NORTHERN PRELUDE

Influenced by their northern homeland, Canadian composers are gaining recognition.

John Weinzweig will always remember the urgent telegram and the excitement it created. It arrived at his home in Toronto in the middle of June 1947, sent by the Canadian conductor Ivan Romanoiff, then on a tour in Europe. His message was straightforward: he was in Prague and had been invited to give a concert of Canadian music. Could Weinzweig send a collection of pieces by Canadian composers immediately?

ECHOSING THE SPIRIT AND SOUL OF CANADA: CANADIAN COMPOSERS (CLOCKWISE FROM TOP LEFT) LUCIEN APPLEBAUM, ALEXINA LOUIE, ALEX PAUL, WALTER BOUDREAU, JOHN WEINZWEIG AND HARRY SOMERS.

BY KENNETH BAGNELL
Weinzwieg, a prolific composer and a teacher of composers, was always in demand. He had a passion for composing and was known for his talent in the field. His compositions were well-received, and he had a successful career as a composer. However, he faced many challenges, including financial struggles and the pressure to succeed. Despite these challenges, he remained committed to his craft.

A prolific composer and teacher of composers, John Weinzwieg helped found the Canadian League of Composers in 1931, which played a significant role in promoting the work of those artists.

Weinzwieg was a good friend of Harry Somers, a composer who was known for his talent and dedication to his craft. Somers was a student of Weinzwieg's and was known for his innovative compositions. Somers' career was marked by success and recognition, and he was a respected figure in the Canadian music scene.

A major event in Somers' career was his premiere of a work called "Quartet No. 1," and later the $50,000 Glenn Gould Award for his contributions to music and composition, which was a significant milestone in his career.

At dawn on a cool September day in 1974, a dozen musicians, all trombonists, stood in silence at various points around a lake at dawn, all in silence. The lake was called a "true" lake and was located in North Country. The following morning, the trombonists were joined by their families and friends to play the full score of a piece composed by Schafer. They watched as the musicians played the composition, and the crowd was amazed by the beauty and elegance of the music.
In 1988 the Toronto Symphony commissioned her to com-
pose a work for their 1988 Olympic Winter Games in Cal-
gary. It was a chamber work based on Canada's national
sport, hockey.

Alexina Louie wrote
Music for Heaven and Earth
for the Toronto Symphony's 1990
Pacific tour. The piece
puts into music
what Louie sensed were
the feelings experienced by
astronauts in space.

WALTER BOUDREAU
1987 Walter Boudreau
was commissioned to write
what became one
of his most notable works,
a composition for
the 1988 Olympic
Winter Games in Calgary,
based on Canada's national
sport, hockey.

In 1988, he was commissioned to do what became one
of his most novel creations, a composition for the 1988
Olympic Winter Games in Calgary. It was a chamber work
based on Canada's national sport, hockey.

The piece, performed in several cities, involves flute,
clarinet, and cello instruments, representing one team,
which take on five more teams, representing the other
teams. Two percussionists represent the sudden
dramatic changes in the game. Boudreau, who
wrote the piece, is known for his
innovative use of rhythm in his works.

Walter Boudreau, a Canadian composer
who was trained in classical music,
was commissioned to write a composition
for the 1988 Olympic Winter Games in Calgary,
based on Canada's national sport, hockey.

Boudreau, who was born in Montreal,
was known for his innovative approach
to composition, often incorporating
elements from other musical
traditions and styles.

The piece, performed in several cities,
involved flute, clarinet, and cello
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ARTFUL CRAFTS

The popularity of handcrafted objects reflects our yearning for simpler times

BY LAIRD O'BRIEN

Last November, an hour or so before the doors opened on the 16th annual One of a Kind Canadian Craft Show and Sale in Toronto, more than 200 people stood waiting outside in a cold, steady drizzle. I was among them.

Two minor domestic accidents in previous weeks had prompted my journey. Early one evening an expensive wine glass had slipped through my fingers and shattered on the kitchen floor. I had swept up the mess and soon forgot about it. Days later I topped an inexpensive coffee mug and felt a surprising sense of loss. It had been handmade, and I recalled the day, some years before, when I had bought it. I was on a trip to Vancouver and had found myself at an open-air flea market, chatting with a bearded potter who had never been east of Calgary and liked it that way. I bought the mug as a memento of my trip.

The two very different responses started me thinking about the lure of things made by hand and why they have become so popular of late. I had come to the show in search of answers.

Once inside Canada's largest craft exhibition I found aisles laden with ceramics and jewellery, ironwork and glass, clothing and furniture. I met the makers of handmade mirrors, leather wallets and purses, flutes, blankets and quilts, wall hangings, lampshades, soapstone sculptures, plates, bowls and mugs, hats and sweaters and even wooden rocking horses. One hundred and thirty thousand visitors would view the work of 550 craftspersons; 16 years earlier, the fine One of a Kind Craft Show drew only 8,000 to see the work of 80 artisans. Allison Parsons, associate director of the Ontario Crafts Council, a nonprofit organization that encourages crafts and their makers, describes the current enthusiasm for Canadian crafts as something of an explosion. "The flowering of the craft movement in this country began about 25 years ago," she says. "The work gets better and better." Craftspersons themselves are proof of the boom. Many are now able to pursue craftsmanship as a full-time career, although as one young jeweller maker says, standing in front of her stall in Montreuil's old quarter, "What's a living to me might not be to a lot of people."

For those who make things, the work is more than merely a means of earning a living; it is a way of life — one that began, for many, in the turmoil and upheaval of the late sixties and early seventies. Running, once-forgotten skills and new value systems flourished as young people turned away from materialism and sought more satisfying work. It is this generation that has made an enormous contribution to the craft movement.

Rosemary Blat Clapham, a full-time weaver and basket-maker living in Ottawa, began her career in the early 1970s. Her storefront studio is in a residential east-end neighbourhood. Here she makes willow and dogwood baskets, as well as wool and mohair sweaters, scarves, shawls and hats. Her work schedule is interrupted occasionally by tourists who stop to watch a weaver at work before moving on to the mansions of Rockcliffe Park. She believes Canadian craftspersons now fall into two distinct groups. "There are folk craftspersons, who grow up learning craft..."
Community colleges and universities deserve much of the credit for what has happened during the past 30 odd years. They met the rush of eager students with new or expanded craft programs; such institutions as the Ontario College of Art in Toronto, Sheridan College School of Crafts and Design in Oakville, Ont., Halifax's Nova Scotia College of Art and Design and the Emily Carr College of Art and Design in Vancouver offer some of the finest programs in the world. As talented graduates have experimented with techniques and materials, their creative output has gradually blunted the wave line between craft and art.

Eleven years ago Susann Greenaway opened a Toronto gallery, Prime Canadian Crafts, to offer truly one-of-a-kind craft pieces as fine art. Upstairs, seated behind a delicate handcrafted wooden table and flanked by a large, almost pulsating fibre wall hanging by Vancouver artist Karen Chapman, Greenaway recalls the early days. "I had a theory that when all the baby boomers reached a certain age and their kids' dental bills had been paid and their mortgages whittled down, they'd start investing in art for their homes," she looks around, "I think it's happening," she adds, inclining her head toward a well-turned-out couple studying a series of three-dimensional layered wall pieces by ceramicist Angelo di Porto.

The man who bought her very first piece years ago still comes in regularly, as do many early customers. Six to eight gallery exhibits a year feature "leading-edge people" working in ceramics, wood and fibre. Their art is also appreciated by an international audience. Photographs of pieces on display are shipped to prospective customers around the world. A New York art consultant who has never been in the gallery recently purchased three major ceramic pieces by telephone.

The need for both purpose and personal identity is well recognized among craftspeople. It is precisely what led some of them to crafts in the first place. One of these is John Bevac, sometime of an elder statesman among Canadian potters. He studied at the Vancouver School of Art (now the Emily Carr Coll-

lege of Art and Design). In the 1950s and apprenticed to Berndt Leach, the dean of British potters. Much of Bevac's work reflects both English and Japanese influences. He also taught at the Nova Scotia College of Art and Design and now lives in the American Southwest. In an interview with the Toronto author and photographer John Flanders, he offered this perspective: "One of the great costs of the industrial civilization we live in is the separation of people from their work and ultimately from real contact with their own lives. People become more and more adjusted to the pace the machine sets for the world and the means of production and the systems of selling things... It is critically important that there be some small trace of people who still understand how to make things."

Things made by hand and bearing the stamp of one person attract us as physical reminders — symbols or touchstones, if you will — of our feelings. They link us in strange ways to people and places we've left behind, to simpler times, to memories and hopes. They touch deep and personal needs.

The promise of personal, a connection to the maker, is one of the strongest appeals of handmade work. The chair or dish is not anonymous, it is not identical to five or 50 others. It is unique. Personal.
of areas. What they have in common is that each has a strong tie to a particular place, incident or person. Her home is a journey through a miscellany of wooden boxes, ceramic jugs and bowls, Canadian folk art and some unusual pieces brought back from Mexico, Guatemala and Europe. Each is appreciated for its uniqueness. "There's a special value in something that has been made with love by a human hand," she says. "I think of a small candle holder that sits on our dining-room table. It was made by a friend who is a potter, Stan Hachings of Hornings Mills, Ont. I like to have it nearby — to be able to look at it and recall the person who made it."

Researchers report that such feelings are becoming increasingly important to us. Since the late 1960s, more and more of us prefer to stay home in the evenings and on weekends; we order in pizza, watch television or videos and "cocoons" ourselves away from an increasingly unappealing outside world. Home is our haven, where we surround ourselves with mementoes and personal treasures.

Environmental concerns are also on the minds of many. We think carefully about what we buy and use, what we discard and where. Caroline Oldacre is a fibre artist who lives in Guelph, Ont. Working in an airy, third-floor studio in her home, she creates a line of what she calls "art clothing," as well as wall hangings, theatre costumes and ecclesiastical pieces. Partly finished skirts and jackets are spread out before her on a huge table — the strong vibrant colours and designs testifying to the Mexican influence in her work. "Like most craftspeople," she says, "I use only natural ingredients — silk, cotton, linen, wool and flax. The people who come to shows are very interested in that aspect. They seem to feel handcrafted items are more environmentally friendly."

"Conservator-society ideas have caught on," notes Allan Peters. "Many people want to buy things that will last, products that are in tune with the earth. Besides, it's difficult to throw out something that has been made by hand. There's almost a compact between buyer and maker — a relationship that's hard to bring to an end."

Another reason for the interest in handmade articles is simply their growing visibility. Crafts have found their way into galleries, exhibitions and public places. Examples dot the country. British Columbia's Coquitlam Centre Mall has a 114-metre-long stained-glass skylight; "River of Light" is one of the largest single works of stained glass in the world and was created by Lott Hauschild, winner of the 1988 Saidye Bronfman Award for Excellence in Crafts. The Whyte Museum of the Canadian Rockies has a touring exhibition called The Quilt as Art. Stephen Hodgins's sculptural wooden divider greets visitors to the Metropolitan Toronto Reference Library. Silk embroidery work created by Elsie Blashfield is in the Massey Collection of the Museum of Civilization in Hull, Que.

Newspapers and magazines often review new work. Designers and architects choose craft pieces to highlight their projects. Architect Raymond Moriyama, for example, designed the Ottawa-Carlton Centre, for which $350,000 was set aside for "integrated artwork," including a mural by Victoria fibre artist Carol Sabin- ton, whose work has been exhibited at the Art Gallery of Greater Victoria.

Corporations have become active as well, with custom-embroidered desks for senior executives and magnificent tables for boardrooms. Ceramics and glassware are now displayed alongside paintings in company headquarters.

Inuit curvatures have certainly stimulated our interest and our craft-giving habits. They started flowing south in large quantities in the early 1970s and have been a mainstay of Canadian crafts ever since.

Just before I left the One of a Kind Show last November I was chatting with Ted Alexander of Dundas, Ont., who makes wooden toys for children. In the past year he had coped with a fire that destroyed his workshop, a prolonged strike at the steel plant where he worked and a reluctant market for toys. Yet, when he talked about the actual making of tiny wagons and trains, there was no hint of the stresses he had endured. Instead his face conveyed only the pleasure he took in his craft. Is it the craftspersons themselves who have a message for us? Many of them — indeed most of them — have found a unity of purpose in what they make and how they live. The two come together as one. Joseph Kuhn, a violin maker in Ottawa, describes it this way: "I like my work, and I really don't worry whether I will change or whether I will starve, because for me it is fulfillment."
UNEARTHING ALBERTA’S BURIED TREASURE

At Imperial's research centre in Calgary, scientists are learning the secrets of the oil sands

By Diane Forrest

In northern Alberta lies the world’s largest single reserve of crude oil, a mammoth patch of energy the size of England, roughly 1.7 trillion barrels of it.

The problem is getting at the oil. These are the oil sands — “heavy oil,” or bitumen, thick as molasses, mixed with sand, forming a hard, tarry mass. Much of it lies beyond the reach of current technology and indeed may never be recovered. Some of the deposits lie two kilometres below the surface. Even where the deposits are close to the surface, anyone who wants to produce oil from them must first solve the problem of separating the oil from the sand.

There are currently two commercial methods of extracting the bitumen from oil sands: mining and cyclic steam stimulation. At the giant Syncrude plant, near Fort McMurray in Alberta’s Athabasca region, Imperial Oil (through its exploration and production subsidiary Esso Resources Canada Limited) and its associates actually mine the sands before separating the oil, producing more than 100,000 barrels of bitumen a day. At the Cold Lake project in northeastern Alberta, Esso Resources produces about 90,000 barrels a day of bitumen through cyclic steam stimulation, which involves injecting steam into the oil-sand reservoirs for several months to soften the bitumen so it can be pumped to the surface. Altogether, the oil sands generate about 40 percent of Imperial’s total crude-oil output.

But current production methods can only capture the most accessible fraction of the vast resource. Esso Resources needs to find new, more economical ways to recover the oil. The key to developing these lies in a gleaming white building perched on the edge of the University of Calgary campus.

Esso Resources’ new research centre, opened in 1990 on the aptly named Research Road, is in good company. Various other research centres are just around the corner, and the University of Calgary is a brisk 10-minute walk away. The $47-million building, with its three stories of labs and four of offices, has not only all the technical equipment necessary to make good research happen but it has an atmosphere that encourages creative thinking. Researchers and support staff amble through light-filled atriums and corridors in soft blues and greys, past tables and chairs arranged in inviting clusters around whiteboards, past walls decorated with a lively art collection from Western painters. For scientists accustomed to "skidrow," one inhabitant jokes, the new building is "awe-inspiring."

But while the surroundings may be more pleasant, what goes on in the new research building is serious business. "Research and development is really the exploration arm of the heavy-oil business," explains Ken Furt, manager of resource development research for Esso Resources. "We know where the oil..."
We know where the oil sands are.

It's not a matter of going out to find them
but of finding ways to make them commercially viable.

sands are. It's not a matter of going out to find them but of finding ways to make them commercially viable.

Steve Vittono, a senior reservoir engineer with PetroSask Resources, keeps the pictures of six people on his wall — researchers Christopher Columbus, Ferdinand Magellan, Hernando Cortez, Henry Hudson and Robert E. Peary and astronaut Harrison Schmitt — because, like him, they're pioneers. "All these guys took risks," he explains. "My life is not at stake, as theirs were, but I've pushed projects, and I've been scared like hell.

The area in which Vittono has done most work in recent years is cyclic steam stimulation. He is far from satisfied with the process. "Initially it's very efficient," he says. "You get a high rate of bitumen production, so you can start paying off your massive investments. But as time goes on you're getting less and less oil. You're actually pushing the bitumen away."

As an alternative to injecting steam and recovering the oil through the same well, Vittono is experimenting with displacement — forcing steam in one well so it can push bitumen out another. Field tests make him optimistic that displacement will recover significant amounts of bitumen after cyclic steam stimulation becomes inefficient. But he emphasizes that it's important to look at methods other than using steam, "so make sure that our minds are not stuck in a groove."

Mark Grometts has the kindly, fatherly air of a scout- trooper leader, and he demonstrates his discoveries with all the enthusiasm of a kid who has just learned how to build a campfire all by himself. The process he has developed for borehole mining, involving use of jets of water to carve the oil sand from its underground deposits, Grometts learned how effective the system could be while he was a student at Colorado State University, charged with cleaning out sediment at a model of the river in the hydraulics laboratories. "Some people have worked with a pipe and showed," he says. "But I used water jets, and it cleaned the sand right off."

For years, Grometts wondered if the principle could be applied to the oil sands. Then an exploration well at Cold Lake gave him a chance to find out. The well, which had been drilled and later abandoned, had started to leak oil, and attempts to stop the flow by drilling down into the well had been unsuccessful. Grometts thought the problem could be solved by drilling a relief well beside the exploration well and then, using water jets, cutting access to the first well to stop the flow of oil. "We didn't know if it would work," he says. "Then, suddenly, water and nitrogen gas, which we'd injected down the relief well, started flowing out of the exploration well, and we got very excited because it meant we had reached the first well."

Through experiments with models back in the laboratory and then field tests, Grometts and his team discovered more about the potential of borehole mining — and most of it was good. "The beauty is that gravity does all the work for you," Grometts explains. "As the water washes down the sand, the deposit becomes more and more unstable and begins to fall apart on its own. Moreover, because of the flooding and agitation in the deposits, oil that is brought to the surface is well separated from the sand. Overall, borehole mining promises to help reduce energy requirements, capital and operating costs and provide greater and faster recovery. Still, there are questions to be answered, says Grometts, and cautions that even the most promising technologies don't always come to fruition. "It happens more often than we like to admit — something that is a technical success can be an economic failure. For every concept that does work out, there are ten, hundred that don't."

Rick Kry has the look of everyone's favourite high-school science teacher — the kind who's still crazy, after all these years, about chemistry or physics or, in Kry's case, a combination of the two. Borehole heating. With chalk in hand, he feeds bite-size glimpses of information about processes that could double production from heavy-oil wells.

The problem, Kry explains, is that the steam injected down the wells just doesn't spread far enough; large areas of bitumen in the sands between the bottom of the wells remain unheated. What Kry's team wants to do is create a horizontal fracture, as low to the reservoir as possible, that covers a wide area. Steam will be injected into the fracture, which will act like a hot plate, allowing heat to spread through the whole deposit.

The way to create that crack is through hydraulic fracturing, which involves injecting fluids at such a high rate that they actually split the rock. And to be effective, the liquid must be thicker than water. Fortunately, says Kry, "in the oil industry there's a whole sector devoted to finding these "magic fluids! Researchers have already identified one that's easy to pump but viscous enough that it won't just seep into the sand."

Kry and his team have already tested their novel recovery process at a pilot well at the Cold Lake site, recovering as much oil in three years as some of the best commercial wells have recovered in six. But there's a catch, says Kry. "There are three things we're looking for: recovery — we want to get the most out that we can; rate — we want to get it out as fast as we can so we can sell more per week and pay down our debt faster; and efficiency of heat use, because it costs us money to make the steam."

With borehole heating, says Kry, "we get two times the oil in half the time — but we use twice the amount of steam."

Kry is hopeful, however, that either his method will become more efficient or that it can be effectively combined with other production methods. The fact that there are still so many questions doesn't bother Kry, a second-generation Imperial employee. "You're talking about the research department. The ratio is four additional questions for every one that you answer."

As a graduate student at McMaster University in Hamilton, Ont., in the mid-1970s, Kenny Adeebagheh fell in love with the concept of gravity drainage when he saw a presentation by Roger Burkle, former manager of the heavy-oil research division at Exxon Resources and now a professor at the University of Calgary.

For a student from Nigeria, perhaps the attraction to oil research was natural. Adeebagheh pursued his fascination with oil in Calgary with funding from the Alberta Oil Sands Technology and Research Authority and joined Exxon Resources in 1985. Gravity drainage may not sound like a seductive subject but when the principle is applied to the massive oil sands deposits, the appeal becomes clear. Adeebagheh's research suggests that by draining oil into horizontal wells, Exxon Resources can increase its recovery of oil from cyclic steam stimulation wells to 30 per cent from 20 per cent.

The basic concept is simple. As production decreases from the rows of vertical wells, pressures used in cyclic steam stimulation, a horizontal well is drilled beneath each row. Steam continues to be injected into the vertical wells.
Gravitation plus the fact that the horizontal well comes into contact with a greater portion of the reservoir... means that we get more oil for the same amount of steam.

and the oil that escaped recovery drains into and is produced from the single horizontal well. "Gravitation plus the fact that the horizontal well comes into contact with a greater portion of the reservoir than vertical wells means that we get more oil for the same amount of steam," says Adesegun. "That makes good economic sense." Computer models have backed up that contention, and field tests are now under way.

It's typical of the cosmopolitan atmosphere at the labs that one of its researchers looks and sounds as if he has somehow wandered off the set of a French film in the middle of the Prairies. In fact, Roland Leautre, who has the earnest eagerness of a Truffaut hero, is a chemical engineer from France who came to the Canadian West to study for his doctorate and decided to stay.

Now he's the head of a research team investigating perhaps the most startling method of extracting heavy oil—in situ combustion. It literally means starting a fire in an underground deposit after the initial steam-compression process. Oxygen, injected through a well, reacts with the oil—a hydrocarbon—and produces carbon dioxide, water, and heat. Once the temperature reaches 150 degrees Celsius, the oil ignites. The heaviest part burns but the lighter part, vaporized by the heat, "flies from the fire," Leautre explains, and gathers in a nearby well and then is pumped to the surface.

For nonscientists, the thought of an underground fire conjures up ideas of environmental disaster. Leautre quickly allays that fear with the reminder that sand is standard equipment in fighting fires. "It sounds dangerous," he explains, "but you have to realize that sand is doing what it is supposed to do; you're doing it in sand, which absorbs heat. In situ combustion is more of a smouldering process." In fact, in situ combustion has certain environmental efficiencies: the energy is produced by the deposit itself, and the 10 to 15 per cent of oil that gets burned in the process is oil that's too heavy to be worth refining. It may also be possible to use the combustion in conjunction with other recovery advances, such as horizontal wells, for even better results. Nonetheless, as with all methods of oil-sand production, in situ combustion must prove itself economically feasible.

At the moment, it is still in the laboratory. To test the process, the department's custom workshop has come up with what looks like a giant pressure cooker, one inside the other, connected to a tangle of wires to take readings on temperature and pressure. Inside, a suitcase-sized box full of sand replicates the state of an oil-sand deposit during combustion. "We're getting closer to putting it in the field," says Leautre. "That will be the culmination of our efforts."

Ken Sury's moment of revelation came as he crumbled a piece of oil sand in his hand. His colleague had told him that extracting precious oil from the sand was a tough, expensive task. But Sury, a senior research specialist, had a different background from any of them—mining. "In the mining industry you have a lot of rock and a very tiny, valuable part—a bit of gold or copper—that you need to get out of the rock. When I held the oil sand in my hands I thought, this is a piece of cake. It's so easy to break, the value liberates itself so easily."

Sury is currently applying his insight to the problem of improving recovery from the Athabasca area—where some of the oil-sand deposits, unlike those of Cold Lake, lie close to the surface. These deposits are currently mined with giant scraping buckets the size of two-car garages. The oil sand is then carried by conveyors to a processing plant, where the bitumen is extracted from the sand using steam and hot water and upgraded into usable light oil. But dry mining is labour, capital and energy intensive; Imperial needs to find ways to reduce these costs of production.

A quietly excited man, who seems never to be deflected from pursuing his goals by disappointments, Sury attributes his successes to his fresh perspective: "I didn't look at the problem as an oil person, I didn't get hung up on the idea that because the oil is so thick, you need lots of heat to free it from the sand." Sury and his colleagues began working on the theory that the oil sands could be more economically mined and separated using wet mining and low temperatures.

According to this energy-saving method, the area to be mined is flooded and the oil sand dug out with a floating dredge. The mixture of sand, oil and water—or "slurry"—is then transferred through a pipeline to a separation plant. Travelling through the pipeline agitates the slurry, helping to separate the oil; by the time it reaches the plant it is so well separated that little heat is needed to complete the process.

In 1986, the team moved from testing this process with 500-gram samples in the lab to a 10-tonne test at the Syncrude operation. "It worked the first day," recalls Sury, "and the five of us were jumping up and down, saying, 'We did it.' Fine-tuning the process has taken more time and more money, but this is nothing new for Sury. Ever since his first job as an engineer in his native India, through four cold years in Labrador City, Labrador, post-graduate work at Pennsylvania State University and his research at Esso Resources, Sury has set high standards for himself. "I always keep questioning myself, asking where things are going wrong and how work can be improved."

Which of the many enhanced recovery methods will actually win in the field? Ken Purt, the judicious manager who must balance the enthusiasm of his researchers with the tight timetable dictated by corporate needs, points out that there is probably no single solution to the oil-sand conundrum but rather a combination of answers. And whatever those right answers are, they had better come fast. "When commercial development of the oil sands at Cold Lake started in 1985, it was based on 20 years of research," says Purt. "Our first horizontal wells were drilled in the late seventies and will go commercial fairly soon. So we've gone from 20 years to 15 years in our research cycle, and with borehole mining we hope to go commercial in seven years. So we're trying to reduce the lead time."
WHERE HISTORY SPEAKS

In Kingston even the penitentiary is historic
BY KENNETH BAGNELL

On some shaded slopes a few minutes drive north and west from the main streets of Kingston, Ont., rolls historic Cataraqui cemetery, resting place of the nation's first prime minister, Sir John A. Macdonald, and other notables from Canada's history. “Unless you have three generations buried in Cataraqui cemetery,” runs a wry maxim, “you’re not a true Kingstonian — an old stone.”

That may have been true decades ago, but it’s less so today. For Kingston, a city where traditions are deep (it claims more historic plaques than any other Canadian city), is a place not just sheltering the past but shaping a different future. Its old streets are making room for new ones, who will help determine that future.

Consider the experience of Graham Stein, who moved to the city with his wife from Toronto in 1976. “We knew no one except the person who sold us our house and her lawyer,” Stein says. Yet within a few years Stein was a community leader, chairman of the Kingston General Hospital and the local United Way campaign. “It’s a city,” he says, “with an utterly undeserved reputation as standoffish. It has undergone vast changes in recent years, so that many newcomers find not just acceptance but the opportunity to take part in decision-making.”
have many single-parent families. But I think the city tries best to reach out and address these problems. In fact, says Stewart Pye, a professor of political science at Queen's University and an observer of Kingston attitudes, this historic and conservative town can also be progressive. Pye notes, for example, that it has a high proportion of subsidized housing, compared with other cities of its size.

Moreover, when it comes time to put old differences aside in the collective interest, Kingstonians do so. In 1982, for example, it was one of the few cities to have a single financial campaign for two distinct hospitals, the Roman Catholic St. Joseph's at Hotel Dieu and the Kingston General. Outside experts predicted that, in a community of such firm traditions, the campaign would do well to raise $1 million. But when the donations came in, the effort had harvested a record-breaking $7.5 million.

This didn't mean that differences, especially over protecting Kingston's history and character, aren't deep and strong. Back in the mid-1950s, controversy raged high over a decision to remove the portico at the historic city hall. In fact, the issue upset enough people to warrant a city-wide referendum. And while the removal was approved, it was only a temporary setback for King-

"We've come to stay." Nor all the newcomers are young, however; Kingston now rivals Victoria as a retirement city. This might suggest a community of rest homes, but the city's retirees seem more interested in stimulation than in armchairs. Kingston offers an abundance of theatre, most notably at its principal playhouse, the Grand Theatre; several museums and one of the country's leading galleries, the Agnes Etherington Art Centre; water recreation minutes from home; and naturally for a city with two renowned educational institutions, Queen's University and the Royal Military College of Canada (RMC), a schedule of classes for people wanting to keep the mind agile. "I give a lecture on Confederation in a local series called 'Later Life Learning,'" says the historian Donald Swanson, "and I notice not just that the hall is filled with active, energetic retired people but that so many have come from somewhere else." Many are early retirees, well educated and relatively affluent, and as one local resident put it, "They bring more than they take." Yet, despite its air of culture and prosperity, Kingston is not entirely composed of successful young professionals and afflu-

But that was in 1980, so when a high-density condominium was proposed for the local community of Portsm-

That reluctance has led to controversy, often high and heated. That was plain in 1980, so when a high-density con-

Kingstonians may be prouder of their other major institu-
tion, Queen's University, but it too can cause tension and not just because of the school's 13,000 students. In addition to that common trait of all university towns, Kingston citizens feel a bit perturbed at times, reflects historian Donald Swanson, because of the large number of Queen's people, especially permanent faculty members, in a relatively small city. "When city council is dealing with a ma-

The walls of the old Kingston Penitentiary, today housing 350 inmates, rise in stern and silent irony beside one of the city's choice residential areas, Aylmer Place. One nearby resident smiles about the prox-

Other notes that inmates' spouses who settle in town sometimes add to the welfare burden. But one man sees a little acknowledge-ed advantage in the pres-

And "they know their clients by sight should any trick around Kingston for business rea-

Within a minute's walk of the penitentiary is the antici-

There is a sense of pride and progress that already exists, that is not represented in the local press: "We believe it when it happens," says a city council member.

Kingstonians may be prouder of their other major institu-
tions, Queen's University, but it too can cause tension and not just because of the school's 13,000 students. In addition to that common trait of all university towns, Kingston citizens feel a bit perturbed at times, reflects historian Donald Swanson, because of the large number of Queen's people, especially permanent faculty members, in a relatively small city. "When city council is dealing with a major public issue and so many of those are not here, the council chamber waiting to speak are professors from the university, it can be understandably iring." The fact is simply that so many people in Kingston are so involved in articulate ways. Their paper, the proud Whig-Standard -- cofounded by
the late Senator Rupert Davies in the 1920s, who was followed as publisher by his son Arthur and, until the paper was sold last autumn, his grandson Michael — is a clear indicator. "Our letters page," says Neil Reynolds, editor of the paper, which has a weekday circulation of about 37,000, "is the meeting place of Kingston. We publish around 5,000 letters a year. And we receive an enormous number of contributions. We even have a group of editorial writers se-
lected from the community — about a dozen." But what may reveal Kingston even more is that in a survey con-
ducted last year the paper's editorial page is read by about twice the number of readers who turn to the sports section.

While the city is best known for history, learning and cir-
cumvention, the world seems less aware of its other qualities. "When people ask where I was born, and I say Kingston," wrote the novelist Marnie Cohen in an affectionate tribute to his hometown, "a blank expression sometimes comes over their face." Perhaps it's because the city has a certain mod-

RESTING PLACE: AMONG THOSE BURIED AT CATARAQUI CEMETERY IS SIR JOHN A. MACDONALD.

est about itself. Perhaps it has been overshadowed by nearby Ottawa, Montreal and Toronto or perhaps, as some-
one once suggested, Kingston has deliberately shunted the spotlight out of the interest. Stewart Pyke smiles wryly and recites a story that may not be entirely apocryphal: "In an earlier era, it's said that Kingston had no street signs. The reason given was that local people didn't need them. As strangers, street signs might help them grow too familiar too fast. They'd like the place, settle in and spoil it." Kingstonians' desire to conserve their city's character is understandable, for if Kingston offers much to engage the visitor's mind, it also delights the eye. Dozens of imposing houses, half a century ago from local limestone, still stand on streets with names like Simcoe, Brock and Wellington, on generous lots, steps from numerous parks and minutes from a shoreline that runs the length of the city. Kingston is on Lake Ontario, a lovely section where the lake meets the St. Lawrence River and the Rideau Canal.

As spring brings life to parks and streets, the visitors who fill the restaurants and inns and the students who cycle the broad streets near the foot of the city are witness to a ritual of the season — the activity along Kingston's waterfront, as hundreds of boaters at scores of marinas hoist sail or power

BLARENT SPHINX: ST. MARY'S CATHEDRAL, GET! AND CITY HALL STAND OUT IN THE SKYLINE.

motors to ply the diamond-bright waters. In recent years, "The Freshwater Sailing Capital of the World" — as King-
ston calls itself — has grown so popular with visiting boaters that some days hundreds have been turned away (a situation the city has now rectified through a $1.5-million expansion of the Confederation Basin Marina at the foot of City Hall). By early August, the city grows expectant as well tuned yacht-
cars arrive for the annual regatta nicknamed CON (Canadian Olympic Training Regina Kingston), in which ambitious sailors compete in trials for a spot on Canada's Olympic team. It's clear to those who watch all this summer's regatta activity — the hundreds of cruisers and sailboats, the three-

decerker tour boat heading out among the innumerable is-
lands beyond the city and the climax of the August rega-
tta — that while Kingston may have history in its stones, it's very much alive in the present.

Still, as another summer event suggests, the past is far from silent. On a May Sunday every year the battle of drums and the clip, clip, clip of regimental feet accompany one of the city's historic events: the annual church parade of students from the Royal Military College (RMC), the oldest school in the Commonwealth outside Brit-

SILENT SCULLERS BORROW THE GENTLE WATERS OF THE CATARAQUI RIVER.

ain. For many generations RMC students have paraded the streets to their churches of choice — hundreds of men and women in gleaming scar-
let tunics and pillow hats. Since the college's founding in 1816, a high number of graduates have become gen-

eral in the British and abroad. In fact, as early as 1915, 28 of them were generals in the British army. Today more

than 700 students are enrolled at RMC, dedicated to high academic achievement and, above all, the military trad-

itions that the old limestone fortifications have been wit-

nesses to since its founding. For, as Neil Reynolds, The Whig-

Standard editor, puts it, "In the end, history is part of the present in Kingston." It's a view shared by Grace Brock, past president of the King-

ston Historical Society, who has often reflected on it. "Kingston," he likes to say, "was implanted with history from the begin-

ning. Historical events that matter to all of Canada were part of its birth." Indian bands had been passing through the area for hundreds of years when, in the 1670s, the French built Fort Frontenac on the site that would later become Kingston. In the middle 1700s the fort fell to the British. Then, 25 years later, during the American Revolution, Fort Frontenac became the destination for large numbers of Brit-

ish subjects fleeing to Upper Canada from the United States — the United Empire Loyalists. Great Britain spent many millions on disembarkation of free land and compensa-
tion, much of it in and around Fort Frontenac — thus setting a precedent for centuries to come. The historians Brian S. Osborne and Donald Swanson note in their book Kingston: Building on the Past that "as the major Loyalist centre in On-

tario, Kingston and the adjacent districts derived substantial benefit from this British influx. Kingston's intimate rela-

tionship with the public purse is clearly as old as the city." The Loyalists had not lived long at Fort Frontenac when, out of loyalty to Britain, they moved to Kingston, which soon was contracted to the simpler Kingston.

By 1841 it was clearly Upper Canada's most important town; its economy was booming and confidence was rising. In that year, Kingston leaders built a city hall, which to many would remain one of the country's finest public buildings.

The city became the new home for the Province of Canada's caretaking government. In 1844, however, the government left for Toronto, where it remained until 1905, the city filled with quiet depression, suffering not only political but economic aban-
donment. Its natural role as a port for the St. Lawrence River was sharply diminished as canals were developed along the river and shipping bypassed Kingston. Moreover, the surrounding land was not suitable for agriculture. By the opening of the 20th century it seemed destined to be simply a modest provincial commu-
nity. History's die was cast.

Not only had Kingston lost its political importance but it would never be a bustling ind-

dustry or commercial centre with steamships and sky-

crapers. But, while that may have been defined as failure in the first half of the century, today a new generation with new values and lifestyles see it very differently. "We often said," says Donald Swanson, "that Kingston has been blessed by slow growth and economic unsuccess."

That "unsuccess," however, is only evident when the city is compared with other, bigger centres. Tourism alone brings $170 million annually to the city. The nine prisons, with a payroll of $95 million, provide a great deal of employment, as do the six hospitals and the Canadian Forces base. Queen's University, with a budget of $135 million, staff of around 3,500 and thousands of students, is another economic boon for the city, and the quality of research at the medical school and other university departments is currently attracting new businesses to the region. Indeed, Kingston may well have achieved the ideal balance so envied in the late 20th cen-
tury — prosperity without the price of pollution and stress.

Back in 1841 the legendary poet and raconteur Charles Dickens found himself in Kingston after the city had suffered a large fire. He was disappointed. "Indeed," he later wrote, "it may be said of Kingston that one of the first acts of the fire, on the evening of the grand out-
down, and the other half not to be built up." Perhaps his long-sago impression was understandable. But today Dickens would find it difficult to recognize the modern Kingston. It seems a city grateful for what history has bequeathed it, yet far from passive. And because it is the repository of so much of our national heritage, we might all be grateful that Kingston con-
tinues to keep faith with itself. [1]
Martin Connell is helping launch the dreams of hundreds of impoverished entrepreneurs in Canada and the Third World

BY CATHERINE COLLINS

"I'm expansionistic in my thinking. I'm acquisitive and imaginative, and I like to succeed," says Martin Connell, and you believe it.

Even coiled into an easy chair in his corner office at Colwood Exploration Company Limited in Toronto, the chairman's lanky frame and lean bearded face betray his intensity. Eyes warm and direct, he gets straight to the point, then closes it with a smile. "I am fundamentally ambitious."

Fundamentally, he is—like every other captain of industry. But where Martin Connell differs is in passionately wanting others to expand, succeed and be ambitious too. Since 1983, the 50-year-old millionaire has funneled the flames of hundreds of tiny entrepreneurial efforts through the Colwood Foundation, the private, nonprofit organization he created to lend money to the working poor, be they Bolivian bicycle porters or Cree basketweavers. Endowed with $1.5 million of Connell's personal fortune and his belief in the universal right to credit, Colwood launches the hopes and chances of impoverished entrepreneurs.

Helping developing people help themselves is not, of course, a new idea. Nor is it the notion of providing loans to finance their small, bootstrap initiatives—or microenterprises as they have come to be called. Ever since the Grameen Bank in Bangladesh, whose founder is often cited as being the father of the microenterprise credit movement, has been doing just that, as have a number of major development agencies, such as Access International in the United States.

What is remarkable about Connell's Colwood is not so much how it is helping others, but how it is helping it. The corporate sector, traditionally tightfisted when it comes to development aid, has thrown its weight, respect and funding behind Connell's dream, because he's not just doing good, he's doing business.

"If we can enhance people's capacity to be more self-sufficient, then everybody wins," he says, using words practical enough to win any corporate heart but with an idealist's shine in his eyes. "The donors see the payoff for their investment, the borrowers get access to something they could never otherwise have, which improves their sense of worth. And the payoff for us is the dignity that flows from their self-reliance."

Practical idealism shines not only in Connell's eyes and Colwood's work but in his mission as chairman of Imagine, the Canadian Centre for Philanthropy's national campaign to boost the spirit of giving. Too and a half years into the campaign, which takes him from coast to coast, speaking to corporations and individuals alike, he champions it not as a bid for charity but, like Colwood, as a mobilizer of human resources and initiative.

"I like words like 'venture capital' and 'merchant banking,'" he says energetically, "but stick the word 'social' in front of them. I live in a world where there are a tremendous number of people who are denied their dreams, sometimes for nothing more complex than having no access to a very small amount of capital. I think of myself much more as a social entrepreneur than a philanthropist."

Think of this, then, not as the story of a charitable man but of a man for whom money is both an end and a means, a capitalist with a conscience, a businessman leading his peers toward tomorrow, just slightly ahead of his time.

DAYLIGHT POURS INTO THE CALMWOOD BOARDROOM AND FALLS LIKE A BLESSING ON THE MANAGEMENT COMMITTEE OF THE FIRST PEOPLES' FUND. A LENDING PROGRAM UNDER THE AEGIS OF CALMWOOD STAFF, IT IS STEERED LARGELY BY NATIVE CANADIANS LIKE YOUNG SHELLIE BEATIE OF TENEROSA, ONT., RECENTLY APPOINTED THE FUND'S MANAGER. SHE'S TRYING TO PULL UP AN UNWEIGHLY MAP OF CANADA AND CALL ON HER BOSS, MARTIN CONNELL, TO ASSIST. AS HE STANDS SOMEONE CRACKS, "HE'S YOUR VAUNA WHITE," AND THE GROUP SHAKES A LAUGH AT THE THOUGHT OF CONNELL, IN SHIRT AND TIE, SPINNING THE WHEEL OF FORTUNE. IT WASN'T LUCK, HOWEVER, BUT HARD WORK THAT BROUGHT CALMWOOD TO THIS TABLE. FOUR YEARS AGO CONNELL WAS INSPIRED BY THE SPIRIT OF ENTERPRISE QUIETLY PERSISTING THROUGHOUT WILLOWFLOWER RESERVE ON ONTARIO'S MUSKOKA LAKE. THOUGH LACKING COLLATERAL AND ANY CHANCE OF CREDIT, MANY Band members were nonetheless running tiny informal businesses—such as a living-room pool hall and home-based native crafts—on nothing but sweat and ingenuity. He
I am probably not the best person to talk with about the nature of business. However, I believe that a true entrepreneur is someone who sees an opportunity and takes it, not just for themselves, but for the betterment of their community. In my opinion, the most important aspect of entrepreneurship is the ability to think outside the box and be willing to take risks. This is something that we should all strive to do, regardless of our background or experience. In the end, it is the people who are willing to take these risks that will drive progress and make the world a better place.

In my work as an environmental consultant, I have seen many examples of this in action. One of the most impressive was a small community that was struggling with pollution and environmental degradation. They came to me with a plan to turn their waste into energy. It was a risky proposition, but they were determined to make it work. And they did. Today, that community is a model for sustainable development and a beacon of hope for others around the world.

I am not saying that everyone should be an entrepreneur or that it is the only path to success. But I do believe that thinking outside the box and being willing to take risks are essential qualities for anyone who wants to make a difference in the world. And I applaud those who are willing to do so, even in the face of adversity.

So, yes, I am an entrepreneur. And I am proud of it. I believe that business can be a force for good, and I am committed to using my skills and resources to make that happen. Whether it is through my work as a consultant or through my involvement in community projects, I am always looking for ways to make a positive impact.

In the end, I believe that entrepreneurship is about more than just making money or attaining personal success. It is about making the world a better place for everyone. And I am grateful to be a part of that effort.
In Closing

The Joy of Diggling

This year, for the first time in a couple of decades, I have planned a vegetable garden. At the moment, I confess, it does not exist. But I plan with passion, and have read all the right books about gardening. I have rung up the nurseries to reserve my favorite seeds, and I have visited every garden shop in town. I have even attended a local gardening club's meeting. I am the only one in town who is so excited about gardening. I plan to use the garden for growing all sorts of vegetables and herbs. I have even bought a new pair of gardening gloves. I am sure I will be a success at gardening. I can hardly wait to start digging in the soil and planting my seeds. I hope to have a flourishing garden full of vegetables and herbs. I am looking forward to the joy of digging and tending my garden. I plan to share my vegetables with my friends and neighbors. I am sure they will be amazed at my garden and will want to grow their own vegetables. I am looking forward to the joy of gardening and the satisfaction it brings.

IMAGINE isn't based on an airy-fairy idea. The number of companies that have moved to the one-per-cent corporate-giving level illustrates that.

nies have committed to give one per cent of their pretax profits to worthwhile causes, doubling the existing national average for Canadian corporations. "That may not sound like a lot of companies," says Connell, "but when you look at the dollars they're handing out, they represent a third of corporate giving in the country."

Boosting individuals' generosity is the tougher challenge, as he well knows. "If I've learned anything, changing public behaviour is going to take a lot longer than any five-year plan is supposed to. By the same token, many charities and their fund-raisers, important for the public's language, are offering if the well-meaning $9.3 million message is just that — all words, no action. Allan Arlitt, former president and chief executive officer of the Centre for Philanthropy, who is now heading a charitable-fundraising consultancy, has heard the grumblings and re- tends them. "Imagine isn't based on an airy-fairy idea. The number of companies that have moved to the one-per-cent corporate-giving level illustrates that. Its purpose is to establish new standards of giving and to raise sights." From there, he says, "it's up to charities to tell people, 'We're a vehicle through which you can act.' Imagine may rely on words, but it isn't the same old tired pitch. Like Meadow, it peaks a pragmatic bottomline philanthropy. Doing good is good for the giver. If that sounds like self-interest, Connell all for it. "Because it means that I've got something and feel I've enriched my life for doing it then I'll work harder to do it again next year." Connell doesn't like the word "charity." It implies some kind of noble gesture, and that's not what's driving him. "I'm thinking just as profit-minded philanthropy." "I don't want to see as someone who would give money away to some internal guilt," he says firmly. "I have money and I enjoy it and I make no apologies." Indeed, he has real- ized as a result of the spectacular success of the charity, the one-man bakery, where he bakes his own bread with such entre- preneurial flair that you half expect him to hang out a shingle.

But in that vulnerable period just before the launch in southwest and Cal- meadow, Connell did contem- plate the grand gesture. "Everybody talks to have money, at least at one time or another, explore the notion of giving it all away, of grabbing the sack- cloths and doing good works for the rest of one's life, with no material concerns whatsoever." But he concluded it would only "make a splash for a few sec. I'm not the Sultan of Brunei," he says, burst- ing his seams, "we'll probably find this kind of giving is no more than a prototype to leverage other people's resources."

That revelation was liberating for Connell, as it will be for the businesspeople who buy into his dream. "If you have one of these solutions, it's a 20,000 pieces of paper on the desk of people who are discouraged, defeated, who don't feel society. The parallel be- tween father and daughter is obvious, but Connell's earliest from his first mar- riage is her own person.

I was enough of the freedom to be ad- venturous and creative," she says. "Six years ago I went to Honduras, and I went to the jungle with a group of people. You're bit by what you have. So Steen looked at what she had and what she could do — and as her father says with

united pride, 'She's sure not going to get rich doing it, but she's richer per- sonally because of it.'

Connell won't take any credit for his daughter's caring, saying simply, "If one person can do it, why can't ten people, or 100 people, or 500 people, or 5000 people in front of people, sometimes these things can happen?"

So, then a lot of things are going to happen, now that Connell is putting the value of giving time and money in front of the whole country. In 1988, when Connell was asked to lead the five-year Imagine campaign, which is inspiring greater giving in Canada through outreach programs, specials, editorial support and a one-on-one life-service advertising. Now at the half- way point in the campaign, Connell thinks the message is getting through to more than 20 major Canadian compa-