerned. In fact, it is a very good place in which to live! ✦✦✦

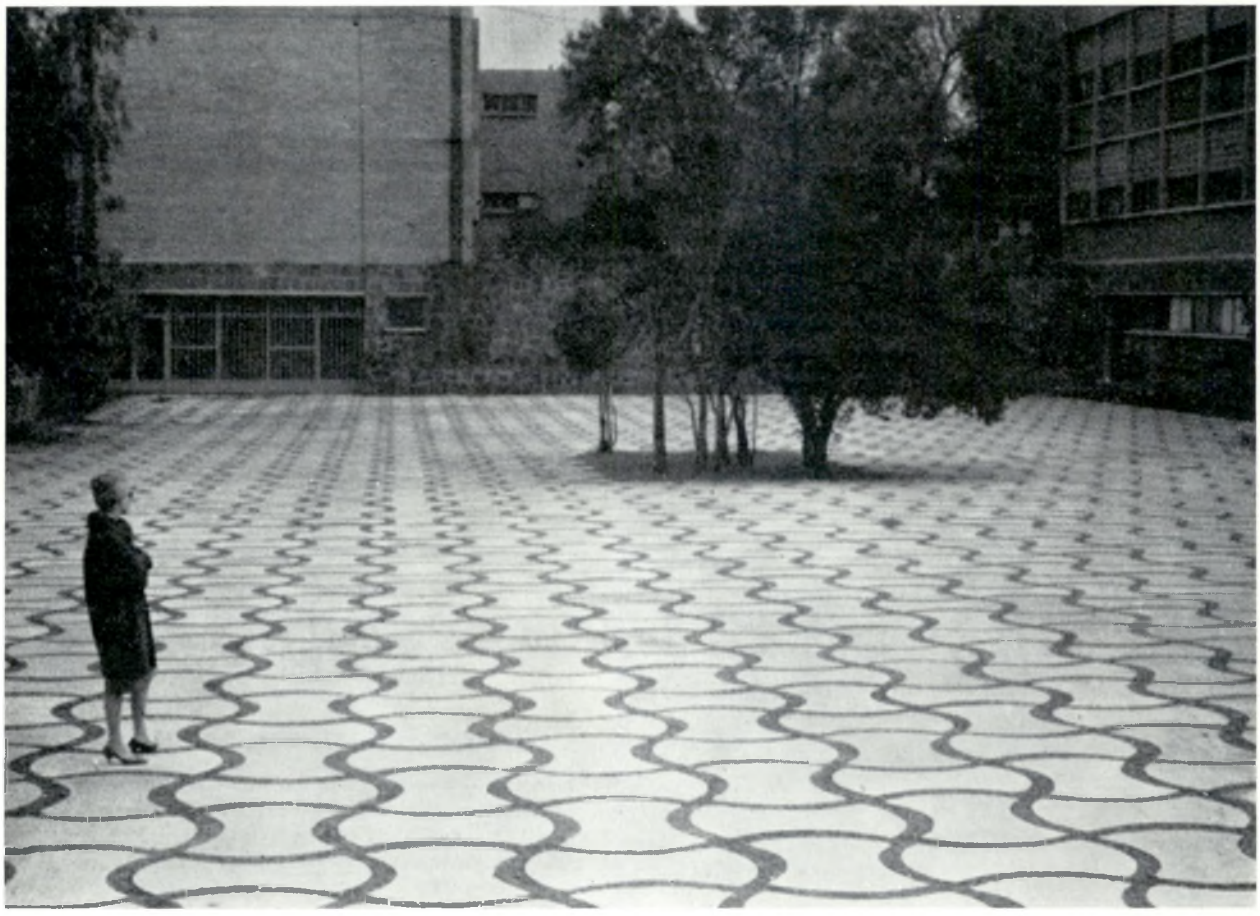
Mr. Cole was born in London, England and educated at St. Michael's and King's College in that city. He was employed by John D. Ward Co., Chartered Surveyors and Land Agents, where he began his career in land subdivision and planning. After joining H.M. Forces in 1940, he was seconded to the position of Resident Agent, Haifa Harbor Estate—working with the Jews and Arabs in the reclamation of land from the sea for the construction of an oil terminal. After the war he remained in the Near East and worked for the Iraq Petroleum Company Ltd. for whom he travelled extensively, co-ordinating plans for the development of new towns for the staff. In 1952 he emigrated to Canada and was engaged as a planner in Calgary. He is now the Director of the Red Deer Planning Commission. Mr. Cole is an Associate Member Royal Institute of Chartered Surveyors and a Council Member Town Planning Institute of Canada.

Commentaires sur la Planification Urbaine Élémentaire

par L. A. Dernoi

Nous célébrerons dans 3 ans et demi à peine, en 1967, le centenaire du Canada, et pourtant les municipalités n'ont encore fait que peu d'efforts pour assurer qu'un tel évènement soit célébré et commémoré dignement. Les personnes immédiatement et officiellement chargées des préparatifs en vue de cet anniversaire sont apparemment indécises et à la recherche d'idées et de conseils originaux et bien formulés.

L'une des méthodes les meilleures et les plus efficaces serait sans doute de créer une atmosphère urbaine nouvelle, attrayante et plus prospère. Une telle réalisation constituerait plus qu'un avantage superficiel; en effet, toute amélioration urbaine aurait un caractère permanent et servirait à inspirer constamment les citoyens d'une collectivité à poursuivre leur action civique.



Trottoirs en mosaïque, Université de Mexico.

Le but du présent article est d'exposer quelques-unes des suggestions les plus plausibles et les plus faciles à réaliser sur le plan national, en ayant recours à la collaboration conjointe des municipalités et des autres niveaux de gouvernement.

La planification urbaine, qui touche en même temps à l'architecture et à l'urbanisme a été, jusqu'à tout récemment, quelque peu négligée. Cependant, entre autres efforts, le rapport publié récemment (février 1963) du "A.-I.-P. Planning Policy Committee on Urban Design Methods" laisse entrevoir un réveil d'intérêt pour la planification urbaine comme telle. Cela se reflète par le fait qu'un comité spécial de travail a consacré plusieurs années à examiner et à étudier ce problème. Cet intérêt et l'amélioration de l'apparence esthétique générale de la cité dans son ensemble ont progressé au delà du simple mouvement en faveur de l'embellissement des cités et des projets réels de renouveau urbain.

D'après les données du rapport précité, les buts de la planification urbaine sont les suivants:

(1) *Différenciation*—Rendre les aires urbaines et les éléments urbains distincts et vivants (l'élément d'agrément).

(2) *Structure*—Faciliter les rapports fonctionnels entre les éléments urbains (l'élément fonctionnel).

(3) *Pleine signification*—Expliquer la fonction et les objectifs de l'aire urbaine et de ses éléments constituants (l'élément idéologique).

Tel est en soi le but et la potentialité de la planification urbaine. On considère à plus juste titre que tout complément à ceci fait partie de l'activité d'aménagement d'une cité.

Le présent article énonce les possibilités de réaliser de la planification urbaine "sur une petite échelle" et une présentation de méthodes à mettre en oeuvre pour reformer, redécorer et rajeunir notre voisinage urbain qui, trop souvent, s'est enlaidi au cours des années. Le genre d'action proposé varie suivant le degré de changement et de modification qu'il est nécessaire d'apporter aux bâtiments existants et aux propriétés privées.

On peut se servir de trois méthodes différentes pour s'attaquer à notre voisinage urbain détérioré.

En premier lieu, la triple méthode de répartition, d'après les éléments d'agrément, de fonction et d'idéologie de la planification urbaine. Quelque logique et attrayant que cela puisse être, il ne s'agit que d'un concept purement théorique qui présente des désavantages pratiques sérieux lorsqu'on s'efforce de le réaliser tel quel dans une cité existante.

La première alternative représente, et est sans doute, l'autre extrême; les améliorations dans les groupements des propriétés suivant qu'il s'agit de propriétés privées ou publiques. L'une ou l'autre méthode, tout en étant réalisable des points de vue juridique et administratif, peut immédiatement présenter des difficultés financières. De même, si on utilise la seconde méthode, certains projets seraient privés de l'aide complémentaire de l'autre groupe.

En présentant une deuxième alternative, je me suis efforcé de concevoir une séquence dans le travail de planification à entreprendre, qui ne nécessiterait que de premiers engagements financiers peu élevés et une action juridique relativement simple. Cette alternative ne comprendrait que des modifications peu importantes de la charpente, dont le coût pourrait être payé par des sommes prévues à cette fin aux trois niveaux de gouvernement ou par des propriétaires particuliers influencés par la Chambre de commerce ou d'autres organismes publics avec l'aide de divers adoucissements de taxes.

1. TRAITEMENT DE SURFACE (VISUEL) DES ÉLÉMENTS CONSTITUANTS D'UN VOISINAGE URBAIN

Il est possible de faire une différenciation entre le travail entrepris au sujet de bâtiments qui sont:

(a) la propriété du public et, incidemment moins dispendieux et;

(b) des propriétés privées et de nature à être remises en état.

Cependant, il devrait incomber à la municipalité de s'occuper de ces dernières, ne serait-ce que pour assurer une certaine coordination.

(*a*) *Propriétés publiques*

Une définition simple de ce terme, bien qu'il soit généralement employé dans un sens plus restreint,

serait "le mobilier de la rue" qui peut comprendre d'autres éléments en plus des poteaux, des ponceaux, des boîtes aux lettres, des lampadaires habituels, etc. Les rues étroites, que l'on trouve dans la grande majorité de nos cités à cause de leur extrême longueur habituelle, ne permettent pas de déterminer et de comprendre les éléments qui les composent et manquent ainsi d'un moyen d'identifier les secteurs qui les constituent.

Afin d'aider à résoudre ce problème, on pourrait introduire une interruption matérielle dans la continuité pour contribuer à une subdivision visuelle d'un élément de planification à deux ou trois dimensions appliqué perpendiculairement à l'axe de la rue. Certains éléments d'embellissement du décor comme des arbres, des haies, des boîtes à plantes, des pots de fleurs, etc, contribuent efficacement à réaliser cette interruption de la vue. Le "mobilier de la rue" traditionnel, comme les poteaux, les lampadaires, les bancs, les boîtes aux lettres, etc, peut aussi être groupé de façon à former une barrière visuelle pour une certaine portion de la rue. Le traitement du pavé et du trottoir peut aussi faire fonction d'élément décoratif, subdiviseur ou circulatoire.

(*b*) *Propriétés privées*

Ce genre d'embellissement visuel relève des particuliers et pourrait être décrit comme "l'embellissement des façades".

Une partie intrinsèque de cet embellissement comprend le nettoyage, la réparation et la redécoration des façades de rues. Cette action doit être pleinement coordonnée et nécessiterait les services d'un dessinateur ou d'un groupe de dessinateurs qui s'occupent d'agencements de couleurs, de motifs décoratifs, etc. On pourrait introduire un certain rythme dans ce nouveau plan ou motif et, par un traitement spécial, on pourrait faire ressortir en particulier des bâtiments plus importants des points de vue historique et architectural. De plus, lorsque des bâtiments ont une valeur historique ou esthétique particulière, toute leur élévation donnant sur la rue devrait être libre d'enseignes et/ou de rajouts de structure qui déparent la façade originale.

2. "CHIRURGIE" DES ÉLÉMENTS INTERNES QUI COMPOSENT L'ASPECT D'UNE VILLE

Bien que les modifications mentionnées ci-après entraînent une certaine modification de la charpente des bâtiments, elles ne nécessitent pas de modifications fondamentales à ces mêmes charpentes.

Il faudrait en tout premier lieu songer à un traitement qui enlèverait de la vue du public ces affreux escaliers de sauvetage. On pourrait songer à employer plusieurs méthodes pour dissimuler ces hideux restes d'habitudes et de règlements de construction démodés et périmés. Ces méthodes varieraient nécessairement d'après la durée possible du bâtiment en question.

Une autre caractéristique dont le coût resterait modéré serait l'introduction de trottoirs recouverts dans les endroits où, pour des raisons de plan ils s'avéreraient nécessaires ou avantageux. Les rues commerciales et les rues très fréquentées par les piétons pourraient s'accommoder avantageusement de cet élément attrayant de planification civique (voir les nouveaux centres commerciaux). En plus de l'aspect utilitaire, ces trottoirs se révèlent un moyen pratique d'unifier les façades de rues en raccordant visuellement les bâtiments et en faisant ressortir les constructions d'une certaine importance.

Une alternative quelque peu plus dispendieuse mais plus agréable est l'utilisation des "loggias" sous les bâtiments existants. Cette méthode est d'un usage très répandu en Europe; elle est employée occasionnellement aussi sur notre continent (e.g. Chicago), particulièrement lorsque le besoin d'élargir le pavage pour la circulation des véhicules a nécessité l'installation de nouveaux trottoirs sous le bâtiments existants, sur un côté ou sur les deux côtés de la rue. Une telle mesure résulterait en une série de "loggias" successives le long d'une rue—comme dans l'Italie de la Renaissance.

Naturellement une telle amélioration entraîne une dépense considérable non seulement à cause des modifications structurales auxquelles elle donne lieu, mais aussi à cause des compensations à payer aux propriétaires pour l'aire de parquet qu'ils perdent, etc. De plus, les difficultés techniques que présentent les

Le concept du mail peut redonner de la vitalité
aux quartiers du centre de la ville.

différents niveaux de plancher et les hauteurs intérieures nécessitent une étude soignée avant l'exécution d'une telle amélioration.

Néanmoins, l'introduction de ces "loggias" sur la scène urbaine canadienne présente des avantages esthétiques et pratiques considérables, si on considère la quantité de neige qui tombe au cours des mois d'hiver ainsi que les pluies torrentielles et le soleil brûlant en été.

Les améliorations ne se limitent pas cependant au niveau de la rue seulement. L'alignement de la façade supérieure des bâtiments peut devenir très monotone et est souvent déparée par des affiches de mauvais goût, des panneaux-réclames et des monstruosités éclairées au néon. Il existe plusieurs méthodes pour remédier à l'aspect désagréable que présentent souvent les murs d'étages supérieurs. Lorsque la charpente d'un bâtiment et une revision des règlements le permettent, il est possible de prolonger une pièce dans la partie supérieure de la rue. Cette méthode serait très certainement bien accueillie par les occupants des étages supérieurs qui s'opposent rarement à l'agrandissement de l'espace habitable à l'étage.

L'alternative opposée, mais moins dispendieuse, peut nécessiter une certaine perte d'espace. Il s'agit de l'introduction de "loggias" semi-fermées à l'étage supérieur, qui contribueraient à donner un nouvel alignement à l'apparence de la façade de la rue.

3. TRANSFORMATION MAJEURE DANS LA COMPOSITION DE LA RUE

De telles transformations comprennent des modifications importantes dans la charpente même des bâtiments existants. Ces modifications ne s'appliquent pas à toute la rue ni même à tout un îlot à la fois, mais elles peuvent être réalisées à l'occasion, lorsque de telles mesures sont désirables à cause de certaines considérations structurales, esthétiques ou financières.

(a) Les premières méthodes correspondraient fondamentalement aux idées exprimées au chapitre précédent—à savoir, le rajeunissement et la création d'un intérêt par l'introduction d'interruptions à la continuité de la rue dans les rues de la cité.

Ce qui serait plus efficace encore serait de joindre au-dessus d'une rue les étages supérieurs de bâtiments opposés. Une telle mesure contribue non seulement à briser la monotonie de la vue sur une rue beaucoup trop longue et à augmenter l'aire de parquet habitable, mais elle a aussi l'avantage très pratique de former un coupe-vent dans les mois d'hiver. Cette méthode était d'un usage très répandu dans les cité historiques du monde entier.

Une autre méthode de modifier la coupe transversale de la rue consiste à créer des places de diverses grandeurs à des endroits convenables du point de vue esthétique, le long de la rue; ces endroits peuvent être choisis sur un côté ou sur les deux côtés de la rue. Certains exemples historiques sont la preuve de la valeur d'un tel arrangement. Contrairement à la croyance populaire, ce genre d'aménagement ne nécessite pas toujours des dépenses très considérables; en maintes occasions de vieux bâtiments ou des parties de vieux bâtiments qui sont dans un état de détérioration peuvent être expropriés et démolis ou on peut utiliser un terrain de stationnement désagréable à voir. En dehors des qualités esthétiques d'une place, celle-ci offre des avantages financiers considérables. Elle contribue à augmenter considérablement la façade des boutiques et l'expérience prouve que le public préfère faire des emplettes sans être exposé à la bousculade créée par la circulation dans les rues.

Il est possible de réaliser un jeu d'élévation semblable mais un effet différent, lorsqu'on a des limites de terrain irrégulières, où la ligne initiale de lotissement, un nouveau mur de façade (ou devanture de magasin) peut être introduite perpendiculairement au mur latéral. Cette nouvelle façade, située à un certain angle par rapport à la limite de la rue, en plus de constituer un espace tranquille, retiré près des devantures de magasins mêmes, contribue par son irrégularité à raviver l'aspect visuel de la rue.

(b) D'autres travaux comprenant des modifications importantes aux charpentes ne sont pas seulement une tentative pour réaliser un heureux changement dans l'apparence monotone de la rue, mais ils sont une tentative de supprimer ou d'améliorer des

Les passages aériens brisent la monotonie des lignes dans une rue.

défauts indésirables et souvent grossiers qui se rencontrent dans un voisinage urbain.

Cela comprend les différences dans les lignes de toit, d'avant-toit et de corniche, qui sont désagréables à voir et trop visibles. Cependant, cela ne s'applique pas à la grande différence de hauteur que présentent des bâtiments très élevés situés à côté d'autres bâtiments plus bas et plus vieux. Le problème existe plutôt là où des bâtiments sont à peu près de même hauteur ou, tout au plus, présentent une différence d'un ou deux étages. Dans ces cas, un traitement approprié du pignon exposé ou de la construction du toit du bâtiment moins élevé pourrait fournir une solution simple. Cependant, dans un certain nombre de cas, particulièrement lorsqu'on se trouve en face d'une grande différence verticale entre les deux lignes de toit, la méthode la plus dispendieuse qui consiste à ajouter un étage ou à remanier la ligne du toit est la seule méthode heureuse.

Les lots vacants qui sont habituellement utilisés pour le stationnement contribuent à enlaidir l'aspect général d'une rue. Plusieurs mesures peuvent être prises pour améliorer l'apparence de ces terrains, e.g. la construction de clôtures décoratives, l'embellissement du terrain, etc. Cependant, cela se fait rarement étant donné l'absence de règlements municipaux pertinents. Néanmoins, non seulement des terrains de ce genre sont-ils un élément désagréable de la scène urbaine du point de vue esthétique, mais ils représentent aussi une perte sérieuse de revenu pour la municipalité vu que l'imposition sur la valeur de l'emplacement n'est en général pas encore acceptée et que les terrains vacants qui ont une certaine valeur au centre des villes ne rapportent que très peu de

taxes d'améliorations.

(c) Une caractéristique, qui est radicalement différente de ce qui précède mérite toutefois d'être mentionnée dans ce chapitre. La différence consiste essentiellement dans le fait qu'on ne peut présentement pas l'observer de la rue même. Cette caractéristique se trouve dans les cours intérieures ou les cours arrière des plus grands édifices. Ce genre de construction est maintenant désuet. La cour intérieure ou la cour arrière, souvent sombre, est dans la plupart des cas dans un état de négligence lamentable. Le projet qui consiste à utiliser ces restes de pratiques de construction démodées n'est pas nouveau. L'ouverture de ces cours sur au moins deux côtés pourrait créer une place publique intime qui se prêterait bien à l'établissement de nouvelles boutiques, de restaurants, de bureaux, etc., dans l'élévation intérieure ou arrière autrefois inutile. Cet espace pourrait, si on le désire, être recouvert d'un toit de verre au-dessus du premier étage, ce qui fournirait encore plus de moyens variés possibles de l'utiliser. En Europe, on fait un usage fréquent d'aménagements de ce genre et on peut même trouver sur notre continent des réalisations quelque peu semblables (e.g. Edifice Dominion Square, Montréal).

L'élargissement de notre champ de recherches à d'autres caractéristiques de planification urbaine empiète en réalité sur ce qui est à proprement parler du réaménagement urbain et d'autres aspects de l'aménagement des cités. Comme exemple de ce qui pourrait être accompli dans ces derniers domaines pour améliorer la planification urbaine, considérons le problème toujours actuel des ruelles, qui, en raison de leur pourcentage élevé par rapport aux servitudes de rues, ont une très grande importance. Il faudrait reviser leur utilisation actuelle, qui sont le chargement et le déchargement des marchandises, les voies d'accès, les entrées de garages, etc.; toutefois, il faut aussi trouver une alternative pour assurer les mêmes services.

Une solution plausible qui constituerait une compensation supplémentaire pour les propriétaires, des pertes d'espace de parquet (subies e.g. par suite de la réalisation de recommandations faites antérieurement dans la présente étude) serait la transformation de certaines ruelles en promenades publiques toutes faites pour les piétons qui courent les magasins; cela permettrait d'ouvrir les locaux arrière des bâtiments existants comme les magasins, bureaux, etc.

Le problème des ruelles qui existent dans nos cités, un aspect désagréable du voisinage urbain contemporain, pourrait être en soi un thème tout désigné pour un programme d'étude, de recherche et d'action.

Un autre projet majeur du même genre serait le problème de la circulation des piétons au coeur même de la métropole. Un système de voies à piétons à des niveaux différents offrirait une solution, comme cela se fait dans certaines grandes cités, dans d'autres parties du monde.

Ces projets d'embellissement et d'amélioration des villes peuvent paraître d'une importance minime en comparaison des vastes programmes de réaménagement. Toutefois, si on les emploie à bon escient, leur résultat d'ensemble en ce qui concerne l'apparence et l'agrément d'une cité, pourrait, à beaucoup moins de frais, être plus efficace que le fait de remédier à la situation qui existe dans certains quartiers isolés et détériorés faisant partie du contexte urbain. Il y a lieu, toutefois, de faire de la publicité sur une grande échelle et même de la propagande, pour obtenir une telle action collective et la pleine collaboration de toutes les sociétés et associations professionnelles, sociales et même religieuses.

Monsieur Louis Dernoi, M.I.U.C. et A.M.A.I.P., naquit à Budapest, Hongerie, en 1925, et reçut son diplôme en architecture de l'Université des Sciences des cette cité, en 1948. Il fit ensuite des études postscolaires à l'Académie hongroise des arts et des sciences, de 1953 à 1956. Après avoir quitté la Hongrie en 1956, il participa à des travaux de recherche en aménagement communautaire, en Tchécoslovaquie et en Italie. En 1957, il immigra au Canada. Il suivit des cours postscolaires sur le logement et l'urbanisme à l'Université McGill, de 1959 à 1960. Après avoir travaillé comme architecte-urbaniste, pour le compte de la ville de Beaconsfield et de la SCHL à Ottawa et à Montréal, il ouvrit, en 1961, son propre bureau d'urbanisme. Il publia aussi un certain nombre d'ouvrages sur le logement en Hongrie, en Italie et au Canada.

CENTRAL MORTGAGE AND HOUSING CORPORATION
SOCIÉTÉ CENTRALE D'HYPOTHÈQUES ET DE LOGEMENT
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FRONT COVER: *The cover is a sketch of the Heatherington Farm in the Gatineau by Phyllis Lee.*

INSIDE COVER *is a detailed shot of the same barn, by the Editor, through the eye of a camera.*

THE DELOS SYMPOSION

For many years the Athens Technological Institute has wished for a meeting which would bring together people from different countries, professions, disciplines, and positions (government, private and academic). It was the particular dream and vision of Dr. C. A. Doxiadis, architect, planner, engineer, teacher and practitioner of his self-coined word Ekistics, the science of human settlement. The forum would give the participants the opportunity for a free, relaxed and easy exchange of talks and ideas like a Greek symposion rather than the Latin symposium which has come to mean an official gathering.

The Delos Symposion was convened in Athens on July 1, 1963 and was attended by 34 unofficial representatives of 14 countries. The Symposion was held on the Steamship New Hellas which, during the 14-day period of discussions, cruised the Greek Archipelago where the whole of our modern technical and scientific civilization originated.

The principal discussions centered on the critical situation which has been reached in the problems of world settlements particularly in relation to the population which will very probably reach 6,500 to 7,000 million by the year 2,000 and in excess of 18,000 in a hundred years' time. And the population of urban centers has been increasing at an even higher rate than that of the world. In the 19th Century it was 2%; it is now between 4 and 5%.

It is interesting to note that although crisis appears in many of the deliberations of the Symposion and the word has come to mean in English danger and doom; in the Chinese it is both danger and opportunity and in Greek (krisis) it is danger, challenge, opportunity and response. It was in this atmosphere of a belief in the human will and capacity to respond to challenge that the discussions took place.

The Delos Symposion is hoped to be the first of similar world-wide meetings and was not in itself intended to resolve the tremendous problem of human settlement but from it has come the Declaration of Delos which can be found on Page 10.

✦ ✦ ✦

PLACES ON THE WAY

by Humphrey Carver

A certain amount of ingenuity is required to hang up your drip-dry shirt overnight in Amsterdam, London, Copenhagen, Glasgow or in an English inn. All sorts of ingenious rigs may be set up in the bathroom; and, in England, a bathroom to yourself is still not a reasonable expectation. But in Stockholm things are different. I found a nylon cord stretched above the bath-tub, several nylon hangers threaded on the cord and a packet of special soap provided for washing your drip-dry garments. This meticulous forethought and practical view of living is a well-known talent of the Swedes, in their design for housekeeping and in their city planning. Such solicitous care does, of course, remove some of the daily challenge to ingenuity in discovering how to hang up a shirt—and how to deal with the usual inefficiencies of cities. Is life more interesting if someone else solves all your problems?

I was looking for the city-planning department in a building just near Stockholm's famous Town Hall and on a handsome spiral staircase accosted an energetic planner-architect, the very man (as I then discovered) who actually sets out the four corner positions for every building in Stockholm. There are immaculate chalk-white models of the future residential sectors of the city, the position, level and accommodation of every building precisely established. Whoever the builder may be, whether private enterprise, public authority or co-operative association, all must conform with the planners' prescription, give-or-take a little compromise. It should be noted that this discipline is partly an aspect of the Swedish character, partly a reflection of racial homogeniety (in the Stockholm telephone book I counted 42 pages of the name Johanson in various spellings), but also partly due to the character of the topography. Stockholm is built on a rugged rock formation (not unlike the Canadian Shield country) with many lakes and inlets of the sea; without rigorous controls it is extremely difficult to arrange a metropolitan city on such a site. The result is a spectacular success in the case, for instance, of Hasselby Strand. This is the last station on one of Stockholm's suburban subway lines, out beyond Vallingby. By the station is a pleasant little shopping center, the school, kindergarten, clinic and so on, with tower apartments on the pinnacles of bare rock and long shelves of housing following the lower contours of a basin of land that surrounds a delightful boat harbor, bristling with the masts of small yachts. It is an idyllic piece of city building.

Things are very different in the suburbs of Copenhagen. The land is flat, and there are a number of municipalities in the metropolitan area. There is neither the common will nor the topographical necessity to achieve any disciplined purpose and consequently there is the kind of lusty disarray to be found in Canadian suburbs. In fact the contradictions are even stronger. Here are some of the largest, bleakest and most recklessly inhuman apartment blocks to be seen in any modern city. And, nearby, some of the sweetest, gentlest and most domestic architecture to be found this side of the 17th century village; low man-sized roofs clustered under the trees, open spaces of mown

grass. Some of this is the work of the distinguished Danish Architect Arne Jacobsen. It is not surprising that when Oxford University sought an architect for the new St. Catherine's College in that ancient city, Jacobsen was chosen. The original Oxford quadrangles were closely akin to the country-house and garden and perhaps Jacobsen seemed nearer to this in spirit than English architects who have been haunted by collegiate gothic and the dilemmas of modern design.

I went to see the unfinished Oxford college which is near the corner of Long Wall and Holywell Street, in the meadows by the Cherwell and I am not sure that Jacobsen's spirit survived the move from Denmark. My companion on that occasion, looked at the long, low two-storey buildings with rows of undergraduates' cubicles each with glass wall and identical equipment for sleeping and working and he observed that this was a kind of cellular system for mass-producing scholars; extruded mechanically and fed upon the honey of Oxford. But it is too early to judge this work for the trees and the gardens are not yet there.

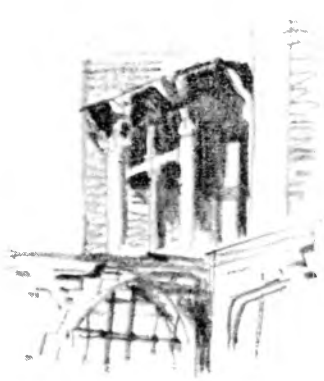
One cannot re-visit England and Western Europe without being deeply impressed by the genius of the 17th century. Could anything be more exquisite than the stone manor-houses of the Cotswolds and Dorset? Their playful roofs and gables, their kindly windows, the quiet terrace gardens and the Jacobean family monuments in the church on the other side of the road. And how quickly the prosperous merchants of 17th century Europe discovered a way to make comfortable cities and towns!

Lewis Mumford has recently called our attention to Amsterdam as a city of wonderfully consistent design. The silent placid canals, instead of noisy streets. The tall dignified rows of four-storey houses side by side, each with a gable of individual shape and a hook-and-pulley at the ridge for raising loads to each floor level. Each with a shop or office at ground level and, above, a comfortable place to live. The plan of the city works like magic as long as the Dutch are willing to speed to and from their work on bicycles, pedalling hard to surmount each little canal bridge and spinning down the other slope with coat-tails flying. The bicycles are mostly black and rusty because the Dutch haven't bothered, like us, to think of a vehicle as a status symbol. The scene is still the 17th century, but the kiss of death is already upon it, for the narrow stone-paved streets between the houses and the canals are already choked with parked cars, their noses to the water.

And this is still the scene in the University Town of Leyden and in Vermeer's Delft. Surely the handsomest town-houses that have ever been built, with high ceilings for the proud self-confident merchants and wordly travelling men and their families who were depicted by Frans Hals. Black and white for clothes and collars. Black and white for woodwork and walls.

Copenhagen is fortunately able to preserve much of its 17th and 18th century character because it has some wide and stately streets between the King's Palace and the Christianborg Palace of Parliament; restoration and new building is tastefully done behind old façades. But Stockholm, that may well claim to be the most up-to-date city in the world, has cleared out a large part of its

center and is now well on the way to completing a great commercial heartland, putting each type of traffic in its proper place, and at its proper level, all served discreetly by the swift and efficient subway that goes out to Vallingby and Farsta and the other new suburban town-centers. One could not expect that the planners of Stockholm would be as successful in disciplining central commercial enterprise as they have been in controlling the growth of the suburbs and suburban town-centers. But the result can be compared favorably with the rebuilding of central Rotterdam, that has the familiar confusion of a North American city. It should also be compared with the spectacular rebuilding of central Birmingham that displays all the bravura of that earliest of all industrial trading centers, willing to try everything once, whatever shape or size or color or material, a real architectural hotch-potch.

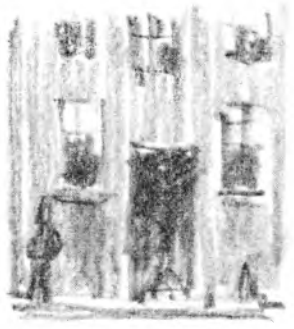


Coventry is to Birmingham as Hamilton is to Toronto, both geographically and industrially speaking. The reconstruction of the blitzed center was, I suppose, the first post-war model for the design of town centers, and for this reason, as well as to view the new Cathedral, this is a place of pilgrimage for everyone interested in such things. It richly deserves this attention and the new hotel in the town center is a good place to stay.

With six other people, a young Canon of the Cathedral and his attendant, I joined in the responsive reading of the Psalms at an early morning matins, in the chapel behind the high altar—and at the foot of the immense tapestry designed by Graham Sutherland. The words seemed to have the awesome simplicity of the stone inscriptions on the walls of the nave. But however you may be impressed by the interior of the new Cathedral, you are most likely to remember the ruins of the old church beside it, and particularly you find yourself thinking about the rough cross that has been made of two charred beams of the roof that was burned on that ghastly night. If you walk around the new shopping center, crowded with teen-agers and families that have come on the jostling two-decker buses, you are likely to contemplate the significance to them of this dreadful recollection.

The Coventry center suffered, perhaps, from being the first of its kind; a noble pioneering experiment as Letchworth and Radburn were for other purposes. It seemed to me to be too ingenious in packing so much into so little space, with its many levels of car-parking and its bridges and upstairs shops. It seemed a pity that the focus is a town square so filled with buses and other traffic that it has to be fenced off and, to cross from the shopping center to the Cathedral precinct, you have to search for the underground passage. And in the middle of the square, defended by the surrounding traffic from indecent intruders, is naked Lady Godiva on her horse. . . . But, let there be no mistake, for those who are interested in cities, Coventry is now one of the great places of the world, because of what has been done there.

The period that created Coventry and Birmingham and the wealth of the Victorian Empire, also created Glasgow, that most awesome of all industrial cities, a special place for Canadians



because so many sailed out of the Clyde on ships that were built on the Clyde. A city of engineers, of unparalleled reputation throughout the world. You may approach Glasgow from the direction of Loch Lomond, from the Campsies in the Scottish mist, from a countryside that is evocative of so much kindly loving family history—and be astonished that this people could have struck a thing of such brutal ugliness out of their hills, such an appalling brownstone monstrosity. The streets of four-storey tenements with their massive bay windows and gray slate roofs are built to engineering standards that are impregnable to almost any kind of disaster or instrument of demolition. It will be a long and fearful job to remove about 100,000 of these overcrowded dwellings and, in their place, only about 40,000 can be put up, with the consequence that about 60,000 Glasgow families must be housed elsewhere—in new towns. It is said that in Glasgow live "the most overcrowded, the worst-housed people in Western Europe", (*The New Statesman* 28 June 1963). "Almost half the city, over 400,000 people, live in single-ends or room-and-kitchens, i.e. one or two-roomed houses". "Only half the houses have a bath. Over a third share a lavatory".

The building of Cumbernauld and East Kilbride are the first creative steps in providing a new way of life for Glasgow. These are the two "New Towns" for the overspill of Glasgow population, comparable with Stevenage, Harlow, Crawley and the other "New Towns" outside London. On a bus it takes about 40 minutes to reach East Kilbride and in the first part of the town that you enter all the streets are named after Canadian cities and provinces. It is a pleasant rolling landscape and the town is laid out in a spacious style, with row-housing and small apartment blocks in cheerful colors, new neighborhood schools and, at the center of the town, a handsome modern shopping center and an impressive group of tall office buildings now being constructed. The newness of the whole place gives it some of the atmosphere of a western Canadian city, though the housing is a fairly orthodox version of British work by local authorities. Glasgow people go out to their new town, for the ride, and obviously admire it.

Cumbernauld, on the other hand, is the scene of an intellectual experiment in town design. The English New Towns, it had seen said, are a bit too much like places on the prairies, too spread out and too uncivilized in their waste of space. Towns should be more urban and compact. So Cumbernauld, that is being built on a long low rise of ground just south of the Campsies, is conceived in the image of a hill-top town, more Mediterranean than Scottish, perhaps with a romantic reference to a mediaeval Basque town with walled fortifications. Instead of streets and rows of fronting houses there are compact clusters of dwellings, some of them looking into little internal patios, with blank walls to the street as in an Arab city. There are walls and paved walks and more walls and interesting little vistas in the lamplight. Apart from the practical intention to get more town on less land the design seems to be dominated by the romantic idea; perhaps it is not particularly Scottish—except for the interesting experiment in the use of heather as a ground cover,

instead of grass. The Town Center, not yet started, is also to be a highly concentrated cluster of shops and civic buildings with buses entering a roofed citadel.

In its intensive use of land and buildings perhaps Cumbernauld will be more like Glasgow than East Kilbride. Will Glasgow people like it the more for this? Or will they prefer the uncivilized spaces of Edmonton Avenue and Calgary Crescent?

From Glasgow, when you have flown south across the border and passed over the austere ridges of the Pennines and barren Yorkshire moors, you are once again looking down on the bright green fields of England and back within the orbit of prosperous Western Europe. Everyone is heading for London. And what a wonderful place it is! Never has London looked gayer. The stucco has been painted and the window boxes are flowering and the front doors have blossomed out in a new range of color schemes. Even my old lodgings near the King's Road, Chelsea, look as bright as a button. The pubs are no longer the refuge of that patient character, the British "working man", but have become the social centers of the new self-confident middle class that emerged out of the war, the proprietor looking like a sporting squire and his wife ("By-by dear") carefully mascara-ed and eye-shadowed.

The new tall buildings in West End London and the large redevelopment projects such as that between Victoria Station and Buckingham Palace (where the brewery used to be) are all impressive evidence of this newly discovered kind of prosperity. Unfortunately, the commercial sponsors have made some pretty nasty blunders in steel and glass; as you approach Westminster Abbey and St. Paul's, on top of a Number 11 bus, the view has been marred by particularly unimaginative non-architecture the authors of which should be committed to a 50-year term in Glasgow.

But the most impressive resurgence of London is not in the West End at all. You have to go into that other London that is across the river and down to the East. Take a swing through Camberwell and Bermondsey to Rotherhithe and through the tunnel into Stepney and Popular. This was the great grimy London of infinite grubby streets and alleys, a million chimney pots in the fog and rain, the home land of the cockney. Bombs destroyed a lot of it 20 years ago. The most impressive aspect of the re-building is the absence of standardization and uniformity in what has been done. There is a surprising freshness of invention and continual variety of arrangement in the planning and design of housing large and small and middlesized; it is not a mass-production job like so much public housing in North American cities but, rather, a series of interesting essays in buildings and spaces. One is not surprised to find a Moore sculpture here and there. Though each of the London boroughs took part in its own reconstruction the undoubted success of the whole vast enterprise is generally attributed to the leadership of the London County Council's architectural and planning staff, in recent years the gathering place of England's most gifted urban designers. The culminating piece in this particular series of projects conducted by the L.C.C. is not, as a matter of fact, in the East End but at Roehampton on the edge of Wimbledon Common. It i

worth noting that Anthony Cox, who was responsible for its design, now heads the Development Group of the Ministry of Housing and Local Government; further developments are awaited with interest.

A comparison might be made between the methods used by the L.C.C. in rebuilding London's East End and the methods used in the development of Stockholm's suburbs. Both are undertakings of great size and high ambition and both are based upon complete governmental control. I think the London work must be regarded as superior because it has admitted a greater freedom for the individual designer, rather than imposed upon him a preconceived detailed plan. Stockholm is too virtuous in pin-pointing the four corners of every new building. There is always the danger, however, that designers will get out of touch with real life when working for a corporate authority and not in immediate communication with the ultimate client: the people who are going to live in the place. There is at least one such transgression in London's East End: a well-known and brilliant architect conceived the idea that the native habitat of cockneys was a narrow echoing alley of rough material and that, since this kind of thing could no longer be built on the ground, it might be stuck up in the air. There are three tall thin buildings tied closely together by a criss-cross of galleries at various floor levels, giving the effect of an open mine-shaft down the middle. Children are not discouraged from scribbling rude messages on the staircase walls and one has the impression that the architect thought he was experimenting with rats, not people. . . . But the work of the L.C.C. is notably free of the indiscretions and eccentricities of those technical and professional autocrats who can be as dangerous in today's society as the imperial autocrats of other times.

Meanwhile the overspill of London's population has been moving out to the New Towns—to Harlow, Stevenage, Crawley and others. And England has gained new fame for the brilliant common-sense of these great public enterprises and much respect for the continuity of its political action in being able to bring the New Towns to completion through a succession of governments. The "Development Corporations" that were created to build each town have now virtually completed their assignments, having each brought into existence a new community with a busy town center, with industries, schools and some of the best housing to be seen anywhere in the world. They are now in the process of transferring local affairs to elected officials of normally constituted municipalities. At the same time they will be surrendering the principal real estate (the housing and industrial sites, etc.) to a new national body, the Commission for the New Towns with its offices in Stag House, one of the large buildings in the redevelopment near Victoria Station.

On a chance call I was fortunate in finding Mr. M. G. Mackenzie, the chief administrative officer in the Commission for the New Towns, who gave me a most coherent view of the next phase in the history of these towns. Though the Development Corporations will go out of business this does not mean that the towns will cease to grow. The original build-up of housing was almost

entirely in the form of family housing with two and three bedrooms and in the next phase it will be necessary to supplement this with housing for the young newly-weds and the old people who will emerge out of the present population. Also in the first phase, there was emphasis on completing the operating parts of each family neighborhood within the towns, their schools and local recreation arrangements. Hereafter it will be necessary to provide the central halls and meeting places that a town-size population will need and also add to the accommodation for professional and other services. So the Commission for the New Towns will not be only an administrator of real estate but also an active building agency in all the new towns. So far only Crawley and Hemel Hempstead have been transferred to the Commission; others will follow shortly. Elsewhere I was told that a separate Commission might be set up for the Scottish new towns.

In exploring the new towns it adds to the interest of the expedition to include Letchworth and Welwyn, for these two Garden Cities are the forerunners without which urban history would have been very different. They lie, respectively north and south of Stevenage, on the main northern exit from London.

Letchworth, the shrine of Ebenezer Howard, with its rather colorless rough-cast houses and unfinished center is somewhat a museum piece. But Welwyn is a fully-mature work of art with some beautiful houses of the between-the-wars period and its whole center now fully completed in a serene and low-keyed style. Its fountain, its gardens, its Georgian brickwork and its long-row vistas make it surely one of the most satisfying places in the world. Perhaps it offers a special pleasure because it is a little out of date in its art-for-art's-sake that first attracted tweedy women and refugees from Bloomsbury. It has already grown its grandfathers and grandchildren who may be seen having tea in the shops at the center of the town. It has successfully resisted the glamor of high-rise buildings and cheap commercial ambitions.

The other new towns are bubbling with modern life. Mothers with perambulators, three or four of them in a group, with pedalling outriders, make their way along the paths from all directions towards the town center, park their perambulators outside the supermarket or go and sit by the fountain in the main square. The shops are new and handsome. The general appearance and convenience of the place is far superior to anything in Canada or the United States. Everyone has the same London accent. So why emigrate? (Perhaps for some people the answer is that, like Stockholm, it's all rather too good to be true. The little houses in a terrace are sweet, but is there something to be said for a big brutal builder's house in Toronto with a big brutal mortgage and the future unknown? How perverse can you get?)

Presumably, there will be more new towns in England and in Scotland, because there is no doubt about the success of those that have already been built. And presumably there will be much restless thought about the changes that should be made. Should they be more compact and urban, like Cumbernauld and like the proposed new town of Hooke that is said to have been suppressed by

"the Establishment"? Should they, in the mood of Britain's present prosperity, offer more room for free enterprise, the single-family house and something more nearly like the suburbs of Toronto? Fortunately I don't have to worry about this and I am free to admit that I am quite disarmed and find the present new towns quite charming and utterly satisfactory. Part of the reason that they are so delightful to the visitor is that they seem to have continued the tradition of the English village and small town, for this above all else is the aspect of England that remains unexcelled. The house rows and solid gable ends, the bricks and creamy colors, the closes and greens and footpaths. Even the occasional square-built point-blocks of apartments are evocative of the solid church-tower to be seen over the roof-tops. And in every neighborhood is the village pub with its picturesque sign. To an observer from another country the source and identity of this image is perhaps clearer than it is to the English themselves. Only the centers of the new towns have broken away from English tradition and are indeed something new and original, with important lessons for Canadian application. My favorite is the rather modest center of Hatfield New Town, forming three sides of a square with a view across a decorative water into the playing fields and the park. Stevenage comes a close second, followed by the suburban town centers of Vallingby and Farsta in Stockholm.

On this occasion, in very pleasant company, I was able to travel along many English country roads and renew acquaintance with many villages and small towns. Branscombe and Beaminster, Burford and Upper Slaughter, Ewelme and Whitchurch Canonicorum. It seemed to me that they were better kept, brighter and economically healthier than they had been before. Along the coast, of course, there is an immense change because of the car-borne city people with their trailers and their tents in thousands; but back from the coast there has been improvement rather than spoiling.

There is, however, one poignant change in the English countryside. That is the plight of the great country-houses and manor-houses that were formerly the foundation of life outside the big cities and the native place of great families since Elizabethan times. Many of them are empty, with closed windows, nettles growing in the drive and the grass tall and rank behind the hedges. Here and there a wealthy man who has made his money in a chemical industry, in betting or in cosmetics has managed to settle in and get the grass cut; but the girls in the village don't want to do housework and his stay will be short and anyway he is out of his element. Here and there a house has been rescued by the National Trust or is to be made into a place for old people. But the truth is that this part of the English establishment is gone forever. There will be no more ladies and gentlemen in the garden; there will be no more records in the parish churches of their sons who died in battle or became Lord Chancellors of England, of their daughters who married well or languished in gentility. This company of people are all as obsolete as the Dodo. But we are haunted by the realization that the empty houses they have left behind are still more beautiful than anything our clumsy generation can contrive, with all its professional skills of planning, of design and management.

Mr. Carver is Chairman of the Advisory Group, Central Mortgage and Housing Corporation.✦✦✦

DECLARATION OF DELOS

MEETING IN DELOS ON THIS, THE TWELFTH DAY OF JULY, 1963, WE THE UNDERSIGNED, DRAWN FROM A WIDE RANGE OF DIFFERENT DISCIPLINES, NATIONS, POLITICAL ALLEGIANCES AND CULTURAL GROUPS, AFFIRM AND DECLARE THAT:

1. The city throughout history, has been the cradle of human civilization and progress. To-day, like every other human institution, it is profoundly involved in the deepest and widest revolution ever to overtake mankind.

2. This revolution proceeds under the sign of dynamic change. In the next forty years, the world's population will rise to seven thousand million. Science and technology determine more and more of the processes of human living. As they advance, man's social behaviour is profoundly modified. These changes present themselves in every field as a danger matched by an even greater opportunity. Man can use atomic power to reduce every human settlement to the shambles of Hiroshima. It may give them enough energy to fulfill all human needs. The world's population may far outstrip its food supply. Even to keep pace, to-day's food production must rise threefold by the year 2000. Yet for the first time, we also have the means of securing enough food for everyone.

3. These paradoxes are widely felt. What is *not* realized is that the failure to adapt human settlements to dynamic change may soon outstrip even disease and starvation as the gravest risk, short of war, facing the human species.

4. A universal feature of the worldwide revolution is the movement of people into urban settlements at an ever faster rate. World population increases by 2 per cent a year, urban population by over 4 per cent. In the next forty years, more urban construction will take place than hitherto in the whole history of man. It is already evident that wrong projections of urban development produce inexcusable waste. No forecasts at all lead to chaos in the cities, to the undermining of civic order and the destruction of precious and diverse historical traditions. The need for the rational and dynamic planning of human settlements both now and in the foreseeable future is thus inherent in the urban situation to-day.

5. Man can act to meet this new crisis. There are sufficient resources for the task. Modern technology permits the mobilization of material means on a wholly new scale. Developed nations spend 150 billion dollars a year on armaments and still their national incomes go up. Billions are spent each year on social services, some of which are made necessary by the inadequacies of urban life. Once a problem is recognized, the resources for meeting it can be found. These resources are not, it is true, uniformly available. Some societies still lack the means for action. But this is not an absolute shortage and while they achieve modernization, their lack can be made good by sustained assistance from more technologically advanced areas.

6. Guide lines for policy are also clearer than ever before, thanks in part to the great extension of systematic studies in human behaviour. The aim must be to produce settlements which satisfy man not only as parent and worker but as learner and artist and citizen. His active participation is essential in framing his own environment. He must be able to use creatively the still unforseen possibilities of advancing technology. Planning itself must ensure that such possibilities are not excluded by a static view of human settlements. Above all, the citizen should feel at ease in his own culture and open to the cultures of others.

7. When we turn to the application of these principles to the problems of urbanization, we feel the

need for the most far-reaching reform and reinforcement of existing institutions and procedures. At present, educational systems at every level have not yet taken sufficient action to meet the new problems of human settlement or to explore the possibilities of meeting them through rational planning. In the universities, the application of the basic sciences to human welfare has been fragmented. They have dealt with parts of man—his health, his nutrition, his education—not with the whole man, not with man in community. Thus, we underline with all possible urgency our belief that in every action of ours, in the agencies dealing with these problems at a national or international level, in the institutions of higher learning, whether public or private, our society requires:

a. to establish in its own right a new discipline of human settlements;

b. to initiate basic research of the most far-reaching kind;

c. to bring together specialists from other relevant disciplines to work together on projects in this field;

d. to work out new methods of training the men who can assume leadership and responsibility in the sphere of action;

e. to attract some of the best young minds into this new area of research, development and practice.

8. We come from different nations, from different cultural backgrounds. Our politics differ, our professions are various. But we believe that the problem of human settlements is a general and fundamental problem in our new dynamic world and that it must be viewed and studied in such a way that it will, in common with all great scientific disciplines, transcend our local differences. We agree that the practical implementation of policy—in such vital fields as land use, the location of investment or the planning of cities over time—will be determined by domestic politics and needs, and as citizens we pledge ourselves to attempt to bring these issues into the active political dialogue of our local societies. But we are not divided in what we wish most strongly to affirm—that we are citizens of a worldwide city, threatened by its own torrential expansion and that at this level our concern and commitment is for man himself.

MR. CHARLES ABRAMS
MR. EDMUND BACON
MR. STEWART BATES
MR. A. K. BROHI
DR. WALTER CHRISTALLER
DR. SHAFIK EL-SADR
DR. O. E. FISCHNICH
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PROF. R. BUCKMINSTER FULLER
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LA RÉNOVATION URBAINE

by Goldyn Sunderland

Dans cet article, nous essaierons de trouver une philosophie de la rénovation urbaine qui a pour point de départ la théorie suivante: la cité ne peut exister sans les citoyens, les aspects physiques et économiques de l'entité urbaine n'ont aucune raison d'être si la communauté n'existe pas; la priorité doit donc être donnée aux considérations humaines et sociales plutôt qu'aux structures physiques et économiques.

La rénovation urbaine est à la mode, il est donc nécessaire, de nos jours, qu'une ville ait un projet de réaménagement urbain pour être considérée à date!

Mais comprenons-nous ce qu'est la rénovation et savons-nous de quelle façon cette opération contribuera au bien-être de la ville? Si nous étions tous d'accord sur la définition d'un taudis, nous aurions une meilleure compréhension des problèmes de réaménagement urbain. Cependant, il est apparent qu'il existe un doute quant à la composition d'un taudis—ingrédient nécessaire pour un projet de réaménagement. Selon l'auteur de ce présent article, un taudis est l'ensemble d'une dégradation considérable physique, économique et sociale qui s'étend sur un secteur résidentiel d'une ville; les édifices délabrés ne sont pas par eux-mêmes des taudis et il nous faut songer profondément aux implications qui découlent de l'appellation de taudis donnée à un secteur particulier.

En fonction de la planification d'un milieu urbain donné, il faut accepter sans question que le but principal est la protection de l'esprit de corps fondamental de ses habitants. La théorie qui veut qu'un fort esprit de corps existe côte à côte avec un mauvais entourage, est à notre sens, bien établie.

L'acceptation de cette théorie et son application comme base d'un traitement pour les vieilles villes nous indiquent la nécessité de questionner sérieusement nos critères actuels sur la démolition des taudis et le relogement de ses habitants.

Il semble qu'en général on ne juge l'existence d'un taudis qu'en se basant sur les conditions physiques des édifices; de cette façon, une simple vue superficielle des rues, des édifices et des espaces compris dans un secteur engendre un premier jugement à l'effet qu'un secteur soit mis à étude pour fins de réaménagement. Si nos soupçons sont confirmés quant aux conditions physiques, notre tendance de prime abord est de préparer un programme de réaménagement qui comprend une démolition et un relogement comportant des inconvénients innombrables sur la vie sociale des habitants actuels.

Il faut considérer quels sont les objectifs du processus de rénovation. Ces objectifs ont pour but 1) la réalisation des importantes politiques de la municipalité à l'égard de l'organisation de son territoire et 2) l'amélioration des conditions de vie des habitants. L'amélioration des conditions de vie peut exiger la construction de maisons nouvelles à telle ou telle distance du secteur à réaménager, ou elle peut être mieux réalisée grâce à la conservation de l'unité de voisinage existante avec une amélioration des conditions de vie des citoyens vivant dans cet entourage.

Dans nos villes plus anciennes la responsabilité de l'équipe composée de l'urbaniste, de l'administrateur et du représentant élu serait de définir les entités sociales que comprend la ville pour s'assurer que les divers projets anticipés ne créeront pas de chaos social. L'exemple classique est la construction d'une artère à circulation très dense qui coupe une paroisse en deux parties. Ceci peut avoir comme effet, non seulement la création d'une barrière physique dans les relations sociales, mais aussi, la diminution de la population à un tel niveau que la paroisse la moins favorisée, du point de vue financier soit en danger de disparaître, de mourir.

Cette diminution de la population résulterait non pas seulement de la diminution de superficie de terrain due à la construction de cette artère, mais également à

l'attraction d'une utilisation commerciale des abords de la rue.

En somme on pourrait dire que cet article est un plaidoyer en faveur d'un nouvel approche aux problèmes de la rénovation où l'accent serait porté tout d'abord sur les problèmes sociaux du secteur et le maintien de son entité comme unité sociale. L'ajustement et la recréation de l'équilibre économique des secteurs, districts ou paroisses et la conservation, la restauration ou le réaménagement de son tissu physique doivent être en sympathie avec l'objectif social poursuivi.

La dignité humaine existe même dans les pires taudis et il est essentiel, en tant que gens civilisés, de tenter de comprendre les problèmes de l'individu dont la vie est dérangée, ébranlée par ces travaux et dont l'environnement familier est dérobé à sa vue.

Un programme poursuivant ces buts devrait prendre en considération:

1) l'identification des unités sociales, de voisinage ou de paroisse;
2) l'étude des effets des programmes municipaux sur la vie communautaire de chacune de ces unités, dans des projets pour voies, métro, grands parcs, zonage, transports, etc. . . .;
3) le maintien de toutes les communications entre le district en cause et les autres parties de la ville;
4) la détermination des effets que la rénovation apportera à la ville comme telle ainsi qu'aux résidants du secteur;
5) la recherche d'une méthode afin de maintenir le complexe humain du secteur pendant les travaux de rénovation qui élèveront les standards de ce secteur à un niveau acceptable pour la vie moderne.

Différents travaux préliminaires nécessitent un programme à long terme et doivent être entrepris dans le contexte d'une vue d'ensemble de tous les éléments jugés nécessaires, à des degrés différents, dans la

Un édifice moderne en construction semble toiser d'anciens bâtiments dont le sort est en suspens.

Démolition d'anciens édifices qui seront remplacés par des plus modernes.

Doit-on réaménager ce secteur?

rénovation d'un secteur; il serait bon à ce stade, de considérer le sens de ces termes.

La conservation devrait prévoir, dans le sens social du mot, la préservation de la vie communautaire existante; dans le sens physique, voir à la protection des édifices d'intérêt historique ou architectural, des parcs, des beautés naturelles, (ou des aménités, telles que belles vues sur une rivière); dans le sens économique, assurer le prolongement et l'expansion des commerces qui permettent les formes d'activité normales du voisinage; maintenir des industries qui procurent du travail aux habitants du secteur en cause ou même de la ville entière, pourvu qu'il ne résulte pas un conflit sérieux de cette utilisation du sol par rapport à l'ensemble des utilisations comprises dans l'unité résidentielle à conserver.

La restauration peut s'appliquer soit au secteur entier dans la création d'un équilibre social et économique nouveau, soit seulement aux édifices eux-mêmes afin de prolonger leur utilisation.

Le réaménagement est déjà bien connu et consiste simplement en la démolition et la reconstruction de nouveaux édifices comportant une utilisation semblable ou différente du terrain.

Nos efforts dans "l'opération rénovation" doivent être dirigés tout d'abord vers la solution des problèmes urbains dans leur ensemble. Conserver d'abord, restaurer si nécessaire, pour la conservation!

Cela ne veut pas dire que le réaménagement n'est jamais nécessaire ni recommandable, e.g. le projet de la Ville de Montréal à Victoriatown*. Malgré l'existence d'un fort esprit communautaire et aussi quoique les propriétaires et les locataires aient amélioré leurs propriétés de façon appréciable, ce secteur demeurera toujours un îlot de résidences anciennes dans une véritable mer d'installations industrielles au milieu d'une circulation très dense.

Il reste encore plusieurs questions qui se posent à propos du relogement des familles déplacées dans un processus de réaménagement. Suffit-il de leur procurer des maisons en bon état, modernes et construites selon les normes de construction applicables? Si nous voulons voir dans cette dernière formule seule le moyen de continuer le sens d'appartenance des résidants à ce secteur, nous trouverons à la fin des travaux que tous nos espoirs se sont envolés à cause de la disparition d'une forte proportion des anciens habitants.

En général les secteurs délabrés—les taudis, se trouvent au centre ou immédiatement autour du centre de nos villes, là où la valeur des terrains contribue à changer l'utilisation de ces endroits pour des fins autres que résidentielles. D'autre part, il est raisonnable que les résidants de ce secteur aient le privilège de vivre près des facilités communautaires qui existent déjà dans le centre et tout autour du centre d'une ville.

Placé en face de l'alternative d'être relogé dans les banlieues, ou de trouver une habitation près du secteur où il demeure actuellement, le résidant d'un secteur à réaménager doit, en effet, choisir entre une vie nouvelle dans un endroit peu connu et la continuation de son mode de vie actuel dans un secteur avoisinant le projet de réaménagement qui, à son tour, sera peut-être l'objet d'autres travaux semblables.

On entend souvent dire que telle municipalité n'a pas besoin de planification—elle est toute construite . . . Cette théorie est vide de tout sens dans le contexte des changements qui prennent place de jour en jour en ce qui concerne les fonctions précises des différentes parties de nos cités. Il nous faut un plan d'aménagement pour les territoires vierges, mais ce qu'il nous faut davantage c'est un programme de rénovation pour tous les territoires présentement construits et occupés. ✦✦✦

*"Réaménagement urbain — Victoriatown" — Service d'urbanisme — Ville de Montréal, novembre 1962.

Monsieur Goldyn Sunderland, né en Écosse en 1926, est gradué de l'école d'architecture et de l'école d'urbanisme d'Édinbourg. Depuis son arrivée au Canada, en 1957, M. Sunderland travaillait à la Société centrale d'hypothèques et de logement à Ottawa et Vancouver; jusqu'à dernièrement il était architecte et urbaniste en chef pour les succursales de Montréal et Québec de la même Société. M. Sunderland a quitté la Société en février 1963 et il est maintenant en pratique privée à Montréal. Il est urbaniste-conseil pour la Ville de Montréal et professeur à l'Université de Montréal.

New Orleans

by N. R. Bawlf

Mr. Bawlf was the recipient of one of five travelling scholarships awarded by Central Mortgage and Housing Corporation in 1962. The awards are made on the basis of one to each Canadian University which has a school of architecture. The scholarships enable outstanding architectural students in the graduating classes to make a study of North American housing. The following is the second article from Mr. Bawlf's report on his tour. The first appeared in the May-June 1963 HABITAT.

When one has constructed an image of a city through secondary and tertiary sources, particularly romantic and nostalgic ones, it is difficult to realistically adjust even when confronted by factual evidence which would seem to give the lie to such an image. Every time a circumstance, an experience or a situation happens to corroborate this impression it assumes a dominant place and by compounding these pieces of evidence, no matter how scattered they are, he can often rationalize this image into seeming reality.

Our initial experiences in New Orleans did little to dispel the popular conception of the city but rather, because of their nature, tended to bolster it. It was only after spending several days, as well as evenings, that we came to see that our preconceived notions are sharply out of focus with the present socio-cultural-economic facts.

We arrived at our destination in the early evening, and our initial experience was that of driving along one of the city's wide, post-civil-war avenues, Canal Street, in oppressive heat which hit us in great blasts as it came swooping down the street split by huge street-cars which rumbled down the center boulevard like great, olive drab troop-carriers.

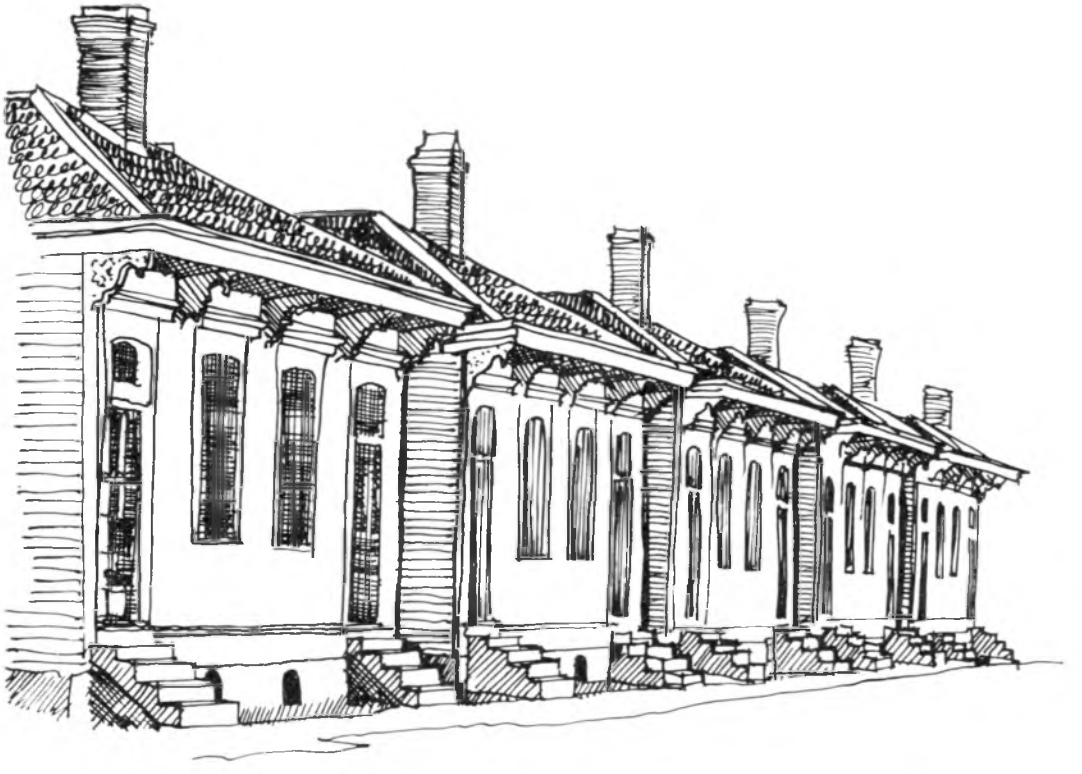
It is difficult to describe the shock when walking out of a hotel or a restaurant where immense air-conditioning units blast currents of ice-cold air upon every nook, into a stifling humid atmosphere which seems to force human beings like butter down to the paving. Within the course of several minutes your shirt and slacks seem to be plastered to your body like wet wallpaper and you feel yourself adding to the multifarious complex of fumes and odors which the air sucks from humans, animals, the buildings, the ships, the wharfs and the river. Every particle of dirt, dust, discarded paper and even manure from the horses who draw the ridiculous little calèches of the Vieux Carré make their contribution to the odoriferous and titillative atmosphere that characterizes the city. Yet after the initial shock, this atmosphere does not seem particularly unpleasant—it adds to the image.

The city of New Orleans had its genesis under the French on the north bank of a U-shaped bend in the Mississippi River. This part of the city, known as the Vieux Carré, or Old Latin Quarter, still remains in much the same state as it did in the latter part of the 19th century, because of legislation prohibiting the razing of old buildings and subsequent erection of structures designed in a contemporary vernacular. The Quarter was laid in a grid system on the only high ground near the city—on the levée or natural dyke which confines the river along much of its course through southern Louisiana. It covers an area about a half a mile deep stretching for approximately a mile along the river. This formed the main core of the city through successive periods of French, then Spanish, then French rule until Napoleon sold the colony to the United States during the early part of the 19th century. When the Americans entered the history of the city, it began to expand along the north bank of

the river upstream and downstream from the original settlement. Later in the century the introduction of a system of drainage canals and pumping stations enabled the residents to reclaim the swampy land between the levée of the river and the bank of Lake Ponchartrain and the city began to expand away from the river.

The fact that this area, by now the major portion of the city, is five to six feet below the river level and would easily revert to a swamp without the drainage system, renders problems such as sewage disposal and building foundations extremely difficult. The result is that the central business district tends to cling to the river while the reclaimed land is devoid of any large buildings, particularly high-rise and is occupied almost exclusively by residences. The growth of these residential areas was sporadic and checkerboard, so that within the city are segments which, having been developed by speculators at one period, have now degenerated into blighted areas of dilapidated housing. Land values, as is generally the rule in New Orleans, have become excessive (e.g. $15,600 for a twenty-five by one hundred foot lot in a blighted area). In addition, this sporadic development and decay, coupled with social and racial segregation has resulted in the creation of pockets of Negro occupancy rather than in the development of a single teeming Negro ghetto like that of Harlem.

One of the most noticeable factors about this city and probably many of the areas in the southern states is that there seems to be a great time-lag in their economic and social development when compared to the western, northern and eastern states. As a result New Orleans has one of the worst problems of housing in the U.S. The 1950 census indicated that 17% of the city's 170,000 dwellings were dilapidated or lacked running water and a full 25% were either dilapidated or minus running water or toilets. The greater majority of these dwellings and for that matter, of all dwellings in the city, are of a type known locally as "shot-gun" houses (one and occasionally two-storey frame dwellings where rooms run the full width of the house and access is through each successive room). In general they were built by speculators around the turn of the century and are owned by absentee land-



Shotgun Houses.

lords who often charge exorbitant weekly rents. The majority of these dwellings are occupied by families in a low-income bracket, mainly Negroes.

The civic authorities, faced with this seemingly insurmountable problem which has built up over the years, have tried several solutions, none of them wholly successful. The first attempt was a $100 million program of slum clearance and public housing. In many cases all that has resulted from this program has been one large set of problems (the housing project) replacing innumerable small ones where an area has been cleared of the blight and replaced by a great new ghetto of housing. The second attempt was engendered by the success of improvement programs based on individual homeowner participation in other cities of the eastern states. Known as the "Conti Street Project" it was sponsored by civic authorities as a pilot project in an attempt to show landlords and tenants what could be done with existing dwellings. But its failure was due to circumstances which are prevalent in every similar area of the city. The area was a typical slum street with the usual inadequate sanitary facilities. The costs were shared by city and landlords (since few houses were privately owned) on a 2/5-3/5 basis respectively with the tenants, all Negroes, doing the work. The most immediate result was that landlords increased the rents by nearly 250%. The project failed to excite any further enthusiasm in the neighborhood and the whole scheme was subsequently dropped.

It is interesting to go back and look at the earliest part of the city and to compare it to those parts which have been developed in the post-civil war era. The Vieux Carré grew around a town square known originally as Place d'Armes, now as Jackson Square (after Andrew Jackson) which was laid out in 1731 under Bienville, the founder of New Orleans.

Intended as the religious and government center and focus of the original town it still serves admirably in the same capacity as far as several of these original intents are concerned. The square is bounded on the south side by the north bank or levée of the river; on the east and west sides by the Pontalba Buildings, four-storey brick apartment houses (reputed to be the first in America) and on the north side by St. Louis Cathedral, rebuilt in 1794 by the Spaniards and flanked by two remarkably identical buildings with deep arcades on the ground floor, originally built to serve as government offices (Cabildo, 1795) and a bishop's palace (Presbytère, 1795). The majority of the original merchants' shops were situated within two blocks of the river front and in fact this same area is still occupied by stores which serve much the same functions. The Esplanade in front of the long wharves is still the site of a very active market which engenders most of the odors (and stinks) which characterize the river-front area and is a delightful riot of melons, vegetables, fish, grains, drygoods and people at nearly any hour of the day or night. The remainder of the Quarter is occupied by residences, single and multiple, and by small shops and restaurants.

The majority of these residences exhibit characteristics which bear witness to the ingenuity of their builders in combating the problems posed by the climate. With the exception of some of the very early houses, which were built in the same manner as those of a French town of the early 18th century, most of these dwellings are excellent examples of adaption of foreign building traditions to a special problem. To begin with, the streets are usually relatively narrow and the buildings of a sufficient height to shield pedestrians from the direct sunlight through all except the midday hours. The main house or apartment unit is on the street, with its front face on the building line. The slave quarters, in separate buildings, are at the back of the lot and the space between the latter and the main house is usually a paved court occupied by ample foliage, pools and fountains. The rooms are very high (an average—14 feet) and the back and street-front windows are high and narrow and generally covered with louvered shutters which provide privacy and ample ventilation. The street façade and often the court façade as well are shielded from the sun by balconies which overhang the sidewalks to the street curbs. The latter, with their slender iron columns and filigrees of wrought and cast-iron are a well-known feature of New Orleans, but surprisingly enough they did not come into use until the beginning of the 19th century and in most

Residential Court,
Vieux Carré.

cases are imported from Baltimore. The louvered shutters, high ceilings and cool courts facilitate excellent cross-ventilation and indicate that the builders came closer to solving the climatic problem than we do today with all our air-conditioning equipment, for they did not create the terrific contrast of temperature and humidity between outdoors and interiors which one finds with contemporary buildings. The balcony, besides providing shade in the daytime, is an important feature of local life. Down every street in the city, are people on the balconies, stoops or verandas in the evening hours.

This is the real "front parlor" or living room. The yellow and red lights of the windows hang in the humid, velvety brown-black of the evenings and silhouette figures between the houses and the street, sitting, sprawling, standing and slouching, talking quietly, arguing vehemently or carrying on shouting conversations with their neighbors across the street or on either side. Deprive a native of this city of his stoop and you take away part of his life. Even 40 miles up the river from New Orleans, on a trip to look at some of the remaining plantation houses of the area, we noticed that the stoop was always a dominant feature. In this case it usually took the form of a continuous gallery running completely around the house, supported by the exterior walls and a free-standing colonnade, providing both shade and access to the second storey rooms.

There were other aspects of the city and of the people that stood out. The inhabitants, Negro and White alike, seem to exhibit a remarkable freedom from pressure and tension. One notices a languor about them and a ready acceptance of social and economic conditions which by general American standards are below average.

In comparison to San Francisco and the eastern cities of North America we found a lack of interest in the intellectual sphere and in the higher echelons of the performing arts. If one hunts for the traditional

character of New Orleans' night-life and social entertainment he will be sadly disappointed in some respects. Certainly there are some excellent restaurants featuring traditional Creole and French cuisine, because good eating is a time-honored pastime in New Orleans, but by and large the place of dixieland jazz, in the city of its birth has been usurped by the craft of the stripper. As we walked along Canal Street and Bourbon Street we were pounced upon by shills who literally dragged us into the maws of bars lit by garish purples and reds which spread their eerie glow on an array of gyrating female limbs and torsos. If one wishes to be nostalgic he can decry the relegation of the remnants of jazz to a few completely commercialized night-clubs and a handful of halls where a few dedicated musicians continue to pound out these delightful old tunes, but the strippers are what both New Orleans and the tourists prefer.

Turning aside from our wanderings into the more exciting aspects of New Orleans we found that Public Housing occupies a much more important place here than it does in San Francisco. To satisfy the great demand for such housing, the New Orleans Housing Authority has found it most economic to erect great tracts of two and three-storey attached units which generally cover 8 to 15 city blocks. In selecting a particular project to study we found that individual housing projects were so similar that the only question which had any bearing was whether to choose a White or Colored project, since all housing is still segregated. In the end we chose a White project, since in this instance the economic and social position of the White tenants seemed to be almost on a par with the Negro tenants of other projects.

The project consisted of a total of 1,510 apartment units contained in 161 two and three-storey masonry buildings laid out around a series of connected spaces (rather than courts). At first glance the individual buildings do not seem too bad but when one has to walk from one side of the project to the other (a distance of nearly four city blocks) you are impressed by an overwhelming feeling of monotony and repetition. Apart from purely aesthetic considerations, there is a very bad psychological influence created by the size of such projects. After talking to only a few tenants it was very easy to see that they felt they were dwelling in some great social ghetto. Since many of the tenants are single women with large families, they cannot leave the project except to shop and they tend to lose contact with the outside world. In addition the dominance of the project, because of its overwhelming size, helps to categorize the tenants in the minds of the surrounding inhabitants and in doing so to attach a definite stigma to anyone living in the project. The children particularly suffer from this stigmatization and they tend to band together to protect themselves from the aggressions of children whose parents are not project tenants.

The New Orleans Housing Authority regards the St. Thomas Street Project, as our study subject is known, as particularly fortunate because of its proximity to a welfare organization, Kingsley House, in the immediate vicinity. This organization, housed in the original buildings of a 19th century cotton press and warehouse, specializes in the care and supervision of children, but the fact that it is separated from the project by a major thoroughfare seems to provide an obstacle to the children utilizing the excellent facilities. Their parents prefer to keep them near the homes where they can exercise closer supervision.

In order to try and ascertain to what degree tenants differed in their social attitudes from their non-project neighbors we obtained the use of a room in one of the units and spent the greater part of four days trying to talk to them. To our amazement we encountered a wall of hostility and, I might add, a great deal of fear. The greatest dread of a tenant is that the Housing Authority may find sufficient cause to evict him and, with all due respect to the latter body, this power of eviction is often used as a club. If the tenant breaks one of the innumerable rules or regulations he is often threatened with eviction by the project manager or any one of the lesser employees of the Authority. If you add to this the fact that the majority of the tenants have achieved only a low level of education by present-day standards and that many of them are not city-dwellers but come from small farming communities in southern Louisiana then there is a set

of circumstances which accounts for a noticeable lack of honest social communication. Having been introduced to the tenants by employees of the Authority we were regarded by the former with some degree of suspicion, more or less as spies working for the Housing Authority. We noticed a willingness to tattle on neighbors in attempts to curry favor with employees of the Authority, a fact which often led to small feuds between tenants. In trying to ascertain what sort of relationship existed among neighboring tenants and if these followed any patterns due to grouping, we found that even if we did succeed in enlisting the co-operation of individual tenants (about once in every five attempts), they often refused to acknowledge any degree of communication with any of their neighbors, except where they bore a grudge, in which case they were vehement in their criticism. Yet curiously enough, the minute we had emerged from the first apartment, tenants four buildings away knew that we were attempting to pry into their affairs and in each successive interview we were met with an increasing amount of reticence and hostility.

In summarizing our experiences with public housing in New Orleans I would say that two major problems, not necessarily unique to this city but rather more outstanding in this case, impressed themselves upon us. First, that the erection of huge complexes of housing usually creates vast social ghettos where the tenants are isolated and stigmatized by the rest of society. Secondly, much of the machinery and methods used by Housing Administrations are often oriented towards pure administration ends and alienates tenants rather than enlisting their co-operation.

In addition, the economic, social and cultural background of every area of the country indicates that there are problems and circumstances which are peculiar to each area and that they cannot be solved by applying a formula which is based on a national average. Certainly this is borne out by the complex situation of that portion of the New Orleans population which relies on public housing. ✦✦✦

Street Facade,
Vieux Carré

The book "A Better Place to Live" published by the Department of Municipal Affairs of the Province of Ontario was requested by the Community Planning Association and was jointly sponsored by the Province of Ontario and Central Mortgage and Housing Corporation. Professor Milner was Chairman of the Committee which supervised the Legal Aspects of the Book. No member of the "don't do as I do, do as I say" school, Professor Milner lives in a renovated house in downtown Toronto.

A BETTER PLACE TO LIVE

by J. B. Milner

There is a strange fascination watching the wrecking ball as it knocks down tired old houses to make way for spanking new apartments. Rarely does the less spectacular clean-up of renovation receive such universal attention. More appealing photographs can fill our 'homes and garden' magazines with paradises of picture-windowed split-level bungalows and the imposing spires of high-rise apartments. Yet most rebuilding is expensive and requires the disruption of complete neighborhoods by putting families out of their homes and dispersing them to strange areas of the city. Old houses can often be repaired with considerably less financial outlay and with less cost in emotional upset placing families in new and foreign surroundings. And this is not taking into consideration the irreplaceable beauty that lies hidden behind the grimy exteriors of many of our older dwellings.

A Better Place to Live, the final report of a study on minimum standards of occupancy and maintenance of dwellings, jointly sponsored by the Ontario Department of Municipal Affairs and Central Mortgage and Housing Corporation, is dedicated to the idea that repairing, coupled with less doubling up, is worthwhile.

How much does it cost to repair an old house? What sort of repairs are likely to be necessary? How long will it take?

If you have a statistical turn of mind you may be satisfied with the kind of information that is given on page 49 or 58 about costs, but some idea of the cost of a new roof, or the plastering of a single ceiling, or the replacement of the galvanized iron gutters, or the installation of a new electrical wiring system, fly screens for windows, a new concrete cellar floor, new ductwork for the furnace, copper pipes to replace clogged iron pipes, might mean more to those of us who find averages a bit misleading. A survey showed that 4,500 dwelling units in Toronto were without flush toilets, 5,200 without a bath or shower. In these circumstances, how much for a new toilet—a new tub?

The best indication of the kind of things that need doing is shown on Page 51, where the activity of the Winnipeg City Health Department for one year is set out. It makes very homely reading and includes such things as getting rid of rats and mice and removing gas stoves from bedrooms. The list is a long one and is meant to cover most eventualities and as the necessary degree of rehabilitation is not consistent, the cost and time involved with dwellings will vary considerably.

The objectives of *A Better Place to Live* are both to preserve the good quality housing before it slides into middle age and to salvage the elderly houses that have already slipped. The objectives are really to find ways and means of encouraging, and if necessary compelling, each householder to keep his house in good repair without "overcrowding", that is,without filling it with too many lodgers to help pay for the cost

of the repairs. Compulsion is never a popular thing and despite my lawyerly interest in the study, I am equally as interested in how successful the process of encouragement will be.

The process of encouragement seems to me to come down to a matter of official nudging, instead of outright prosecution. The book does not offer any easy solution to an admittedly difficult problem, but it does offer to any municipality wanting to make a start a complete account, both historical and current, of attempts elsewhere, and if sharing problems and possible solutions has any value, this record of experience should be valuable. One specific plea runs throughout the study. Find some administrative machinery that co-ordinates the work so commonly divided among the health, fire and building department. If an aggressive building inspector takes the initiative then he may be the man, but ensure he works with the others. A householder will not be stimulated by a sequence of inspectors filing through his house searching for troublesome items. The objective is clear, a simple code and simple administration.

The code proposed in *A Better Place to Live* attempts this co-ordination by bringing all the regulations under one by-law. This much is simple, but simplified administration is another thing. Co-ordination of personnel calls for administrative talent.

A reader unfamiliar with the existing string of regulations in municipalities may think the model by-law a pretty cumbersome and verbose code and indeed it is. The code draftsman has to make it simple, if possible, but he has to make it work. If the only requisite is to nudge the lazy or indifferent householder and, perhaps, offer him money on loan at easy rates of interest, then the code is simplicity in itself. If the code encompasses the use of legal force, then it has to be precise enough to stand up to the unsympathetic interpretation of a court. This requirement was met, or so the study group hoped, by taking the matter out of the hands of the usual courts and establishing a special one for this job alone.

The standards in the by-law are stated in fairly clear language, but there is an added requirement! "The owner of residential property shall repair and

maintain the property in accordance with these standards *to the satisfaction of the (urban renewal) officer*", rather than to the satisfaction of a court. The italicized words make the standard that of the officer's satisfaction, although the matters about which he must be satisfied are set out in some particularity in the standards that follow.

When this sort of authority is vested in a public official it is reasonable to add some safeguards lest the officer's satisfaction be unreasonably withheld. This safeguard is provided, not in the by-law, where it might or might not be enacted, but in the enabling legislation itself, which guarantees the householder a right of appeal to a housing standards committee. The constitution of the committee is left to the council although some ground rules are prescribed to ensure a fair hearing. No further appeal was thought necessary. The sanction of the law lies not in exacting a fine or sending a householder to gaol (in neither case would the house be likely to get repaired), but in authorizing the officer to repair the house himself and to charge the cost over some period of time against the householder's tax bill.

We should be ignoring the facts of life if we pretended that administrative responsibility of this sort can be assumed by just any municipal official. It will obviously be acceptable only in those cities large enough or rich enough or wise enough to have a staff of high quality. While *A Better Place to Live* makes it clear that many smaller places need a program of repair coupled with suitable standards limiting the number of persons who can live in a house, it may be doubted whether an administrative program involving this kind of discretion will be workable just anywhere. Let me hasten to add that the proposed administration is no radical departure from existing practice as the examination of present public health by-laws will readily show. But the success of these by-laws may depend on the presence of a highly trained public health officer as an essential part of their administration.

The book suggests as a basis that no council should be authorized to take on a program of compulsory repair unless it has first produced (in Ontario) an official plan that recommends housing rehabilitation for a part or the whole of the planning area. This emphasis on planning was thought to be necessary to prevent municipalities from wasting their money on repairs to houses that proper study would have shown should have been torn down in the traditional fashion.

Will this insistence on planning result in only well-staffed municipalities qualifying for the authority? It will not necessarily require a large staff, but it will require a wise one. ✦✦✦

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PROPOS SUR L'ÉDUCATION ARTISTIQUE DANS NOTRE MILIEU

par Jean-Charles Faucher

Depuis 10 ans, le Canada est, de tous les pays du monde, celui qui s'est développé le plus rapidement. Les villes et leurs banlieues, qui ne cessent de s'agrandir et d'envahir les terres avoisinantes, contiennent aujourd'hui 60 p. 100 de la population totale du pays. La Commission Royale d'Enquête sur les perspectives économiques du Canada prévoit que d'ici 1982, on construira près de 4 millions de maisons d'une valeur totale d'environ 40 milliards de dollars.

Selon une enquête récente de l'I.R.A.C., c'est-à-dire l'Institut royal d'architecture du Canada, le nombre des maisons aura plus que *doublé* d'ici 1970 à Calgary, Edmonton, London et Toronto, *triplé* à Montréal, Vancouver et Ottawa-Hull. Plusieurs autres études du même institut ont permis aux architectes et aux urbanistes d'analyser l'expansion extraordinaire de la construction et de faire des constatations qui ne nous donnent pas lieu de nous réjouir et qui ne peuvent que nous inquiéter pour l'avenir.

Voici ce que déclarait au comité de l'I.R.A.C., le conseil national féminin, je cite: "Ennuyeux, tristes, d'une similitude déprimante, voilà les épithètes que l'on utilise pour décrire ces quartiers où le même modèle de maison est répété et multiplié à l'infini. Cette absence de cachet et de goût entraîne fatalement la déchéance rapide de la propriété."

Le Club des femmes universitaires d'Ottawa ajoutait: "Ces quartiers construits en 1954 avaient presque l'air de taudis avant même que d'être habités. Que faire? Ils étaient laids, disposés sans imagination en quadrilatères étroits. Toutes les maisons avaient la même orientation; toutes étaient peintes de couleurs criardes et disparates. Et pourtant il n'aurait pas coûté plus cher de bien concevoir et de mieux ordonner ces quartiers selon un plan directeur bien défini."

"Presque toutes les commissions d'urbanisme au pays sont paralysées, à cause d'un manque absolu d'autorité", déclare Noël Dant, architecte et urbaniste en chef du gouvernement d'Alberta.

Mais qu'est-ce au juste que l'urbanisme?

L'urbanisme a pour but de résoudre les nombreux problèmes qui sont nés du développement des villes; aménagement rationnel des voies publiques, des services de transport, des immeubles privés, hygiène et salubrité des quartiers, nécessité de réserver des secteurs exclusivement à la résidence, d'autres aux espaces libres, d'autres aux établissements industriels, ce qu'on appelle le zonage, luxe même de la cité, conforme à l'esthétique moderne, sans sacrifier les témoins des esthétiques anciennes.

Et que demande-t-on à l'urbaniste? D'abord qu'il soit ingénieur ou architecte, très souvent l'un et l'autre; versé en économie, en sociologie, en histoire, en géographie, en géologie, en horticulture, un peu philosophe, que les Beaux-Arts ne lui soient pas totalement étrangers et que, d'autre part, il ait beaucoup vu et beaucoup retenu. Aux qualités qu'on exige de l'urbaniste, connaissez-vous beaucoup des nôtres qui soient dignes de l'être?

Voyons maintenant, d'après la même revue, ce que pensent quelques-uns de ces messieurs: "Ce que nous avons fait et continuons de faire au Canada", assure Jacques Simard, ancien président national de l'Association Canadienne d'Urbanisme, "il faudra peut-être un siècle pour le défaire. Peut-être n'y parviendrons-nous jamais complètement. Néammoins, il est encore temps de façonner le visage et l'âme de notre pays, si seulement nous décidons ce que nous voulons". Et il ajoute: "Ce qui nous manque le plus, c'est une philosophie. Devons-nous centrer l'urbanisme sur l'automobile? Abattre les arbres pour élargir les rues et massacrer les parcs pour y établir des aménagements routiers? Quelles valeurs sont en jeu?"

Certainement pas les valeurs humaines. En effet, à Montréal, rien n'a été centré sur l'homme. Au contraire tout est orienté vers l'industrie, le commerce, l'automobile. Nous habitons un site idéal; une île, avec, en son milieu, une colline de 900 pieds de hauteur, entourée de terrasses naturelles. Nous sommes donc des insulaires, mais nous ne voyons jamais l'eau

qui nous entoure, nous n'y avons pas accès; notre port, un des plus grands en Amérique, est merveilleusement organisé pour la manutention des marchandises, des céréales, du charbon et du pétrole, mais on n'a rien prévu pour les milliers d'humains voyageurs, même pas la plus petite gare maritime, le plus petit abri convenable.

Québec, Trois-Rivières, Verdun, Lachine ont réussi à aménager des terrasses en bordure du Saint-Laurent, "notre majestueux fleuve", nous pas."

N'avez-vous pas frémi d'horreur lorsque, l'an dernier, on abattit des centaines d'arbres, boulevard Saint-Joseph?

Pour ma part, j'ai trouvé suprêmement indécent que l'on dépouille ainsi cette artère importante de son somptueux manteau de verdure et que, par le fait même, on déshabille pour ainsi dire les pauvres maisons qui la bordent et qu'on dévoile leur triste nudité.

"Le grand problème de l'urbanisme", selon Stewart Bates, économiste, président de la Société centrale d'hypothèques et de logement, "tient à l'incapacité des commissions d'urbanisme et des urbanistes eux-mêmes à secouer la *profonde apathie du public*, à la lenteur et à la lourdeur des rouages administratifs ainsi qu'à des lois de zonage désuètes. En outre nous manquons d'urbanistes au Canada".

"La croissance défectueuse des villes", James Wilson, ingénieur et urbaniste de Colombie-Britannique, l'attribue "au peuple canadien qui n'est pas prêt à sacrifier un peu des ses profits, de son indépendance ou de son confort pour un bien supérieur."

"Les abords de nos villes, véritables foires et marchés aux puces, ne rendent pas justice aux qualités de notre peuple". Norman Pearson, urbaniste d'Ontario.

Cette dernière citation s'applique, hélas, parfaitement à nous, Canadiens-français, qui depuis 1880, avons dilapidé inconsidérément notre patrimoine artistique. Il faut que cesse ce régime d'anarchie et de laisser-faire, qui permet à n'importe qui d'édifier n'importe quoi, n'importe où et n'importe comment et enrayer, avant qu'il ne soit trop tard, la *montréalisation* du Québec. Il faut de toute nécessité, et le plus tôt possible, un législation de planification pour *toute* la province, si nous voulons garder de ce patrimoine le peu qu'il nous reste et préserver les très beaux panoramas du Québec.

Ecoutons ce que dit Gérard Morisset, conservateur du Musée de la Province et directeur de l'Inventaire des œuvres d'art: "Nos ancêtres étaient des hommes simples, réfléchis, prévoyants. Ils croyaient à la nécessité de l'apprentissage et du compagnonnage, ils avaient le respect des matériaux, le goût de la "belle ouvrage bien faite".

"Leur architecture, honnête et franche comme eux, de style Louis XIV, mais d'un Louis XIV simplifié, parce que d'origine paysanne, vient tout droit de Normandie, d'une part: maison longue, haute, peu profonde, aimable. On en retrouve des exemples dans la région de Québec. Au contraire, les maisons de la région montréalaise sont courtes, massives, profondes, sévères. C'est toute la Bretagne."

"Or depuis le milieu du XIX siècle, les traditions chez nous commencent à s'affaiblir. L'architecture n'est plus l'art de bâtir, mais celui d'imiter des formes périmées, qui nous sont totalement étrangères et de camoufler les matériaux. Tous les styles y passent: on imite le romain, le gothique, le style grec, la Renaissance française, la Renaissance italienne, les styles des trois Louis, XIV, XV et XVI, le style rhénan, le romano-byzantin, même l'architecture militaire du Moyen Âge et le colonial américain.

"Comme si, las des vertus qui ont assuré sa survie, le paysan d'hier voulait remonter d'un échelon dans la société des gens qu'il croit civilisés. S'il monte, c'est au prix de la simplicité et de nombreux mensonges architecturaux. Car nous n'avons guère imité que des formes, sans nous soucier de leur génèse, de leur utilité technique, de leur poids esthétique. Avec le plâtre et la tôle, nous avons imité la pierre et le marbre; avec le bois blanc, les bois précieux ou exotiques; avec les pâtes de bois et l'étain, le bronze et le fer forgé. En sorte que, notre architecture n'est riche qu'en apparence; qu'elle trahit, sinon une indigence d'imagination, du moins un sens morbide de l'imitation; qu'elle est nettement spectaculaire, ostentatoire, comme les sentiments qui l'ont inspirée."

Voulez-vous l'opinion du président sortant de l'Association des architectes du Québec, monsieur

La maison normande longue, haute, peu profonde, aimable que l'on retrouve dans les environs de Québec.

Paul Trépanier? La voici:

"Il est difficile de penser à l'ARCHITECTURE, sans faire une amère critique des monstruosités qui s'érigent autour de nous".

"L'architecture qu'elle soit belle, qu'elle soit laide, est statique et s'impose dans nos rues sans qu'on puisse, surtout quand elle est laide, fermer les yeux pour ne pas la voir."

"Comment peut-il exister une censure sur les livres et les imprimés, la radio, la télévision, le cinéma et non pas sur l'édification de bâtiments dont les conséquences sont, aussi sérieuses et même plus durables que l'émission d'un écrit, d'une image ou d'une programmation radiophonique, non orthodoxe?"

"Tout ce qui est œuvre d'architecte n'est pas irréprochable. Parce qu'il y a deux sortes d'architectes: ceux qui veulent faire de l'ARCHITECTURE, et ceux qui veulent faire de l'argent."

Il y a cinquante ans, l'architecte ne recevait pas une formation suffisante. Les mauvaises copies de tous les styles passés, la grandiloquence, le monumental (rapetissé, pour des raisons économiques et d'espace) étaient le signe indéniable des gens de goût."

Si je prends comme poste d'observation le Musée des Beaux-Arts (ce n'est pas le plus vilain secteur de Montréal) et que, me plaçant au pied du grand escalier, je jette un coup d'œil semi-circulaire, voici l'éventail très varié que cela donne: à la gauche et immédiatement à côté du musée, de style néo-grec ionique et de marbre blanc, j'aperçois l'église American Erskine, de pierre brune et de style rhénan très lourd, plus loin, véritable non-sens, les appartements "Château", de style militaire médiéval, avec leurs multiples tourelles, échauguettes, poivrières, créneaux, faux machicoulis, fausses meurtrières, etc.; puis un nouvel immeuble à bureaux, très contemporain. Traversons la rue Sherbrooke; l'hôtel Ritz-Carlton, immense bloc banal à décor gréco-romain, la maison Holt-Renfrew, sobre et d'assez bonnes proportions, quelques maisons victoriennes de pierre grise à deux ou trois étages, à côté d'une autre, assez jolie de pierre brune et de style flamand avec son toit en escalier, puis face au musée, l'affreuse et cafardeuse bastille de brique noirâtre, adossée à un autre immeuble d'appartements, lui, de style renaissance italienne avec fenêtres et portes à frontons et à consoles; de l'autre côté de la rue Bishop, un immeuble à bureaux où loge la banque de Toronto, très net, très clair, très réussi; enfin des maisons victoriennes, édouardiennes. Retraversons la rue Sherbrooke. Voici du côté droit du musée, l'église St-Andrew St. Paul, construction de style néo-gothique, relativement récente, une trentaine d'années environ. (Notez que la période gothique est révolue depuis le XVe siècle. Mais qu'à cela ne tienne, à Montréal, on peut, sur une distance d'à peu près 500 pieds, vous l'avez constaté, franchir des millénaires; on ne tient compte ni du temps ni de l'espace! Quelle variété! C'est fou! Mais aussi quelle absence d'unité et de goût! Immeubles de 10, 15 ou 20 étages écrasant les maisons voisines à deux étages.)

Je ne parle pas de nos "belles escaliers", immortalisés par Louis Francœur, Philippe Panneton et Roméo Boucher. S'il est un pays au monde où de telles monstruosités ne devraient pas exister, c'est bien le nôtre

Des escaliers comme ceux-ci, offensent le bon sens et le bon goût tout en étant un véritable danger.

avec ses pluies verglaçantes, ses frimas, ses gelées, et son hiver de cinq mois. C'est un péché contre le bon sens et le bon goût. Combien de gens, hélas, sont descendus autrement que sur leurs pieds de ces ignobles échelles. Combien d'accidents mortels? Les urbanistes précités n'ont-ils pas mille fois raison?

Il y a tout de même quelques réussites en architecture chez nous. Pour être objectif, je dois vous les signaler, et avec un vif plaisir: les nouveaux immeubles du boulevard Dorchester; C.I.L., Place Ville-Marie, place Windsor, la bibliothèque de l'université McGill, le Curling Club de Westmount, la synagogue de la rue Terrebonne à Notre-Dame-de-Grâce, plusieurs "high schools" protestants, le centre de commerce Rockland, quelques nouveaux immeubles à bureaux ouest rue Sherbrooke, l'aréna Maurice Richard, le restaurant du Lac-aux-Castors, et un grand nombre des nouvelles églises du diocèse de Montréal qu'il serait trop long d'énumérer—l'Eglise de St-Marc de Bagotville, les écoles de Ste-Agathe, Terrebonne, Ville-Jacques-Cartier, etc.

Et puisqu'il y a progrès, il y a espoir. Alors raison de plus pour accentuer ce progrès par notre action individuelle et collective. Et sans tarder. Il ne nous reste plus que 4 ans avant l'exposition universelle. Je vous ferai remarquer, en passant, que pas un seul urbaniste, pas un seul architecte, pas un seul artiste n'a été appelé à faire partie de la Commission chargée d'arrêter les plans de cette exposition. Voyez en quelle estime on tient ces messieurs et ce qu'ils représentent. Que des hommes d'affaires!

Donc nous sommes d'accord, avec tous ces messieurs que j'ai cités plus haut, pour trouver les Canadiens "at large" apathiques, indifférents à la laideur, au désordre, veules au point d'accepter de vivre dans la médiocrité et même, semble-t-il, de s'y complaire. "L'abandon à la laideur", disait Robert Elie, "n'est qu'une forme du refus de vivre."

Quelle est la cause de notre indifférence? A quoi attribuer cette apathie? Evidemment si l'enseignement des arts plastiques était pratiqué, dans les écoles, dans les collèges et dans les séminaires comme il doit l'être et par des *professeurs qualifiés et compétents*, nous n'en serions pas là et la face de notre pays serait sûrement différente de ce qu'elle est. Devons-nous crier haro sur le baudet et tomber à bras raccourcis sur le monde de l'enseignement? Ce serait trop facile et la vérité est beaucoup plus complexe. L'enseignement est mauvais, dit-on, et à tous les degrés? A qui la faute, je vous le demande? Il me semble, en tout cas, que nous avons mis beaucoup de temps à nous en apercevoir. Notre inertie n'y serait-elle pas pour quelque chose? L'enseignement était hier ce que nous voulions qu'il fût, comme il sera demain ce que nous voudrons qu'il soit.

Trop longtemps, à cause de notre mentalité utilitaire et matérialiste, on a négligé l'enseignement des matières dites culturelles sous prétexte qu'elles n'ont pas de fins utilitaires et pratiques et ne sont pas d'un rendement immédiat. Encore aujourd'hui on oublie ou on ignore que la connaissance de l'art est indispensable au développement intégral de la personne humaine et que l'art est peut-être la plus belle extériorisation de l'âme d'un peuple.

Dans notre pays hélas, l'ignorance en matière

d'art, qui est la conséquence normale de la formation toute intellectualiste donnée par nos maisons d'enseignement, devient une tare quasi héréditaire que se transmettent les générations les unes aux autres. On finit par prendre le faux pour le vrai, l'idole pour le dieu. Une telle ignorance était excusable il y a un siècle ou même cinquante ans. Aujourd'hui, avec les moyens modernes d'information, de diffusion et de communication, quelle excuse invoquer?

Comment étudier ou enseigner les langues et les littératures, mortes ou vivantes, l'histoire des peuples et des civilisations, de l'Eglise et des religions, des sciences, voire du commerce et ne pas côtoyer l'Art à tout moment?

Et notre haut clergé et nos hommes d'État, dans leurs fréquents voyages à Rome, à Paris, à Londres, n'ont-ils rien vu des merveilles du Vatican, de Notre-Dame, de l'abbaye de Westminster? Eux dont le rang social et le degré d'instruction auraient dû leur ouvrir les yeux. Auraient-ils eu quelque sensibilité ou quelque discernement qu'ils en auraient été impressionnés pour le reste de leur vie et que nous n'aurions pas tardé d'en ressentir ici même, les heureux effets.

"On ne peut nier, dit le philosophe allemand Hegel, que l'un des effets de l'art ne soit d'adoucir et d'épurer les mœurs. En offrant l'homme en spectacle à lui-même, il tempère la rudesse de ses penchants et de ses passions; il le dispose à la contemplation et à la réflexion; il élève sa pensée et ses sentiments *à des idées d'un ordre supérieur*. Aussi l'art a-t-il été de tout temps regardé comme un auxiliaire de la religion; il est avec elle le premier instituteur des peuples et, en effet, c'est surtout dans l'histoire des religions et des cultes qu'il faut chercher l'histoire de l'art."

Qu'on est loin, dans notre pays, de cette compréhension! Sommes-nous donc un peuple imperméable à toute émotion artistique, voire à toute sensibilité?

S'il n'y a pas de société sans art et si, d'autre part, la qualité de l'art dans un pays indique le degré de civilisation de ses habitants, que penser du Canada et des Canadiens? L'évolution de la culture artistique, chez nous, est certes très lente en comparaison des progrès énormes que nous accomplissons dans d'autres domaines. Il faut donc prendre conscience de notre pauvreté culturelle et artistique et sans développer un pessimisme desséchant qui risquerait d'éteindre nos actions, faire un sérieux examen de notre condition et, surtout, ne pas craindre de nous adresser un reproche personnel et collectif.

Comme il y a interinfluence de causes, on ne sait vraiment à qui attribuer la faute. Aux classes dirigeantes? Aux autorités civiles, religieuses, enseignantes, aux parents? Oui et non. A tout le monde et à personne. Que faisons-nous chacun de nous pour corriger cet état lamentable et que pouvons-nous faire pour hâter l'avènement d'une époque meilleure?

Agir sur soi d'abord et, par voie d'irradiation, sur son entourage. Si seulement les professeurs et les parents avaient le respect de la Beauté, ils feraient déjà œuvre de formation. Car on ne donne que dans la mesure où l'on possède. Autrement cette interaction entre le milieu humain et le milieu physique risque de nous maintenir encore longtemps dans un cercle vicieux dont il nous faut sortir, coûte que coûte. Et qui rompra ce cercle, ou plutôt, quels sont ceux qui ont le *devoir* d'y pratiquer une brèche? Ceux qui *savent* et qui, parce qu'ils savent, devraient *comprendre*. Les éducateurs? les parents? les chefs de la nation? du pays? Les éducateurs et les parents d'abord. Car c'est à eux, qui se proposent de former des hommes complets, qu'il appartient de donner à leurs élèves et à leurs enfants, lesquels deviendront plus tard les chefs du pays, une culture artistique. ✦✦✦

Monsieur Faucher est né à Montréal. Il a étudié au Collège Ste-Marie; il est diplômé de l'École des Beaux-Arts de Montréal. Il a fait plusieurs voyages d'études en Europe. Il est maintenant professeur d'arts plastiques à l'École Normale Jacques-Cartier et à l'École des Beaux-Arts de Montréal en plus d'être directeur des élèves à cette dernière institution. Il a participé à plusieurs expositions de peinture au pays et à l'étranger et a contribué à la préparation de manuels scolaires illustrés. Il a préparé pour plusieurs publications des articles sur l'art et l'education artistique et il fut conférencier invité à plusieurs endroits.

Paul F. Wendt;
HOUSING POLICY — THE SEARCH FOR SOLUTIONS

A Book Review by R. W. G. Bryant

Professor Wendt has produced a thoughtful study of housing policy in the United Kingdom, Sweden, West Germany and the USA and attempted to appraise the relative success of these four widely differing approaches. A study of this sort involves not only factual survey, but also value judgement. American conditions and traditions are so very different from European that it is stimulating and refreshing to have familiar problems looked at in another perspective. The author candidly admits that he is for the 'free market' and not over-sympathetic to government intervention. It is a pity, none the less, that he has not made a greater effort to project himself into the outlook and traditions of his European examples. That would add to the value and meaning of his comparisons and is the difference between knowing about something and comprehending it. Professor Wendt's value judgement would be more interesting if he had tried to forget his personal bias.

In the British chapter, one is impressed by the absence of reference to sources so important that he would expect any serious investigator to regard them as basic. Professor Wendt appears to have consulted with the National Federation of Building Trades Employers, about the last organization I would consider likely to provide a balanced view of the housing problem. There is no mention of the Housing Centre, nor of local housing authorities' reports, nor of the invaluable work of the Rowntree investigation, nor of Mr. J. B. Cullingworth's careful analysis, nor of Professor Donnison's studies of post-war housing policy and, in particular, the effects of the 1957 Rent Act. The results of this last work may not have been available in time, but they make nonsense of Professor Wendt's remarks on rental control and much information was certainly available in Development Plans, a source simply not touched. All this is odd and it is odder, too, that the only Press item quoted is a piece from that well-known repository of higher intellectual wisdom, the Sunday Express. No reference is made to much more important articles printed from time to time in the more serious and responsible journals. No doubt one could cull a sheaf of reports from the popular press about oddities in local authority housing —they make good copy. But bias goes somewhat far when it extends to this sort of selectivity.

The general argument is that undue emphasis on public subsidized housing has queered the pitch of the speculative builders to the extent that they cannot fulfil their *natural* function. Not many responsible students of British housing would go along with that. Professor Wendt has little to say about interest rates, nor does he discuss the desirability of separating housing finance from market fluctuations, as a matter of social policy, nor does he bring out the odd fact that Britain is about the only country in Western Europe to tie public housing finance to normal interest rates.

Nor does he have anything to say about the situation in which "only 9% of families in 1958/59 had incomes sufficient to enable them to buy a house, and only 23% sufficient to enable them to pay an economic rent" (J. B. Cullingworth, "New Towns for Old", footnote, p. 40). One could wish that the author had been less anxious to make out a case for private enterprise, and a rather tendentious and one-sided one at that, and was more concerned to appreciate the very real and obvious reasons why the public sector in British housing has been growing in importance ever since 1919. In historical context, the 1950's will no doubt appear as a fumbling interruption.

After all, was not one of Mr. Macmillan's first acts as Minister of Housing, to say "no more New Towns" and did it not take wasted years to dawn on the Government that the problems could not simply be swept under the rug? It did appear for a short time in the later 1950's that housing supply had at last caught up with effective demand, demand held down by financial stringency to a level below the real need. But one imagines there are few people in Britain now who can believe that any more. Professor Wendt does pay tribute to the "impressive programs of slum clearance and public housing construction", but on the very same page says "the tradition of public intervention in housing dies very slowly". The short answer to that one is "why on earth should it", but I would guess that many hard-pressed borough housing managers might have an even more forthright word and so would most Londoners.

The same too-evident bias is apparent in another passage, the Swedish chapter—"Sweden's residential construction industry is far behind American industry in its organization for land subdivision . . ." The standard American subdivision procedure is an archaic and unfortunate hangover from pioneer times and a fearful obstacle in the way of rational growth of American cities. Bully for the Swedes; in fact, they have more sense than to mess their suburban land about as the Americans do. I think the ordinary American housing tract or subdivision is a dreadful expression of communal breakdown and I can't imagine the Swedes ever wanting to get down to Levittown standards. Why on earth should they? The best in America can be very good, but my point is forcibly brought home by comparing the comely and beautiful and pathetic stump of Radburn, N.J., pace-setter for the world, whose development was cut short by the 1929 crash. It is cheek by jowl now with dreary standard subdivisions laid out by folk who didn't want to do anything better than turn out dollars and cents. This may not bother Professor Wendt, but it does bother me because I believe that those who lay out housing have a responsibility to provide an agreeable environment according to the best possible standards. Even Professor Wendt admits that British local authorities have been better than the speculative builders. As for Sweden, America has nothing to touch the superb execution of the Stockholm metropolitan plan, with its organized satellites nor can it have until it starts to develop land properly instead of "sub-dividing" it—these are two very different things. At present, proposals such as the metrotowns for the Baltimore and Washington metro area can be hardly more than pipe-dreams—in Sweden, they are old hat. The Swedes may well lay more emphasis on houses as against flats in future; they already talk much about "laying the point blocks on their sides", but that can be done without altering any basic feature of their policy and organization. And one wouldn't think they'd ever want to make a fetish of useless sideyards and absurdly rigid by-laws about distances from lot boundaries which make it next to impossible for American designers to use skill and imagination in housing layout in subdivisions.

And here, of course, I make value judgements of

Terrace Housing, Alton Estates, Harlow.

my own. I appreciate the reasons for American attitudes, but I go along with many thoughtful Americans who dislike their own suburbia. I do not go along with the notion that land on city fringes ought properly to be a Roman holiday for land speculators, nor with the usual American notion that it is a badge of good citizenship to own one's own home by putting himself in hock to the aforesaid speculators. John Keats has said all that in "The Crack in the Picture Window", far more cogently and amusingly than I could. Another detestable corollary of that notion is that tenants, or renters, are somehow inferior; I know at least two Canadian cities where only owners may vote in municipal elections and that seems to me a dreadful negation of democracy.

Professor Wendt starts off from the position that housing is best left to private enterprise—simon-pure, and that public housing is a regrettable and marginal affair whose necessity may be grudgingly admitted in certain cases. Against that, I quote from Professor Gordon Stephenson's masterly Redevelopment Study of Halifax, Nova Scotia, 1957 (p. 36)—"There is a prevailing theory, or rather, dream, which suggests that in a free-market economy, houses will be built in such quantities that nearly every family will have a ranch-type bungalow in the near future. Those who are not so lucky will have an older house, which comes to them through a filtering down process. There is no evidence in Canada, or in any part of the world, that such a dream may be realized". Halifax is now pressing on vigorously with a public housing program, having at last waked from the dream. Had it possessed a stock of public housing on a normal European scale, its problems would be infinitely easier. Even the post-war pre-fabs were sold off to the occupiers at cost, presenting the latter with handsome windfalls and saddling the city with an ultimate redevelopment problem".

Professor Wendt's book is a useful repository of fact and an interesting illustration of a point of view, but one could wish he had left some of his preconceived notions behind on his visits to Europe. ✦✦✦

R. W. G. Bryant is an Englishman with a Scottish education, now assistant professor in a French-Canadian University (l'Institut d'Urbanisme, Université de Montréal). He received the degree of M.A. with double honors in geography and economics at Aberdeen University, and then spent two years in post-graduate research at the London School of Economics. He also took the diploma in Town Planning of the University of Manchester. Before coming to Canada, he worked in the former Ministry of Town and Country Planning, Lancashire County Planning Department, and Coventry.

CENTRAL MORTGAGE AND HOUSING CORPORATION
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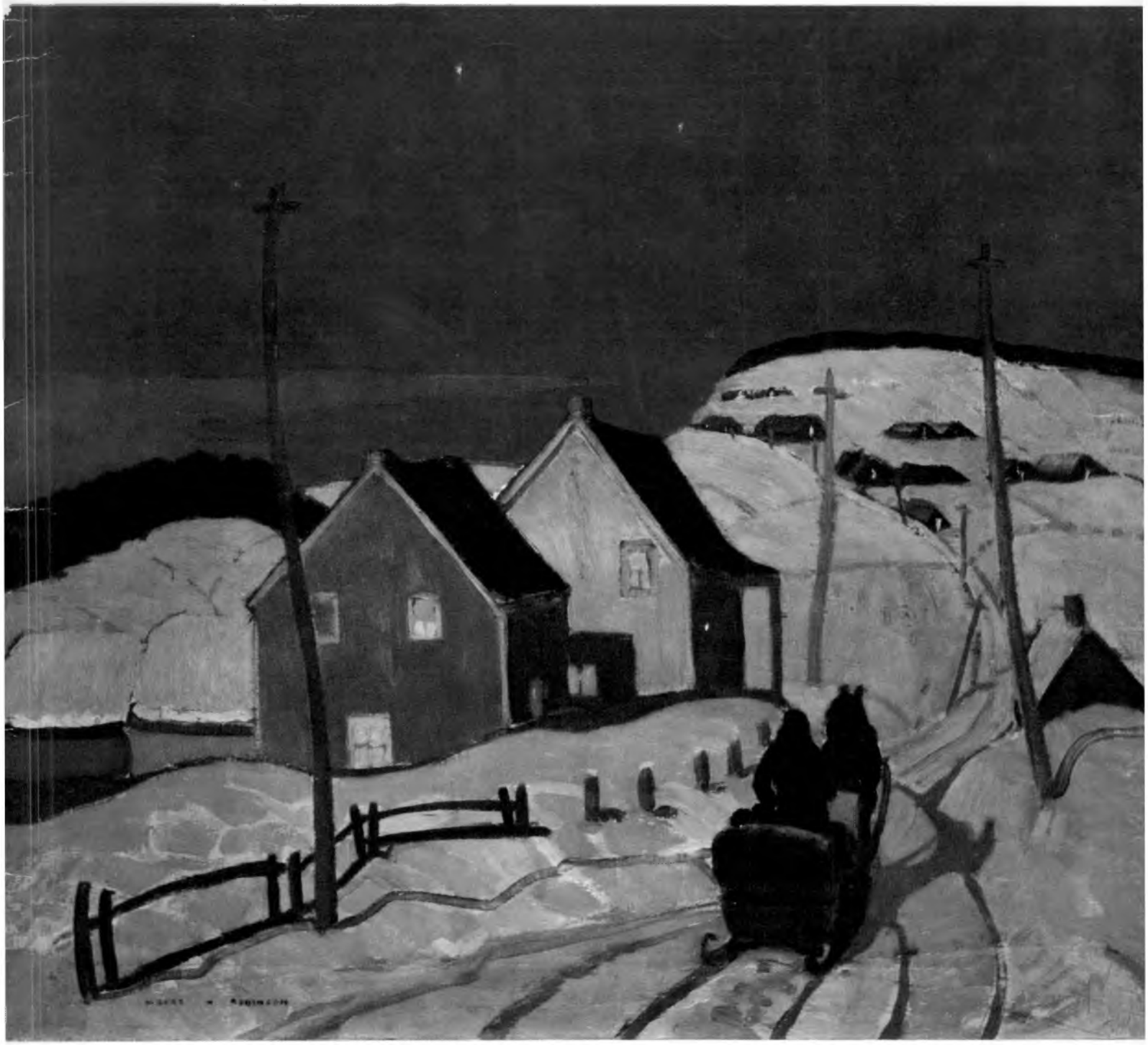

HABITAT

NOVEMBER-DECEMBER 1963
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COURTESY OF THE NATIONAL GALLERY OF CANADA, OTTAWA.

INSIDE COVER: *Sir Galahad dons winter dress.*
PHOTO FEATURES

NEW TITLES

METRO TORONTO: A DECADE LATER by Frank Smallwood, Ph.D. published by the Bureau of Municipal Research. This study by Professor Smallwood of the first ten years of life of the metropolitan government of Toronto was financed by a Dartmouth College Faculty Fellowship and a research grant from the Canada Council.

At its inception in 1953, Metropolitan Toronto was without precedent in North America. It can be regarded as a landmark in the attempt to control the forces of urban growth. The lessons to be learned from such an attempt are invaluable to all who are in any way concerned with the viability of urban areas and their government.

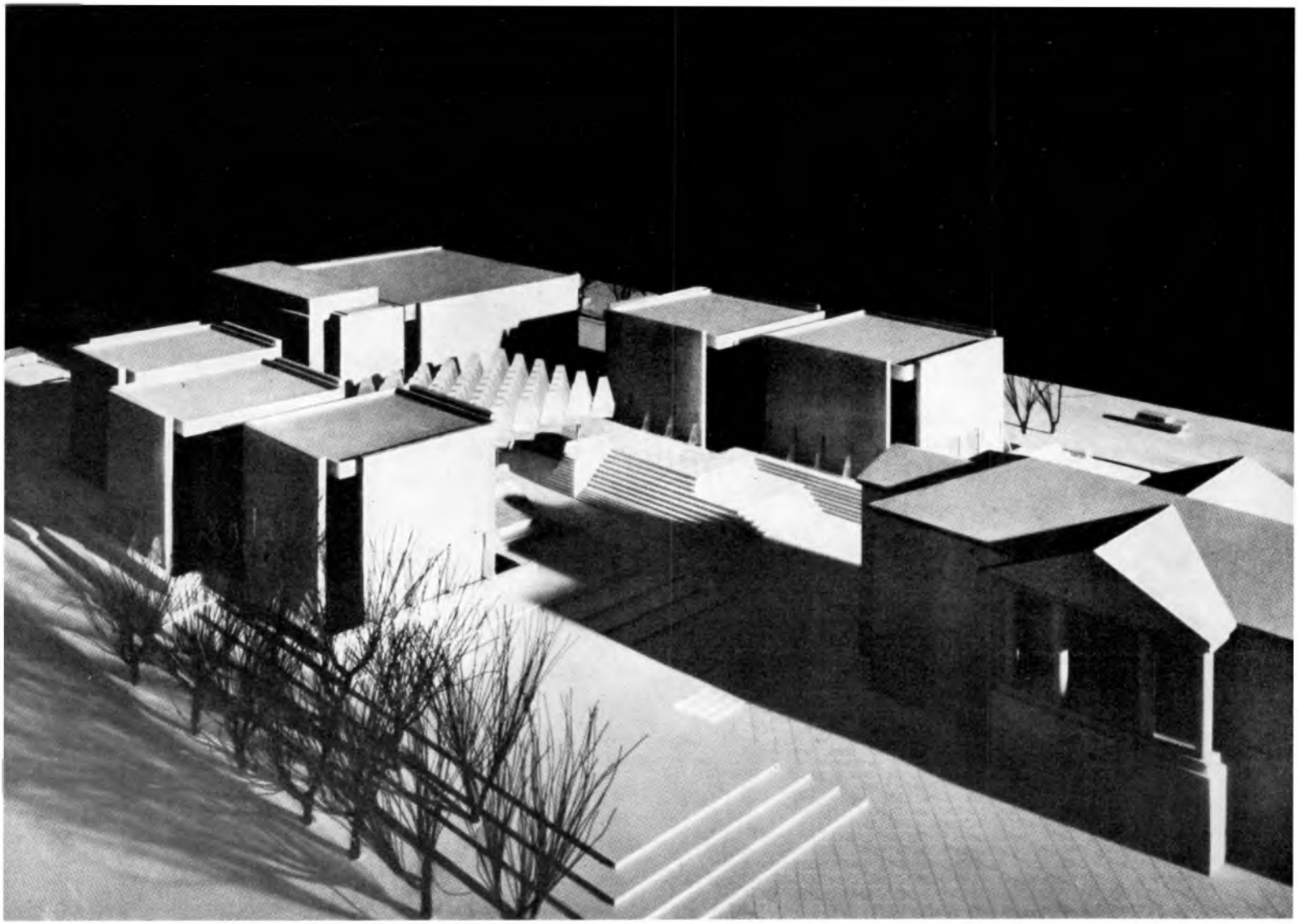
The survey deals first with the symptoms that required this form of government, then the proposals as to the form the new government should take are examined on their relative merits.

This is followed by a study of the policies pursued by Metro in the fields of roads, sanitation, transport, water supply, housing, education, welfare and recreation. The financial and planning policies that backed up these programs are given critical examination.

Frank Smallwood is Assistant Professor of Government at Dartmouth College, New Hampshire. Since 1960, he has been a Co-Director of the Dartmouth M.I.T. Urban Studies Program. The book is available at $1.00 per copy from the Bureau of Municipal Research, 32 Isabella Street, Toronto 5, Ontario.

THE ANCESTRAL ROOF by Marion Macrae and Anthony Adamson—a very lovely and much needed history of domestic architecture in Ontario prior to Confederation will be reviewed in detail in the January-February HABITAT by Professor Michael Hugo-Brunt, Division of Town & Regional Planning, School of Architecture, University of Toronto.

✦ ✦ ✦



The "Fathers" is located in the heart of Charlottetown.

Fathers of Confederation MEMORIAL BUILDING

by Walter P. de Silva

A PRELUDE TO CENTENNIAL

In the words of Anna Sewell ". . . Centennial celebrations are posterity's tributes to the past. Sometimes they are a tardy acknowledgement to genius". However, there is nothing tardy about the project now under construction in the center of Charlottetown. It is proceeding on schedule and will be ready in May next year when Prince Edward Island celebrates one of the most important dates in Canadian history—the 100th Anniversary of the first Confederation Conference of Canada held in Charlottetown in 1864. With the centennial of 1967 looming as the most historic event in Canada's history, it would be apt to dwell briefly on the background and emphasize the significance of this meeting of the Fathers of Confederation which led to the birth of the nation.

When Prince Edward Island fell into the hands of the British in 1763, it was called St. John's Island and its principal settlement was named Charlotte-Town after Queen Charlotte, wife of George III. In 1764 the King's Surveyor, Captain Samuel Holland, surveyed the colony and recommended that Charlotte-Town

be made the capital because "as this side of the Island cannot have a fishery it may probably be thought expedient to indulge it with some particular privileges". Subsequently Charlottetown became a planned city and the street layout and land use pattern of the older part of the City remains much the same today as originally designed by Captain Holland. As will be seen from the map of Charlottetown, this plan provided a central square called Queen Square around which the civic buildings were later erected and the market and commercial activity developed around its perimeter. Four smaller squares were also provided around which the residential development took place. The plan also called for a large section for public open space (Victoria Park) which constituted roughly a fifth of the town area.

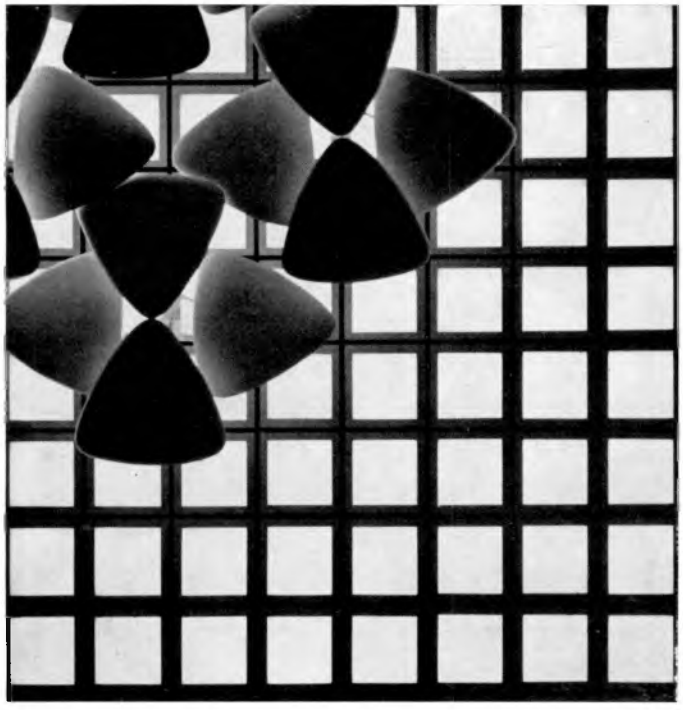
The Colonial Building now called the Provincial Building was built in 1847 and it was in this edifice that the Fathers of Confederation Conference opened on September 1, 1864. This significant event in Canadian history was held in Charlottetown to discuss Maritime Union and the Canadian Government sent, as unofficial observers, seven delegates headed by the Honorable Sir John A. Macdonald to see if the proposed Maritime Union could be extended to include all the Provinces.

Although there is scanty information as to what went on in the Conference, the discussions produced significant results:

a) Maritime union was impracticable but a union of all Provinces was deemed feasible.
b) The union should be Federal.
c) It should be based on the British Parliamentary System.

The formal discussions and social activities at Charlottetown enabled the exchange of goodwill and established personal relationships that facilitated further negotiations which were held at Quebec. However, the Quebec resolutions were not acceptable at the time and two years later in 1866 the representatives of the Provinces met at the Westminster Palace Hotel in London to draw up the British North America Act which was proclaimed on July 1, 1867. The City of Charlottetown, the venue of the 1964 Conference, is now endearingly referred to as the "Cradle of Confederation".

During the last century, Canadians have been busy building a nation and taming the elements to develop the vast potential of this continent. Two world wars in which Canada made a major contribution have consumed much of the period. The spirit of the pioneers and hard work by the generations that followed made Canada what it is today—a highly respected and stable young nation. It is only during this decade or so that the majority have had time to look back and take an active interest in history and the pursuit of cultural activity. As a result, many people realized nothing significant has been done to commemorate the Fathers of Confederation who played such a prominent part in the history of Canada. In 1961, a group of private citizens from different parts of Canada formed a committee named the Fathers of Confederation Memorial Citizens' Foundation to build in Charlottetown the first memorial to the men who founded the nation.



A novel lighting pattern on the ceiling of the Memorial Theatre.

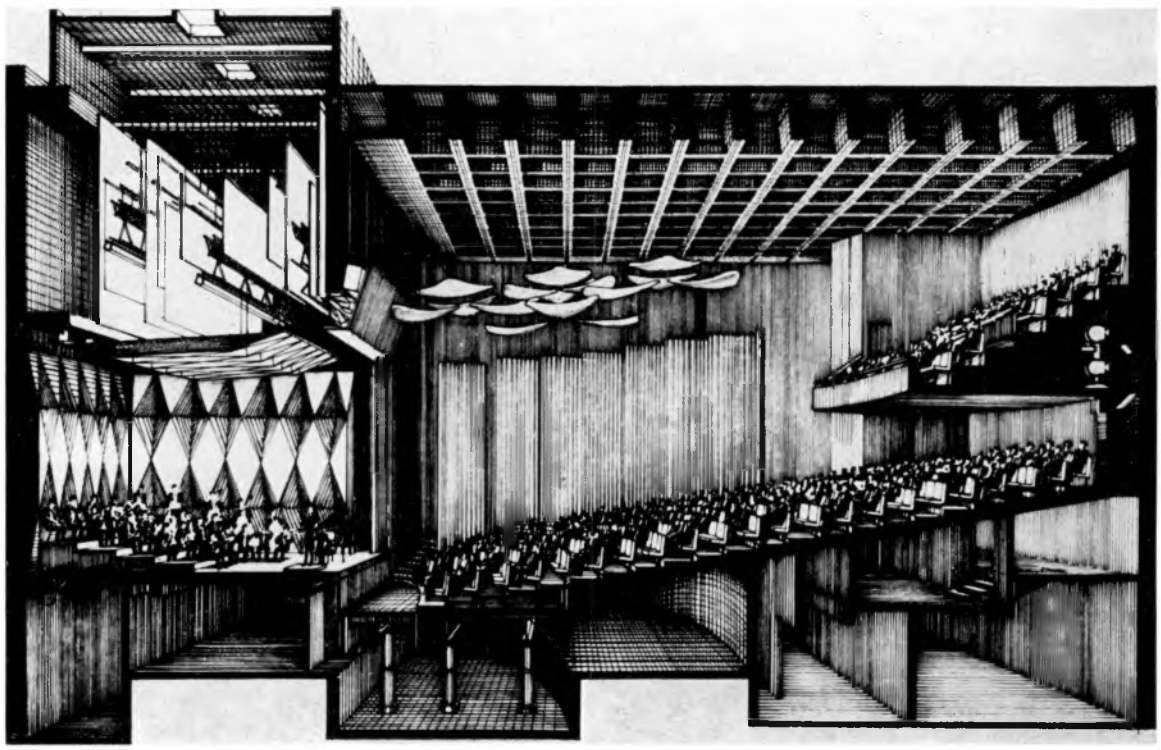
The Citizens' Foundation promoted a nation-wide architectural competition, subsidized by a grant from the Canada Council, to select a design for a cultural center to be constructed in Queen Square in the heart of Charlottetown immediately adjoining the historic chamber where the 'Fathers' met in 1864. The contest was won by the Montreal firm of Affleck, Desbarats, Dimakopoulos, Lebensold and Sise in association with Montreal Town Planner, Norbert Schoenauer. This national project is Canada's gift to Charlottetown and will be financed by Federal and provincial governments and private sources. The estimated cost of the project, which is now under construction, is $5,600,000. Thus, every Canadian will have a stake of 30 cents in the memorial.

The General Concept

The cultural center which is affectionately referred to by many as 'the Fathers' is a group of buildings comprising a three-sided square surrounding a glass-roofed Memorial Hall. Other components of the group include; theatre, museum and archives, art gallery and library on a terrace level elevated from the street. A concourse level below houses ancillary accommodation for the terrace as well as a small hall, committee rooms and restaurant.

The nature of the site which is rather restricted for the building area, the several functions of the memorial project and the conditions of the competition were all in a rare challenge to the competing architects. The winning design now under construction is a supreme example of modern elegance that is subtle in scale and discipline. It is also a deceptively simple design of a complex problem of civic architecture and in the words of Sir Basil Spence, a member of the Jury of Award, "It captures the true feeling of the City (Charlottetown) and is a beautiful expression of the event it commemorates".

The integration of the historic Provincial Building with the new complex is achieved with great respect and skill and the view of the Provincial Building from the Memorial Hall will be dramatic in its effect. Terracing and steps give the overall site a sculptural quality of its own with rare sensitivity. Terracing on



Cutaway model of the Fathers of Confederation Memorial Theatre.

the east side of the new building will be matched by similar terraces on the east side of the Provincial Building and the resultant effect of integrating the old with the new has been mastered. The new buildings will be faced with the type of stone used in the Provincial Building and will come from the same quarry in Wallace, Nova Scotia. The overall impression of the memorial can best be described in the words of Peter Desbarat writing in the *Montreal Star*, "a miniature, extremely modern 'Acropolis' in the heart of the Provincial Capital".

The Components

The Memorial Hall

The Hall has been planned to have an all-directional view and under its jewel-like glass roof, Canadians from all walks of life will mingle in the sheltered plaza and be conscious of an atmosphere that commemorates a great historic event. According to present plans, the only decorative feature of the Hall will be the quotations from the Fathers incised in its sandstone-faced columns and steps. The Memorial Hall occupies a focal point in the complex and its inward and outward-looking feature is quite ingenious.

The Theatre

The thousand-seat, multi-purpose auditorium, although basically a simple design is quite intriguing in its technical provisions. There is a conventional stage for the performance of ballet or symphony orchestras and an apron stage which can be used for spoken word performances. The ceiling of the Theatre has an aerial sculptural quality of its own, resulting from the deep concrete-box technique used in the construction of the roof. The concrete used for this structure as in many other parts of the building is reddish-brown Island aggregate which will be sand-blasted to reveal its warm color. With careful organization and promotion, the presence of these facilities in Charlottetown could make this City the cultural center of the Maritimes.

The auditorium with its ancillary areas can provide accommodation not only for the dramatic arts but for conventions and other national gatherings although the primary use will be the promotion of cultural activity. Already the Dominion Drama Festival is scheduled to open in Charlottetown from May 17th to 24th, 1964 and some 60 other organizations, prominent among them the Royal Society of Canada, are solidly booked for next year.

The Museum and Archives

This unit will function mainly as an historic museum, but there is provision for display areas and exhibition galleries. The Archives provide for areas suitable for reproducing documents and research facilities with curator's office and other ancillary accommodation.

The Art Gallery

The Art Gallery has provision for exhibition space, two small galleries and outdoor exhibits of sculpture and other works of art. An art selection committee is currently engaged in selecting Canadian artists who will provide two large murals and several sculptures for the building.

The Library

This building will house the public library now operating in Charlottetown and also the legislative library from the Provincial Building which is sorely in need of additional space.

It has been said, "History builds the town", and the Fathers' Memorial as a classic example of good civic design and architecture will be in a fitting setting in Charlottetown, the Cradle of Confederation. At a time when the nation is planning for the Centennial of 1967, the Memorial can be described as a venerable prelude and if similar standards can be established for other projected memorials, we will be leaving a very fine legacy to posterity. ✦✦✦

Walter P. de Silva, A.R.I.B.A., A.M.T.P.I., M.R.A.I.C., A.M.T.P.I.C., was born and educated in Ceylon. In 1951, he went to the United Kingdom and studied at the Hammersmith College of Art and Architecture and joined the University of London where he obtained his post graduate Diploma in Town Planning and Civic Architecture. He has worked for a leading firm of Architects and a firm of engineering consultants in London. Mr. de Silva emigrated to Canada in 1960 to take up the post of Assistant Planner, City of Halifax and was appointed to his present post as Provincial Planning Officer—P.E.I. in 1961. Currently he is engaged in completing a Planning and Housing Study for the City of Charlottetown and the Province. The study has been partly financed by a grant from the Central Mortgage and Housing Corporation.

Third Avenue, Ottawa—a street worth keeping?

THE PHOTOGRAPHS ARE BY STAN PICKETT OF CMHC, SKETCHES ARE BY THE AUTHOR.

3rd Avenue

by John Leaning

Third Avenue is a street in the Glebe in Ottawa. It is not unusual and many similar areas can be found in the city and throughout eastern Canada. It is a street in the process of change like many streets in North American cities. Change in a street is the cumulative result of a variety of public and private actions and if those actions are soundly conceived and executed, change can be for the better. However, if no one takes an interest it may become synonymous with decline.

The simple frame houses on either side of the street were built during the first quarter of the century for the most part and one or two of the original owners still remain. The people are a mixed bag—very old, very young; owners in their own houses, tenants in others; apartment dwellers, a Baptist Minister, an architect, a poet, civil servants of all degrees (some retired), a civil engineer, a contractor, French Canadians, old and New Canadians, Scandinavians, poor and well-to-do, all in one short street length—a fascinating mixture hard to find in more suburban areas.

Third Avenue has many valuable characteristics. There is a corner store at one end of the block and a Federal Government Parkway complete with lily pond, the Rideau Canal and many fine trees at the other. To these may be added a frequent bus service, the amenity of a major shopping area two blocks away and numerous churches, indeed, all the ingredients for a satisfactory community. By many counts, Third Avenue is something worth keeping, worth the expenditure of time, energy, money and loving care.

The unfortunate situation facing our street is that many people—owners, real estate men, politicians, bureaucrats—often look upon such areas of the city as places to be either cleaned out and sterilized or forgotten. Few have the imagination to recognize its social and aesthetic potentialities. Hence the streets are strewn with wires and poles, trees are dying

Right, an example of good craftsmanship which the owner is rightly preserving.

Below, by a careful use of colors the house on the left has been transferred from a dull brown and cream to a sparkling white and charcoal grey.

Above, the success of this garden depends on its neighbors who form the wall of this outdoor room.

We do not need 33 feet of asphalt . . . .

a street garden would give us a more pleasant place
to chat with neighbors while
watching our children play together safely.

through abuse by linemen, roads and sidewalks are often in disrepair, houses are painted dull and discordant colors, back yards are filled with shacks and children are forced to play between cars. Yet the houses have a simple charm waiting to be re-activated by a reasonable scheme of color and repair, the trees are mature and capable of contributing handsomely to the appearance of the area. The streets are wide enough to provide space which, re-organized, could allow cars to run, children to play safely and their elders to meet without being run over by tricycles or automobiles.

This last spring, the elements of these ideas were discussed both with residents and with utility companies. A start has been made which is quite extraordinary considering how little organizational effort or pressure has been exerted. Several houses have been repainted to a more or less common color scheme, gardens that were ill-kept before show signs of loving attention, the Hydro-Electric Company has amalgamated its wiring and the Telephone Company is moving off the street altogether (a mixed blessing since we will now have the pleasure of seeing them from the backs of our houses instead). The effects are even spreading to neighboring streets where houses previously painted dull brown or green are now resplendent in pure white. Our hope is high.

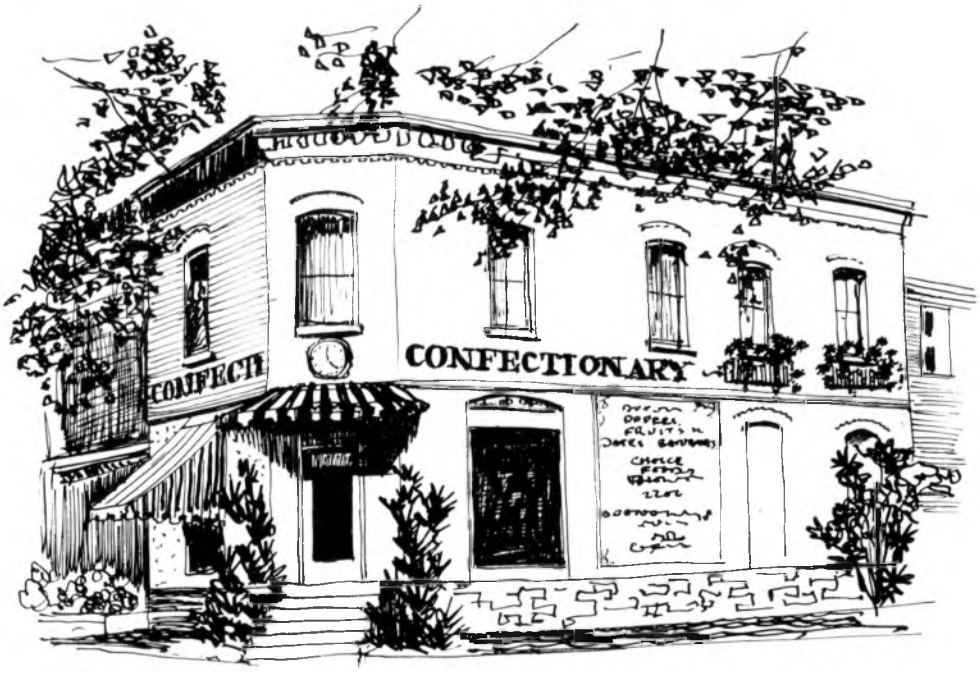
What are the rules behind this form of improvement? Consider house colors. These have been for the most part brown, green or cream—a typical mixture inherited from the English Victorian Era when a dirty industrial air made people give up white as being an 'impractical' color and adopt what they considered to be the natural colors of the countryside which they missed. Unfortunately the browns and greens used are rarely to be seen in nature since the natural green is in fact many greens in one and natural brown is very far from painter's brown. Our forefathers knew that trim painted on a building had to contrast with the background and so they often painted it either black or dark grey or white. If they wanted background color for siding they often chose a contrasting dark grey, stone grey or red. One can see many excellent examples of this in New England

towns such as Lexington and Concord and in Upper Canada Village.

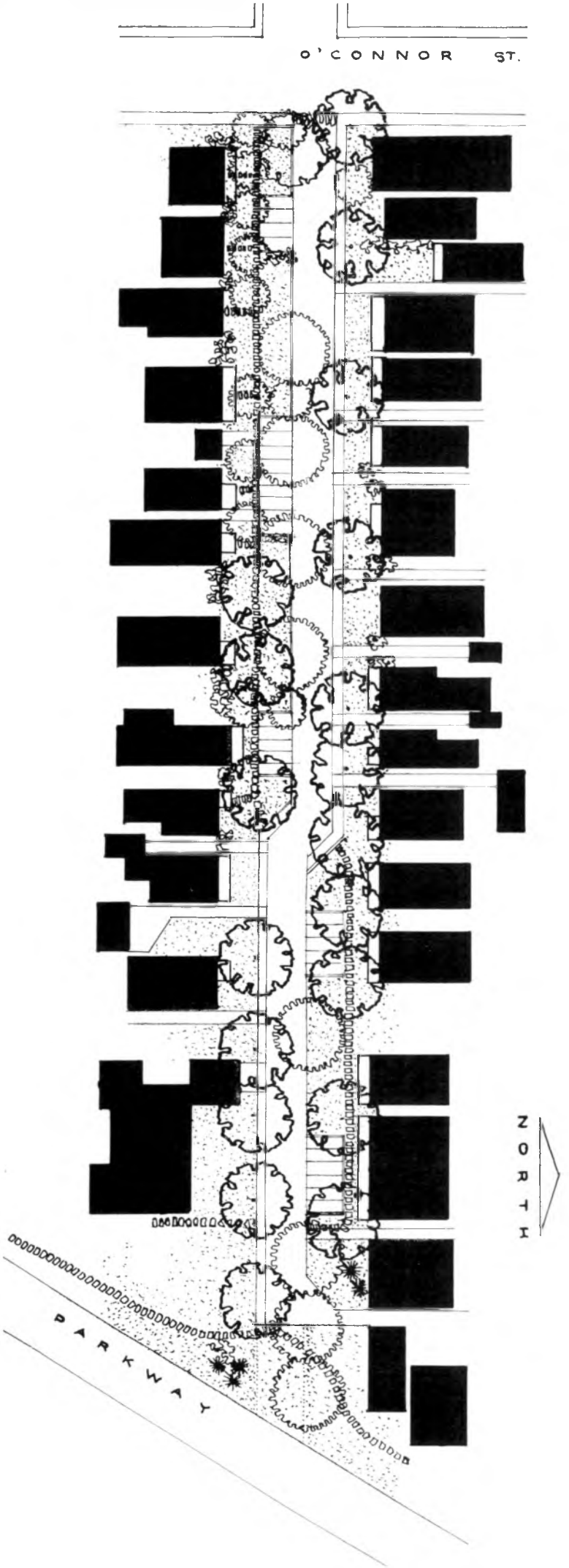
Here are a few rules that might be helpful for a start:

1) All trim (including window and door surrounds, eaves, bargeboards, fascias and ornamental woodwork) should be white.
2) The reverse is equally satisfactory, i.e., black or dark grey trim on a white background.
3) Siding should be a neutral color such as white, off white or dark grey. A dark background with white trim is a very sparkling combination and we now have one very good example on the street.
4) Colors other than white, black or grey should never be used for trim and should be very sparingly used elsewhere other than on front doors and ornamental panels. Light grey, brown, green or cream lack contrast with other colors and merely look dull after a year or so.
5) Where window trim is painted white, the glazing sashes can with good effect, be painted black.
6) Use wood shingles on porch roofs—they have a

A corner store is a valuable part of the community . . . .



but it could look better with fewer, better-designed signs and some landscaping.



much more attractive color and texture than asphalt shingles.

7) Avoid the use of artificial materials. They invariably look incongruous and seldom suit older buildings which were constructed of natural materials.
8) Don't destroy the wooden ornamental porches and gable boards.
9) Remove eaves troughing and down spouts wherever possible—they are an eyesore and flood when they become blocked with ice or leaves. A gutter of crushed stones at ground level is far more practical, cheaper and looks better. A strip of metal or wood to direct water to one side avoids the problem of drips over entrances.

One of the most valuable inheritances we have in these older houses is the natural genius of the craftsmen who produced their highly ornamental and imaginative scrolls, brackets and wooden ornaments. This last year has seen the preservation of two of the best examples of such house decoration all painted white and a pleasure for passersby to behold.

When it comes to dealing with utility companies and to consider the reorganization of the street, the problems become more difficult. The Hydro Company was asked to amalgamate its poles on Third Avenue. This they did on the side of the street where there were no trees, rightly enough since such trees as there are on the other side were already grievously damaged by wires. However, the poles are now more obvious than ever, not being camouflaged by trees and it will require quite a lot of planting by the city to make them less obvious. The only real solution is to bury the wires together with all other services, in a common duct in the middle of the street. Maybe this is not too much to hope for. It would, however, demand more co-ordination between civic authorities and utility companies than presently exists.

The city authorities have undertaken to plant trees on Third Avenue ahead of their schedule, for a nominal cost, if asked to do so by the residents. However, the street needs more than trees, for below the lowest branches the scene is really quite bare and large shrubs are needed to join the houses together and to get rid of the monotony of the long pavement.

Plan of Third Avenue as it could be showing a reduced road width (20').

The houses at present look like teeth that are too widely spaced; it would be a considerable improvement if the many garages cluttering up the backs of the houses, were between the houses. This would then free the back yards for more pleasant use and help to close the ugly and dark gap created by our curious sideyard by-law requirement. The rear yards have a great potential as outdoor rooms as people are slowly realizing. Two or three gardens in the street have already been improved and such improvements are one of the keys to successful urban renewal.

What of the future? This depends on the attitude of future residents. This, in turn, depends on what is done now to make our street an attractive place on which to live. One of the street's worst features is the large expanse of unnecessary road surface which encourages cars to speed, making themselves a danger and annoyance to everybody, especially the very young and the very old. The street is, despite all that the traffic experts say, improperly serving as a common meeting ground for grownups as well as a dangerous playground for children and a parking lot for 26 cars with a two-lane highway. With a bit of organization and the removal of the highway function it could serve all these needs properly at little cost to the community. In spite of official opposition to cul-de-sacs our street is one, insofar as commercial vehicles cannot enter the Parkway at the end. It would benefit us all if the street was actually blocked at the Parkway as we would then be spared the doubtful benefit of any through traffic even though snowplows and the like might cross the grassed or cobbled area along the Parkway. In addition to this, if the pavement was reduced in width to 20 feet we could all enjoy 13 feet more grass and trees in place of asphalt. Parking spaces at right angles to the street could be grouped together over two short stretches instead of our having to live on the side of a parking lot used by the whole of Ottawa to the detriment of Third Avenue. With the co-operation of the city authorities, and the consent of all the property owners on the street, this can be accomplished.

Officials are afraid of setting precedents—yet this would be a good one to set for many residential streets. As to the cost to the city as a whole, it might mean a saving of one-third in paving, snow removal and maintenance costs. This is not an untried idea—it is done in Philadelphia, New York, Baltimore and other cities where the renovation of older residential areas has been a successful program. But it will demand a very conscious effort on the part of all the residents.

What one man does on his own property is not just his own business, his neighbors have to live with it too; it can affect them as much as it does him. As neighbors, we generally respect each other's desires and do not consciously offend, but there are rental dwellings in our vicinity and the absentee landlords do not have the same concern for the environment. Here lies a most serious threat, which only joint action on the part of all of us will overcome. These landlords could, by wise action, make their properties (row houses and apartments for the most part) most attractive to tenants who prefer the charm of an older house, as has been proved in older areas of Boston, New York, San Francisco and many other American and European cities.

These ideas you will note are very simple and inexpensive in their execution, yet they can produce far reaching results in terms of good living for us all. Our old, outwardly dowdy street can be converted to a pleasant haven. But inexpensive though it may be, it will demand imagination, resolution and bold action. Above all, it will demand the conviction that some of the environment which we have inherited from previous generations is well worth preserving and strengthening. ✦✦✦

John Leaning is an architect and planner trained at Liverpool and McGill Universities, a member of the Royal Architectural Institute of Canada, the Town Planning Institute of Canada and the Royal Institute of British Architects and Past President of the Ottawa Chapter of the Ontario Association of Architects. Before coming to Canada eight years ago, he lived in Sweden where, apart from general architectural practice, he prepared one of the first designs for the New Town centre at Farsta, near Stockholm. He was also in Paris at the architectural atelier of M. Le Corbusier before going to Sweden. Mr. Leaning is Past President of the Ottawa Chapter of the Ontario Association of Architects and a former employee of C.M.H.C.

Problèmes d'Aujourd'hui

par Marcel N. Junius,
architecte à la succursale de Montréal de la SCHL.

Architecture, art de l'espace, art de bâtir, support de tous les autres. Tout homme le subit, toute notre vie s'y trouve conditionnée, organisée. Chacun de nous perçoit, sent, voit, réagit au contact de l'architecture; rue, bureau, atelier, usine, théâtre, habitat . . . Nos 24 heures y sont mêlées. Architecture, art de clore l'espace.

Problèmes économiques, politiques, sociaux. Donner à chaque homme sa maison, programme électoral rentable! Problèmes dévalués, tant ils sont devenus communs. Mais rien ne bouge, ou presque.

A côté de cette passivité déconcertante, on construit beaucoup, trop parfois, trop vite souvent. Avec quels moyens? Alors que l'architecture d'aujourd'hui, "architecture vivante", issue de la révolution industrielle a engendré un mouvement de pensée, de combat, un ordre nouveau, solide, charpenté, afin d'apporter des solutions aux problèmes du logement, c'est le Bauhaus, c'est Le Corbusier. Forme et Fonction! Collaboration entre l'Art et l'Industrie! Hélas comme le notait "Architecture' 52" tous ne sont pas convaincus de cet appel, voire de la nécessité de continuer, de poursuivre sans arrêt la lutte pour un monde meilleur et plus humain et cette publication constatait: "Il est fréquent de nos jours de voir d'honnêtes gens, possesseurs d'une quiétude céleste, refouler dans le passé toute velléité révolutionnaire. Mais quoi, disent-ils avec la bonne foi et la candeur des bien-pensants, l'importance de la révolution, qu'elle soit politique, sociale, technique ou artistique, n'est-elle pas aujourd'hui reconnue et appréciée, aussi bien dans notre pays, qu'en France, en Russie ou aux É.-U."?

L'époque des grandes polémiques n'est-elle pas passée, l'homme de la rue, le public cultivé, les techniciens avertis et l'artiste le plus insoumis n'ont-ils pas pu juger du bien-fondé des revendications les plus diverses, de l'urgence des problèmes les plus contradictoires, du rayonnement des solutions proposées, prometteuses d'un avenir meilleur et enfin de l'efficacité et de la qualité des oeuvres déjà réalisées? Non. Il est nécessaire de dissiper une illusion qui gagne chaque jour du terrain et de répéter à la suite des meilleurs esprits de notre époque que le *20e siècle est le siècle de révolutions successives.* Nous ne vivons plus ces lentes évolutions caractéristiques des âges passés, ces cheminements de la pensée n'aboutissaient qu'au terme d'infinies pérégrinations. L'esprit de notre époque procède par le heurt et la contradiction. Chacune de nos générations se décolle par rapport à la précédente et c'est pourquoi le rythme de notre époque est syncopé.

Si nous diagnostiquons le malaise au sein des confréries d'architectes ici et ailleurs, nous remarquons tout d'abord qu'il est le reflet du malaise qui règne dans le domaine politique et social. En effet nous appartenons aux *générations déchirées entre le respect du passé et les promesses de l'avenir*, et notre présent est tout entier dans ce déchirement.

Nous constatons ensuite la cadence rapide à laquelle se suivent les découvertes scientifiques. A peine l'emploi de l'acier et du béton armé—ces conquêtes du XIXe siècle—a-t-il codifié mais non encore assimilé au point d'avoir donné naissance $ un style, que déjà sortent des laboratoires des matériaux et des techniques qui, utilisés audacieusement bouleverseraient nos habitudes de vivre et jusqu'à notre manière de penser.

Enfin notre génération a vu éclore et s'élaborer cette science d'amour universel qu'est l'urbanisme. A la suite d'une guerre, par désir et par nécessité, sont nés des organismes les mieux intentionnés, des administrations prometteuses d'ordre, de justice et d'harmonie. *Mais une administration peut-elle jamais servir une révolution?*

Voilà le malaise. L'urbanisme peut-il être codifié alors que ses données le modifient sans cesse? La route fait concurrence au chemin de fer, à l'avion, aux voies maritimes. L'hélicoptère ne sera-t-il pas la voiture de demain.

La population augmentant en nombre, la maison-capital ne sera-t-elle pas bientôt un anachronisme? Et la construction préfabriquée ne sera-t-elle pas désormais la seule issue au problème angoissant du logement populaire?[1] Cet appel angoissant, résultant du malaise de notre temps reste d'actualité. Mentionnons que ce problème humain de l'architecture, est aussi étroitement lié au problème du "design" de l'objet utile, de la cellule d'habitations, tout aussi bien que du "grand ensemble".

Notre siècle baigné complètement de sciences et de technique, risque le danger de s'enliser dans le message "technico-scientifique", oubliant l'aspect humain de toute entreprise.

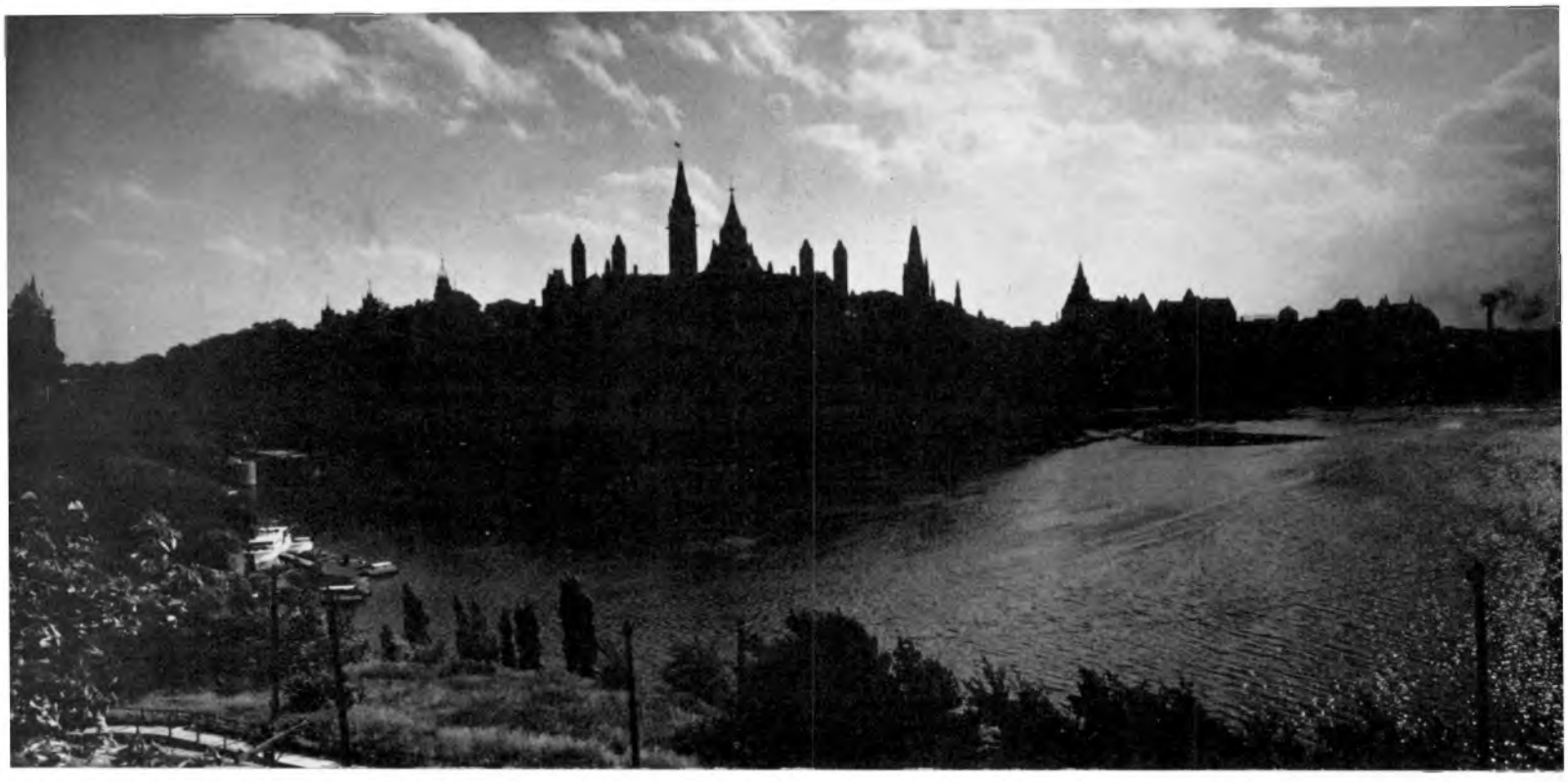
Il reste que nous, jeunes architectes, créateurs de l'objet, qu'il soit outil ou maison, avons trop longtemps monologué . . . sans qu'un écho favorable nous parvienne. Le monologue a trop longtemps duré, il faut que ce mur d'insouciance ou d'incompréhension se renverse au plus tôt et que se construise sous cette dualité "créateur-industrie" une technique propre et honnête, une plastique qui parle le langage de notre temps et enfin comme résultante une "production-masse" qui fera tomber le coût de revient de l'unité-élément. Industrialisations de l'objet-architecture tendant vers une normalisation de l'objet, il faudra dès lors placer l'architecte, le créateur, dans une position telle qu'il puisse donner une solution communautaire à la réalisation collective, affaire de tous.

Donner à chaque homme son logis, oui! mais pas n'importe quel logis! et noter que ce problème n'est pas seulement numérique. La multiplication à l'échelon industriel sera limitée par des contraintes sociologiques, économiques, géographiques, politiques, plastiques. De plus, l'identité du logis doit être trouvée dans l'habitat lui-même dans la "cellule d'habitations", dans l'unité d'habitation, dans le quartier, dans la ville, dans la région.

La différence des fonctions, se fera sentir, par exemple, entre le logis et l'unité d'habitation. Cette différenciation créera le groupe visuel, qui est un élément essentiel de bon voisinage. L'expression plastique contemporaine de tels éléments visuels dans le cadre d'une préfabrication poussée nous aidera à conserver à l'homme, son identité malgré l'ampleur du problème.

Planifions les problèmes, planifions les solutions. —*Libérons le sol et collectivons les espaces.* Ceci demande un effort d'imagination et une nouvelle sensibilité plastique, dans un monde nouveau de formes, d'espaces, de couleurs. Pour pallier à ce que d'aucuns ont appelé "l'enrégimentation des bâtiments"——"uniformité" — "échelle inhumaine" — "écrasement", arguments valables sans aucun doute, car l'homme moderne a été bouleversé par la "quantité" avec toutes les implications matérielles et spirituelles que cette multiplication implique. Nous somme convaincus que seul, un nouveau langage esthétique pourra intégrer efficacement la "quantité" dans une harmonie dynamique digne d'une harmonie classique. *La maîtrise des espaces*, consacrée depuis *l'élément-base-planifié*, répondra à ces impératifs. Révalorisons les valeurs. Que la ligne de conduite soit souple et ample à la fois, que le dialogue s'amorce et alors nous pourrons réaliser ce rêve qui voudrait donner à chacun sa maison, dans une "nouvelle architecture", pleine de la promesse de nos espoirs pour un monde meilleur.

[1] *"Architecture 52" No 1-1952—Bruxelles.* ✦✦✦



PHOTOGRAPHS OF THE TWO MODELS ARE COURTESY OF THE NATIONAL CAPITAL COMMISSION
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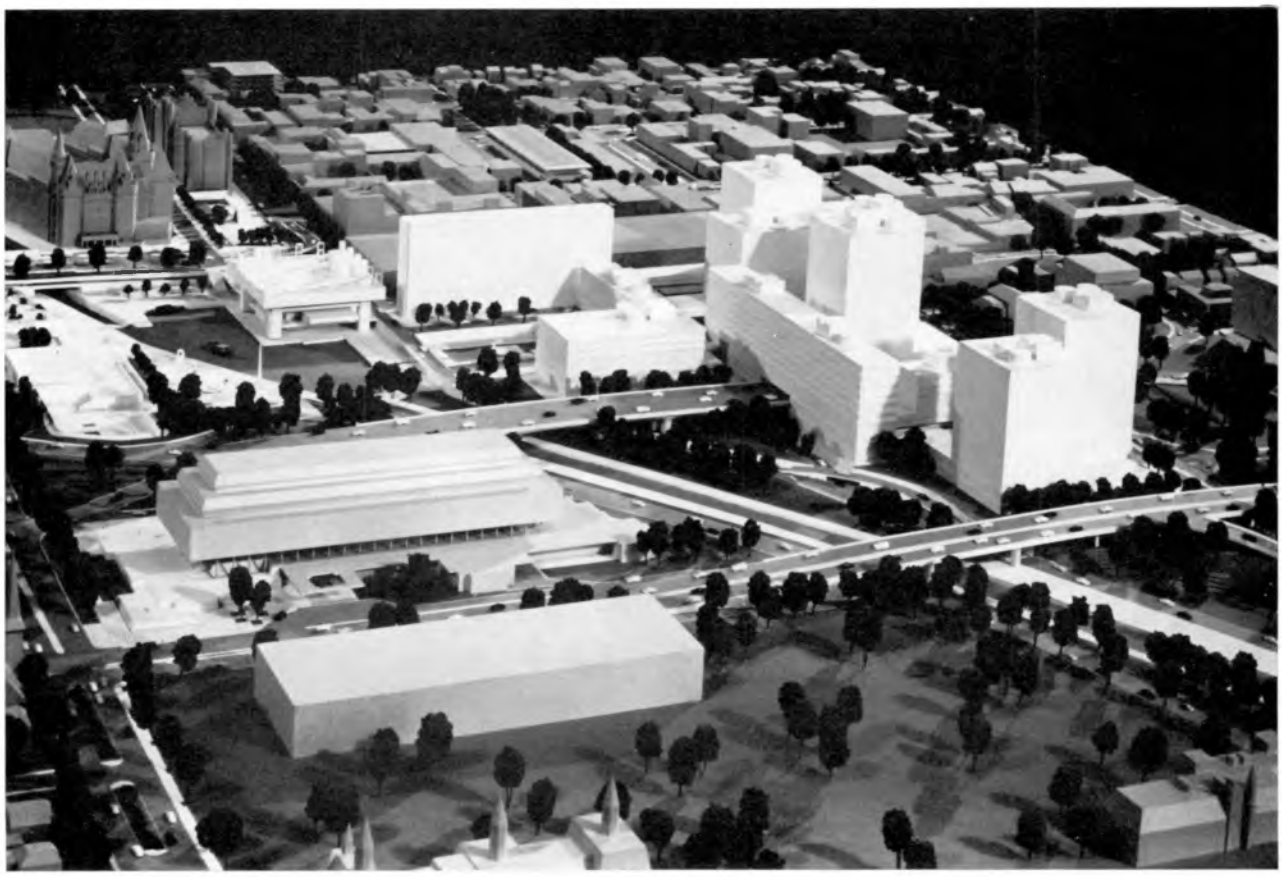
OTTAWA

The familiar skyline of Canada's Capital dominated by the Peace Tower has not altered appreciably since the reconstruction of the Parliament Buildings after the disastrous fire of 1916. World War II brought a major increase in the population, but the construction consisted principally of a major hotel, medium-size apartment blocks and series of low-rise temporary buildings to house Government departments. After 20 years and considerable renovation, the temporary buildings, scattered strategically throughout the city, have become a part of the Ottawa scene. Only now has a start been made to demolish the first group.

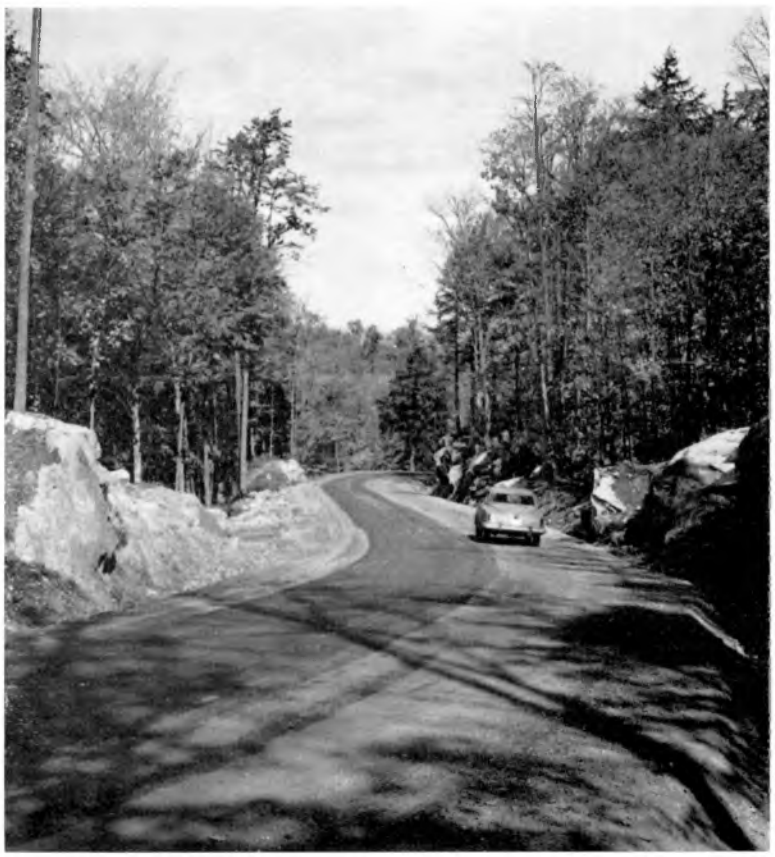
But since 1950, there is a new feeling in the Capital. This once stately seat of government is becoming a major city and will be a world capital in which the charm of the Parliamentary complex will be a backdrop to contemporary architecture. The new Ottawa is not confined to the Federal sector, rather there is a complementary transformation in the area controlled by the Civic Authorities.

The Ottawa remembered by the transient citizens of the war years will soon be a part of the nostalgia of that period.

Except for the Parliament Buildings, there is no clearly delineated Federal sector in Ottawa. Although the Government buildings are interspersed throughout the city there are high concentrations in certain areas. There is much to be said for the dispersement of the major structures—the tendency has been to build in the fringe areas of the city—but this does create problems for the civic authorities supplying municipal services. However, the next two major Federal construction projects, Le Breton Flats and the Parkin Plan, shown in model form on these pages, will be in the downtown portion of Ottawa. Le Breton Flats was a mixed commercial, industrial and row housing residential area that grew up adjacent to the pulp mills which are on the Hull side of the river. It will be completely cleared. The Parkin Plan is a very ambitious project entailing the removal of the Union Station, directly across from the Chateau Laurier, and the clearing of 40 acres of downtown commercial property.

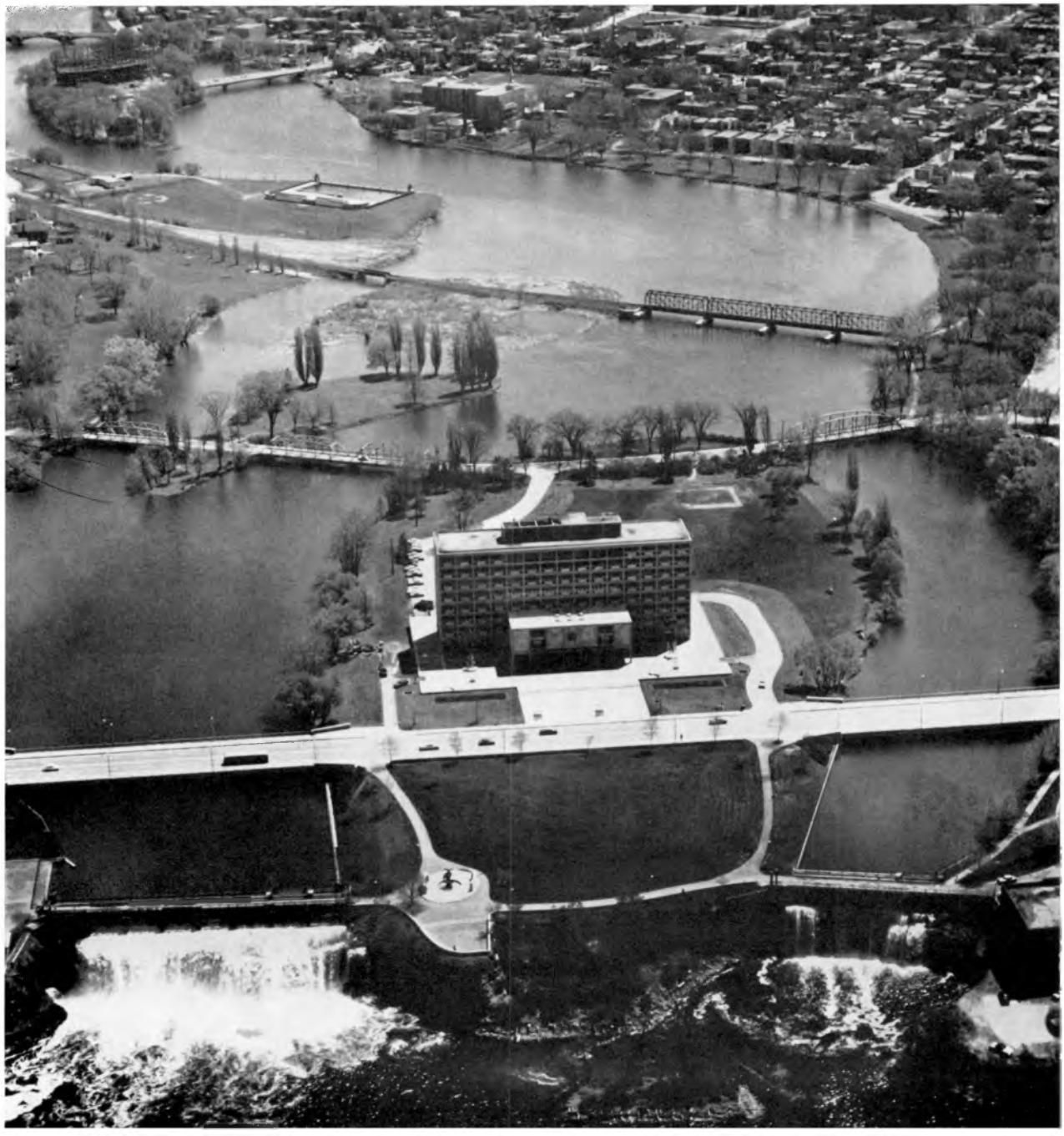


One of the newer Federal areas is the Confederation Heights complex situated in the southwestern section of the city. It is centrally located near Uplands Airport and yet only a few minutes from the Parliament Buildings via the new Dunbar Bridge over the Rideau River. Included in the group is a new building for the C.B.C. entering its last phase of construction. Across the Ottawa River on the Quebec side, the National Capital Commission has developed a lovely system of scenic drives through the Gatineau Hills.



In pace with construction by the Federal Government, Ottawa's Civic Sector is being modernized. A Development Study recently was completed and one portion of the city has been designated as a redevelopment area. A new Sewage Disposal Plant was recently put in operation—part of more than $20,000,000 the city is spending to modernize the system. A new bridge, the Macdonald Cartier, is being constructed to replace the Interprovincial Bridge which has carried streetcars, trains and vehicular traffic between Ottawa and Hull since the last century. Other bridges across both the Ottawa and Rideau Rivers will soon be underway. For the past few years, work has been progressing on the Queensway which will provide a bypass to the City or alternatively a direct, speedy access to the downtown areas.

Luxurious high-rise apartments have been built throughout the Capital and several major hotels will be constructed in the next few years. Ottawa will never sprawl like other Metropolitan areas, as it is circumscribed by a green belt and will eventually be the hub of a series of satellite towns. In the meantime, it is fast becoming one of the most beautiful cities on the continent and will be a Capital of which all Canadians can be proud.



The new Sewage Disposal Plant at Green's Creek.
The City is making a major contribution to rid the majestic Ottawa River of pollution.

A span of the Macdonald Cartier Bridge connecting Ottawa and Hull, is floated into position.
The bridge is being built with cooperation from the Federal Government, Quebec and Ontario and the two cities concerned.

Left, Ottawa's new City Hall is beautifully situated on an island just above the falls where the Rideau River tumbles into the Ottawa.

Ottawa's Mall which has only made its appearance in the summer season, will soon become a permanent feature.

Work progresses on the new Queensway.

Above, part of the Rideau River rushes over the Hog's Back in the Vincent Massey Park—one of the many public recreation areas throughout the city.

Left, one of the many new high-rise apartments located throughout the City.

Philadelphia

by N. R. Bawlf

Mr. Bawlf was the recipient of one of five travelling scholarships awarded by Central Mortgage and Housing Corporation in 1962. The awards are made on the basis of one to each Canadian University which has a school of architecture. The scholarships enable outstanding architectural students in the graduating classes to make a study of North American housing. The following is the third article from Mr. Bawlf's report on his tour. The first appeared in the May-June 1963 HABITAT, the second in September-October 1963.

Up to this point in the tour, we had caught isolated glimpses of the struggles to introduce some measure of new vitality into urban centers. Civic organizations and planning commissions, all too often hampered by their lack of experience, public support and aggressive imagination, had succeeded in erecting some obvious monuments to their industry. As a rule, these ventures take the form of pretentious civic complexes, yet seldom do their efforts alleviate any of the stagnant effects of urban deterioration.

Philadelphia was where we saw the total results of a current battle against this process. The efforts of the City Planning Commission occur in every corner, not just in one isolated civic development. The story of the city's rebirth is now famous.

In the early 1940's, the city was prey to the majority of ills that plague contemporary urban centers. The desertion of the upper class and much of the middle class to the encircling suburbs had left the core without pride and at the mercy of a cold atmosphere of speculative commerce. The core of Philadelphia was rapidly being destroyed by economic expediency. William Penn's spacious plan of 1682 lay buried beneath a clutter of factories, slums and victorian 'slag'. The unrelated filaments of railway tracks laid a web over the city intertwining near their termini and slashing through its heart where they came to a stop a block away from city hall in a 'Chinese Wall', splitting the core assunder. All this, despite the fact that at one time (just prior to the American War of Independence) it was the second largest English speaking metropolis in the world, with its place of fame in American history as the site of the origin of American government and as the nation's first capital whose municipal government had adopted a metropolitan administration as far back as the 1860's.

The rebirth of the city, physically, economically and politically, began in the early 1940's. A reform government, elected on the promise of rejuvenating interest in the city's welfare, was petitioned by a small group of citizens. The latter, with the support of a hard core of conscientious and influential citizens, enlisted the aid of 60 organizations and succeeded in obtaining the creation of a planning program. The success of

the Planning Commission is due primarily to three factors: its aggressiveness and determination, the result of an excellent leadership; its autonomy and effective authority; and the quantity and quality of public support given it. These factors are manifested in many ways, so rather than give an explanation of the Commission's structure and workings, I will endeavor to illustrate its effectiveness by presenting a series of isolated impressions and incidents which will enable the reader to form his own conclusions.

The most salient feature of the city's core is its massive, graceless, victorian city hall, which stands astraddle the intersection of the city's two principal thoroughfares, Broad and Market Streets. Its mass is arranged like a doughnut around a central court, the walls pierced at the four compass points by gargantuan arches, framing the two streets as they stretch out to infinity. 'Billy' Penn stands atop the highest man-made promontory in the city, the city hall tower. A gentleman's agreement is still respected; no building height has yet violated the city founder's stature. The court is undoubtedly the most public space in the

Independence Hall, the most historic building in United States. Sight of the signing of the Declaration of Independence and the adoption of the Constitution.

Philadelphia's City Hall with the statue of William Penn atop the tower still, by gentleman's agreement, the tallest structure in the City.

Commonwealth. Everyone walks through it to get from one side of the building to the other; the perifery of the building is left to the automobile. A city commissioner stands eulogizing before a police memorial to a bevy of wreath-carrying cops and firemen; a group of short, volatile Italian sailors, just out of a submarine, stand bantering comments with several American sailors. One Italian and one American erupt in a flurry of fists. The cops pull them apart and the speech goes on. At night the mansard roof, the dormers and the tower float in a grey-green light from spot lights and again the lights of Market Street perforate the street's edges 'till they fuse at a vanishing point and the same thing occurs at each point of the compass.

On our second day we found ourselves under the wing of the Planning Commission. Mr. Edmund Bacon, the Executive Director, gives us an insight into the reasons behind the enthusiastic public response and support of the Commission's work. He suggests that we attend a luncheon with him, where he is going to speak. We stand, embarrassed, as the central business district chapter of the Kinsmen Club serenades us with "O Canada". Sitting between a Hershey Bar salesman and an automobile dealer, we listen while Ed Bacon explains the development program and its results. Later, on our own volition we sneak off to see the $500,000 display which the Commission has shown everywhere in Philadelphia, a triumph of graphic and visual presentation of tape recordings, models, drawings, maps and photographs which explain the future of the city, in minute detail to school children and stockbroker. Everyone seems to have seen this display . . . except us. The Commission regards the education of the public as the investment most likely to ensure future dividends. This policy is beginning to show results. The schoolchildren who 10 years ago first saw this display are now property owners and tax-payers.

That evening we have supper with Ed Bacon in his house, or rather, on his roof-top. It is in an area dubbed 'the Rittenhouse Square Area'. Rittenhouse Square, one of Penn's four greens, is in the southwest quadrant of the central city. The area is occupied by 19th century Victorian homes—four-storey townhouses which until recently was the victim of gradual deterioration. The buildings had lost their air of urban elegance and were inhabited by low-income tenants and light industrial enterprises. Then a spark of elegance re-entered the area. A few of the townhouses where bought and renovated by individuals who wanted to dispense with suburban living. An avalanche of interest resulted and gradually the area climbed uphill again 'till it had re-established a great deal of its former elegance and prestige. It is significant that this resurgence was not a result of civic intervention, nor was it financed by public funds. It is a consequence of private endeavor. But, when it began, it received the full support and guidance of the Commission. Typically the houses are similar to those found in most cities of this era—row-houses, with party walls, tall and narrow, often four-storeys high with mansard roofs and dormers. The entrance opens directly on the sidewalk, leading to a steep, narrow flight of stairs against one party-wall. The streets are narrow and the spaces between parallel rows of houses are subdivided into small private gardens. Sometimes a walk runs down between the gardens of opposite houses, providing rear access to the residences.

In contrast to the spontaneity of Rittenhouse Square is the highly organized rehabilitation of another residential area of the city's past—the Society Hill development. The project is a part of what is known as the Washington Square (another of Penn's original four greens, this one in the southeast quadrant) Redevelopment Area, which relates to the Federal parks projects to restore Independence Hall, Carpenter's Hall and the United States Customs House.

The Society Hill scheme has been planned by the Commission and financed through public funds. Unlike the Rittenhouse Square development it is not the brainchild of private enterprise, but the result of co-ordinated planning. The area, however, like its predecessor, Rittenhouse Square, had been the victim of mischance. It has been an industrial and residential slum for over half a century. It is the repository of some of the oldest residential, ecclesiastical and commercial architecture of the east coast. The Commission has developed a plan for the comprehensive development

of the entire area by stages. The value of existing structures in terms of historic and economic worth has been ascertained through fairly exhaustive study and consultants have been appointed to provide guidance for private developers. The Commission's intent is to preserve the past in a practical way and make it a pleasant residential section instead of a huge museum. They encourage individual families to buy and live in the old homes after restoration. New structures, including apartment groups and town-houses with gardens, are being erected to fill in the gaps left by the removal of unsalvageable buildings. The concept of the development is both refreshing and, by North American standards, imaginative. Even in its early stages it shows encouraging evidences of success. The concept of 'the Greenway Principle', a basic linear system of connecting walkways and green areas, focusing on significant landmarks, has been effectively utilized in the area. This system is designed to accommodate the pedestrian, it makes no obeisance to the automobile. It forms "a skeletal backbone which gives significance and meaning to a series of individual projects." It is a concept which is a favorite device of the Commission and its designers.

The development is not, however, devoid of flaws. In its determination to achieve a well-controlled, unified result, the Commission has assumed the role of aesthetic and managerial steward over the development to such a degree that its efforts tend to be overly pedantic. Too little chance is given the private home-

A section of the original city in Washington Square.

WILLIAMS

Public housing located in the Mill area of Philadelphia.

WILLIAMS

owner to exercise his imagination. In replanning the area, the Commission has decided to relegate all commercial and retail enterprises to a small shopping center in the heart of the area, taking the shops and small offices out of the residential area and depriving it of some of the most important sources of urban verve. There is a tendency to ape the appearance of the 18th century residences in new construction. Pseudo-colonial dwellings make poor neighbors for the genuine article and both suffer from the perpetration of these shams. I. M. Pei's design for Webb and Knapp's submission to the "Society Hill Competition", now in the first stages of construction is successful only in part. His use of traditional materials and forms in the townhouses is subtly effective, but the siting and manipulation of exterior spaces around the houses is rather ineffectual. Since the three 30-storey apartment towers have yet to be built, the total relationship between the old townhouses and these new townhouses and towers cannot be judged.

In the course of such a development the authorities are plagued with one of the problems which, to date, seems to have no practical solution. This is the question of rehousing the original occupants of the area. Since the authorities are required, either by law or common tradition, to provide for their re-accommodation, any of these people can call upon their services. By and large, however, they simply move into other areas of the city of their own choice and contribute to the creation of new slums. Thus the authorities are continually chasing the slums around the city. They no sooner succeed in reclaiming one area of blight, when they are confronted with a new one. Considering the continual process of urban evolution and the vagaries of human nature this problem may prove to be beyond solution.

In retrospect, I would say that the total impression of this area, notable as it may be, seems somehow too consciously contrived to be entirely natural. The area lacks that bit of dirt, of untidiness, so characteristic of city dwellers of this continent that it gives one the impression, despite the Commission's determination to avoid creating a museum, that the area lacks that vital element of life. Perhaps time and human nature will apply those scratches to the newly applied polish which will take the starch out.

Due to our preoccupation with the general development of the city and in particular with the City Planning Commission and their projects, we devoted a relatively small portion of our time to public housing. We undertook our usual perusal of a number of projects and eventually chose a particular project for more intensive study. The latter was a departure from our normal approach, since we spent only a short time in determining and investigating the social aspects. The project, composed of several stages, one completed and one in the process of construction, forms a part of a comprehensive redevelopment scheme for an area in West Philadelphia, one of several such schemes

now in effect in the city. The precinct, known as the Mill Creek Area, is predominantly a residential district. In recent years it has begun to show evidence of advanced blight and the general purpose of the scheme of redevelopment is to prevent the spread of this blight and inject some adrenalin into the area. The presence of an old sewer, which has recently caved in and exposed the contents of its 20-foot diameter to the surroundings, has hastened the deterioration of the area in terms of its residential desirability. The public housing project, in keeping with the Commission's policy, occupies an integral part of the general scheme. Louis Kahn, who worked on both stages of the project, has designed units which function beautifully . . . as housing units . . . yet despite his capability and efforts, they seem to lack some element of human quality when viewed in totality. The first stage consists of 10 small buildings, each containing four individual family units, laid out in a checkerboard pattern, and three 14-storey apartment buildings; the two building types being separated by a large open play area. The smaller units are highly successful, but there are certain aspects of the apartment towers which are disturbing, despite the ingenuity displayed in their plans and structure.

The most noticeable flies in the ointment are the balconies which project from two sides of the building. The deep reveals of the concrete walls and floors which enclose the balconies form excellent bris-soleils, but the mesh of the chain fencing which the housing authorities have applied to the balconies completely seal them in, turning the quite pleasant feature of a balcony into a rather harsh, cage-like appendage which seems to cling to the building's wall. When one looks up at 14 storeys of these cages, at children clinging to the mesh, at the clothes and bicycles which grace the cages it brings to mind the graceless jungles of fire-escapes which have become such visual eyesores in so many of our urban slums. I suggest that this simple expediency increases, rather than alleviates, the public's contempt for the occupants of these projects. Perhaps such criticism of what might be regarded as an insignificant detail could be considered petty in view of what Mr. Kahn has accomplished. Very probably the blame for such a detail does not lie on his doorstep, but on that of the Housing Authority, yet the impression created as a result of this detail tends to eclipse many of the attributes of the scheme.

In discussing the project with one of the social workers who is employed by city welfare agencies in the area and who works with public housing tenants and non-project residents of the area, we found that the project had created social problems for both groups of people. The presence of subsidized housing in an area where 80% of all housing, despite its quality, is privately owned, does nothing to further any compatability between the two groups. Its placement in the center of a blighted area, compounds the problem, because of the inevitable stigma attached to public housing by all levels of American society. The apartment towers are disliked by both the tenants of the project and the occupants of the surrounding area. The latter is not due to architectural quality necessarily, but can be attributed also to the reticence of residents in accepting them as a useful and valid component of urban living. The fact that they are the product of civic authority, rather than of private enterprise, seems to increase their unpopularity.

In this review of our stay in Philadelphia it has become apparent to me that it is very difficult to portray the essence of the city's awakening. To grasp this essence it is necessary to see all the facets, to form a comparison between the redeveloped elements and those which still remain untouched. Nobody could attempt to forecast what the eventual totality of these developments will be like. It is an unceasing process of change, and in all likelihood will never come near to achieving a balance of components, but it strikes me that the success lies not in the end but in the approach to a problem which has recently become almost insoluble in the minds of most proponents of urbanism. It requires a great deal of optimism to surmount the sense of despair which the present state of our cities arouses. It also demands the ability to examine and plan, in totality, keeping the entire city in mind, while remaining in touch with the street and in a scale with the human and his need for identification with his immediate surroundings. ✦✦✦

RÉUNION À DÉLOS

RÉUNIS À DÉLOS, CE DOUZIÈME JOUR DE JUILLET 1963, NOUS, LES SOUSSIGNÉS PROVENANT D'UNE GRANDE VARIÉTÉ DE DISCIPLINES, NATIONS, ALLÉGEANCES POLITIQUES ET GROUPES CULTURELS DIFFÉRENTS, AFFIRMONS ET DÉCLARONS CE QUI SUIT:

Monsieur Stewart Bates, signant, au crépuscule, la Déclaration de Délos, dans l'ancien amphithéâtre, sur l'île de Délos.

1. La cité, au cours de son histoire, a été le berceau de la civilisation et du progrès de l'humanité. Aujourd'hui, comme toute autre institution humaine, elle est profondément mêlée à la plus sérieuse et plus vaste révolution qui ait jamais ébranlé le genre humain.

2. Cette révolution se poursuit sous forme d'un changement dynamique. Au cours des quarante prochaines années, la population du monde s'élèvera à sept milliards d'âmes. La science et la technologie déterminent un nombre toujours plus grand des différents modes de vie humaine. A mesure que s'effectue ce progrès, le comportement social de l'homme subit de sérieuses modifications. Ces changements se manifestent dans tous les domaines sous forme d'un danger contrebalancé par une occasion favorable encore plus grande. L'homme peut se servir de l'énergie atomique pour réduire toute agglomération humaine aux décombres d'Hiroshima. Par contre, elle peut produire suffisamment d'énergie pour répondre à tous les besoins de l'homme. La population du monde peut dépasser de beaucoup son approvisionnement en aliments. Même pour suffire, la production d'aliments à notre époque devra tripler pour l'an 2000. Et pourtant, pour la première fois, nous avons aussi le moyen de procurer suffisamment d'aliments à chacun.

3. Un grand nombre de personnes ressentent ces paradoxes. Ce dont on ne se rend pas compte, toutefois, c'est que l'insuccès à adapter les agglomérations humaines aux changements dynamiques qui s'opèrent, pourra bientôt dépasser même les maladies et la faim comme le danger le plus grave, sauf la guerre, auquel l'espèce humaine aurait à faire face.

4. Une caractéristique universelle de la révolution qui se produit à travers le monde est le mouvement des populations vers les agglomérations urbaines, à une allure encore plus rapide. Chaque année, la population du monde augmente de 2 p. 100, tandis que la population urbaine augmente de 4 p. 100. Au cours des quarante prochaines années, il se fera plus de construction urbaine qu'il ne s'en est fait jusqu'à maintenant dans toute l'histoire de l'humanité. Il est déjà évident que des conceptions fautives d'aménagement urbain produisent un gaspillage inexcusable. Par contre, l'absence totale de prévisions est une cause de chaos dans les cités, contribue à saper l'ordre civique et à détruire des traditions historiques précieuses et diverses. Le besoin d'une planification rationnelle et dynamique des agglomérations humaines, aussi bien maintenant que dans un avenir prévisible, est ainsi inhérent à la situation urbaine de notre époque.

5. L'homme peut cependant prendre ses dispositions en face de cette nouvelle crise. Il dispose de ressources suffisantes pour s'acquitter de cette tâche. La technologie moderne permet de mobiliser des moyens matériels sur une échelle tout à fait nouvelle. Les pays développés dépensent 150 milliards de dollars chaque année en armements et leur revenu national continue d'augmenter. Des milliards sont dépensés chaque année en services sociaux, dont un certain nombre sont rendus nécessaires par les insuffisances de la vie urbaine. Une fois que l'existence d'un problème est reconnue, il est possible de trouver les ressources nécessaires pour y faire face. Il est vrai, toutefois, que ces ressources ne sont pas uniformément disponibles. Certaines sociétés manquent encore de moyens d'action. Mais il ne s'agit pas d'une pénurie absolue et pendant qu'elles travaillent à leur modernisation, leur pauvreté peut être compensée par une assistance soutenue provenant des régions plus avancées du point de vue technologique.

6. Les principaux points de repère qui permettent de tracer une ligne de conduite sont aussi plus clairs que jamais auparavant, partiellement grâce à l'extension considérable des études systématiques du comportement humain. Le but à atteindre doit être de produire des agglomérations qui satisfassent l'homme non seulement en tant que travailleur et parent, mais en tant qu'apprenti, artiste et citoyen. Sa participation active est essentielle pour former son propre milieu. Il doit être en mesure d'utiliser d'une façon créatrice les possibilités encore imprévues de la technologie en progrès. La planification elle-même doit assurer que de telles possibilités ne sont pas exclues par une vision statique des agglomérations humaines. Par-dessus tout, le citoyen devrait se sentir à l'aise dans sa propre culture et disposé à reconnaître et accepter les autres cultures qui l'entourent.

7. Lorsque nous passons à l'application de ces principes aux problèmes d'urbanisation, nous ressentons le besoin d'appliquer la réforme la plus complète et de renforcer nos institutions et procédés actuels. Jusqu'à maintenant, les systèmes d'éducation à tous les niveaux n'ont pas encore adopté suffisamment de mesures pour faire face aux nouveaux problèmes de l'agglomération humaine et pour explorer les possibilités d'y faire face par une planification rationnelle. Dans les universités, l'application des sciences fondamentales au bien-être humain a été fragmentée. On s'est occupé de certaines parties de la vie de l'homme—sa santé, sa nutrition, son instruction—sans s'occuper toutefois de l'homme tout entier, ni de l'homme vivant dans une agglomération. Ainsi, nous soulignons avec toute l'urgence possible notre conviction que dans chaque geste que nous posons, dans les organismes qui s'occupent de ces problèmes au niveau national ou international, dans les institutions de haut savoir, à caractère public ou privé, notre Société a besoin:

   a. d'établir de son propre chef une nouvelle discipline des agglomérations humaines;

   b. de commencer des recherches fondamentales très poussées;

   c. de grouper des spécialistes d'autres disciplines pertinentes et de les faire travailler ensemble à des projets qui relèvent de ce domaine;

   d. de développer de nouvelles méthodes pour former des hommes qui puissent assumer la direction et des responsabilités dans cette sphère d'action;

   e. d'attirer certains des meilleurs jeunes esprits dans ce nouveau domaine de recherches, de développement et de pratique.

8. Nous venons de différentes nations, de différents antécédents culturels. Nos politiques diffèrent, nos professions sont variées. Cependant nous croyons que le problème des agglomérations humaines est un problème général et fondamental dans notre nouveau monde dynamique et qu'il faut l'envisager et l'étudier de façon que, comme toutes les disciplines scientifiques, il se situe au-dessus de nos différences locales. Nous convenons que la mise en oeuvre pratique d'une ligne de conduite—dans des domaines très essentiels comme l'utilisation du terrain, la situation des placements ou la planification des cités au cours des temps—sera déterminée par les politiques et les besoins domestiques, et, à titre de citoyens, nous nous engageons à

nous efforcer d'introduire ces sujets dans le dialogue de la politique active de nos sociétés locales. Toutefois, nous ne sommes pas divisés sur ce que nous désirons le plus fortement affirmer—à savoir que nous sommes les citoyens d'une cité universelle, menacée pas sa propre expansion torrentielle et qu'à ce niveau notre souci et nos engagements ont pour objet l'homme lui-même.

Monsieur CHARLES ABRAMS
Monsieur EDMUND BACON
Monsieur STEWART BATES
Monsieur A. K. BROHI
Docteur WALTER CHRISTALLER
Docteur SHAFIK EL-SADR
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Professeur C. H. WADDINGTON
SIR ROBERT WATSON-WATT

Lady Jackson—Barbara Ward pour tous les économistes—formulant la Déclaration de Délos—à Délos. On voit ici ce qui reste de l'amphithéâtre, autour duquel sont assis les participants à la conférence de Délos, appartenant à toutes les nations et à toutes les disciplines. M. Stewart Bates est assis à côté de M. Ottoo, du Nigéria—à la deuxième rangée. On remarque aussi sur la photo bon nombre de personnages de renom, comme, par exemple. Margaret Mead qui tient la houlette du berger.

Houses and Homes

by Albert Potvin,
Information Division, Central Mortgage and Housing Corporation.

Houses are the homes of other people. The taxi driver and the postman think of a house as an address. The statistician views a house as a unit. To the money lender a house becomes a mortgage. The municipal official sees a house as a taxable item, the landlord considers it as a source of income, while the realtor looks at a house as a merchantable commodity. To the builder a house is an assembly, the fitting together of its segments or components, but the architect regards a house as a monument, a medium through which to exercise his creative skill.

If a house can be all of these things, according to the eye that sees, it can also be more than the sum of all of these. For each one of us there is a house that is different from all others. It is no longer just a building, it is a bit of yourself as well—your home.

Home can mean a quiet secluded room insulated from the rumbling of the street outside. It can mean the comfort of an armchair within reach of the evening paper, a bed to crawl into after a day well spent. It can mean a porch with an open view on the community, but a few feet from the retreat within or a corner where you can be treated to fact and fantasy through the magic of television. The mention of home can evoke the noisy clamor of youthful voices, a stimulating exchange of thoughts with intimate guests or a quiet dialogue with your partner when the last of the supper dishes have been put away. A home, as the saying goes, is more than just a house, more than a shelter; home is of the spirit, the house its embodiment.

During a period in the lives of most of us home means family—laughing, playing, quarrelling children, restless youngsters tearing in and out, digging into the self-replenishing refrigerator, making unintelligible phone talk, slamming doors, bringing in loads of dirt, noise—and love. Then a marvelous unanimity is re-established three times a day, when the house is filled with the smell of cooking. At no time is the concept of home more intimately real than when the hungry family gathers around the dinner table.

To others the notion of home is not complete without a decor of flowers and shrubs—the rosebush that has to be pruned, that bed of asters and nasturtiums and the clump of lilac trees that fill out every spring with scented blossoms.

There are homes where everything is permanently in its place, not a blade of grass grows longer than the next, not a foreign speck is allowed to settle. In less fastidious homes things are lost and found, broken and repaired, lent and never reclaimed. Another home is a guarded sanctuary, protected by a lawn, a hedge, a picket fence, where the tranquility is only occasionally punctuated by the uninvited ringing of the doorbell. While the home across the street has a well worn welcome mat that speaks its communal character; its doors are open to neighbors and family alike.

Whether animated or serene, boisterously alive or muted, turbulent or orderly, the abode is home when an occupant has a feeling of belonging. Home is the solitary log cabin along the lonely backwoods road, the hovel near the railroad track, the twelve-room mansion on the hill inviting envious stares from the dwellers below. Home is the anonymous carbon-copy bungalow, and the second-floor apartment where the presence of the tenant is revealed only by the unlatching of the door every morning and the discreet turning of the key at the end of the day. The squatter's tin-lined shack by the city dump and the millionaire's estate are equally invested with that same title, giving them the same claim to dignity. But they must first be touched by that undefinable quality generated by the loving, possessive presence of those who make it their dwelling place.

Home is the light off in the distance, the curl of smoke above the trees, the gleam of white paint reflecting the morning sun. It's the bark of a dog, the indistinct mutterings of a radio, a baby's cry. It's the

smell of roasting chicken, the wash dancing on the line, the clicking of pruning sheers, the whine of a vacuum cleaner.

Homes are the cells from which the community is born. They may grow in clusters as in the cities, fighting for space, trying to maintain their identity and their individuality or in the relative detachment of the countryside. Whether separated only by a party wall or by a section of land or by miles of forest, all are linked by some line of communication. The path to every home also leads to a common artery, a street, a highway, a stream or a railroad. The hermit's cabin perched on the mountainside, the fisherman's shanty and suburban ranch-house all have a point of convergence. None is so isolated or remote that it escapes this gravitation.

If in the city, homes are reassuring by their very numbers, the presence of a single home in the wilderness dispels some of the anxiety born of solitude. The sudden sight of a house or a cabin around a bend is a relief after a long drive through sparsely-settled country. Without these occasional signposts of civilization, the houses along the way, we become uneasy. Now contact with people has been re-established, if for a fleeting moment, and our feeling of security is restored.

A house is expendable, but a home is permanent, for we take it along with us wherever we go. We will say we are "leaving the old home" to move into a new *house;* but very soon this is our new *home*, and our former home becomes "the house we used to live in". The transition is complete once the drapes and curtains are up in every window and when we can unerringly find the electric switch in the dark and no longer stumble over the bottom step.

Houses undergo subtle changes through the years. For one thing, when we were children they were built much taller. That's why balls kept breaking windows when they should have gone right over the roof. Houses were equipped with dark corners for playing hide-and-seek, holes to crawl into under the porch and spooky attics where old locked trunks and moth-eaten clothes and framed pictures of long deceased relatives were kept. Bannisters were appreciated because they saved so much time and effort when swooping down from the second floor. Keyholes were set up at eye level, which was very rational indeed. Houses had large pantries where cookies and raisins and shelled walnuts were hidden and where parents kept finding out that somebody had been in. Every house had a covered porch with columns that you could shinny up. Roofs, for all their height, were accessible, though there was always someone below to insist that you "come down this very minute". Windows could be opened from the outside in case you decided not to use the door. Houses were designed for playing in those days, for eating in too; still these functions could be complicated or interrupted by such inconveniences as filling the coal scuttle and wood box and carrying out the ashes.

Little children grow up to be big people and learn about property taxes, mortgages, building depreciation, rent and fuel bills and other such unpleasant things. Yet the home, for all its mutations, its added demands, its deceptions too, remains the ever calling oasis, our own fort or stronghold from which we can face life with equanimity. In the home we can dispense with artifice, throw off the cloak of disguise, the servility or the agressiveness expected of us in our work-day relations. Here we can shut out the idle curiosity, the unkind judgment and relax from the pressure of competition into soothing non-conformity. In the cloister of his home a man can build his empires, right the wrongs of a troubled world, fight his battles and put his enemies to shame.

Houses are built of wood and clay; homes are made of the things we have known and accepted and have come to cherish. Houses are assembled with mortar and nails, built for a season or to withstand the centuries; homes are built of contentment, more enduring than stone yet more fragile than the tent that collapses with the first heavy gust. Houses are sold and exchanged but homes have no price tag, no dimensions by which to establish a market value. Home can be as small as the cell of a Trappist monk, or as long as your street and as broad as your city. Home is where you would rather be and where you instinctively return when your day is done. ✦✦✦

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