When I was seventeen I spent a summer in Northern Ontario. I travelled out of Sioux Lookout by canoe with a group of boys my age. Our guide was an Ojibwa man who knew the routes and the weather. At the head of one large lake, he showed us a petroglyph that was hidden under some moss. We placed tobacco as an offering and prayed the winds wouldn’t drive us too far off course. But he knew the winds would be strong, maybe too strong for young men like us. When the going became too hard for us even to stop to drink, he taught us to lift our paddles high, and allow the water to trickle down the shaft and into our open mouths. In the evening, the ground was hard; we had only a wool blanket each. And we were tired. He showed us that hemlock needles grow out flat from the branches and that the boughs themselves are arched. Cutting several of these we could make a springy mattress.

This memory comes to me thirty-seven years later as I work to make my own canoe, my tribute to the creativity of the people of our northern land. So often the extremes of Canada define a kind of incapacity – the daunting distances between our cities, towns and villages and our inability to predict whether we will even make it out of our snow-bound driveways. But does the adversity of the Canadian wilderness not have a positive aspect? Do we not, all of us, excel as an inventive and creative people?

Working with a team in Paris, France, I have been helping to outline the themes and content for an exhibition about Canada that will open in Paris at La Cité des sciences et de l’industrie at La Villette (www.cite-sciences.fr) this coming December – Imaginer le Canada: Canada et Modernité. A project sponsored by the Canadian Government, it is being directed by the Canadian Embassy in Paris and mounted in co-operation with La Cité. With instructions from La Cité’s chef du projet, Pierre DuConseille, I am working on four interlaced themes: 1.) the north; 2.) our passion for communication; 3.) the diversity of our people; and 4.) the Canadian talent for invention – or “inventing for survival.”

The people of France are fascinated by Canada. True enough, their image of our country is often a made-up Canada, a mythological place. Yet, I suspect that the somewhat cliché themes are more appropriate than we would like to admit. The character of all Canadians contains an inner spirit that reflects the northern wilderness, a place at once lonely and even savage, but also warm and human. We have created a unified country of caring, diverse peoples despite the huge distances and the extremes of climate and geography.

Does the adversity of the Canadian wilderness not have a positive aspect? Do we not, all of us, excel as an inventive and creative people?
My boyhood canoe guide was a true Canadian expert in communication. Travel over the terrain of Canada requires the ability to survive within that wilderness. Canadians do not simply travel from one safe haven to another. Debbie Brisebois, the Executive Director of the Inuit Broadcasting Corporation, wouldn't travel in the north, she told me recently, with anyone who did not know how to build a snow house – igloo – should the snowmobile break down. It's interesting that we often see this Canadian igloo image as a kind of joke. Many of us consider the reference as one verging on racism. After all, Inuit of today use modern transportation and communication equipment. But Joëlie Sanguya, an Inuit consultant living in Clyde River on Baffin Island, assures me that nobody can fully appreciate the science and technology of Canada's northern peoples save those who go there. Once in the far north, we will find the snow house is not a cliché. Even the snow is different. The strength, the insulating properties are unequalled.

But don’t jump to the conclusion that northern people prefer the snow house. During the early 1990s I met Asen Balikci at the University of Montreal, where he was a professor of anthropology. Having worked with the northern peoples of Canada for decades, he laughed about the notion that Inuit crave a return to living in the igloo. Temperatures inside can go down to minus 35 Celsius, with only a seal-oil lamp for heat. Northern communities that use modern fuels for heating and construction materials from the south are, not surprisingly, the new direction for the Inuit.

Does this desire for the comforts of the modern world result in the people of the north leaving behind their traditional knowledge? By its very existence, the Inuit Broadcasting Corporation (info@inuitbroadcasting.ca) challenges this concern. For millennia, peoples of the north have communicated over long distances. Navigating seemingly featureless terrain, Inuit hunting families exchanged visits to their small encampments as an essential part of community.
life. Hunting, food, marriage, children, and, maybe especially, human contact for the sake of story-telling and simply seeing one another were all dependent on the creativity and invention associated with travel and home-making under some of the harshest climatic and geographical conditions on earth. The Inuit Broadcasting Corporation is a successful enterprise that exemplifies the continuation of the northern art of long distance communication. Just as Bombardier's snowmobile invention was easily accepted into a society that had used dogsleds for generations, in the early 1980s the Anik satellite made possible a new form of long distance travel, this time over the airwaves and into televisions in the homes of northerners.

Canada is unified by satellite technology. We explore our enormous land through radar and infrared imagery, looking for oil and gas reserves, veins of ore, agricultural shifts; long-term climate changes are calculated using real-time imagery correlated with detailed weather data; and resource and transportation needs are predicted for an ever-changing diverse population using a combination of living images of Canada from space along with a dynamic network of communications systems that connect Canadians across the country and to the rest of the world. Bob O’Neil, Director of the Geo-Access Division of the Canada Centre for Remote Sensing and his team in Ottawa are busy putting together one of the most active atlases in the world. No longer the province of mapmakers who once travelled the country by canoe and by foot, the atlas of Canada (http://atlas.gc.ca) is a constantly evolving tapestry. Here the invention is the country itself. It changes by the hour. Talking with Dr. O’Neil, I am heartened by the image of a dynamic northern country, filled with people who accept the challenge of distance, extreme terrain and climate and who excel almost as a consequence of the adversities experienced.

Does the north give birth to inventiveness and creativity? One could partially test the assumption by travelling to other non-Canadian northern territories. I had the occasion to do just that during the summer of 1990 when I worked on an exhibition that featured northern Siberia. On the Yamal Peninsula, north of the Arctic Circle, the permafrost yields a delicate shell of tundra growth, the summer feeding grounds of reindeer. Since the early 1700s, the Nentsi and Khanti people of this region have domesticated the reindeer. Corralled in winter in the south, the reindeer are released and followed into the Yamal during the summer months. A young Khanti woman, Maksasova Galina Vasiljevna, the daughter of Lazar Semenovich and Kelchina Rosa, encouraged her parents to take out and construct for us the reindeer skin tent, the tchum. As we sat under the hides, the twenty-four hour northern sun glowing through the skins in a golden light, Lazar remembered his days of following the reindeer. The wind-breaking shape and durability of the reindeer skin tents were valued more than any twentieth century equivalent. And the traditional travel by sledge over the delicate tundra landscape was vastly superior to the gouging and permanent destruction caused by the huge modern vehicles of the oil and gas drilling teams working the same Yamal territory.

At first we thought we were witnessing only nostalgia, a memory for something long past. But no, it turned out that, although Lazar and his family had decided to give up the reindeer trek, others – in fact the majority of Khanti – still followed the tradition. In fact, the Khanti school children were

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about to be taken to their families' nomadic summer tchum homes by helicopter after the last day of compulsory school classes. Contact was maintained through the use of amateur radios. It was an amazing juxtaposition of old and new technology: modern communications equipment and helicopter travel, alongside traditional reindeer-skin tents. In any case, the evidence of profound ecological and communications knowledge fitted well into a theory of northern inventiveness and mirrored the Inuit of Canada with their tender regard for a fragile territory and easy adoption of the Inuit Broadcasting Corporation.

But I also recall a place I once visited that is, while as vast and featureless as Canada's north, not in the Arctic. In Riyadh, Saudi Arabia, two architects, Abd al-Halim I. Abd al-Halim and Rasem Budran, showed me their concepts for a new science museum for which they were proposing the use of traditional architectural techniques that would, for example, trap sunlight in pits at the base of the proposed building, allowing the natural upward movement of passive hot air to produce cooling winds that would flow through the many halls and rooms of the upper sections. This would preclude the need for massive electrical air conditioning systems. Other designs trapped the wind of the desert and sent it through layers of outer walls, forming an insulating skin of air. They claimed that the creativity characteristic of Arab architecture has as its origin the harsh climate and the vast distances of the desert terrain. This sounds familiar.

Perhaps we could look to the very opposite of a wide-open, northern, harsh terrain. Would a hot climate and very limited living space yield less inventive people? No, not less inventive—just a different form of creativity. While in Calcutta, I witnessed the most extraordinary examples of innovation. I met families living within one square of sidewalk. Hygiene was maintained under the most adverse conditions: lentils were ground on the pavement in one corner and lavatory facilities were designated in the one opposite. Broken pipes allowed water collection to be timed with fluctuations in the city supply. Fuel was made from sacred cow droppings mixed with soot. I would conclude that the mere survival of these people is an example of their having weathered some of the harshest conditions on the face of the earth.

What about Paris, the site of the Canada exhibition itself? Inventiveness permeates Paris. Each small district is a village. One is never more than a short walk from a café, a school, one's place of business, a garden, a sports facility, an art gallery, a concert hall. In Montreal, the café life is seen by some as being as delicate a terrain as the tundra of the far north. Le Groupe de recherche en conservation de l'environnement bati at the University of Montreal (the research group dedicated to the preservation of the constructed environment - http://ps.dgtic.umontreal.ca/unites/pub/) maintains that the cosmopolitan district around the Boulevard St-Laurent is an example of human creativity at its highest. Life in Paris and Montreal underlines the universal nature of human inventiveness, which I think we can safely say exists in all corners of the world. And that brings me back to my current investigations for this Paris exhibition. Verna Miller, Director of the Tmixw Research Centre for the Nlakaapmx people of British Columbia, hastened to implore me not to simply list gadgets and devices to represent the inventiveness of the peoples of Canada. For her, the dedication to human equality, democratic communities, and mutual tolerance for our diversity and our origins were the best examples of an inventiveness that has defined the land since the time when Canada was inhabited by its earliest First Nations peoples.

Does our northern terrain inspire inventiveness? Yes, a unique version of it, but one that reflects the universal human spirit for creativity. Today we are a country of people whose origins include all world cultures, working together creatively in this northern excess we call Canada. That is the generous and robust image I hope we portray to our neighbours and friends who come to see the Canadian exhibition in Paris this winter.

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