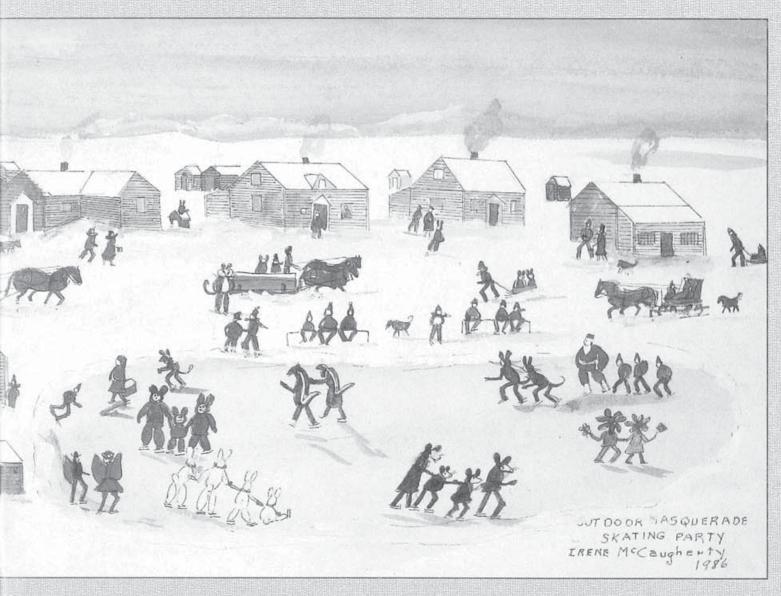
## Winter Cities



The Ideal Winter City
The Two Faces of Public Spaces
Cold Climate Neo-Traditionalism

Planning



## Winter

## Cities

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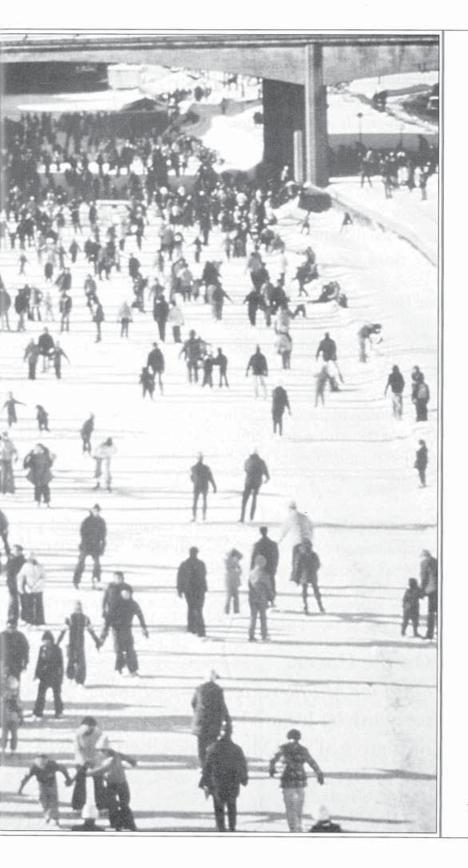
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#### WINTER CITIES NEWS

VOL. 10 #4, March 1993 ISSN 0838-4096 Charitable Donation Registration No. 0-796 514-21-10 Second Class Mail Registration No. 6952

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Winter Cities News is published by Winter Cities Association, 1933-5th St. S.W. Calgary, Alberta, Canada T2S 2B2
Phone: (403) 229-0696
Fax: (403) 245-9701

#### Winter Cities Association

is dedicated to realizing the unique potentials of all northern communities.

Through publishing, networking, organizing conferences, facilitating research and other means, the Association seeks to make available solutions and to promote awareness of opportunities associated with the winter season.

#### Subscription Rates:

Cdn \$40 - 1 year Cdn \$75 - 2 years Cdn \$100 - 3 years

Publisher/Editor: Harold Hanen Editor Emeritus: Jack Royle Associate Editor: Greg Liburd Typist: Lori Glass Publisher: Windmill Printing Ltd.

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## THE CRUSHING OF CULTURES

Dealing with science in general is difficult enough. To deal with it in the context of public policy, credibility, and acceptance in the North is enough to frustrate even the most intrepid in a quagmire of generalizations. Let me therefore qualify the title with an observation by Mark Twain (surely one of America's foremost social scientists), who said: "All generalizations, including this one, are false."

cience, far from being an absolute, is simply a process of progressively refined generalizations. So, if we can accept Twain as an authority, it should be obvious that what we are dealing with, in general, is a progressive refinement of falsehoods. That refinement leads us towards the truth.

In 1970, I was the on–site engineer during the construction of a new town in Canada's Northwest Territories – the town of Edzo named after a famous Indian leader and statesman from the area. The town of Edzo was to replace the existing Indian village of Rae. The decision to abandon Rae and to create a new town was based, to a large extent, on the advice of fellow applied scientists.

Two years later, when the town was complete, I began to recognize that a mistake had been made. Looking back several years after that, I realized the applied–science approach issue was a large part of the problem and that it stood in the way of a decent solution to the concerns of the people who made Rae their home and in whose name the project was originally undertaken.

Rae–Edzo is the largest Indian community in the N.W.T., with a population of about 1300 Dogrib Indians. It lies about 110 km west of Yellowknife on the shores of Marion Lake just off the North Arm of Great Slave Lake.

Rae was founded at its present site at the turn of the century because of the competitive trading between the Northern Trading Company and the Hudson's Bay Company. The choice of location was based on easy water transport, access to the renewable resources of the region, and the travel routes used by the Dogrib Indians. Hence a trading post and later a mission, and then a school and other services, were added to what was originally a well–used Indian camp and rendezvous.

However, as the population of Rae grew and its infrastructure expanded, the community began to experience a number of problems. In the 1960s these problems seemed to peak, in a political sense, when a number of children died. Several of the deaths and many of the community's health problems were attributed to poor water, sanitation, drainage, and housing. Health officials and the community called for improvements. The federal and territorial governments responded. Public health officers, planners, and consulting engineers from the south were called in to survey the situation. All agreed it was serious.

The community was located on solid rock and seemed to be haphazard in its land use. Linguistic, social, economic and cultural differences were profound. The outside technical experts seemed somewhat overwhelmed by the apparent chaos and the difficulty that they faced on applying traditional engineering and planning solutions. After several visits to Rae and many more meetings between officials in Yellowknife and Ottawa, it was decided that the best solution was to

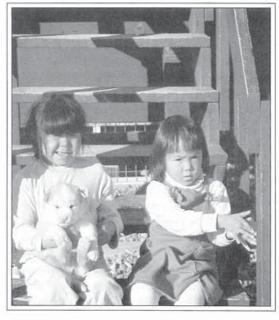
#### DONALD J. GAMBLE

move the community to a nearby location. Although the new site was away from the lake, the engineers were able to show that the soil was better for laying underground water and sewer mains and was better drained and more suitable for building foundations, that the site had better highway access, and so on. It was to be the showpiece of the North. The responsible public officials, many of whom had technical backgrounds themselves and none of whom were native, were impressed. Everyone had the best of intentions.

Through all this, the Chief, the band council, and the people of Rae were subjected to countless meetings as federal and territorial officials and their consultants and specialists came and went. The people at Rae remained concerned about the health problems, but to that original concern was added a new one – the moving of the whole town. They quietly pointed out the need to stay near their fishing nets on the lake. They said that they didn't need to be near the highway. They talked of the value and meaning of their community in a geographical and historical context. They repeatedly spoke of who they were as a people. This was all done quietly and repeated many times. It was clear that the people didn't want to move.

Eventually the southern officials got what they needed to justify what they wanted to do for the people of Rae. The Chief said that if all these outsiders really wanted to build the town so much, to go ahead, but the people from Rae probably wouldn't move. This was taken to be local endorsement for the project.

A residential school was erected to serve the region, which includes several small more isolated



communities and outpost camps. Roads, houses, a nursing station, a fire hall, water and sewer mains, and a sewage lagoon were put in place. An area was zoned for future commercial and industrial development. When I left, a few families had moved into the houses, although at least half of them were still vacant. Children were being bused 24km from Rae to attend the new school at Edzo. As the Chief had always maintained, the majority of people refused to move to Edzo.

Since leaving Edzo, I have tallied up the costs and,

with the considerable benefit of hindsight, I have concluded that the public health and other technically related problems in Rae could have been solved within that community at a substantially lower cost than that required to build Edzo. In fact, that has happened anyway. Today, the government has abandoned its hope of moving Rae. Huge new investments in infrastructure have been made in the old town. Edzo was a colossal error in technological, financial and human terms.

If Edzo were unique, perhaps we could dismiss it as an unfortunate error. But what happened at Edzo is not unique. It fits into a larger and quite disturbing pattern. Look, for example, at direct parallels in Canada's North – the attempt in the Mackenzie Delta to move Aklavik to Inuivik, and the more recently aborted grand design to relocate the community at Resolute Bay. Even so, attempted community moves are only the more obvious examples of the flawed thinking that permeates our activities in the North.

Of course, the use of science, and engineering in

particular, is only one aspect of the encounter between Western societies and northern societies. Nevertheless, I think it is instructive. Difficulties seem to become most obvious in engineering ventures, because that is how we most obviously apply our science in the North. And engineering and technology form the conventional Western notions of progress and development.

But in all this, what is symptom, and what is cause, and why? I think most would agree that the application of science, as I have described it here, created problems because it ignored the human condition. That is not uncommon even in our southern societies. We are struggling to find ways of incorporating the social sciences and the humanities into decision-making. What is happening to northern societies highlights this struggle and at the same time goes beyond it.

The root of the issue was touched in a lecture by a distinguished political philosopher, Professor Leo Strauss when he noted:

All the hopes that we entertain in the midst of the confusions and dangers of the present are founded positively or negatively, directly or indirectly on the experiences of the past. Of these experiences the broadest and deepest, as far as we Western men are concerned, are indicated by the names of the two cities Jerusalem and Athens. Western man because what he is and is what he is through the coming together

of biblical faith and Greek thought.

... every attempt to understand the phenomena in question remains dependent on a conceptual framework that is alien to most of these phenomena and therefore necessarily distorts them. "Objectivity" can be expected only if one attempts to understand the various cultures or people exactly as they understood themselves.

Obviously, indigenous northern societies emerge from a past that is not based on Jerusalem and Athens. They have different roots and different perceptions that offer a different meaning and a different avenue to the "Truth".

One is led to the same conclusion through linguistics. Unlike other Indo-European languages, it seems that Indian and Inuit languages cannot be calibrated with our own. Native peoples dissect nature and the universe differently, and this often leads to fundamental differences in perceptions of what is true, what is right, and what conduces to public needs and welfare.

In northern societies, in places such as Rae-Edzo we are confronted with a large portion of the population who do not share our world view. There is, of course, nothing wrong with this difference as long as it is recognized, accepted, and respected. But when it is ignored, denied, or downgraded, it creates serious problems.

I think that the application of Western scientific technology in the North is responsible for many of those problems

simply because it does ignore, deny, and downgrade, even though it usually does so quite unconsciously. In applying science, we provide value-laden "objective" technological solutions that mask fundamental social issues. But because the solutions-to us - seem clear and definitive, and are so eminently qualifiable and rational, the decisions, people who share the same technological world view, embrace them. In other words, the only things that count are the things that can be counted.

This pervasive bias was explored by Otto Rank, regarded as one of Freud's most outstanding students and a pioneer in the field of transpersonal psychology. It was his main thesis that ideologies, much more than realities, determine the behaviour of individuals and subsequently the fate of people. He advocates a new and proper balance. By accepting the irrational we can rediscover vital human values. These values have simply been masked by the living process - a rationalizing process plagued by fear of natural forces both without and within.

This represents sensitive ground on the Jerusalem side of our tradition. But there are important scientific insights to be gained through the exploration of this mystical side of human nature and history. For example, in Varieties of Religious Experience, William James points out that only individuals experiences - whether rational or irrational to the observer - and not scientific facts or methods, are concrete:

It is notorious that facts are com-

## "Objectivity" can be expected only if one attempts to understand cultures exactly as they understood themselves.

patible with opposite emotional comments, since the same fact will inspire entirely different feelings in different persons, and at different times in the same person: and there is no rationally deductible connection between any outer fact and the sentiments it may happen to provoke ... whatever of value, interest or meaning our respective worlds may appear endued with are thus pure gifts of the spectator's mind.

This is the lesson of Rae-Edzo. These insights come from our own tradition. They are not new, yet they seem lost on our science as it is applied in northern societies. Why? I believe that specialization in the sciences, particularly the applied sciences, is a basic cause. It wasn't that we who were involved with Edzo were malevolent; rather were incompetent beyond the rather severe limits of specialization and, what is worse be it is so common, we couldn't even accept the limits when they were pointed out, as the people of Rae tried to do.

Specialization produces an expertise able to plumb the depths of science, but by its very narrowness and isolation it becomes less and less responsive to the living experience of the nonspecialists leads to a contemporary parallel to what David Hume crystallized in his natural History of Religion: a two-tiered model of the elite and the vulgar, where significant insights are defined by the intellectual leadership while much of the everyday activity of people is relegated to the realm of popular ignorance or superstition. Edzo is a case in point.

In specialization, and the power given over the specialist, there is a tendency to become encapsulated in smaller and smaller spheres of intellectual certainty. We lose our ability to integrate and make comprehensible what is unknown or misunderstood in a particular economic, political, and social situation.

Certainly, excellent scientific work is being done to break through the rigidities we have inherited. But with the increased complexity of science and its insistence on a mechanistic-reductionistic "rational" methodology, science is becoming increasingly divorced from itself. The various fields of science are quickly losing the necessary ability to cross-fertilize. Each speciality in its application becomes more like a malignant cell that destroys rather than supports its host. This is uncomfortably apparent as we see the effects of applied science in northern societies.

In science, we apply our Westernbiased reason and judgement to establish an "objective" meaning for ourselves. But it is often just a Western-biased meaning, and not necessarily universal. Our science is therefore value-laden in what it chooses to acknowledge as important and to study and what it chooses to ignore. There is a scientific blindness in our perception of the vibrancy of northern societies. It is not myopia, but blindness. How can those who see explain to the blind that there really is such a thing as colour? No amount of scientific information can offer the experience of even the quickest glance. if only there were a means of really seeing, of really knowing.

The confusion I see in information. knowledge, and wisdom arises from these different world view. Scientific application asks "what" and "how", and that leads to scientific information and knowledge. But when it comes to "why", the basis of wisdom ,science, and particularly applied science, is silent. But the question "Why?" permeates all that we are. It is the internal compass that guides what each of us does, yet it can never be objectively defined or explained. It can only be experienced.

In my 20+ years in the North, I have found that aboriginal societies have more awareness of the "Why?" that I ever found in institutions of learning in the south. There is a treasure there that must be acknowledged even if it can't be understood. But with our Western scientific fixation, plagued by intellectual arrogance and an unconscious cultural subjectivity masked by a claim of objectivity, we are crushing the very essence of what is vital to survival in northern societies. In the process we are losing what is vital to the expansion of our own notions of science.

Our experience in northern societies has illustrated how mechanistic science must be instilled with a new attitude. That attitude will arise from a new humility, broader awareness, and a refined sense of responsibility. From that will emerge a new kind of knowing and a fresh wisdom on our mental as well as our geographic frontiers.

Originally presented at the Arctic Science Conference.

## There is a scientific blindness in our perception of the vibrancy of northern societies.

## Prospects for Soviet/Canadian Co-operation in the

#### Arkadi Cherkasov

Many aspects of the Canadian experience in the development of the northern territories attract keen interest from Soviet specialists: high labour efficiency with a relatively low number of those employed in northern industry; the use of specialized machines and equipment; priority development of the transportation infrastructure; and some community planning decisions (for example, at Fermont in northern Quebec).

It is interesting that many Canadian specialists in this field have a similarly positive assessment of the Soviet experience.

Whereas Soviet builders admire Canadian achievements in the construction of small mobile houses and "living modules" for the North, of which entire "mobile cities" are often assembled, Canadians have high regard for Soviet experience in building multi-storey houses and structures on permafrost, and in the construction of large, multifunctional centres such as Noril'sk with a population of 200,000 at 60N latitude - a city Pierre Trudeau once called "one of the modern marvels of the world".

Also impressive is the complete absence of unemployment in the Soviet North, notably among the indigenous population; in traditional industries, such as reindeer breeding, there is actually a shortage of manpower. Nor can anyone deny the accomplishments in the development of public education in the native languages of northern peoples. One of the things that promotes the participation of the indigenous population of the northern territories in the settlement of their problems is the territorial autonomy of many northern peoples in the U.S.S.R.

This mutually positive appraisal of each other's "northern" experience creates a rather favourable atmosphere for Soviet-Canadian co-operation in the development of the northern territories. That co-operation may serve as a prototype for the development of East-West relations, both bilateral and multilateral, in many other fields.

Our experience is mutually complementary. The natural and climatic conditions of the Canadian North and the structural distinctions of its resource potential are strikingly similar to those in the Soviet Union (and include as important a factor as the distances between the South and the northern territories under development). In addition,

the principal direction of economic activity in the Canadian North is very similar to that of the Soviet North, although somewhat smaller in scope; large-scale development of mineral, oil, and resources; construction of railways, highways, and pipelines; exploration of the arctic shelf and sealanes; and town planning in permafrost conditions.

adian North in the counstructure of Canmbles

The country of Canmbles Finally, the place of the Canadian North in the country's economic system and in the structure of Canada's modern economic links resembles to a much greater extent the place of the Soviet North in the Soviet economic system than that of Alaska in the United States, Greenland in Denmark, or the

#### Murmansk Initiative

navia.

northern territories in Scandi-

In his Murmansk speech (called the "Murmansk initiative" in the West), Mikhail Gorbachev urged the intensification of co-operation between arctic and northern states on a bilateral and multi-lateral basis.

The Soviet Union and Canada, which have already scored a number of spectacular successes in this area, could lead the way in fostering multilateral co-operation-always a challenge from an organizational perspective.

In the first two points of his six-point program, Gorbachev called for a relaxation of military tension in northern Europe through establishment of a nuclearweapons-free zone and restrictions on naval activity in adjacent seas. As a first step toward spreading confidencebuilding measures to the whole of the Arctic, this directly concerns Canada, but within the framework of multilateral agreements.

Peaceful co-operation in the development of the

## Northern Regions

northern regions, including the Arctic could add a new dimension to Soviet–Canadian relations and be tested for feasibility through bilateral co–operation. In this context, the most important questions, theoretically, are: Why do we need to develop northern areas, and how are we going to do it?

There are two different points of view on this matter. According to one of them, the focus should be on the developed South. The North is of secon-

dary importance and requires neither extensive settlement nor the establishment of sizeable miscellaneous industries.

The second point of view calls for extensive development and settlement of northern areas, and the establishment of major multi-functional cities.

This is a far-from-perfect method, which can give rise to major ecological problems in this particularly vulnerable environment. Besides, it demands huge initial investments that will require a long time to pay off.

Apparently, there is a third way, based on the rational choice of essential industries, a sensible combination of development techniques, and a reasonable degree of local involvement in the

industrialization process.

There is an urgent need for a scientifically sound approach to the development of northern areas. This is where Soviet–Canadian cooperation could be particularly useful.

This is actually the fourth point of the Gorbachev program, which calls for the scientific exploration of the Arctic. It emphasizes that questions bearing on the interests of the indigenous population of the North, on the study of its ethnic distinctions, and on the development of cultural ties between northern peoples require special attention.

All the issues covered in this and the fifth point of the program, calling for co-operation in environmental protection, have been dealt with in the currently effective Soviet–Canadian program for scientific and technical co-operation in the problems of the Arctic and the North. Drafted according to the protocol on Soviet–Canadian consultations of 16 April 1984, it is divided into four sections, dealing with geological science and arctic oil; environmental control in the North and the Arctic; construction in the North: and ethnography and education.

Co-operation in transportation in the North could be one of the most promising areas of Soviet-Canadian co-operation, although it has not yet been added to the above program. Here, too, we face a number of important theoretical and applied problems. But it also offers ample opportunity for exchanges in the fields of know-how and technology. For example, the Soviet Union has purchased Canadian all-terrain vehicles from Foremost Industries of Calgary for use in Siberia. In exchange, we can offer our ample experience in arctic navigation.

In the sixth point of the program, Mikhail Gorbachev offered to open the Northern Sea Route to foreign ships, with the Soviet Union providing ice—breaker services.

The offer refers to more than just a right of passage. The Northern Sea Route is a complex infrastructure whose development (fairways, reconnaissance, weather services, and other land–based agencies) has cost millions of roubles and requires many millions more. Permitting other ships to use it will be the same as allowing Soviet trains to run on the Canadian national line. In addition to certain economic prerequisites, this implies creating an international situation of trust and co–operation, and, above all, ending military confrontation in the Arctic.

Soviet–Canadian co–operation in the North, including scientific contact, will promote trust and help turn northern areas into a zone of genuine peace and fruitful co–operation.

Arkadi Cherkasov is a Doctor of Geography at the Institute of the U.S.A. and Canada in Moscow.

## ICEBLOCKING

Many activities are both fun and inexpensive, but one that has lasted throughout the years is ice—blocking. This activity utilizes the properties of ice and gravity, providing an exciting downhill ride on a block of ice. Ice—blocking is generally a seasonal sport with participation primarily in the summer, yet there is nothing to stop the more advanced ice—blocker from braving the winter elements. The first and most important consideration when planning such an adventure is to involve "fun" people. Ice—blocking is what one makes of it, and it can be extremely enjoyable when everyone participates and has a good time.

Ice—blocking is definitely not an equipment—intense sport, although certain supplies are required. Ice—blocks must be purchased and may be obtained from various supermarkets at a cost of \$1 to \$2 a piece. Shopping by phone prior to the event may be a good idea, because ice—blocks are not available in all supermarkets. One ice—block per person is ideal, but not necessary. In addition, one old towel or large rag is needed for each ice—block. The towel must be large enough to cover at least the width of the block. Proper attire is also important. Old clothes, such as jeans (no white jeans), t—shirts and sweatshirts are appropriate.

Another consideration is the location of the iceblocking event. This location should be selected prior to the activity to prevent the waste of precious time (the ice does melt). The hill should be a steep, grassed slope, about 50 to 100 feet in length, Variant degrees of steepness and grass coverage can be used in this activity, but remember, the steeper and longer the hill, the better the ride! Also, make sure the hill you select is "legal", by either the owner's standards or by local laws. Ice—blocking illegal areas or without permission may damage the environment or disrupt the owner, and one may end up with more adventure that bargained! After readpicked grassy loof the hill is neceshill at least two or potential hazards. obstacles of which such as patches of hidden in the grass. rocks can be very



ing the precation, a survey sary. Check the three times for There are many to be aware, dirt or rocks Falling on dangerous.

However, the biggest danger on a hill is sprinkler heads. These protruding "devils" present a great risk to all involved. Injuries spoil an activity, so be careful! Also make certain to allow enough distance at the bottom of the hill to slow down. Sidewalks and cement are not conducive to "good" ice—blocking.

Now that all the preparations have been made, the fun begins! Take the required supplies to the top of the hill, and survey the intended path for obstacles. Place the ice-block on the grass with the short side facing downhill, and put the towel on top of the ice, being sure to cover the whole surface, then climb on board! Balance is a key factor and takes a while to perfect, so do not get discouraged. Most likely, the first couple of runs will be slow, but after a few tries the balance and expertise come naturally. Ice-blocking in the winter when the grass is dead and the ground is hard will produce a faster ride, but perhaps more pain when accidental dismount occurs! However, with the proper equipment and precautions, ice-blocking can be a great activity for both family, friends, youth and agency groups.

#### Personal Finds and Adventures

When we went on our ice-blocking adventure, we considered a number of different spots for a maximum speed and distance. As we were preparing to begin at our selected site, a lawn maintenance worker

#### Dr. Burton Olsen

informed us (and not so graciously) that it was illegal to ice—block on the property. he declared, "Not here, you don't!" When we asked him for another possible location, he suggested Washington D.C. or Tallahassee, Florida. Maybe he knew something about these locations that we didn't! Anyway, we continued on our way and found an appropriate hill. This slope was not a steep nor as long as we would have liked, but it proved to work out quite well.

We made a number of interesting observations

that may be ning icefirst of these volved the tivity. We the condiideal when wet, whether ness was due



useful to beginblockers. The findings intiming of our acdiscovered that tions were most the grass was or not this wetto early morning

dew, sprinklers, or at night when the grass was moist. The grass was perfect because it created less friction between the ground and ice—block. After our path was established, we found it was better to remain in the same location, because each time a run was made, our speed increased. Ice—blocking in warm weather, however, causes the ice to melt and produces the same effect as a few runs.

Our next discovery dealt with the numerous riding positions. A vast variety were available to try, until the most preferred method was found. Sitting on the ice facing downhill is the most widely used position for ice—blockers and also one of the most stable.

We found that females prefer this method more than males, because their center of gravity is in their hips. Sitting facing backwards is a fun position to try, but when racing or going for serious action, this way is not the most beneficial.

The prone method (lying down facing downhill) is the most preferred and stable way for males because it given them the greatest balance. It may be uncomfortable for females for obvious reasons, but it is possible. The backwards prone position is not the best iceblocking method, but it is acceptable for the more adventurous sort. Another possibility includes kneeling which is a difficult way to ice-block, and we found it to be quite taxing on the knees.

The funniest and most enjoyable way for everyone to participate was in a "group chain". This was
achieved with multiple ice—blockers hooked together
by putting their feet around the person in front of them.
This was very amusing and usually resulted in a "dogpile" at the bottom of the slope. In all of these positions
one's arms and legs are crucial for balance. An iceblocker should experiment with the many ways to ride
downhill on the block of ice until discovering the most
suitable method.

I c e – unique activity or a group, and preparation and blocking does tential dangers,



blocking can be a fordates, families, requires little equipment. Ice present some pohowever. Some

methods of riding can be dangerous, especially if they are unusual. Substantial damage to the environment is possible, making ice-blocking illegal on some hills. But despite the dangers of ice-blocking, it is a sport which has found a place in the hearts of many people.

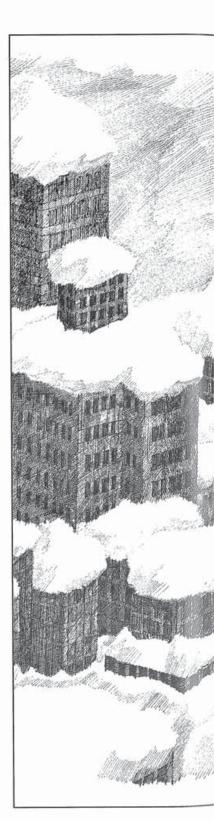
Dr Burton Olsen is based out of Brigham Young University

# Elements of Winter City Planning

Look around. That is all you have to do in order to see the absence of planning which reflects the authentic nature of the north. True, there are some striking exceptions; but, for the most part, the vast majority of communities are eclectic imitations of the south. Given that we do not live in a vacuum, the negative repercussions of such inappropriate planning are vast on both economic and social levels.

This occurs because the policy makers are sadly out of touch with the character of the urban personae. Those who do have an awareness are the citizens, who interact with their surroundings as a necessity. Ask the average city dweller how they would improve their community and you would receive practical, straightforward suggestions. Improve our walking networks, increase our accessibility, protect us from the elements.

This pragmatism, of meeting the needs of the people to the reality of their surroundings, is the undercurrent of the following articles. It is the realisation that the essential element of planning is understanding and then using that as a platform to develop organic communities which will exist in concert with their inhabitants.





#### 16

## TOWARDS AN IDEAL

Millions of people throughout the world live in winter cities. For several months every year, they contend with cold, snow and ice – and all of the problems that accompany such offerings of nature.

Acknowledging that there is a wide commonality in the lifestyles of people living in winter cities, one is now discovering that there are significant differences in the way people respond to their winter problems – and that one has much to learn in studying these differences for possible application to one's own regions.

here are a number of common problems associated with northern cities in the winter, which are all extremely familiar to residents in these cities, making little elaboration necessary.

- Snow and ice can substantially reduce residents' mobility and social interaction, thereby affecting businesses. Driving and walking can become extremely hazardous.
- Long and cold winters can have substantial impacts on energy consumption, which can increase hearing bills for homes and business, making area business less competitive.
- 3. Weather can affect outdoor activities. Long cold winters can severely restrict residents' outdoor activities for long periods of time.

- 4. The winter landscape can be rather gloomy and bleak, and there may be little vegetation and colour.
- 5. Long winters can affect a person emotionally. One can sense some residents' depression after a long winter.

In the past, one generally accepted these problems as unavoidable and almost insolvable. This attitude has not been helpful in finding ways to overcome these problems.

It can also, in part, make northern cities increasingly less competitive. A change of attitude is needed if one is to address problems associated with northern cities. 500 million people in today are living north of 45 degrees latitude, and there is a need to share ideas among cities.

#### Weiming Lu

Many things can be done to overcome these problems, and to make our downtowns and inner cities more livable in the winter:

1. What can one do to maintain accessibility in the city?

Better plowing of streets, alleys, and sidewalks in the neighbourhoods is essential to maintain accessibility in the city. Through the city's program, our streets are pretty well plowed. Alleys, however, are not as well serviced, which can hinder our mobility in neighbourhoods where garages are connected by alleys.

With increasingly tight city budgets, private plowing services, or neighbourhood cooperation such as the joint purchase of a plowing vehicle, may be worthy of consideration to insure resident mobility. Special attention should be given to the needs of older persons.

Current road design and neighbourhood layouts often pay little attention to how snow is plowed and stored. Providing wider roadways and strategic snow-piling areas may make the plowing and storing work easier and more cost effective. More intelligent snow piling could provide snow banks which would act as windbreaks in the winter.

Salt has been used widely in the winter to improve roadway conditions. However, salt corrodes automobiles, kills curb trees, and even destroys garages which, with increasingly tight budgets, require designs for special protection against salt. Regular washing, inspection and maintenance efforts are needed. More fundamentally, an effective substitute for sale needs to be found.

Heated bus shelters may make bus waiting a little more comfortable, yet more frequent bus service would be truly helpful. In northern cities such as Montreal, Toronto, Stockholm, and Sapporo, rapid transit helps to provide essential services and to shape city form. However, in the Twin Cities, rapid transit remains an elusive goal despite many years of planning efforts.

In the downtown core, skyways can assure easy and comfortable pedestrian accesses. Since their introduction during the 1960's in the Twin Cities, they have become indispensable.

Saint Paul and Minneapolis each have more than 30 bridges connecting major retail, office, government, and entertainment centers, and the system is still expanding.

Many American northern cities such as Des Moines, Spokane, and Duluth, have followed the Twin Cities' example in bridling theirskyway system. In Duluth, the long skyways connecting downtown with the convention center have been used as indoor walkways for winter exercise.

Some blame the decline of street level activities on the growth of the skyways, when in fact, without skyways, the two downtowns could hardly compete with suburban centers. With the skyways, one has witnessed the healthy rebirth of two downtowns.

On more moderate days, people welcome the opportunity to use streets. To increase pedestrian activities on the street level, more interesting shops and better amenities must be provided.

Recently, there has been increasing interest in enclosing the Nicollet Avenue pedestrian mall in downtown Minneapolis. What is emerging is perhaps a two-level pedestrian-way system, which can help to strengthen downtown activities and adapt downtown even more effectively to winter seasons.

2. How can one design neighbourhoods differently, taking winter into consideration, and make one's city energy efficient?

In renewing downtowns or inner cities, buildings may be properly clustered to save energy and protect residents from strong wind in the winter.

Existing buildings may be retrofitted. Earth—sheltered, super—insulated and solar housing may be cost effective. Streets may be vacated and glazed over, and a winter garden created. Solar energy, and return heat from the district heating

system, may help to heat the garden in the winter. The North Quadrant Plan prepared by the Lowertown Redevelopment Corporation provides one such example.

To increase livability, a neighbour-hood commons could be created just off the winter garden. Such a commons may include a grocery, nursery, day care, and school – all connected to apartments by the winter garden or covered walkways. Even a neighbourhood hot tub to do away with the winter chill could be included. In a northern Japanese village to this date, on new year's day all villagers strip and get into a hot tub together. What a way to generate neighbourhood spirit!

Creative neighbourhood design competitions may even encourage the creation of interesting ice sculptures, as in Saint Paul, Sapporo, and Harbin, and snow gardens in selected parks, as Noguchi did in his beautiful earthwork design for Riverside Park in New York City. This could be done throughout the winter, rather than merely at festival times.

3. How can one expand the cultural, arts, recreational, and entertainment activities in the winter?

More outdoor activities, including hockey, skating, cross-country skiing, ice fishing, and snowmobiling, will help to combat "cabin fever", and keep body and mind vigourous and healthy. The magnificent park system in the Twin Cities provides many opportunities for outdoor activities.

More paths for cross—country skiing could be created for recreation, and even for home—to—work trips, perhaps along public parks and river-fronts.

Skating rinks, warming houses, and tobogganing areas would be welcomed by children and adults alike. However, tight municipal budgets







can at times trim the operating period for skating.

Perhaps igloos could even be constructed in the neighbourhood parks for recreational and educational purposes.

Special consideration should be given to old persons. Their mobility, for example, is a winter problem. Car pools and van systems could be provided to extend sightseeing, socializing, shopping, exercise, and the like. How the sidewalks in front of their houses are cleared after snow is another problem. Whether it could be done through private contract services, neighbourhood volunteers and collaboration, or other means, should be considered.

Safe, secure housing in an urban core, at an affordable level, can make it easier for the elderly to get around, and there are many amenities at hand. A skyway system helps to make these amenities accessible. The potential for developing safe, attractive and supportive environments has not yet been fully realized.

More indoor activities, including concerts, plays, poetry readings, cinemas, libraries, and exhibits, can make winter enjoyable. Arts and cultural programs in the Twin Cities are benefitting the people greatly, and are important factors in keeping or attracting business to the area.

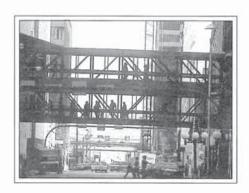
More community-wide celebrations (like Saint Paul's Winter Carnival) and other activities, can help to generate lots of winter fun, community spirit, and national publicity. Saint Paul's Ice Palace, built in the winter is 1986 by hundreds of volunteers, stimulated great public interest and civic pride, and was a very successful example.

Incidentally, the introduction of new fabrics, which are of lighted weight but given effective insulation, is crucial to winter clothing. Certainly, winter clothing can be attractively and fashionably designed. Why couldn't more winter fashion shows be initiated?

4. How can we beautify our winter landscape?

Winter landscapes need not be bleak or depressing. Beyond greater use of evergreens, sensitive articulation of the terrain can make the winter landscape more interesting. Warmer coloured street lighting can create a warm glow on dark winter nights. Housing exteriors need not be sombre and monotonous. Better articulated building facades, such as with window set-backs, etc., and the intelligent use of colours, can add much interest to buildings and strengthen the identity of a neighbourhood.

In the winter, the days are short. people go to work and return home







in darkness. If the downtown skyline can be effectively lit, it would become more distinctive, and our daily journey to-and-from work would have that much more interesting. The lighting idea for the skyline was included in the Metro Center '85 plan for downtown Minneapolis, which is one such example. During the Christmas season, lighting can be made far more creative. Selective use of neons, and new technology including laser lights, can make the downtown skyline an exciting palette for artists.

For some people, winter can be depressing because of the longer nights and shorter days, the length of the season, and the inconvenience of restricted mobility. There is a need to combat such depression and negative psychology.

If one assures accessibility, participation in diverse arts and sports activities will go a long way to combat depression. At the beginning of each winter, why couldn't special seminars and events be conducted to prepare people psychologically for the season, to think about is positive aspects, and to plan for activities which help them enjoy rather than dread winter? Why couldn't more festivities be held throughout the winter?

Perhaps for others, long winters and shorter days may affect them physiologically, and a remedy such as daily exposure to simulated sunlight panels may be needed. A short vacation in the South during the middle of winter would be therapeutic.

One the other hand, for some longtime residents of the sun belt who never have been to the North in the winter, experiencing our White Christmas can be most memorable and enjoyable. Why couldn't some initiatives, such as sister cities programs (which can facilitate people in the north and south to exchange residences during winter vacations) be explored?

In 1986, two CBS weathermen, one from Phoenix, the other from Minneapolis, exchanged jobs for one week during the winter. Each gained much insight into the other city, and helped residents in each of the two cities to learn from the other city.

Finally, winter could be and should

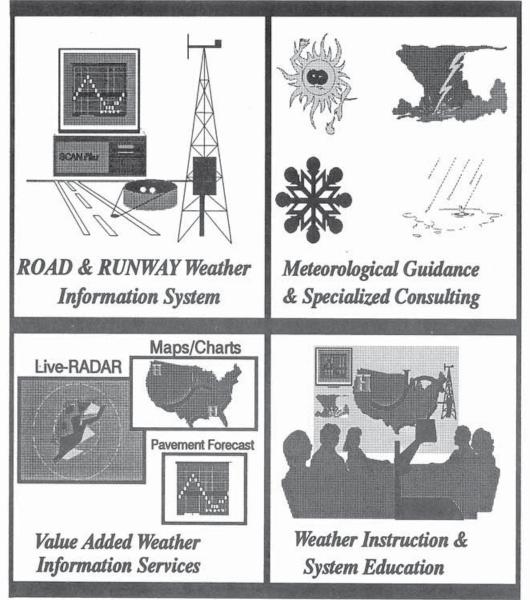
be enjoyed for its own beauty and serenity. More time could be found for quiet reading and reflection. Many persons choose to live in the north because of this advantage.

To sum up, an ideal winter city should be many things to many people. It should be a city of choices. It has plentiful job opportunities. It provides a variety of housing. Accessibility to arts, cultural, recreational, sports, and entertainment activities must be assured for all There should be equal people. choices for indoor and outdoor activities.

It should be an energy efficient city. Residents will find well-designed and insulated homes. Energy costs will not be excessive, in order to allow business to be competitive. The city would be compactly developed.

It should be a city of love, where mutual help becomes a way of life. There is a common belief that, by working together man can overcome whatever inconvenience, difficulty, or emotional burden is placed upon him by winter. Only then, may each of our cities indeed be "a city for all seasons".

Weiming Lu is on the WCA Board of Directorss and is Executive Director of the Lowertown Redevelopment Corporation





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The business community financially supports the event, and provides a chili run during the "one nighter" snow statue construction.

Winter Carnival has major benefits for Houghton and the Keweenaw Peninsula. Rooms are sold out in advance within 50 miles and the area's numerous restaurants are jammed. Although actual economic impacts are difficult to determine, a study by MTU business students conservatively estimates that \$300,000 is spent by visitors over the three day event.

For most Houghton residents, Winter Carnival has significance beyond the economic benefits. Winter Carnival is an opportunity to celebrate winter and their community and show pride in a goodrelationship with the university.

#### CHINA CONTINGENT

Daqing, China, a new full member of the WCA, is diving into the Winter Cities Movement head first. The are sending at least three members of their municipal government to participate in the Winter Cities Forum in Yellowknife, NWT. While in Canada Mr. Xing, Ms. Baiquin and Mr. Xingzhong plan to visit Daqing's sister city Calgary, Alberta

We heartily welcome these delegates and wish them a productive, exciting visit.

#### TALES FROM TROMSO

Under the direction of Svien Kristiansen, Tromso is a new affiliate that is definitely making waves. This university city of 60,000 is situated in the rugged northern mountains of Norway and is known as the 'Gateway to the Arctic'. They are to be home to not one, but two international events this year which are running concurrently.

The 5th World Wilderness Congress (WWC) will take place September 24th to October 1st, 1993. General issues will include such topics as": Indige-

nous and Traditional Peoples, and their use of natural resources; Polar Resource Conservation and Utilization; and Sustainable Communities. Delegates will also develop action plans for specific case studies such as Ecotourism in the North and Polar Resource Management. The celebrated Norwegian author and explorer Dr. Thor Heyerdahl will be the Honourary Congress Chairperson for the 5th WWC.

The 4th Northern Regions Conference will occur from September 27th to October 3rd, 1993. Entitled 'People in the Arctic: Regional Rights and Regional Management' the conference will address four major themes: Regional Development and Organization in the Arctic; Industry and Infrastructure Development; The Marine Resources of Northern Regions; and Arctic Tourism.

As if hosting two major international conferences were not enough, there will be other satellite events during this exciting period. The Festival of Reindeer Husbandry will run from September 24th to 28th. In addition, from September 29th to October 3rd, the Circumpolar Expo '93 will take place.

Tromso's initiative in undertaking such a monumental task is to be applauded. The melding of the two conferences reinforces the idea that cold climate issues are all interrelated and that a lot is to be gained by pooling our vast collective resources.

Amazingly, Tromso is also very active on the WCA front. They are energetically promoting WCA Scandinavia and are helping to initiate a new political entity called "The Barents Sea Region". This region is now organized on a Norwegian level and hopes are high for it to link with the similar entity on the Alaskan side.



#### AWARDS IN ALBERTA

Banff, Alberta is a tourism driven mountain community nestled in the heart of the Canadian Rocky Mountains. Recently its Downtown Enhancement Plan received national recognition by the Canadian Society of Landscape Architects in their 1992 Awards Program. The plan consultants were presented the Regional Merit and National Citation Awards in the category of Planning and Analysis.

What makes this announcement relevant is that two of the consultants are WCA members and the plan was structured to address cold climate realities. Harold Hanen and Michael Stringam were part of the team that created the award winning plan which dealt with, "The specific needs of a primarily winter environment through climatic design adaptation." The consultants took an ambitious approach in striving to create a new category of town planning, that of Planning for Tourism. Hopefully this will perpetuate the concept of planning for both purpose and environment.

## OTTAWA OPTS FOR WINTER

Ottawa, Ontario has long been a leader in the Winter Cities Movement through its recognition of the challenges of a multi–season municipality. This awareness has been elevated to new heights through its Official Plan: A Vision for Ottawa. This ground breaking document may be the first on a civic level to include cold climate factors in its official urban development plans.

Founding WCA member Patrick Chen is the primary force behind the considerable work involved with creating a viable winter city plan. Through an extensive public consultation process, Ottawa aspires to create an ideal city for all of its citizens and through all its seasons. The WCA hopes that all other municipalities will follow suit and take an integrated approach to their future planning.

## SNOW AND WIND INSTITUTE STORMS AHEAD

The Snow and Wind Institute, a WCA affiliated organization, is charging forward in establishing global networks for cold climate information exchange.

The Institute is based in Guelph, Ontario under the guidance of Frank Theakson. It works in close collaboration with Canadian universities in order to collect and maintain a clearinghouse for the most up to date information possible on snow and wind. This data is then used by numerous agencies in such activities as regional planning and ecological assessment. As well, the Institute also has snow and wind simulation facilities and is working with Guelph University to develop a graduate studies program.

Recently, a contingent of four from Finland, sponsored by the Canadian government, visited the Snow and Wind Institute and were quite impressed. They thought that the potential for such a facility was so great that they expressed an interest in creating a similar agency in their homeland.

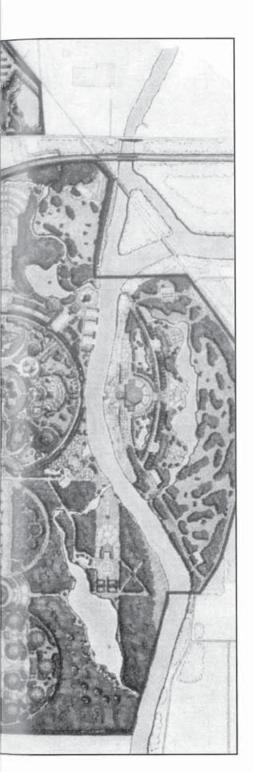
Given the emergence of a new Europe and the C.I.S. such a sister institute could make an immense impact on future development. This would be an extraordinary advancement for the Winter Cities cause and the WCA whole heartedly wishes the Institute the best of luck.

#### **ANCHORAGE AWAY**

Recently a conference was held in Anchorage with WCA Board member Norm Pressman as a key speaker. Apparently, the American federal government has passed new legislation earmarking funds for alternative transportation networks and for the increased development of winter cities. The WCA is quite interested to see what impact this bill will have on the progress of multi–season communities in the States and strongly hopes that it is a positive one.

## **Neo-Traditionalism**

#### Greg Liburd



Neo-Traditional Community Design (NTCD) "encourages the creation of a pedestrian-friendly centre, establishing a sense of place and community in addition to complex, geometric street layouts, slower speed street design, and mixed land use." It was developed in the early 1980's as a response to communities spawned by post-war zoning regulations which, because of their total separation of land uses, created dependence on the automobile. This new approach to community planning was structured to alleviate the wasteful, environmentally detrimental and socially destructive effects of the previous model.

Does NTCD meet the requirements for a good community? Currently it is all the rage and fits in conveniently with the prevailing fronts of the New Conservativism. It is touted as a return to small town living and values. However, behind the marketing noise and professional jargon lie principles which are quite sound. NTCD promotes a greater compaction of activities, a balance between different modes of transport, mixed land use and an emphasis on communal socialisation. In effect, the NTCD attempts to directly address the needs of the people and provide balance with the environment. That, in effect, is how one plans a good community.

NTCD certainly is an effective means of creating a community which serves its inhabitants rather than enslaving them. However, certain factors must be considered before this concept can be effectively applied to multi–season regions. Severe climatic conditions have an immense impact and each season has its own unique requirements; thus, sensitivity is required. Building a Neo–Traditional community in Tromso, Norway based upon a neighbourhood in Florida (where NTCD originated) would eventually create a situation akin to the one that NTCD was developed to rectify. The successful NTCD based cold climate community would take into account factors such as: protection from the elements; snow and management; optimisation of solar energy: and protecting continuity of access.

There are overlays between NTCD and appropriate circumpolar design. However, if a blueprint is created based upon a situation that does not exist then it will ultimately fail. It takes introspection to arrive at an identity and strength to chart out a unique future. By denying regional realities the cycle of mindless appropriate southern 'solutions' is perpetuated. Only by being true to both self and place can any community plan be ultimately valid.

Harold Hanen and Greg Liburd are, respectively, the Editor and Associate Editor of Winter City News.

## Quality for the Pedestrian Realm

"The city, if it is to be successful, must be a place to gather, to meet people, socialize and engage in the spontaneity of urban culture."

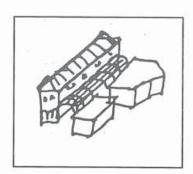
Streets as a distinct form of public space have always reflected the spatial diversity and human scale so essential to our physical and psychological well-being. They assist significantly in creating environments – in a broader sense – which can become agents of social contact reflection and vitality. Successfully designed public spaces accommodating collective needs almost always bear witness to the primordial demand for social intercourse.

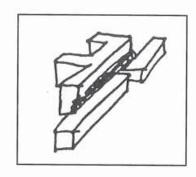
The street speaks a universal language. Its signals are part of everyday learnings; its rules for movement are among the most widely understood of all public codes of conduct; and even its most bizarre variations offer, upon close examination, familiar goings—on in the School of the Street.

Unquestionably, the street is a teacher of urban culture. It helps to remind us of the sensory qualities of the city – those aspects of urbanity which heighten the experiential realm. The city is much more than a ledger book of statistics on land values, uses, modal splits, hectares of open space inhabitants, number of vehicles/available parking spaces, population density and all the other data which are part and parcel of the urban policy analyst's compendium even if many of these components contribute to life quality. Walking for pleasure (spazieren gehen as the Viennese call it) has been an old—world tradition. Taking a "Sunday drive" has been he new world equivalent hardly encouraging sociability. Intensity of public life has always been one of the three most critical characteristics that make a city.

The city, if it is to be successful – especially at the centre –must be a place to gather, to meet people, socialize and engage in the spontaneity of urban culture, in addition to fulfilling so–called 'functional' requirements. After all, "Feeling comfortable and welcome" is one of the most important of all urban functions, as an expression of the collective will. It is the variety of experiences attractive to a large number of inhabitants and visitors alike







#### Norman Pressman

that constitutes the major criterion on a successful pedestrian area – and a healthy downtown.

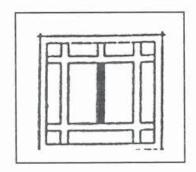
To achieve a healthy urban organism, walking must be considered as an important movement mode. As a mater of fact, walkability can be considered a significant indicator of livability, and should be accorded the same attention given to the various modes of motorized locomotion.

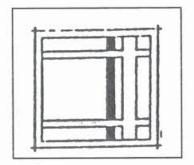
Almost all trips commence and terminate on foot and it would indeed be wise to create as continuous a network of walk—ways throughout parts of the city — and even partially, throughout all of the city — wherever possible giving equal weight to the pedestrian mode ("slow—mode") as tothat which currently exists for motorized modes would seem a reasonable objective. This, however, has not been the normal practice although in many European cities, greater efforts are being made to reduce and even eliminate cars from city centres.

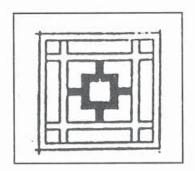
The true impact of the passage was found in the 19th century France. Political and social factors were held accountable for their magnificence. During this era, streets were congested by horse–drawn carts, and hence the source of intolerable stench, filth, and disease.

A new wealthy "bourgeoisie" consisting of lawyers, bankers, and businessmen demanded a new, clean, well-lit, elegant environment, in which to shop, meet, mingle, cafe-sit, discuss politics and literature and be genuinely isolated from the inhumane life of the street. Passages responded to this need. They were the first public urban spaces removed from the discomforts of the traffic and filth of the street systems.

The principle of the passage became popular because the street existed without any sidewalks, was dirty and foul, dangerous for walking and window-shopping, poorly paved, and without drainage systems.







Thus, the poor state of existing street life played a crucial role in the creation of the passage.

The first passages were reflections of the evolution of a newly emerging capitalism. Revenue generators for luxurious shops, restaurants, cafes, and salons; real estate speculation opportunities for developers and

businessmen; and show places for the wealthy "bourgeoisie", the passage was in effect, accessible to the public at large. However, the fashionable passages of the day really catered to the interests of the wealthy and those seeking luxurious surroundings.

"It is essential to direct greater attention to the achievement of a milieu in which the slow mode is dominant."

but not entirely ignoring them either. In the fussganger zone pedestrians clearly are accorded priority. But in the context of public urban space of high quality walking and simply strolling about must be viewed as one valid mode of transport.

If walking - the soft/slow mode - could be

encouraged (by further restricting car movements and through improvement of collective transport modes) and continuous paths and networks for pedestrians implemented where people live, work and play, then the public and semipublic spaces of the city's fab-

ric which are woven into these paths could be appropriated for a wider range of uses.

Clearly, new attitudes – especially in North America will be required if funding, participatory measures, legislative means and marketing are to evolve with the intent of making serious changes to our behaviour with respect to how we move around. The micromeso, and macro-scales will have to be tackled simultaneously.

Solutions developed for an urban region will significantly affect strategies targeted at specific, localized parts of the city. If quality in urban life is demanded, then walking must be viewed as part of the overall plan, and as a constituent element of the broader civic space.

Recent trends indicate a strong concern for climatic protection, among all the other social, economic and political goals operative in urban centres. Combined with functional considerations – which provide the 'raison d'etre' of central zones – aesthetic qualities, climatic comfort and programmed events (such as parades, carnivals, musicians, street–performers, etc.) are becoming moire important in sustaining the urban tempo and rhythm we have come to expect of downtowns. In addition to total, or even partial, protection

The passage was, for the most part, private property accessible to the public. It served both the land developer, and the pedestrian; and was always the result of private real estate speculation.

This was the case until the development of the Galleria Vittorio Emanuele II – the result of an international design competition initiated by the City of Milan in an effort to create a new, strong, vital city centre. This is the first example in history of a "passage" developed and administered by a city.

Although we are witnessing a "renaissance" of the passage and arcade — examples abound especially in the Federal Republic of Germany's cities like Kolm, Hamburg, Dusseldorf, Brauschweig, Frankfurt am Main, Karlsruhe, etc., as well as in the Netherlands, Switzerland, Sweden, Denmark, for instance — these "arcades" or glazed—over pedestrian lanes/streets, ascommercially vibrant as they are, are still essentially pedestrian islands surrounded by noisy, polluted and sometimes visually unattractive motorized environments.

Hamburg's inner city is perhaps an example of the state-of-the-art in open-air streets combined with "passagen" largely excluding vehicular movements,

from the elements the following principles should be followed in developing areas for walking, standing and sitting.

- · provide shelter from the wind.
- create an urban form which avoids increased windspeeds.
- designate sunny and sheltered open spaces for nonmotorized activities.
- save existing vegetation (for wind protection) or provide windbreaks.
- make provision for comfortable walking (design effective rainwater run—off areas, provide selected snow deposit areas and respective drainage for melting, eliminate or modify kerb—cut details for ease of movement, etc.)
- include ramps (as well as stairs) where changes in elevation occur. Heat them in cold, winter climates.
- · design for ease of access.
- extend the outdoor comfort zone especially in the marginal seasons, providing "transition areas" mediating between indoor and outdoor spaces and activities.
- furnish the public spaces with comfortable, visually pleasing, and well located "urban furniture".
- serve the pedestrian zones and networks with highly visible and accessible collective transportation.

Some complementary guidelines should likely be followed if intensive use is to be anticipated in the urban pedestrian environment.

- · concentrate on the whole area not just the downtown
- balance the traffic system with the pedestrian system
- · ensure accessibility to motorists
- design public spaces for users of all ages and physical needs
- plan for the rainy day, noise and other disturbances
- · animate space with light and graphics
- · zone for a mix of uses such as retail and housing
- · educate motorists to pedestrians' needs
- support the growth of public transportation systems
- keep the streets alive with cultural and recreational activities

The recent wave of underground passages and above—grade skyways linking private "atrium—style" developments and enclosed shopping malls (often connected to railways terminals and subway systems) has created a pseudo—public environment of substantial size in central cities. While offering weather—protection, these projects guarantee social filtering and careful "selection" of patron—users. Commercial objectives are first and foremost on the "development agenda".

Hence, increasingly, the traditional role of the city centre—to provide goods, services and amenities to the entire urban population—no longer can be said to prevail, as the newer projects generate incremental privatization, resulting in traditional users being displaced elsewhere to find locations which meet their needs. This dilemma must be offset by opening up more genuinely public space—parks, streets, lanes, green—areas, squares—in order to act as a counter-thrust to the erosion of the public domain.

Public life for all citizens must be viewed as a legitimate concern of local and national authorities. Attractive and well managed streets and open spaces and the activities, both planned and spontaneous, which occur in them form the essence of urban life. Once out of either the car or public transportation everyone eventually becomes a pedestrian.

Therefore, it is essential to direct greater attention to the achievement of a milieu in which the slow mode is dominant. This will be the only way to enrich the use — in all seasons — of the city and to make it both economically and socially viable within a framework which is both "green" and "sustainable" well into the long—range future.

Norman Pressman is a professor at the School of Urban and Regional Planning at the University of Waterloo and is on the WCA Board of Directors.

# The Public/Private Places DEBATE

The 'city' is moving indoors. Increasingly, the atriums, malls, passageways and amenities they provide fulfill 'public place' functions and have come for many to symbolize the city.

The new atriums and enclosed malls have the potential to become social places which make a significant contribution to the quality of urban life, especially for those with limited mobility. The level to which this potential is met, however, depends on the extent to which they are truly public environments.

The opportunity for people with divergent experience, behaviour and expectations to see and be seen simultaneously reinforces social patterns through the reenactment of ritual and promotes and technological change through the sharing of new information. By deliberately capitalizing on vital community needs, multi–purpose complexes must assume a degree of social responsibility.

## The Indoor City

David Brown, Michael MacLean, Pieter Sijpkes



Is the Shopping Mall Public or Private?
Can it be successfully integrated into the Urban Fabric?

Virtually all atriums and malls are used as public places to some degree. The nature and extent of use, however, is dependent on locational factors and the design and management of each centre. Some centres, attain a public quality simply by offering pedestrian corridors protected from the weather and vehicular traffic. Atriums located in office buildings with little or no commerce or entertainment are less successful as public places. Although these indoor spaces may be aesthetically very pleasing, overbearing architecture or intimidating behaviour by guards often limit social activity to waiting for friends working in the buildings.

Suburban shopping centres present a third type of 'public' indoor environment. While shopping is clearly the predominant activity in these centres, many shoppers take advantage of the occasion to socialize along the mall area.

The overt effort of guards to maintain a certain decorum in atriums and malls are supported by design features which effectively limit acceptable behaviour. The quality, comfort and placement of seats is especially important in governing social behaviour in malls.

The IBM plaza in New York offers what is perhaps the best possible sitting arrangement for a social viewpoint. Here a large number of movable chairs and tables are readily available. Unlike fixed seating, where some places may go empty because people are reluctant to sit too close to a stranger, the available chairs are quickly commandeered and placed in a location which meets the sitter's territorial and security needs.

In contrast, many centres provide a limited number of rigid benches or backless seating platforms.

The placement of seats is a critical factor as people want to be near to, yet protected from, active areas. Too often seats are located in the main circulation area to increase friction with passersby and encourage a short stay.

In addition, the sense of publicness of indoor space is enhanced by providing seating areas in conjunction with other amenities such as daylight, vegetation, fountains, public washrooms, and entertainment areas.

Clear territorial markings are also important so that people will have some sense of which rules along the public—private continuum they will be expected to adhere to. Objects considered to belong to the city or the management of the building help to establish a 'public' domain.

On the other hand, the presence of temporary private facilities in a public area may enhance the public quality. The form of the space available to the public provides a further design element.

The public-private quality of indoor environments can vary significantly both among and within centres. These differences are especially evident when centres are linked to form a weather-protected system of pathways. The multiplicity of different owners and arbitrary

rules create confusion. Separate 'rules of the game' must be learned for each part of the system.

Finally, many centres try to take advantage of pedestrians who attempt to use their building or enclosed pathways to move from a transit station to other buildings. Often deliberately circuitous routes are introduced to send them past as many stores as possible; compounded by inadequate signage which has strangers searching desperately for a street exit to regain their orientation.

The use of the space clearly reflects environmental features and administrative policy. A key variable is the presence of activities or facilities which convey a 'public' quality and legitimize use of the space for recreational purposes.

There are, however, few really public indoor environments. While developers frequently argue that they are contributing to the revitalization of cities, their contribution generally stops short of social objectives, due to their efforts to limit non–shopping activity.

The inclusion of atriums, malls and passageways in large new buildings obviously answers a social need. They have the potential to make a significant contribution to city life, but they also present a fresh

challenge to the vitality of traditional public places. Outdoor urban parks run the risk of failing as meeting places due to a lack of diversity, while malls or atriums provide diversity but impose subtle controls on both the ways in which their space is used and the types of people who feel welcome.

The fundamental importance of public places suggests that local governments should assume primary responsibility for the design and management of both outdoor and indoor environments. As virtually all multi-purpose projects involve local government in matters such as land assembly, zoning modifications, and traffic management, cities have ample leverage to ensure that the interests of overall community are respected. With the indoor city mushrooming around us it is important to consider how this new architectural form may be successfully integrated in the urban fabric.

## Shopping Centres: Public Agora or Privileged Place?

Bruce Krüshelnicki

The City of St. Catharines has become the focal point of an interesting debate over the degree to which privately owned and managed shopping centres are public places. The truth of the matter is that shopping centres are private property in which members of the public have only temporary, implied rights. In addition to being subject to the usual laws restricting our behaviour on the public avenues of the city, we are subject to the will, preference and in some cases the arbitrary tastes of the mall owners and tenants.

#### Picketing and Trespassing

A Local of the Retail, Wholesale and Department Store Workers was legally striking Eaton's to achieve a first contract. The workers had been on strike for several months in the midst of winter and had set up pickets. Picketing, of course, of legal, but the strikers can only picket on public property.

In Ontario, the law in this regard has been quite clear for some time. Ontario courts have found that "the owner [of the shopping

centre] retained the right to withdraw his invitation to the public, or any member of the public, whose refusal thus becomes a trespass".

In the St. Catharines case, the strikers, in concert with local labour leaders, left the picket line at the parking lot entrance and, carrying signs and chanting, entered the shopping centre.

As the courts would put it, the shopping centre managers, acting on the owners' instructions, "withdrew their invitation" to these members of the public.

In the U.S., some states have enacted laws which would allow picketing within a shopping centre at the entrance of the business which is the subject of the strike. Any other policy, the courts decided, would suppress free expression as established under the First Amendment to the Constitution.

Subsequently, more conservative courts have overturned this ruling and have, indeed, struck down state laws allowing on—site pickets at malls. The basis for this turnaround (other than the changed constitution of the court) was the view that such a requirement constituted a limitation of the owners' property rights, as well as a limit to their right to free expression.

The new wrinkle in this case is that the Canadian Charter of Rights and Freedoms, as contained in the Constitution Act, 1981, was used for the first time as a defence to the trespass charges. The new Charter includes provisions relevant to the case such as freedom of expression, freedom of peaceful assembly, and freedom of association.

The local court has decided that the new Charter does not appear to change the right of the owner, since property rights had not been altered. There continue to be only two kinds of property ownership; public and private property rights. The trespass charge was upheld. The issue, should it reach the higher courts, will be whether the Charter rights, as now entrenched, supersede the rights of a property owner

The truth of the matter is that shopping centres are private property in which members of the public have only temporary, implied rights.

when that owner has invited the public to use the property publicly as a market.

#### Sex in a "Public" Place

A second incident which has achieved national attention is one in which a shopping centre called in the police to solve a problem of homosexual activities in its "public" washrooms. The police chose to adopt sophisticated surveillance techniques involving clandestine camera locations and highly publicized mass arrests.

The charges laid were under the Criminal Code and related to the offence of gross indecency. On the evidence there appears no doubt that the law was broken.

Yet, unlike the previous cases in which the emphasis under the law has traditionally favoured the private rights of mall owners, it appears that when the owners find it convenient they may claim to be merely stewards of otherwise purely public places.

It seems from these two incidents that whether a shopping centre is considered public or private depends upon what is convenient or expedient to the mall owners at any given time, rather than upon any principle of public policy or civil rights.

#### Removing "Undesirables"

The final incident of interest here is the case of an elderly man named Harry. At 74, Harry is like many lonely old people. He lives in a seedy downtown hotel, suffers from disabilities caused by a recent stroke, and takes a free approach to his dress and personal hygiene.

For him and for many retires, the mall had become the winter substitute for the city streets. Their alternative is virtual imprisonment in a sparsely–furnished hotel room or taking their chances on the frigid streets.

The mall is now strictly offlimits to Harry. His scruffy appearance, occasional incontinence and meagre purchases got him kicked out by the mall management and told never to return. His invitation was withdrawn. When he did try to return, the police were called and he was escorted off the property.

#### The New Urban Centre

In effect, the shopping mall has replaced the town centre as the hub of retail commercial activity. It is the new city centre that we have perhaps unwittingly created. From history, we know that whenever such a hub of activity has emerged, it rarely remains undimensional. The medieval cite, the industrial town centre, and the Nortrican town common each had their focus; and each was characterized by a multitude of uses and a sense of common access and ownership.

The mid-twentieth-century shopping-mall is no exception to this. While the owners and tenants would prefer that the mall be restricted to middle class retail consumers, many other uses – some condoned, others not – are finding their way to the mall.

In addition to the typical retail establishment malls now house bank branches, taverns, theatres, library branches, lawyers' offices, social service agencies, and a host of other service—type uses, some of which are public. Mall owners condone these so long as they pay their own way and do not offence the primary

It is necessary to enact a new type of quasi-public category of ownership and stewardship which recognizes the essentially public nature of the mall while retaining reasonable rights for mall owners.

money-machine function of the mall.

The shopping mall, whether or not we approve, has emerged as another major centre of urban life. Although its originators intended it solely for shopping, it has become a service centre, a social centre and meeting place, and even a centre of arts and culture in the populist tradition.

Historically, the heart of the city has been a place to which all citizens of the city had equal access and for which all had some measure of responsibility. Although downtown merchants have, at various times, through vagrancy laws and the like, tried to appropriate the city centre as a money—machine, they were never quite successful. The streets and sidewalks were public. No one could withdraw their rights unless the law, applicable to all, were breached.

Where the downtown merchants failed, the mall owners have succeeded. Using the law of private property, they can operate the mall according to their exclusive image of what the centre of the city should be; an image in which the predominant object is to facilitate profit oriented consumption. Where this object is threatened by the presence of strikers, senior citizens, or eccentrically—dressed adolescents, the mall owners can summarily evict.

On the other hand, when it is convenient to the mall owners, they may call upon such public resources as the police and the courts to protect the public from such offensive behaviour as breaches of their dress code or sexual activity in their washrooms.

Malls are, in effect, quasipublic places, and should be regarded as such before the law. The
benefits which mall owners enjoy
are not solely of their own making,
but arise from a general community
betterment. The privilege of serving the consuming public and of
extracting lucrative rewards from it
carries with it the responsibility of
accepting the role of being the centre
of city life.

It is necessary to enact a new type of quasi-public category of ownership and stewardship which recognizes the essentially public nature of the mall while retaining reasonable rights for mall owners consistent with their needs. The archaic property laws which see only the two categories of public and private land are clearly ill equipped to meet this need. Legislation should implement more open principles of entrance and egress, based on universally applied criteria which do not offend basic liberties.

Furthermore, if the mall shall be able to use the police, the courts, and other public services, it should not be only as its own convenience. The police cannot ordinarily be selective in the administration of justice-their job is to protect the rights of the public. The mall should thus be subject to policing as a public place, not solely on the basis of periodic complaints by mall owners. A mall, especially its common areas, should be as open and accessible a centre of urban life as is practically possible. It has become too important a place in the culture of North America for governance by a few mall owners.

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## DISCORDANCE AND CONCORDANCE THE TWO FACES OF WINTER PUBLIC SPACES

#### Anne Brit Børve

In a number of our most modern cities, we no longer find places streets where the casual meetings and informal conversations take place between inhabitants, where both young and old can find their place.

We no longer find the variation of spaces and streets where service, trade and transport move at a relaxed tempo, where the meeting between home and work, life and learning are closely knitted. Once, the inhabitants themselves had a collective control that gave safety and protection in order to live in the inner city.

In our modern city space, we move almost all the time within segregated systems under the control of a very few units which incur heavy limits. We arrive in an automobile, enter or cross over these spaces or move within large systems of enclosed shops/offices and service centers whose major task is to direct movement and activity towards consumerism and "artificial" stimulation.

It is within these closed systems that man's ability to be creative, intuitive and inquisitive is both hampered and controlled. We adopt many different reasons to get involved in projects that result in such solutions. One of the weakest arguments is that our cities are especially cold, thus revitalizationing these northern areas must include an increased availability of commodities and services all day, all year.

#### An Example:

Oslo, a city of about 460,000 inhabitants, has developed within a framework of both ideologies. it is possible to travel from one's home near by the center of town, or in immediate surroundings, into the city center by car, and park in an underground garage, or take public transport directly to one of the large shopping and office centers where everything is available, and to return home without entering the city room, or in other words never become acquainted or aware of activities that happens on the city's streets and squares.

Just the same, today, the city is dominated by a flourishing

outdoor life on many of its squares and streets rather than the indoor life of the many shopping centers. It is possible to arrive by foot or public transport at any of the large central public parks, markets and streets, without crossing too many heavily trafficated areas or built hindrances. The dimension of functions is small scale, evenly spread and activated, and housing is found throughout except for the innermost center of the city. In this center without housing, there are public areas that can be characterized as endangered species.

Despite the possibility to choose a totally "enclosed environment" year round and almost all day, many Oslo citizens have adapted their needs and physique to remain outdoors on the street and market places all year long regardless of cold weather and snow. An important factor is the regular use of parks and recreation areas found in the foothills surrounding the city. This means that the average inhabitant has acquired a resistance to the cold and heat of changing seasons, and thus it is possible to stay outdoors with a minimum of protective clothing or protective mechanisms. The physical relationships within the urban structure are still open to achieve this physical state within the individual inhabitant.

Just the same Oslo does have some problem areas that result in health problems, especially in the winter. In one of the low lying areas which could be described as a bowl–formed landscape room, there is a heavy concentration of transport networks with dry dust and massive over built areas.

#### Basic Needs: Criteria Guiding the Planning

City center areas both indoors and outdoors, should meet certain primary needs in all seasons:

It should be possible for all citizens to move around both indoors and outdoors at all times of the day, and year. This is especially important in winter, as it will build up a natural capacity for survival within the natural framework of the area.

The built framework of the city should have a quality that promotes safe pedestrian traffic and a variation of places from the

## The original functions of public spaces are about to be lost.

completely open, to dry and sheltered waiting zones and indoor areas. The outdoor areas should vary between parks, closed green streets and service streets; all free from health risks such as; concentrated pollution, dust, pockets of stagnant cold air and harsh winds due to building structure's physical form and continuous shade. Large snow masses, as a problem, could be reduced by cutting down the use of private cars and increasing public transport in the winter. Snow that can remain unploughed is kept as is, thus reducing maintenance costs.

City centers should include functions that have an "all day" operation with a social network to achieve collective responsibility, control and security. This can be achieved, among other things, by requiring a certain number of housing units evenly scattered throughout the inner city area.

Our information society has diminished the cultural differences between town and country. In spite of this, or because of this, interest in the identity of places and regional cultural differences has increased. We ought to preserve these qualities, also, when attempting to rewind the positive natural framework around life in a city adapted to place identity.

### Revitalization Tools Planning Methods – Comprehension

It is possible to soften winter's harshness and barriers in city life by total overall planning of buildings, streets and squares in a carpet—like form where wind and snow drifts are not broken down or ploughed, but the snow is allowed to remain quiet, relatively untouched by ongoing traffic, and thus it is possible to traverse the center city in more traditional ways such as skies or a traditional norwegian "spark".

Methods to translate and understand local climatic conditions have improved in the last years. These methods are good tools to help anticipate the climatic consequences of new housing projects and developments.

It is possible to improve the climate conditions and air quality in congested inner areas. By ventilating stagnant air in enclosed streets or squares, or by adding self-ventilating elements in a consequent and related manner throughout the inner city, or by

establishing wind control structural elements in the early phases of building and planning and the planting of vegetation in strategic zones when possible. Simple model test methods are available to the prestatement on climatic conditions in cities. It is important to use existing analytical tools and test methods that can give information about the consequences of the planning and construction within the city.

#### Regulations and Codes

We have lost much of the traditional knowledge our past city dwellers had. Building codes and laws for developing our cities must therefore have both a pedagogic element as well as the pure structural, technical, economical and operational aspects.

There should be regulations within the code that not only touch upon the light and wind aspects within a city, but also set levels for pollution and require assessments of the barrier effects of buildings and road schemes. There should be laws that require any building initiative must offer a clear improvement of existing conditions of the area, especially heavily burdened zones.

### Knowledge/Multiple Expertise in the Organization of Planning and Projects

To preserve a city's health, knowledge of the framework and adaptability between man, his work and nature must be a common denominator.

This knowledge of man's necessities found in more traditional cultures, should form the premise of our work. This is only achieved through a broad cross section of expertise and interdisciplinary cooperation in the planning of our cities.

Anne Brit Børve is a professor at the Oslo School of Architecture.

#### NANISIVIK EVALUATED

The purpose of this research was to evaluate Nanisivik, NWT a community designed around a behavioral focal point. Since community demands exceeded the capacity of the building housing the focal point, new buildings were constructed that diluted the focal point's original purpose. Yet the community retains the original building, the dome, as a functioning focal point and center of daily community life. In that sense, the original plan is still a qualified success.

Two policy decisions have influenced present absence of any focal point design. housing the equal or superior to housing munities. The results was that housing ence.

The second decision was to increase the the wives of workers. The result of this of time spent in the home and in recreashow that in public settings the recreatown in the American Midwest which is



the quality of life at Nanisivik beyond the The first of these was to have the quality of most residents had encountered in other combecame a positive asset of community experi-

amount of time spent working and to employ decision was to drastically reduce the amount tional pursuits in the home. However, the data tional level is above the average for a small considered a high standard for community par-

ticipation. The increase in time spent at work agrees with previous experiences in military bases in Alaska, where it was found that increasing work loads resulted in fewer domestic problems.

In addition, the data show the Nanisivik community to be especially receptive to children and adolescents in its public settings.

It appears that Nanisivik functions relatively well without having the ideal focal point around which its activities are organized. But there is a problem in participation for the very expensive swimming pool. It appeared, at the time of the study, that adult participation had dropped off and that some effort would need to be made to raise participation, to justify the presence of such an expensive facility.

Another policy that markedly influences participation is the separation of adults and children. Adults do not like to share a swimming pool with children and if they see large numbers of children, they tend to leave.

Architectural design, however, can compliment or interfere with such policies. If the pool is within sight of a behavioral focal point, it is more likely people will be attracted to it both to watch and to participate and be seen. When the pool is in a separate building, it requires a person to make a social commitment when he leaves a building to go to the pool. In addition, in winter this often involves suiting up for the cold. These elements work against participation.

An obvious, but perhaps prohibitively expensive solution is to enclose all the recreational facilities in a larger dome. Short of that, the dome could serve as a kind of central mall on which the other buildings front. This would be a solution only for the design and construction of a new site. About the best that could be done for the present site would be to connect the recreational bridling and the dome at both the ground and second floor levels.

The housing shortcomings at Nanisivik seem to result more from the present state of housing construction in the Arctic than from faulty design. Windows that do not work and lights that are too dim are faults easily corrected. The settling that caused some ceilings to part from interior walls is merely the result of ignorance in construction practice. But these problems point out the difficulty in conveying knowledge about arctic construction to the proper sources.

The integration of Inuit in the housing and work environment of Nanisivik is another factor contributing to the quality of its life. Since the housing is of better quality, Unit families view the experience as positive despite some cultural adjustment problems.

Overall, the town of Nanisivik is undoubtedly one of the better examples of the state of the art for designing arctic communities. It seems to have avoided many of the past mistakes and made a real effort to build an integrate community. It is a place that measures as a good environment for families, children, and workers and it integrates the Inuit in housing and work situations.

Robert B. Bechtel & C. Burgess Ledbetter

#### DEVELOPING THE SOCIAL ECONOMY OF COLD REGIONS BY STRENGTHENED COOPERATIONS

Accelerating the development and prosperity of the social economy, and providing a proper environment and good conditions for mass production and the people's life in cold regions are the common tasks in front of us. For this purpose, we make the following suggestions:

1. The consultations and dialogue between to be strengthened in order to promote the peace. Like the people elsewhere, the people tional environment to ensure the social eco-We appeal to the government of various ment as the fundamental purpose, to promote prejudice against each other on the basis of ground while reserving differences on minor ship on the basis of mutual accommodation peace and prosperity.



the countries and regions in cold aresa have mutual understanding and keep the world in the cold regions need a peaceful internanomic development of their own countries. countries to take the peace and developtheir mutual understanding and remove their equality and respect; to seek common issues, to strengthen their trust and friendin order to bring about a ever-lasting world

- 2. Scientific and technical cooperations should be in a closer manner to accelerate the construction and development of the countries in the cold area. As a mighty productive force, sciences and techniques have greatly pushed forward the social economic development. But there isn't any single country in the world, no matter how advanced it is, that is able to create or invent all the necessary techniques. Even developing countries have their own superior techniques. This fact objectively requires that the scientific and technical cooperations between different countries be enhanced. To answer the challenge from the nature, every country must fight together with other countries, learning from others' strong points to offset one's weaknesses. Science and technology as the crystallization of the wisdom of the mankind has long since surpassed the boundaries of the countries, and become the common wealth belonging to the whole world. Therefore, making use of the achievements made through the joint efforts of all people to serve the people's better existence and a brighter future is a demand originated from conquering and remaking the nature. The scientific and technical cooperations will surely benefit the people of the world.
- 3. The economic and trade relations between the different countries and regions in the cold area have to be enhanced. Today, there isn't any single country, no matter how rich its natural resources are and how powerful its productive capacity, which is able to produce all the materials and commodities that can fully meet its own demands. Therefore the business trade through which each country can import what is needed and export what is surplus is an important element in developing the country's social economy. This is even more important for the countries in cold regions where the material supply is often relatively insufficient and the consumption is usually high. It is an activity of far-reaching significance. It not only helps the development of bilateral or multi-lateral relations on the basis of equality and mutual benefit. In short, we should take hold of the advantageous chances provided by the world situation to develop and strengthen the economic cooperations between various countries and regions.

Heilonjiang Province is situated in the Northeast frontier of China. It covers an area of 460,000 square kilometres with a population of 33 million. The climate is classified as a north frigid-temperature of -2 to 3 degrees centigrade. Heilonjgiang is rich in various natural resources, and it has the mighty latent potential for economic development. But the development and construction in this province started quite late, and the proper economic order suitable for the cold region has not been well established yet. We are now still short of technologies and equipment. Heilonjgiang is such a place that awaits further development.

We suggest that an international cold region technical development society be established to facilitate the exchange of experience in the development and construction work in various countries, to accelerate the prosperity of the cold regions, and to make contributions for the well-being of the mankind.

Wang Fenglian, Tao Yongzhi, Sun Yufa & Chen Baojiang Heilongjiang Municipal Economics Research Center

### MAIN STREET INTENSIFICATION

In 1990 we participated as urban designers, in Metropolitan Toronto, Borough of East York's, Main Street Intensification Study, through their Commissioner of Planning, Richard Tomaszewica.

This study focused on the prime objective of increasing residential density along the borough's major arterials. A sub-objective of equal importance was how to achieve these new densities while enhancing the social, economic and physical usefulness and attractiveness of these streets in all seasons, but particularly in response to winter's rigors.

We reiterated standard winter physical design issues that needed to be addressed, including:

- · sunlight penetration to the street
- · cover from rain and snow
- · wind protection
- · separation from vehicle intrusions
- · pedestrian safety
- · relief from long hours of darkness

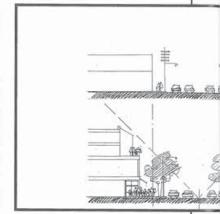
How to achieve these design goals while enhancing social and economic criteria became our task.

The main streets of East York have great potential. They march across the borough in a regular grid, marking community places related to strong established neighbourhoods. Their regularity and identification with neighbourhoods, make them easily accessible to pedestrian activity, and transit. In a number of areas they describe active individual community characters.

Each of these main streets flourish because of an open community life pattern that embraces public space interaction. Yet each of them are diminished because of underdeveloped urban design features. For example the sidewalk width on Pape Avenue is restrictively narrow, so that opportunities for increased planting, street furniture, kiosk or seating areas, and pedestrian cover are difficult if not impossible to achieve.

To demonstrate how these design interventions can be applied, Pape Avenue was selected as a prototype. While not proposed specifically to deal with winter conditions, each strategy was tested against winter conditions, as the dominant criteria for improvement of the streetscape.

The blocks along Pape Avenue vary in length between approximately 60 metres and 90 metres, and are 30–35 metres deep. Some of the blocks have rear lanes between the arterial facing lots and the housing along the adjacent east/west blocks. Except for the infrequent institutional use, such as a church, or a school,



the general use at grade is retail or storefront office. A number of blocks have service station lots which have been modified into strip plazas or fast food outlets with parking. The general profile of the street is of two storey structures mixed with some single storey structures.

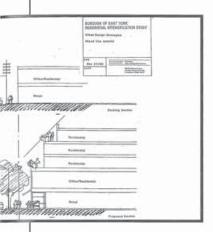
The widths of the lots are generally very narrow, varying between 4 metres and 9 metres. The second storey use is predominantly residential but a number of offices also appear regularly on the street on the second floor. The sidewalk widths vary between 2 metres and 3 metres. Light poles, parking metres, newspaper boxes, and waste receptacles are all placed along the sidewalk at the curb line. The street is virtually devoid of trees, most probably because of the narrowness of the sidewalks. The combination of all of these observations, presents a low profile streetscape of undistinguished buildings, each vying for attention through an unorganized collection of store signs and awnings.

The narrow sidewalks, combined with the streetscape clutter, parallel parking and lack of trees, creates an inhospitably pedestrian environment, which if tolerable during summer months, must be intolerable during periods of snow and slush accumulation.

The following urban design strategies were created to enable implementation of increased densities with design improvements at street level.

The urban design strategies were developed not to penalize property values. Indeed density bonuses were offered for the implementation of the strategies.

#### JOSEPH A. BOGDAN



#### a)Land Use Intensification

Density is to be doubled within setback and height controls and minimum lot size definitions. Land use categories are to continue as a mix of commercial and residential, however additional density is to be limited to residential use.

#### b) Lot Size Definitions

In order to achieve both sufficient economic and design mass, a minimum frontage for development at the proposed increased density is recommended to be 25 metres. On a typical block length, this proposal would result in a maximum of three developments per block.

#### Height Limits/Setbacks

Height limits are to be determined as a function of setbacks as much as by a rigid single height dimension. It is recommended that a stepped building face setback system be utilized, which establishes a first setback at the third floor; however, into this setback, bay windows could intrude. A general height limit stories is also recommended. Again the setback system wouldrecognize the scale of single family adjacent structures to the rear, and step down to reflect that scale.

A simple sun/shade coverage formula is proposed, and is to be utilized in establishing allowable heights within a property. The combination of angled setbacks and a sun/shade formula will open the street to greater sunlight during winter months.

#### e) Pedestrian Elements

Two sidewalk related design strategies are proposed:

(i) Intersection redefinition is to be encouraged in any redevelopment scheme, so that the intersections are identified more clearly. It is recommended that corner properties and building faces have a diagonal setback of 2 metres.

This recommendation in addition to creating a distinct spatial definition of the intersections will offer better safety visibility for both vehicles and pedestrians while allowing greater sun penetration, particularly during winter months.

(ii) Enlarged sidewalk areas are encouraged, by requiring a 1.5 metre building face setback from the property line. This new setback would create a sidewalk of 3.5 to 4.5 metres in width. In addition a 1.5 metre recessed or arcaded setback for up to 50% of the fronts encouraged, by offering a density bonus of 2 times the area set aside. As the street section diagrams show, these strategies will create opportunities for pedestrian lighting, planting, snow piling, covered ways, and covered activity areas.

In conclusion, the urban design strategies focused on enhancing strong existing community incentives and improved physical delineation. Recognition of winter's constraints were built into the strategies, to the degree that they would enliven that season.

Increased pedestrian lighting is to be augmented by decorative tree and street lighting during winter months.

Outdoor sales kiosks continue to function during winter under cover. Outdoor summer cafe seating areas become solariums during winter months.

Widened sidewalks allow for a "boulevard" zone at the curb for planting, shelters, lighting and during winter; snow accumulation and separation from vehicle splashing.

The true test of the strategies will not be a measurement of them against winter criteria, but rather how they extend public space activities and enjoyment into all seasons.

Joseph Bogdan is a priniple in the architectual and urban design firm Joseph Bogdan Associates Inc.

### Book Reviews

### Climate-Sensitive Urban Space

by Boudewijn Bach and Norman Pressman



Very few books deal with the impact of climatic factors on urban form or structure, emphasizing livability in human settlements. Those which exist usually do not focus on minimizing the negative aspects of climate nor on maximizing the positive ones, and they rarely apply sound climate—related knowledge to urban development.

Some of this knowledge exists within the discipline of landscape architecture and normally is directed toward site—specific problems. At the urban design scale of intervention, the data are seldom utilized in contemporary settings. Vernacular or Folk—building traditions and micro—geographic studies have been useful examples of the weave of climate, culture, lifestyle and urban form into a coherent composition. Such practices, regrettably, are not commonplace when "techno—lust" seems to be the driving force behind design solutions.

CLIMATE-SENSITIVE URBAN SPACE— is an attempt to address the relationships of built form and the natural landscape. It succeeds in bridging the chasm between these with the objective of bringing about integration of ideas. The case-studies portrayed indicate new ways of improving the micro climates of spaces between and around buildings—at a neighbourhood scale—for human comfort.

The Bach–Pressman booklet commences with a section on the social significance of public urban space citing several leading studies and publications on public space, traffic—calming, social well—being, and personal health. It then proceeds to examine design and policy interventions which promote "green" modes, such as walking, cycling and transit. One of the basic premises is that sheltering systems, combined with devices offering protection from adverse climatic elements, will encourage use of these modes. Both historical and contemporary analysis of arcades, gallerias, and colonnades are undertaken, as are ways of stimulating beneficial microclimatic areas in cities. Pedestrian and cyclist behaviour patterns are described on the basis of recent Dutch research, and strategies for achieving a model split in favour of cycling, walking and transit are revealed. The authors firmly believe that a reduction in private car usage (resulting in decreased pollution), greater energy conservation, and a wiser use of urban space can hasten the arrival of a sustainable future and help to produce an urban configuration to accommodate its functions.

This small book (96 pages in length) is well illustrated with graphs, charts, drawings and photographs supportive of the lucid text. Most of the photographs are of innovative European projects, but there are also Canadian examples. It is extremely easy to read and comprehend, and packs much useful information into a handy, compact size. Although the theoretical foundations of the case—studies are not the forte of this publication, the numerous practical ideas make it highly valuable for architects, planners, urban designers and policy analysts concerned with livability in towns, villages and metropolitan areas.

Bach and Pressman make a strong plea for accommodating climatic variables in development policy and for creating design guidelines which can respond to weather agents during differing seasonal demands. They focus on the outdoor activity zone during winter and the marginal seasons (late spring and early autumn) when it is less comfortable to be outdoors.

Concern for climate has generally been overlooked in urban design practice. Under harsh conditions, climate—sensitivity should be a determining force in the generation of design strategies—or, at least, a modifying element. Drawing attention to this simple fact makes the book valuable reading for professionals involved in environmental design. Summing up, this practical little book is to be applauded for its content, its clear focus, its well—chosen graphics, and its up—to—date examples not readily available elsewhere. It is a useful guide of existing practices and an excellent base for further explorations reflecting an original approach.

Peter Nash

#### Winterstadte Planung fur den Winter in Kanadischen Grosstadten

by Barbara Hahn

A highly recommended read and primer for those searching for a conceptual base for harmonious design appropriate for the northern hemisphere.

So often, those persons on the edge, have a better perspective of an event than those participating. Such appears to be the case with Professor Hahn, as evidenced by her observations in her book Winterstadte

Planung fur den Winter in kanadischen Grosstadten. The irony is her book which documents the unique character of Canada's major cities is now published in German for the German market. We can only hope that her book will be published in English to ensure it's perspective and value will have a most direct impact on those affected. The book documents the friendly and unfriendly faces of Canada's winter and their impacts on the different segments of society. It reviews the legacy of neglect of the cold winter climate in architecture and urban planning and discussed extensively the impact of Canada's contribution to the vocabulary of urban infrastructure, the multilevel protected pedestrian network.

In her concluding chapter Dr. Hahn notes:

"Architects and urban planners have a wide range of possibilities to make life easier and more pleasant. Planning for winter is still in it's first phase. Ideas have to exchanged on the national and international level in order to go beyond the first phase. However, this exchange of ideas should not result in creating identical cities all over the world. Winter cities in different parts of the world should always reflect the regional characteristic."

I believe the future quality of northern urban culture is dependent on the building of a strong empirical foundation such as Dr. Hahn has produced in her new book.

HH



by Donald Hoffman Dover Publications Inc. N.Y.

The dramatic revival of interest and influence of Frank Lloyd Wright, considered by many to be the greatest architect who has ever lived, has a sense of inevitability in a world

constantly striving to rebalance itself in it's forward motion. In this last center century we have gone from eclectic classicism to technical driven internationalism to the eclectic neomodernism pistache, of styling from other places, and at times to deconstructivism's search for disonanence and disorder. No wonder Wright's "organic" approach, stressing comprehensiveness and a pragmatic relationship to nature seems like a breath of fresh air to the newest generation of environmental literates.

Wright's empathy for the uniqueness of each place in each season is a constant theme in both his physical and literary output. He begins his famous autobiography by recalling the play of a naked weed against the snow and he took great pride in calling Taliesin, his renowned home, a house of the north.

This inexpensive paper back edition is a bargain entry into the thoughts of Wright and in to the fine sensibilities of some of the people who influenced him, Thoreau, Ruskin, Emerson, Louis Sullivan and Jens Jensen.

HH

