Images of the North: Cultural Interpretations of Winter

Winter Communities No. 5

by Norman Pressman
1987

The Institute of Urban Studies







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The Institute of Urban Studies is an independent research arm of the University of Winnipeg. Since 1969, the IUS has been both an academic and an applied research centre, committed to examining urban development issues in a broad, non-partisan manner. The Institute examines inner city, environmental, Aboriginal and community development issues. In addition to its ongoing involvement in research, IUS brings in visiting scholars, hosts workshops, seminars and conferences, and acts in partnership with other organizations in the community to effect positive change.

IMAGES OF THE NORTH:

CULTURAL INTERPRETATIONS OF WINTER

Winter Communities Series

by

Norman Pressman

Institute of Urban Studies 1987

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Norman Pressman

An urban designer and planner, Norman Pressman is an Associate Professor of Urban & Regional Planning at the University of Waterloo, Canada. He has been a co-founder of the Livable Winter City Association/Association pour l'animation des villes en hiver and was the Associations founding president in 1984/85. His extensive scholarly and applied work in the "winter development" field of study has earned him an international reputation. He has consulted, lectured and directed workshops in this subject area throughout Iceland, Sweden, Norway, Finland, United States and Canada. Furthermore, he is editor of Reshaping Winter Cities (1985) and, with Prof. Jorma Manty of Finland is nearing completion of a book entitled Cities Designed for Winter (1988). In 1987, he inaugurated a unique and innovative course on "Winter Cities" which is taught at the University of Waterloo.

This paper is the outgrowth of an address he delivered on the Cultural Dimensions of Winter, to the "Livable Winter Cities: Manitoba Perspective" conference in February 1987, sponsored by the Institute of Urban Studies, University of Winnipeq.

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Winter is the true season of the North. Spring is only a promise that something great is about to happen; Summer is only an illusion of what people, during some hot days or weeks, at the most, believe to be true; Autumn means death, it is the dark grave of the promises of the Spring and of the illusions of the Summer. But Winter is something that really exists. It always comes back.

Toivo Pekkanen's Thoughts
(selected from his works by
Antero Pekkanen, WSOY, Porvoo,
Finland, 1962, p. 61)

1.0 UNDERSTANDING "WINTER CITY" TERMINOLOGY

What is meant by the term "winter city"? How far north is "north"? Are there differences between what is "north" and what is considered as "northern conditions" with respect to building, design, planning and management of human settlements? There are a multitude of interpretations based on factors such as latitude, climatic elements (e.g. temperatures, precipitation, seasonal variation), incidence of vegetation, location of the treeline, and cultural perceptions of what constitutes "cold". For example, Glasgow and Copenhagen, not really considered northern settlements, are located at the same latitude as Moscow and Edmonton which are among the world's coldest cities. Whitehorse and Reykjavik are at approximately the same latitude but the former is considerably colder and snowier than the latter. Toronto is situated at the same latitude as Nice and Monte Carlo but its climate during the winter season bears no resemblance to these cities on the Cote d'Azur. Land and water mass, ocean currents such as the Gulfstream, and winds, influence climate where the north is concerned. Similarly, other elements which can be included in attempting to define "north" are the number of days of continuous permafrost, freezing periods, or permanent snow cover.

The question might be asked "what is winter"? Here again, there are no official definitions but merely interpretations. The astronomical view defines it, for the northern hemisphere, as the period from the winter solstice (December 22) to the vernal equinox (March 21). The shortest day occurs

because the earth's axis is tilted as far away from the sun as it will ever be during the course of a calendar year. The climatological view accepts the division of the calendar's twelve months into four groups of three months each — the December through March quarter known as winter. Many definitions pertain to the beginning of winter, such as the first frost or the first snow with the duration of these phenomena forming the basis of a broad understanding, as vague and arbitrary as this may appear. For some, the winter is essentially seen as a season in which snow and ice-cover enable outdoor recreational activities such as skiing, skating, ice-fishing, snowmobiling and ice-boating. 1

There was a first attempt at defining "winter cities" as: places where the average January temperature is $32^{\circ}F.$ ($0^{\circ}C.$) or colder.²

Based on this arbitrary definition, another has sprung up which defined "winter cities" as:

places where the average January temperature is $32^{\circ}F$. (0°C.) or colder, and that are generally located above 45 degrees latitude.

Generally, most winter cities tend to be located roughly at the 45th parallel and north of it. However, exceptions are found in communities at high altitudes, e.g. Iran, Afghanistan, Mongolia, and other mountainous regions where snow and cold temperatures are in abundance. Denver, Colorado and other American cities situated in the Northeastern States areas which are beneath the 45th latitude surely qualify as "winter cities".

If you are in an urban settlement anywhere in the northern half of China or Japan, the United States, the Soviet Union, Scandinavia, Greenland, or most of Canada you are almost certain to be in a winter city. Winter climates vary considerably in both perception and reality. Torontonians may be impressed by the high annual snowfall levels in Ottawa or Quebec but they must contend with greyish slush for much of the winter season. Oslo and Reykjavik may cringe at the intensely cold temperatures of Oulu or Edmonton while they must manage through months which have relatively little sunshine or daylight. Stockholm receives few sunshine hours during the mid-winter period but, occasionally, can be fortunate enough to experience little snow. Other cities live with ice storms, hail, freezing rain and a myriad of precipitational variations. Towns such as Bodo in the north of Norway live with severe wind velocities and extreme wind chill while Calgary with its Chinook wind (similar to Europe's 'Foehn') can go from cold to warm temperatures in a matter of hours.

To some, winter is associated with heavy snowfall or intense, prolonged periods of cold, while to others it may be related to darkness at far northern latitudes. All of these characteristics are invariably functions of northern winters possessing both positive and negative aspects. However, a harsh, cold, winter climate is a relative notion, embodying five basic elements: ⁴

- 1) temperature -- normally below freezing.
- 2) precipitation -- usually in the form of snow.
- restricted hours of sunshine/daylight.
- 4) prolonged periods of the first three elements cited above.
- 5) seasonal variation.

To minimize confusion,

we could think of the north as generally the top quarter of the globe - the northern half of the Northern Hemisphere. A region inhabited by an estimated 600 million people.⁵

An acceptable definition of winter cities, must assume that they are situated in regions where air temperature is below 0° C, where earth is covered by snow, and where water is frozen, during a considerably long part of the year.

The one major criticism with the definition stipulating that average January temperature is 32°F. (0°C.) or colder is that snow or ice may not be present in such settlements. The reason being if night temperature falls below freezing — in which case it might snow — but day temperature is above freezing, any snow which may have accumulated during the night will have melted. There may be an average temperature of 32°F. (0°C.) but no continuous existence or accumulation of ice or snow and it is precisely these two elements that tend to be strongly associated with winter cities all over the world.

Therefore, based on the above, this author wishes to present the following definition:

A "winter city" is one in which the average maximum daytime temperature is $32^{\circ}F$. (0°C.) for a period of at least two months or longer.

This suggests that winter normally lasts at least two to three months in length, and therefore incorporates the five basic elements. Furthermore, it acknowledges that winter communities also exist in the southern hemisphere with "reversed seasons".

2.0 CULTURAL DIMENSIONS OF WINTER

Winter has many faces in the world's nations which must endure this season. Winter has been perceived in many ways, both positive and negative. Climate has been rumoured to significantly influence the temperament, mentality and psyche of nations. In fact, this notion was introduced on a wide scale during the latter half of the 18th century by the French philosopher Montesquieu who claimed that the character of different nations was formed, to a large extent, by the natural surroundings and climate. This "climate doctrine" was to influence the literary scene as well as prevailing political perspectives throughout late 18th century France. He went so far as to say that:

If it be true that the temper of the mind and the passions of the heart are extremely different in different climates, the laws ought to be in relation to the variety of those tempers.

Simply to think of a country like Canada implies an immediate association with winter. Most images of this season are invariably bleak. For example, one recent depiction of Canada appeared in the August 11, 1980 issue of 'The Los Angeles Times' and read as follows:

Canada is one of the most northern of the world's countries. Its most northerly tip, Cape Columbia on Ellesmere Island, is only 475 miles from the North Pole. More than 40% of Canada is an iced and harsh mass of land lying north of the 60th parallel. Only Outer Mongolia has a colder capital city. Yet it is often difficult for Canadians to look toward the North and think Northern.

French chroniclers of the 17th century portrayed unpleasant views of Canadian winters. Contemporary chansonniers and poets, song writers and authors from Quebec are known for their powerful descriptions of the winters, although there is always some affection for the season displayed in their writing. The entire pattern of urban settlement and town founding in Canada is linked to the history of surviving winter, enduring and adapting to it. On the whole, it could be stated that Anglo-Canadian culture has frequently tended to deny the existence of winter, fighting it when possible and even escaping from it - for those fortunate enough to afford this option - by spending several weeks or months each year in the more southerly climates of the American south-west, the Caribbean, or Spain's Costa del Sol.

French-Canadian culture has been less reluctant to deny the "winter fact". Well-known artists such as Cornelius Krieghoff and Clarence Gagnon have depicted scenes of winter festivities in Quebec's rural areas as well as in Quebec City. Krieghoff, although of Dutch birth, lived in Montreal and Quebec from 1845 until 1864. His paintings of the local habitant life embodied satirical humour with outstanding colours. His overriding themes were merrymaking, neighbours gossiping, lovers flirting on winter evenings, Indians greeting each other on frozen rivers while Montreal gentlemen pass by on elegant sleighs. 8 These paintings mirror gaiety, joie de vivre, and an almost carefree attitude exploiting the beneficial aspects of ice and snow for the sole purpose of enjoying life. The Quebecois, those original colonial settlers of the frozen Canadian landscape, have accepted climate as an integral part of their cultural framework which was to evolve in a new land, far from the more temperate climate of Mother France. The most potent image ever projected of the French-Canadian cultural and physical landscape was by Gilles Vigneault in his poem "Mon Pays" (My Country):

Mon pays ce n'est pas un pays c'est l'hiver Mon jardin ce n'est pas un jardin, c'est la plaine Mon chemin ce n'est pas un chemin, c'est la neige....

My country is not a country, it's the winter
My garden is not a garden, it's the plain
My road is not a road, it's the snow....(English translation)

One of English-Canada's well-known poets, Alden Nowlan, writes in the second verse of Canadian Love Song:

December is thirteen months long July's one afternoon; therefore lovers must outwit wool, learn how to puncture fur.

In 1925, A.Y. Jackson in a speech entitled "Canadian Art" addressed to the Empire Club, and referring to trends of the day in painting (he was one of the celebrated 'Group of Seven' landscape artists) proudly spoke out with respect to the landscape:

In summer it was green, raw greens all in a tangle; in autumn it flamed with red and gold; in winter it was wrapped in a blanket of dazzling snow; and in springtime it roared with running waters and surged with new life, and our artists were advised to go to Europe and paint smelly canals.

Winter was frequently depicted in all its splendour whether the scenes dealt with nature or with the built environment. In fact, the important exhibit "The Mystic North" which toured the Toronto and Cincinnati Art Galleries during 1984 did much to display symbolist landscape painting in Northern Europe and North America from the period 1890-1940. The exquisite forms and colours of the northern regions and hinterlands are unequalled in their interpretations of seasonal variation and, as expected, much of the exhibition had to do with winter scenes. Many of the northern landscape artists had a sensitivity toward nature that is beyond description. As Edvard Munch, the famous Norwegian painter, so carefully articulated:

Nature is not something that can be seen by the eye alone - it lies also within the soul, in pictures seen by the inner eye.

In Canada, as early as 1920, J.E.H. MacDonald, one of the Group of Seven, stated that: $^{10}\,$

Every country has its peculiarity of physical features, its characteristic scenery, its distinguishing climate and atmospheric effects; and out of these and other well-recognized traits of the land and their outgrowth in the life of the people has grown each country's art.

MacDonald's observations closely echoed those of Swedish artist Richard Bergh who, in 1902, wrote the following: 11

It is not so important that all small nations make immediate and astonishing contributions to the great culture...It is, on the contrary, of major importance that they develop independently and logically from their own roots, working with subjects which especially suit them - in order little by little, and in an original way, to grow part of the larger organism, and address its variety from an original and vital perspective.

Although Bergh's ideas were accepted by much of the artistic community throughout Sweden - with an impact on the surrounding Nordic nations, and Canada, as well, there was scarcely any effect where architecture, urban design and planning were concerned.

People and planners living in northern regions have, for a long time, ignored the lengthy and, at times, unbearable winters. Most of the energy of professionals has been focussed on the "warmer" seasons - summer, spring and autumn because they have not been educated in a tradition emphasizing "seasonal thinking"; and "thinking winter" was out of the question most of the time! However, a genuine "winter-consciousness" has arisen since the inception of the "livable winter cities" movement in the mid-1970s. This occurred in the twin cities of Minneapolis and St. Paul, Minnesota largely as a result of one

individual, Prof. William C. Rogers, who influenced civic committees dealing with urban quality to take heed of climatic constraints. His constant efforts at promoting conferences, symposia, discussions and media coverage of "winter problems" were eventually recognized and started to make themselves felt in urban policy statements and design concepts.

Most winter cities, except for energy-conservation measures introduced in the aftermath of the 1973 world energy crisis, have not addressed the range of problems posed by winter. Uniquely "northern" architecture or urban design does not exist -- with the exception of some brilliant concepts realized by architect, Ralph Erskine who lives in Sweden. The overall urban form, land use patterns, development policies and management strategies have not been adequately adapted to winter climates. Winter cities are still at a relatively primitive stage in terms of minimizing winter-induced stress for their inhabitants. Architecture, planning and urban policy must catch up with the proclamations of MacDonald and Bergh if our cities are to become more habitable on a year-round basis. Any improvements to the urban environment will make unquestionable gains if they seriously attempt to accept winter in its multiple dimensions.

In a large number of cultural contexts, the customs, ritualistic ways and social manifestations are often related to some aspect of thermal satisfaction. Certain places have traditionally been associated with activities or behaviour settings which are conducive to comfort-related factors, as were their habitual use of space.

The great fondness of Mediterranean cultures for their streets and plazas is largely thermal. A great deal of social life goes on in the streets and plazas because they offer the greatest thermal comfort. They provide a place to bask in the sun or a shady and airy place to be cool.... In most Mediterranean countries the custom of an evening promenade, or paseo, developed to take full advantage of the pleasant coolness of the streets and square in the summer's evenings. After the sun has set and the heat of the day is broken, people emerge from their houses and their workand take a stroll along the via and the piazza to see whom they may see, to stop and talk, but most simply to enjoy the pleasant air. 12

The sauna, reputed to have originated in Finland, was and still is essentially a place not only in which one is cleansed but also in which one may seek warmth in a very cold climate. Although the tradition of the sauna has its roots as far back as the middle ages and was a place for worshipping the dead where "one must conduct oneself as one would in a church", the aspect of thermal comfort is undeniable. Additionally, there is the sensuous experience which accrues to the body when bathed in great doses of heat relieving tensions and providing a place in which the family normally relaxes at least once a week. Many places possessing desirable thermal qualities tend to assume the characteristics of frequented social spaces thereby attracting people by virtue of the welcoming and hospitable climatic elements. Enclosed shopping centres have recently taken on such functions in societies where commerce is viewed as a major form of recreation and leisure - especially during cold, winter periods.

3.0 PERCEPTIONS OF WINTER

Many meanings are attributed to winter by various northern cultures. In Iceland, for example, a seven month long winter, which is characterized by a lack of daylight and constantly volatile weather systems, has certainly had a major effect on the development of a national cultural identity. Although it is not extremely cold in this country (the mean annual temperature for Reykjavik is 5° C.), there is much rain - often mixed with snow - and heavy winds, especially in coastal regions. There is almost continuous daylight for a period of two to three months in summer with lengthy twilights in early spring and late fall. Normally, Icelanders consider that they have two seasons which tend to be defined by the amount of daylight available. In European terms, these would correspond to early spring and late autumn. Winter is often associated with darkness, isolation and silence as reflected in "Midwinter Poems" by Vilborg Dagbjartsdottir: 14

Cold and darkness and blizzard the midwinter gloom descends heavy as a snow mass on the roof.

Despite its largely negative connotations, winter also assumes a positive figure which, for example, has been conveyed by the poet Eftir Thorarensen in "Iceland": 15

Thou wonderful medley of frost and of fire
How fair to view are thou and wondrously dire
Thy flames grant us vigor, thy frosts strength afford us.

In Iceland, harsh winters were simultaneously respected and revered, despised and feared. In many narrow fjords the sun cannot be seen for a full two months or longer and the expectancy of awaiting the reappearing sunlight provides a unique aspect to the Icelandic winters. In fact,

It must have been even greater in the old days, before the advent of electricity, when the whole country lay more or less in darkness for months every winter. These very long winter nights no doubt had a profound influence on the imagination and literary activity of the inhabitants.

Winter, in the extreme northerly latitudes, has its beautiful features, as well.

Among these are the very long winter nights with their occasional moonlight and the Northern Lights dancing across the sky like gracefully draped ballerinas whenever the weather is clear during the early part of winter. There are the tantalizingly short but wonderfully brilliant days of midwinter when the sky is clear, and the curiously twilit days when it is cloudy.

Winter must be reckoned with. It must be acknowledged and accorded due respect if the societies exposed to it are to survive and flourish. Iceland, has been one such society, and it has been said that

From the dawn of their history winter has been one of the dominant factors in the mental as well as the physical world of the Icelanders. In every respect it has shaped their destinies, coloured their outlook and conditioned their daily existence. 18

Even if our technology permits us to disregard the climate, we must attempt now, more than ever, to achieve a harmony with the natural elements if our environment is to have meaning and if we are to develop a sense of climatic place -- knowing where we are and understanding the built world, shaped by human decisions, as it responds to the forces impinging upon it.

Whatever has been said about northern phenomena, on the whole, "cold" has been viewed negatively while "warmth" has been imaged positively. Winter has served as a metaphor for the passing of life; spring, with its rebirth and awakening. This notion is given credence in an Eskimo song translated by Knud Rasmussen:

There is joy in
Feeling the warmth
Come to the great world
And seeing the sun
Follow its old footprints
In the summer night.
lyaiya - ya - ya.

There is fear in
Feeling the cold
Come to the great world
And seeing the moon
- Now new moon, now full moon Follow its old footprints
In the winter night.
lyaiya - ya - ya.

Well known Canadian author, Farley Mowat, described the landscape this way: $^{20} \label{eq:canadian}$

Stretching across the upper reaches of this continent lies a primordial giant; one side rough-pelted by the dark taiga forests, the other naked under the white polar skies....Its bones are the bones of an elder world - cold bones into which an eternal frost strikes deep....Seeming to stretch beyond all boundaries, this brooding Titan has many faces: some harshly brutal, some fantastically grotesque, some that are infinitely lovely.

In Canada, the culture has to a significant extent been formed by the wilderness, the immensity of the land and, often, its barenness. Much of the nation's literature and poetry is imprinted with this characteristic which can assist in a better understanding of the peculiarly Canadian historical character. However, this landscape is not unique to Canada alone. It seems to apply equally to countries such as Finland -- and Norway, Iceland, Sweden -- although they are much smaller by comparison.

Mystery writer, Len Deighton, in his book $\underline{\text{Million Dollar Brain}}$, depicts a vivid description of Helsinki:

Helsinki is a well-ordered provincial town where it never ceases to be winter. It smells of wood-sap and oil-heating, like a village shop. Fancy restaurants put smoked reindeer tongue on the menu next to the Tournedos Rossini and pretend that they have come to terms with the endless lakes and forests that are buried silent and deep out there under the snow and ice. But Helsinki is just an appendix of Finland, an urban afterthought where half a million people try to forget that thousand upon thousand square miles of desolation and arctic wasteland begin only a bus-stop away.

The Finns, once having acquired independence from Russian and Swedish dominance, had to develop a cultural identity of their own, and natural landscape, lakes and forests, blue sky and white snow (colours of the national flag) were taken as a self-evident symbol. 22 In the pre-Christian era, Finns found a basis for religion in the natural world, peopling their solitary country with spirits of the forest, hills and water. 23 Their close relationship to nature becomes obvious in their architectural designs which have rightfully earned world recognition through application of bold geometric forms and an extremely close relationship to and appreciation of natural terrain features. However, it is interesting to note that the models used for architectural and urban designs were largely based on examples from Central and Southern Europe without much conscious adaptation to the Finnish winter climate. 24

Just about every aspect of urban living takes on negative connotations with respect to winter. Most human activities therefore take place indoors - except where absolutely impractical. One goes out-of-doors to reach the workplace or, occasionally, for recreational purposes. Snowstorms are viewed as tremendous nuisances making movement difficult if not impossible and, on the whole, interfering with life's circadian rhythms. There has been a strong reticence to write systematically or analytically about winter, let alone to design spaces, buildings and towns to accommodate these conditions. After all,

People tend to take their own climate for granted. There are no records of Central Africans complaining of heat or Egyptians commenting on their extreme dryness. Western Haida Indians never once warned early European visitors to bring their raincoats.

Winter tends to be a season which dwellers of cold regions try vehemently to deny. The arrival of the first snow and intense cold is greeted with great despair and a 'rejection mentality' theme is triggered among the population. Often, public behaviour reflects this disdain for winter by appearing to ignore its presence.

Some communicate this theme by underdressing. A businessman will walk with a "deliberate normal posture": upright slow gate with arms relaxed at his sides from building to building. He will do this without a hat or coat. A school boy will wait for the bus in a down vest unsnapped in zero weather. 26

We all wait for the winter to be over and hope that it will be brief and mild milder than last year, with less snow to boot! Inhabitants of snowbelt cities,

hibernate through the dark and cold months, spending evenings indoors. When spring arrives, the first crocus, the pale green colour of buds emerging on the lifeless limbs of trees and the lengthening daylight, symbolize a change in the human spirit as well as the natural rhythms. Summer is to be enjoyed, winter just tolerated. 27

Contemporary society reacts negatively when the word "winter" is uttered. Dozens of jokes have been enumerated about winter invariably emphasizing its less desirable qualities, and numerous quotations exist which address this season in a less than complimentary fashion. A sampling is offered:

"Winter is a disease"

- Alfred de Musset

"Every mile is two in winter"

- Outlandish Proverbs by George Herbert, 1640

"Summer in Minnesota is the two weeks when the ice-skating is lousy" - Anonymous

"One month before fall, winter comes"

- Georges Dugas (St. Boniface), 1890

Definition of SNOW, obscenity:

"white stuff that falls in winter in massive quantities for months on end, looks pretty for a minute, then turns grey and mushy, causing damage to boots and clothing bringing unwanted moisture to feet and other parts of the body, causing untold pain and suffering to the undeserving populace. Often accompanied by high winds and extreme cold."

- Thad McIlroy, The Winter Book, 1985

Clearly, even though winter has its beautiful aspects -- clear atmosphere, snow reflected sunlight, brilliant northern lights acting as kinetic sculpture in the skies, freshness and invigoration -- especially in urban areas it has been under constant attack and is rarely appreciated except by a handful of nature enthusiasts who cannot wait to get out their snowshoes, ice-skates or skis and head for the open country. If we must fight winter, then it is important to understand what needs to be done and just how livability can be enhanced during this long season. It is imperative to master the techniques which will allow the creation of more favourable microclimates.

4.0 INUIT VISIONS OF WINTER

The word <u>Inuit</u> is the plural form if <u>Inuk</u> which means "man" or "person" in Inuktitut, the language spoken by the indigenous circumpolar people often referred to as "Eskimo" derived from Indian phraseology meaning "eaters of raw meat". Their language is written in syllabics and is aesthetically beautiful from a configurational viewpoint. It is estimated that approximately 100,000 Inuit are living in the harsh regions of the Arctic — the eastern tip of Siberia, Alaska, Canada and Greenland — about one quarter of which reside in Canada. They are usually divided into fourteen major groups with each speaking a somewhat different Inuktitut dialect. In Alaska, there are some 30,000 Inuit along with roughly 7,000 Aleuts — from the Aleutian Islands — also an Inuit people who speak a separate language, and some 8,000 who count among the several bands of Athapaskan Indians.

The climate ranges from an average of -25° C. in January, reaching the freezing point between May and June, climbing to a maximum of 10° C. in July and dipping steeply down again to the freezing level in late September. Generally, the Inuit tend to think in terms of two basic seasons - summer (as brief as it may be) and winter. They are predominantly engaged in food gathering - moving inland across the immense land mass - hunting caribou and fishing. The society was organized in such a way as to prepare food supplies available during the short arctic "warm" period prior to the onset of winter ice and darkness. With the winter imminent, they would move back to the milder coastal areas, gathering into tightly-knit groups in small villages with access to the sea which enabled seal hunting during the coldest season.

These circumpolar peoples have adjusted and adapted well to the cold. It has been so much a part and parcel of their normal existence that there was never a need to explicitly address its problems as has been the white man's case. This notion has been expressed by Fred Breummer in Seasons of the Eskimo:

White men's tales from the Arctic often read like long, depressing weather reports. Cold is their enemy, warmth the goal of their dreams. Eskimo stories, now, as well as in the past, rarely deal with the cold. Cold they conquered through cultural adaptation, and unless it impeded hunting, weather played a very minor role in Eskimo stories and conversation. Food, or the lack of it, was the all-engrossing subject.

One of the cornerstones of this cultural adaptation has been the kinship, friendliness, cooperation and sharing mentality of the Inuit. A visitor to the Canadian Arctic community of Sugluk wrote: 30

Within the first week, at least 120 people came to visit and snare my food. Very soon my supply of foods ran low and the tables were turned; for most of the summer I spent my time visiting Inuit households and sharing in their food and drinks and conversation. They never excluded me from sharing at any time of the day or night.

Winter lasts close to ten months in the Arctic! A culture which evolves out of such harsh conditions understands it thoroughly. In Inuktitut there are said to exist twenty-nine words for "ice" and approximately twenty words for "snow", as follows: 31

Inuit Word	English Meaning
kannik	snowflake
kanik	frost
apun	snow
nutagak	fresh snow, powder snow
aniu	packed snow
natigvik	snowdrift
kimaugruk	snowdrift blocking a trail
mavsa	snowdrift overhang (ready to fall)
kaiyuglak	rippled surface of snow
pukak	sugar snow
auksalak	melting snow
milik	very soft snow
akillukkak	soft snow
mitailak	soft snow on an ice flow covering an open spot
sillik	hard, crusty snow
mauya	breakthrough snow condition
kiksrukak	glazed snow in thaw time
katiksunik	light snow, deep for walking
apuyyak	snow patch
sisuuk	avalanche

The indigenous peoples inhabiting the far north embody a unique understanding of northern climatic place, the classic example being these twenty expressions for different types of snow formations. In terms of their interpretations of the seasons — as the white man knows them — they were not based on a fixed calendar. The Inuit recognize six seasonal variations (the Lapps acknowledge eight such variations). In some regions, these carried specific names, as follows: ³²

- 1. Ukiaktsak -- period between the summer and fall.
- 2. Ukiak -- fall, when the first snow arrives.
- 3. Ukiok -- the commencement of winter (coldest and darkest period).
- 4. Opinraksak -- early spring, when snow begins to melt.
- 5. Opinrak -- spring, when ice melts and waters become navigable.
- 6. Aoyak -- summer, with 24 hour daylight and milder climate.

These "periods" of climatic variation are based essentially on changing environmental parameters and are more precisely suited to a way of life determined by weather systems. During the deepest part of winter there is a maximum of socialization. With the approach of longer daylight hours and melting snow (spring), the more usual activities of hunting, fishing and working recommence. The Inuit vision of six - instead of four - seasons appears as an effective manner for psychologically diminishing and breaking up the annual cycle. It is more finely tuned to the environmental elements and more cognizant of minor alterations occurring among the so-called seasons.

The inherited conception of Inuit life found its origin in the total dependence on nature. The sharing of the sea's catch was entirely in keeping with such a conception, as was their belief system which accepted the fact that there are certain malicious spirits and powers which constituted a danger for the living. According to these beliefs, there was life after death and Shamans, who were in touch with the invisible, had the power to drive away evil.

Hence, there appears to be more than one way of regarding seasonal change or of interpreting the concept of time. Perhaps these visions of winter should play a dominant role in urbanized society. In exactly which ways these varied interpretations could assist in psychologically easing the blow of winter, in the "white man's" world, is not yet clear. However, there is a suggestion that options do exist in terms of the way the largely negative perceptions of the long, cold season can be manipulated. If our attitudes are to shift away from a negatively toward a more positively inclined stance, the manner in which we view the world surrounding us and the language we use to identify various phenomena will be critical. The ways in which we re-organize or re-structure our social systems and the physical fabric of our urban communities will have to be connected to our gestalt of the northern hemisphere. Cross-cultural comparisons may be of valuable assistance if our objective is to develop a healthier balance between technology, nature and life style.

5.0 CLIMATE AND PLACE

The climate in which we live has a tendency to determine our outlook and life ways. It sharply influences particular environments - and their effects for every type of civilization. Even from slight variations in climate one can witness different kinds of social systems and cultural attributes which are frequently reflected in architectural styles and building traditions. Especially when compelled, man has learned to protect himself against nature using his inventiveness to turn liabilities into assets. Archetypes commonplace in vernacular building reveal triumphant solutions both to meet basic needs and for pleasant living -- varying from one mountain valley to another and from deserts to landscapes bathed by the midnight sun. Designs and ideas dictated by climatic and topographical concerns are genuine and authentic, as they must be if they are to respond meaningfully to human needs, local materials, and natural forces. They have sought to be the way they must without resorting to clichés, fashion or dominant trends in stylistic thought. For example, almost every type of roof slope (and design) can be accounted for by understanding the local climate:

In Chamonix, where snows are heavy, the roofs are slightly sloped, with a wide overhang and covered with wood shakes. The reason: snow accumulates on the roof, clings to the wood, whereas a stronger pitch would make it slide. It soon builds up a cosy blanket offering a powerful insulation against the cold. The wide overhang also permits the farmer to reach the stable at the rear without shoveling snow. In Annecy, where precipitation has become rain, the roofs are highpitched and covered with small flat tiles shaped like the scales of a fish, on which the water glides as on the back of a duck. 33

Similarly, shelter from wind and maximum exposure to the sun have been among the most important criteria dictating orientation of buildings and designation of townsites. Most of the world's major towns, especially in northern latitudes, have been founded on sites — or shores — which are south-facing. It is usually these southern exposed sides which experience rapid growth. Many Alpine villages in Switzerland and Austria are seen to have their 'chalet' dwellings similarly aligned in cluster formation on south-facing hillsides. This "Alpine" aesthetic is perceived as a unique conception due to the perfect harmony with the natural environment using local building materials and reflecting activity patterns of the inhabitants. An extremely sophisticated level of "identification" with natural landscape has been achieved by the built environment, in which "identification" means:

to become "friends" with a particular environment. Nordic man has to be friend with fog, ice and cold winds; he has to enjoy the creaking sound of snow under the feet when he walks around, he has to experience the poetical value of being immersed in fog..

The higher the form of expression between man and his natural environment, the more meaningful the landscape becomes and the greater the possibility of its embodying symbolic attributes. In the Nordic countries, where natural forces are encountered in great number, impressions generated by nature take on primary importance.

Still today Nordic man carries these beings (gnomes, dwarfs and trolls) within his psyche, and when he wants to "live", he leaves the city to experience the mysteries of the Nordic landscape. In doing this he looks for the genius loci, which which he has to understand to gain an existential foothold. 35

A critical factor of northern values is human closeness and cooperation, stemming from a survival ethic.

Against the severe climate, human cooperation becomes a spontaneous imperative. A mechanical breakdown of a snowmobile is a life-threatening situation demanding and receiving community priority. The wayfarer is sheltered without question. 36

Until this very day, Norway has retained many of its traditional folk customs regarding common law interpretations of land use rights in contrast to specific property rights. For example, one is permitted to "break into" cottages in the mountains or forests to obtain shelter, warmth and food under conditions of extreme duress. This habit obliges one to notify the police as soon as possible afterwards and to pay for the breakage and food. 37

Many guest houses situated in mountainous areas have stated in their operating licenses the obligation to assist people regardless of their means and to create accommodations - under bad weather conditions - even if the house is fully occupied. Furthermore, the Norwegian Tourist Board administers small "self-service" cottages with guests helping themselves to whatever they need and paying for these items on an honour system, with such cottages indicating an annual profit. 38

6.0 CONCLUSION

Clearly, one must adapt to climate and other physical factors which can act either as determining or modifying elements in architectural design and town development. But a system of social norms must accompany the spatial frameworks if a humane existence is to result. Among all the influences of topographical variations and environmental factors impinging on historically static or living, dynamic urban settlements, the most important one is climate - that element which has been most neglected, especially in extreme northern situations. The form of northern cities has not been dictated by climatological imperatives but rather has employed technology to make habitable designs and shapes which are fundamentally unsuited to their respective sites. What is essential, therefore, is that each country develop its own solutions in accordance with its own unique conditions and accept rather than ignore the natural setting. Providing meaningful developments which are not only functional but also emotionally satisfying is the task which confronts designers, administrators and planners working under conditions where "cold" is a prevailing force for a substantial part of the year.

The natural landscape - within which the built world is inserted - may exhibit intense beauty regardless of latitudinal setting. Particularly in northern regions, where seasonal variations are pronounced, every transformation provides experiential meaning and develops fresh insight for people fortunate enough to have such experiences.

The dynamics of the natural landscape can be considered on at least three time scales. (1) WEATHER: the coming of storms, wind, rain, fog, sunshine, blue skies, silver clouds - every change in the weather gives the landscape new expressions, new shades, new shapes... (2) NIGHT AND DAY: the daily cycle of the sun and moon creates a rhythm of changing light - shadows advance and retreat, sweeping the ground like the hour-hand of a clock; the mountainside which was dark against the dawn sky catches the last rays of the evening sun ... (3) SEASONS: the cycle of summer and winter is reflected in the growth and decay of the earth's vegetation, transforming the landscape in colour and form - leaves appear on the trees, flourish, yellow and decay, corn fields ripen and are harvested....The motions of weather and daylight themselves lie embedded within the motion of the seasons, giving the annual cycle an inner unity. 39

Perhaps what is necessary in the present-day world is to learn from nature about how to design climate-responsive urban spaces with a powerful relationship to people's aesthetic sensibilities. Although it is difficult to offer prescriptions to designers and planners, it is nevertheless important to realize the need to create an emotional response and attachment to place. While it has been often repeated that "beauty is in the eye of the beholder", this dictum is an insufficient and unacceptable excuse for ignoring the aesthetic and poetic aspects of our day-to-day lives.

Since we live in a universe where rational, functional and pragmatic values, based on technological know-how and scientific methods, tend to assume a much greater importance than does aesthetic well-being, it is primordially important to emphasize 'natural' and 'naturally-derived' solutions to problems of winter living. Some measure of simplicity and harmony based on an appreciation of nature's delights must be sought as a countermeasure to decisions and interventions which are guided and often determined by "techno-lust". We must urgently rediscover a sense of place with climate acting as one of the primary sources of inspiration in this search. With "facts" being stressed in our thinking and behaviour, imaginative solutions - which delight the senses (and are assumed to fulfill functional requirements) - have become obligatory. What could, after all, be more important than, as Christian Norberg Schulz has put it, to "dwell poetically"? 40

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