Of Monarchs, Horses and Other Works of Public Art

The urge to decorate our landscape and public buildings has resulted in some remarkable statues and monuments and rather a lot of controversy

By Douglas Fetherling

While in Ottawa last year for Canada Day, Her Majesty the Queen unveiled a bronze statue of herself by Jack Harman, a British Columbia sculptor, on a knoll behind the East Block on Parliament Hill. The sculpture, which took five years to proceed from original idea to installation, depicts the Queen astride a horse given to her by the RCMP in 1973. Surprisingly, it is in fact the first equestrian statue of the monarch; it is about four metres high, or one and a half times life-size. In the words of John Cole, the Progressive Conservative MP who led the inevitable Queen’s Statue Committee, “It’s a big horse and a little lady.”

During the weeks before the dedication there were protests over the cost of the tribute: $600,000. But no demonstrations marred the event itself. It was, after all, Canada’s 125th birthday and the time of a royal visit, and the grounds of Parliament, people seemed to say to themselves, are the appropriate place for a statue of the Queen. At another time there could have been a fuss. Certainly there would have been a row if the statue had gone up in some other location.

Before the summer was through, another statue was in the news. For 54 years, a rather melodramatic depiction of Margaret Wilson stood in the rotunda of Knox College, the Presbyterian seminary affiliated with the University of Toronto. Wilson was a 17th-century Scot who was martyred for her religious beliefs – she was tied to a stake and drowned by incoming tide. The statue, which shows her bare-breasted in the Romantic style, survived half a century of mumbling about its supposed puritanism, but it finally lost the battle over its alleged sexism – feminists argued that it objectified women. The work was removed from the rotunda and hidden in a corner of the boardroom, remote from aggrieved eyes.

Along with those of party politics and artistic quality, questions of cost and nudity are two recurring concerns in the social history of statuary, a subject now usually included
Finally, Winnipeg played it safe and picked an English-born architect who worked for the Manitoba government, Gilbert Parent. His monument still stands between Portage and Broadway streets in downtown Winnipeg. As for Hahn, he had the standards 10- and 25-cent pieces first issued in the 1930s and still being minted in Canada today.

The Winnipeg incident is a splendid example of the no-win politics of public statury, but it is not an isolated one. Exquistions such as these occur all the time. In the past few years, for example, a sculpture by the Toronto artist Peter Brown was rejected for display in a west-end Toronto park because it involved a nude male figure, was, after much rancorous debate, finally given another home in a dark corner of Queen's Park, the green area surrounding the Ontario legislature. Queen's Park is already heavily populated with statues, with a dozen large statues of hisorical figures as well as a bust of William Lyon Mackenzie by W. S. Allward (whom Robert Stacey, a respected Canadian art historian and curator, called "the best figure sculptor the country has ever produced"). It's difficult to say whether Bowen's piece fared better or worse than Lover's Bench, a work by Leo Vivot that proved too hot for Toronto entirely and was shipped to Montreal amid a similar ruckus.

Statues also show how the composition of the country has changed. For generations, most statues were of old imperial heroes—the romantic statue of Samuel de Champlain in Quebec City, for example—or of Canadian politicians who upheld the ideals of two founding peoples. Even some comparitively recent statues show the old preference: the statue of the British explorer Captain James Cook, which overlooks Vancouver's Inner Harbour, for one. But increasingly, minoriuty communities have been allowed their own importance by commissioning statues, which are by no means immune to controversy. For example, political rivalry in the Chinese community underlay the extended argument about a statue of Dr. Sun Yat-Sen, the first president of the Chinese Republic, which stands in Toronto's Riverdale Park and was created by the Ontario artist Joe Rosenthal.

Aesthetics and the right of individuals to erect public art were the issues in 1984 when Henry R. Jackman, a Toronto art patron, set up his family's monument to Canada's wartime fliers in the middle of the city's University Avenue. Artists and critics claimed that the statue was inferior art and should not be allowed to stand in a public place, but it remains on University Avenue today. Readers with deeper memories may recall other ventures by Jackman in this field. He gave Toronto its swaying Winston Churchill, which decented Nathan Phillips Square, and paid the rescue of an equestrian unveiled VII, sculpted by Britain's most important maker of statues, Sir Thomas Brock (who designed the Imperial Memorial to Queen Victoria outside Buckingham Palace).

The statue originally stood in West Ham but was, to use a polite term, decommissioned. British rule in India was still close enough in time that the statue, to some, carried unpleasant associations. In Canada, however, the chronological chart is much different, and the British connection can often bring out latent nostalgia.

"I believe in statues," Jackman once said. "I believe in them as something to inspire our youth." In this, he was one of a dying breed, for statue of the sort he liked is no longer so popular as it was once. "Statues of the monarch or of the heroic soldier and his buddy—the trend is very much away from that," says Christopher Hume, an art critic for The Toronto Star whose expertise is the whole field of public art. And it's a trend that seems to be paralleled in the evolving role of sculpture. "Artists used to say, "I will use the city as my gallery.' That kind of traditional modernism, that idea of the artist as hero, is over with now. These days, the artist is seen as part of a team." Reconciliation, the new peacekeeping memorial in Ottawa, is the perfect illustration; the sculptor, the urban designer and the landscape architect are listed as equal partners in the memorial's creation. Public art is seen no longer as an offshoot of art and more as a branch of landscape architecture, land use, urban planning—and the development industry. "Artists are brought in now to design public spaces," Hume explains. "That's the differ-
once. The work is as likely to include bridges, benches, hillocks and parks as statues per se, although of course statues are still being erected and are still generating controversy.

In fact, controversy is actually now part of a pattern that has also seen agonized and sometimes ludicrous debate in city councils and legislatures about the whole question of public art—if not about how to prevent it exactly, then about who decides what's good and where it should go. The specifics are always local but the concern is national, for indeed the story is the same right across the country. In Alberta, a columnist with the Red Deer Advocate urged his readers to pepper their city's less attractive sculptures with shotgun blasts. He was roundly applauded and changed with inviting the public to commit a criminal offence. The change was later dismissed. Robert Stacey says, "I'd draw this distinction between a public statue and a monument: a public statue must involve a human figure and must be commemorative."

That is, it must, however loosely, follow certain classical traditions. But such traditions are more tenous, and less complicated, than some people would have you believe. Many contend that equestrian statues are heirs to a symbolic code dating back centuries. They believe that the figure depicted was a heroic hero or if the accompanying animal has all four hooves on the ground, then the rider died as a result of wounds incurred in battle. If only three hooves are on the ground, then that it was actually defeated in the battle. The fact that the newspaper, magazines and almanacs keep reprinting these assertions as though they were documented fact only underscores the deep assumptions people have about the subject.

One of these assumptions, curiously, is that there is no Canadian tradition of statuary. Actually, there are a number of recognized Canadian artists whose main field it was, among them Robert Tait McKenzie (1867-1938), who designed the war memorial in Stratford (and the Scottish-American war memorial in Edmonton). The sculptors Frances Loring and Florence Wyle, who both died in 1969, devoted a significant part of their energies to sculpted memorial art. Moreover, in 1987, Ken Jarvis, Francois Gage and Dora de Pedery-Hunt (also a medalist, or designer of medallions) have been prolific. Many important contemporary and avant-garde artists are working in the field of public sculpture, whose works can be found in parks and other urban spaces. The photographer Henri Robideau has contributed minimally to the understanding and appreciation of monuments in Canada. The quotations are from The Monument Project: A History of Canadian War Memorials, a 1987 book by Robert Stacey, which, while limited to statutory with military themes, is the most complete study on Canadian statuary to date. In fact, though, there has recently been a great deal of serious interest in Canadian monuments.

At one extreme are a few people who have concentrated not on the civic impulse in statuary but on the folk impulse in its absolute fission. The photographer Henri Robideau has a number of gallery exhibits of his images of gigantic Canadian sculptures: the enormous Canada goose in Wawa, Ont.; the giant Mountie in North Battleford, Sask.; the numerous giant statues in places as different as Cow Bay, N.S., and Moose Jaw, Sask. In 1988 he even published a book of these. There are many others that the book, Canada's Gigantic!, could have covered but didn't. For example, in Woodstock, Ont., in 1937 of a cow named Springbank Snow Countess, a champion butterfat producer, or the 40-tonne statue of Jumbo the elephant installed in St. Thomas, Ont., in 1989 on the 100th anniversary of the elephant's death there in a railway accident while touring with P.T. Barnum's circus. At the other extreme, and rather more numerous, are the people who are interested in the traditional sort of statuary, usually as an expression of civic pride. Some of the best loved statues are the most unusual. Peter Pan, by the sculptor George Frampton, has been a favourite of Torontonians since it was put up in a small midtown park in 1929. A Toronto Star columnist pointed out that "in a land where public monuments are mostly erected to dead people, a good many of whom died young, one that recalls someone who never lived and refused to grow up is a happy change."

The text for Robideau's book was written by the late Peter Day, a curator, CBC art commentator and garden historian. That last distinction was significant because of extravagant garrulousness in an area that has been the recipient of far more scholarly attention in recent years. So has a not entirely unrelated topic, the development of public parks. In their book City Parks of Canada, Linda Martin and Kerry Segrave show how statuary was often the product of the same desire for betterment and beautification as the parks themselves, although sometimes with misguided results. (In 1981 the city government in Kingston, Ont., wanted to put a statue of Sir John A. Macdonald atop one of the city's historic Martello towers but was refused permission by the federal government, which clung to the equally silly idea that the towers, built in the 1840s, had a military importance.) What all of this comes down to is the concept of public art as not quite an adjunct of architecture or development but not totally a matter of aesthetics either.

The position of public art as a subject to be administered is further advanced in Toronto. This is not only because Toronto has more statues than any other Canadian city but because of the time during the 1980s was so lucrative for the development industry that civic authorities began enforcing a regulation requiring builders to include public art in their plans and pay for it themselves in cases where they sought a variance from the city's official plan. A company wishing to erect a slightly higher structure than normally allowed, for example, would have to agree to spend a negotiated amount (usually about one percent of construction costs) on public art, with the choices vetted by a committee chosen from artists, curators, gallery owners, critics, teachers, urban designers and "knowledgeable amateurs." "The developers called this the 'art tax,'" says Christopher Hume, "and of course that's precisely what it was." In at least one instance it was used as a kind of punishment, when a company was ordered to erect a $10,000 work of art to atone for the way it had misjudged the width of a back laneway, forcing garbage trucks to pick up from the front of its building.

The policy had the effect of giving Toronto even more pieces of public art. Predictably, the increase multiplied the number of little controversies and this in turn only made the truth more obvious: statues and monuments are the most interactive and democratic forms of art. It's so inevitable that they will get some people up in arms that this might almost be seen as part of their function—certainly in social terms and perhaps even in artistic terms as well. Curiously, it's when the artists are acting in the last individualistic manner, filtering their work through sometimes unsympathetic committees, that they can more easily touch the nerves of the people viewing it. Peter Day's "big horse and a little lady" and its journey through the labyrinth of the Queen's Statue Committee to win public approval on Parliament Hill is the perfect example of this process of interference that might well be described as democracy at work.
Giving Kids a Leg Up

Canada's Boys and Girls Clubs are helping underprivileged youngsters across the country get a better start

By TED FERGUSON

A light rain is adding gloom to an already grey afternoon at Tania makes her way down a pedestrian lane in one of Toronto's toughest low-income neighbourhoods. She is 17, a tall, self-assured girl wearing a lemon-yellow jacket. Before heading to the main thoroughfare, she passes a half-dozen teenage gang members standing in a brick wall, looking bored and edgy. She isn't intimidated. "I was born right here in Regent Park," she says. "I don't get scared because I've learned how to handle myself. You know what I think when I see kids hanging out selling drugs? How sad is it that they're wasting their lives."

At Donlands Street she crosses the road. She passes a bony girl with pigtails around her own age who is soliciting men on the sidewalk. Tania walks into a grimy apartment building and descends the stairs to the basement premises of the Boys and Girls Club of Downtown Toronto. "It can be pretty weird out there," she says. "Sometimes you see gangs fighting, six or seven kids going at it. Or gangsters waking you up at night. It's hard growing up in Regent Park."

Inside the club two younger children come over to share a bag of candies. "I love this club," Tania says. "It is not what it used to be, I don't think I'd be so confident about my future. It has helped me develop the day-to-day survival skills I'll need when I'm making a career for myself."

Her comments unintentionally describe the mandate of the club's parent organization, the Boys and Girls Clubs of Canada. Founded in Saint John, N.B., at the turn of the century, the organization has grown from a tiny volunteer band running a local playground into a nationwide network of 49 branch clubs that help repair the damage that results from abuse, street crime and other social ills. The organization's size and programming focus may have changed, but its target group remains the same. It deals with the most vulnerable and often the most neglected members of our society: children belonging to low-income families. Of the nearly four million Canadians whose household earnings fall below the official poverty line, more than 1.1 million are children. To put it another way, one of every six Canadian youngsters is living in poverty.

Of these children, wrote Jim Pace, president of the Boys and Girls Clubs of Canada, "there are 200,000 who are in very dangerous circumstances. They live a peril of life, caught between the ravages of degrading poverty and the abuse of violent families. Their bedrooms are not safe places at night, school holds only the terror of failure, friends taunt and threaten them, and those in authority act as prohibitors and punishers. These 200,000 live lives of quiet desperation."

Boys and Girls Clubs of Canada helps youngsters deal with this desperation. Around 100,000 young people, aged four to 20, use its facilities in 10 provinces and the Northwestern Territories last year. A great number of them were underfed or inadequately clothed. Some clubs sponsor morning meal programmes or collect and distribute used clothing. Although the clubs are autonomous and can create any project they feel suits their community best, none ever loses sight of the network's chief objective: "to give today's kids a promising tomorrow."

Even summer camps, a time for swimming, canoeing and campfire wiener roasts, have programmes aimed at building self-esteem and sharpening decision-making skills. All the programmes, no matter how different, endeavour to address the organization's 14 core values, which are prominent in its literature. "We care about children and youth," reads one. "We acknowledge that a sense of self-worth is fundamental to individual dignity" is another. And yet another states, "We foster cultural understanding and acceptance."

With the annual membership fee set at $2 to $10 (anyone who can't afford it is sponsored), the organization relies upon its 1,430 full-time, part-time and seasonal staff members and 8,000 volunteers to initiate fundraising campaigns for special projects, such as sending delegates to an international youth conference in Vienna in 1991. Raffles, car washes, raffles and bingos are standard fare. The funding needed to operate the organization on a week-to-week basis, however, comes from the federal government, charitable foundations, individuals and private corporations, including Imperial Oil. Last year Imperial sponsored a pilot project in Toronto designed to encourage youths to stay in school. Through the project, 10 members from local clubs received scholarships ranging from $200 to $500 towards postsecondary education, and 80 children were awarded certificates for completing their grades. An industrial engineering student at Ryerson Polytechnic Institute in Toronto says she was delighted when the Downtown club informed her she'd won a $200 scholarship. Her mother supports a family of five on a job as a factory worker, but her daughter's very hard to come by in our house," the student says. "The $200 bought me a lot of lunches I thought I'd be skipping."

Boys and Girls Clubs of Canada has no statistics showing precisely how often it is turning youngsters' lives around. But it does know that hundreds, if not thousands, of grateful former members have become volunteers or part-time workers, Counting herself among the grateful, Tania says she'd like to volunteer someday. Tania has belonged to the Downtown club since she was four years old and an older sister took her to a meeting. "When I was younger, my mother used to tell me to switch off the TV and go to the club," she says. "She said it was good for me to mix with kids who were keeping out of trouble. Now I can't stay away. This is my second home. Some days I drop in for 10 minutes just to see how everybody's doing." A high school student from a single-parent family, Tania plans to go to university to study criminal psychology. "What's the best thing the club has taught me? That's easy. Learning to do things on my own and not depend on other people." A club member during his youth, former Toronto mayor Art Eggleton says he is impressed with the organization's approach. "Simply letting a child know there's light at the end of the dark, dark tunnel is in itself a worthy undertaking," he says. A warehouse labourer's son, Eggleton credits his experiences at Toronto's Gerrard Kiwanis Boys Club in the 1950s with helping him acquire leadership abilities. "I went to the club because of the craft and camping programmes," he says. "Having to work closely with other kids on projects taught me how to communicate more capably. I didn't realize it at the time, but I was developing more confidence in myself, something that served me well when I was mayor and had to speak with people from all walks of life."

While crafts and summer camps remain staples of the Boys and Girls Clubs, a wide variety of programmes are undertaken, and the organization's head office in Markham, Ont., provides research and advice for groups striking out in trailblazing directions. One project involves club members' taking pets to senior citizen nursing homes in Red Deer, Alta. Every few weeks for the last four years, club volunteers and two or three members have picked up cats and dogs from the local humane society and taken them on afternoon visits. The idea behind the programme is to make children understand that they can enjoy the company of older people and live life more enjoyable for those older people. "The patients' eyes glow when they see the kids arrive with the pets," says Laura Hetchler, coordinator of the Red Deer programme. "Animals are real softies. But you can't talk about pets they once had and then they talk about their past lives. The kids discover they have things in common with them."

Fourteen-year-old Jordy says the visits have changed his opinion. "I thought old folks were really kind of weird, but they give me a high five by on the street without really looking at them. Now I see..."
them as interesting people, and I like to talk to them.

Other programs across the country are remarkably different. LeClerc, for instance, tackles the problem of youth unemployment. Youths going to the Dawson Boys and Girls Club in Montreal learn to assess their own abilities and decide which jobs they should apply for; club participants are taught how to write résumés and conduct themselves during job interviews. The organization also runs a drop-in centre in Calgary where street kids are offered food, medical treatment and counselling services aimed at healing family wounds.

The Eastview Boys and Girls Club in Oakville, Ont., operates a programme designed to aid young criminal offenders. Youths caught committing minor offences attend daily sessions in which they are given remedial and natural assistance and guidance. A club in Victoria is closely involved with four alternative schools for children failing in the regular educational system, and two Vancouver clubs participate in a Latin American family programme that assists the immigrant and refugee families in the area.

Within the overall organization are the youth club divisions that concentrate exclusively on nurturing their members’ potential leadership skills. Formed in the early 1960s, the Keystone Club focuses on youths aged 13 to 17; the Torch Club, which began in 1960, is aimed at children of 11 and 12. Altogether, the divisions have about 2,400 members nationwide. Community service is an essential part of their mandate. Members lend a hand at food banks, hospitals and blood donor clinics and visit facilities for the handicapped and senior citizens. They also attend workshops on drug prevention, eating disorders and literacy, and they organize club meetings on, among other subjects, the environment and parent-child relationships. “Keystone and Torch club members make excellent role models,” says Eric Batson, national programme coordinator of the Boys and Girls Clubs. “In many cases they have first-hand knowledge of the problems they are talking to other kids about.”

First-hand knowledge is an asset that Serge LeClerc, a social worker, brought to a lecture he delivered at the Dwercovert Boys and Girls Club in Toronto two years ago. A formerly drug dealer, he spoke about the beatings, neglect and mental anguish he suffered during 21 years of prison life. The 40 youngsters in the audience sat rapt silence. Some shook their heads, others grimaced. “I was taking a shower in jail and watched the guy next to me get stabbed and die,” LeClerc told them. “When they took him away, they lay him on a stretcher, I saw my face on it. And that’s when I decided I didn’t want to be a loser anymore.”

LeClerc eventually went beyond his grade six education to obtain a diploma in social work. “You’re Jerks if you drink. You’re Jerks if you do drugs,” he said. “You’ve got some choices to make. If you make the wrong ones, you’ll end up a loser.” Afterwards, 14-year-old Randal said to a newspaper reporter, “Listening to somebody who has been there, who has seen it all, that really opens your eyes.”

Persuading children to avoid crime was one of the main purposes behind the founding of Canada’s first Boys Club 90 years ago in Saint John. Newspaper editor Albert Belding is credited with starting the club. A second club opened in Montreal’s Griffintown district in 1905. Within the next two decades clubs got under way in Winnipeg, Ottawa, Halifax and Toronto.

The Canadian movement was inspired by a similar organization in England. During the mid-1960s and 1970s, British children were alarmed by the plight of young children, frequently as young as nine, toiling in factories and living in workhouses. The basic goal of the club they started was to provide recreation and guidance for child labourers. In this country, police officers and welfare workers in the early part of the century helped launch clubs to combat juvenile delinquency.

The Canadian clubs initiated numerous innovative projects over the years. In the 1920s and 1930s, they sponsored youth-oriented employment programmes, and in the 1940s some clubs hired staff nurses. Montreal’s Dawson Boys Club started a scholarship programme in 1953 in conjunction with what is now Sir George Williams University. The inclusion of girls didn’t occur until the 1960s. The mixed programmes were so successful that the Boys Clubs of Canada officially changed its name to the Boys and Girls Clubs of Canada in 1976.

Then came the 1980s and what seemed like a sudden explosion of illegal drug use, marital breakdown and street crime. The national birth rate declined during the 1980s and yet a study found that there were 120,000 more children living in poverty in Canada in 1989 than there were in 1980. The educational system was sagging, too: by age 15 twice as many underprivileged children were falling behind in school than had been the case nine years earlier, and the dropout rate for children from poor neighbourhoods was twice as high as that of children from more affluent districts. “A sense of hopelessness, a sense of entrapment-income households,” says John Clarke of the Ontario Coalition Against Poverty. “Parents say, ‘Nothing’s ever going to change so why bother trying’.”

Kids pick up the message and say, “Why bother going to school?” Some kids drop out or fall behind for other reasons. They don’t eat enough so they haven’t the energy for school. Kids from low-income families have so many negative things to overcome, it’s a wonder any of them escape the poverty trap.”

In 1980, responding to an increasing need among children to escape that trap, Boys and Girls Clubs of Canada began to increase its emphasis on overcoming social problems. The shift was sorely needed throughout the network but no more so than in Regent Park. Heralded as a model for low-income living when it was built in the 1950s, the inner-city neighbourhood is now a high-crime area, and while many tenants put a great deal of effort into the care of their homes and gardens, they are fighting a losing battle.

Uncollected garbage lies in already dirty corridors and plywood sheets cover broken windows in some apartments. Street gangs make many tenants fearful of leaving their homes at night. About 200 children live in Regent Park; a large percentage are members of single-parent families. (Boys and Girls Clubs of Canada estimates that more than a third of the 100,000 children using its facilities last year came from one-parent households.)

“It’s not good enough just to give kids a place to play video games and basketball,” says Toronto’s Downtown club’s executive director, Aiko Di Giovanni. “Sure, the kids like it and parents are happy to have them off the streets. But you aren’t accomplishing very much.”

“Children suffer from an even more technological and socially complicated society than today’s. People think the kids can handle it because they’ve been exposed to adults’ images via television and movies since they were small. That’s a fallacy. That information confuses them. They are still kids at heart — susceptible to any influence, positive or negative.”

Di Giovanni supervises 33 full- and part-time staff workers and 220 volunteers programmes five days a week for about 300 children a year. The volunteers’ occupations vary — there is a sales manager, a secretary, an accountant and a shipping clerk, to name just a few. Some put in 25 hours a week, others 250.

Three years ago, Di Giovanni and his staff created a system to help build character. They call it tracking and it involves behavioural rules, which are posted on walls. The rules nurture decision-making, problem-solving, self-management and task-completion skills and aim to reduce personal self-esteem. A cooperative attitude is developed. For instance, youngsters are encouraged to work on a jigsaw puzzle together, and children are encouraged to give things they believe in to other members. Sometimes a counsellor will remind an excited or angry child about the “too fast” rule, which requires such children to count to five aloud, giving them time to calm down so they can continue in a calmer frame of mind. “Tracking has had very good results,” Di Giovanni says. “Discipline was a problem in the past. Two or three kids a night got into trouble and had to be brought to the office. We’ve managed to whittle that down to less than one kid a month.”

Parents have been known to tell staff members how pleased they are by the influence tracking and other activities have had on their children. One mother said her young son was, of his own accord, washing himself regularly and tidying his room since taking hygiene classes offered at the club. Another mother said her boy was shunning former street gang companions and striving to start a neighbourhood disc jockey service.

It isn’t difficult to speculate that the club’s heightened stress on staying in school has pleased parents too. Four years ago three children won awards at the club’s annual academic achievement ceremony. Last year seven teenagers were given college bursaries and more than a dozen other students were presented with accomplishment awards. Riding in the club kitchen, an adolescent boy named Michael says belonging to the club has been an inspiration to him. “Four of the people getting bursaries are taking management or accounting,” he says. “I’m good with numbers. I’m going to do that kind of accounting.” He reads the newsletter on a table, smiles and adds, “I was a moody brat when I first came to the club. I argued with everybody. I’ve mellowed out, and I like myself better these days. No matter what happens in the future, I’ll always remember what the club did for me.”

RIVIERE BOYS AND GIRLS CLUB, CALGARY

DARROW BOYS AND GIRLS CLUB, MONTREAL

ITALIAN OBSERVER

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Probing the Earth’s Secrets

Using water to bore through rock and employing sound waves to trace underground reservoirs are all part of a day’s work for Imperial’s research scientists in their search for better ways of finding and producing oil

BY PIUS ROLHEISER

At Imperial’s $47 million research centre in Calgary – the most comprehensive facility of its kind in the world – geoscientists, engineers and chemists search for new and better ways to develop Canada’s crude oil resources, particularly the massive oil sands of western Canada.

Many millions of years before the coming of the dinosaurs, they would describe their work in more prosaic terms. Their mandate, they would say, is to develop new technologies that will assist in the production of hydrocarbon resources. Their work involves finding ways to increase crude-oil and natural-gas production, to extract oil from the oil sands of western Canada and to protect the environment. They would talk, too, about the paradoxical notion of “renewal” in a business of nonrenewable resources. The pursuit of these aims engages some 90 men and women at the $47 million research centre, officially opened in 1990 by former prime minister Brian Mulroney. They are engineers, geoscientists and chemists, nearly half of them listing master’s or doctor’s degrees among their
Corrosion is the relentless enemy of the metal pipes used in oil-well casing, and much research is devoted to finding ways of fighting it and coming up with more corrosion-resistant materials. Hydrogen sulphide, a corrosive gas, is pumped into a piece of test piping (left) to determine its effects. John Curle (above), a research technologist, tests different coatings on lengths of pipe to find out how well they resist corrosion.

A high-speed jet of water designed to drill through rock is one of the newest tools used to enhance the productivity of aging oil wells. Ken Orey (above), a research technologist, prepares a sample of rock for water drilling to help develop better jet nozzles. In the background is a two-dimensional model of a Cold Lake heavy-oil reservoir. Results of the many water-drilling experiments conducted at the research centre are provided on computer printouts (left).

credentials. And they’re very good at what they do. Their efforts have placed Imperial at the forefront of several key technological areas. The company, for example, pioneered the cyclic steam stimulation process for recovering bitumen from the oil sands of western Canada. Known in the industry as “huff and puff,” the process uses 300-degree-Celsius steam to heat and soften droplets of crude oil trapped by particles of sand, thus allowing the oil to be pumped to the surface. The company’s Cold Lake operation in northeastern Alberta was among the first to use the “huff and puff” method, and Imperial researchers continue to lead the industry in improving and refining the process. They are at the forefront, too, in the use of new techniques to coax more and more conventional crude oil from depleted oilfields discovered nearly half a century ago. With names like Leduc, Judy Creek and Pembina, these giants in Canadian petroleum history still retain much of their original oil. The ability to recover even an additional 10 percent would more than double western Canada’s remaining crude-oil reserves. The centre also conducts substantial research into environmental protection. Using a giant wave basin – the size of two Olympic-sized swimming pools – researchers have gained Imperial an international reputation in the area of marine oil-spill tracking and recovery. Other research teams delve into the science of metallurgy, investigating new ways of maintaining the integrity of the thousands of kilometres of underground pipelines in Canada. "I see the department's
role as two-pronged," says research manager Howard Dingle. "To support the profitability of the company through technical innovations and to be a major agent for renewal." Dingle spent his first summer with Imperial nearly 30 years ago, cleaning flasks and beakers that had held the molasseslike bitumen produced at an experimental project at Cold Lake, Alta. Since then, largely through the efforts of the research centre he heads today, that project has developed into Imperial's largest single source of crude-oil production, accounting for one of every 10 barrels of oil produced in Canada. Placing the centre's efforts in context, Dingle emphasizes that research isn't done simply for the sake of research and that every step into the realm of the untried is guided by the needs of the business. Water is persuaded to penetrate rock when conventional drilling methods fail. Giant caverns are created in kilometre-deep oil sands, where water is mixed with oil and sand, creating a soupy mixture that can be brought to the surface, where the glue that binds the oil and sand is more easily broken. And sound waves are used to help create three-dimensional pictures of unseen reservoirs so that oil wells can draw from new sources of hydrocarbons. If Koestler's "peeping Toms" are fixed on unlocking the secrets of the universe, the mysteries of petroleum will suffice for the men and women of Imperial's research team. Says Dingle: "There is still plenty we don't know about."
Going Home to Berthier-sur-Mer

A writer reflects on a small Quebec village with a gentle rhythm and a maritime feel that has been part of her life since childhood

BY SYLVIE RUEL

There is a slight chill to the late-summer breeze. The light is softer now. And here and there, trees are turning from green to gold and red. Summer is drawing to a close in Berthier-sur-Mer, and a windingness settles over me as I did when I was a child and the end of summer signified an end to my days near this quiet Quebec village on the St. Lawrence River.

As a child I knew Berthier only in the summer, when I would stay with my family at our cottage not far from the village. Now, whenever I hear the chirp of crickets, the lowing of cattle, or the soft lapping of waves, memories of summers past flood my mind. I see myself chasing butterflies through a field of daisies, recall the fragrance of a strawberry pie in the cottage kitchen, hear a boat whistle rise up from the hollow of the night. I loved those blissful summers, and as an adult returned to spend two full years on the outskirts of the village, writing from my home, which sat alongside a field that stretched down to the river.

Berthier lies on the south shore of the St. Lawrence, 60 kilometres east of Quebec City, beyond the communities of Beaumont, Saint-Michel and Saint-Vallier. In the centre of the village is Notre-Dame-de-l'Assomption church and beside it a small graveyard (bright with flowers in the spring and summer), which together lend the village a special charm. The church, a large grey stone building constructed in 1856, stands like a sentry over the village. Among the houses on Berthier's main street are several gracious ancestral homes. Beyond the village, houses give way to fields and trees. To the north, across the St. Lawrence, rise the tree-shadowed Laurentian Highlands, and from the north end of the village there is a striking view of Mont Sainte-Anne and Cap Tourmente, whose rocky side drops abruptly into the water on the north shore of the river.

Berthier lies on the upper estuary of the St. Lawrence, at the place where it widens and the fresh river water begins to acquire the taste of salt. Here the St. Lawrence succumbs to tides, and residents tend to associate themselves more with the sea than a river, as the very name of the village suggests.

Berthier's history dates to the early 1800s. Shipping on the St. Lawrence was considerably busier then than it is now and gave rise to a number of communities along its shores, including Berthier. While the village served the needs of local farmers, most of its residents drew their livelihood from the water—the men were fishermen, boat builders and sailors who transported people and goods up and down the river. At this point the St. Lawrence could be as dangerous as many seas, devouring sailors and leaving families bereft. It's rare that a Berthier family, even today, doesn't count one fisherman or sailor among its ancestors.

The decline of shipping commerce in Europe and North America after the First World War led to a fall in the demand for boats and sailors, and Berthier saw its maritime role dwindle. A number of its sailors went on to ply their trade on the Great Lakes; some moved to the textile mills of New England. Despite this, however, Berthier has remained a maritime village; an old dilapidated wharf near its centre is a testament to its past.

Willie St-Pierre, now 76, is one of Berthier's oldest sailors. During his 30-year seafaring career he worked on 15 different ships, plying waters from the Great Lakes to the Far North, where he worked on Arctic icebreakers. When he started his career in 1938, he says, there were 80 sailors in Berthier.

St-Pierre reminisces about the glorious time when he travelled on Le Drôle, a ship that sailed out of Quebec City to service the lighthouses of the St. Lawrence. "We took supplies of coal and food to the lighthouses," he remembers. "I was friendly with all the lighthouse keepers."

During the 1920s, the ferry Sainte-Croix took villagers dressed in their Sunday best across the river to the cathedral at Sainte-Anne-de-Beaupré. The old sailor remembers, too, the steamer Champsy, which shuttled back and forth between Quebec City and Berthier.

In recent years, near the old wharf, a small marina has been built to serve the pleasure boats that call at the village in the summer, and there are plans to give the wharf a new life.

One cannot talk of Berthier without mentioning the Île-aux-Oies, a large archipelago in the St. Lawrence extending 15 kilometres east of Berthier and 15 kilometres west. The islands are in many ways a part of life for the people of Berthier. On a clear day many of them are visible from the village. Some have cottages on them, others are uninhabited—transquil refuges for those who venture to them. In winter I would sometimes cross the icebound bay on skis and rest awhile on one of the smaller islands. I went to listen to the silence and drink in the majesty of the surrounding landscape. I could look over the frozen river to Berthier; draped in snow white, this place of gentle beauty seemed to live in slow motion.

Until his death earlier this year, Laurier Guimond, at 81, was Berthier's senior resident. For much of his life he worked as a light-house keeper on one of the islands. He lived in the lighthouse from April to November every year between 1944 and 1962. Each summer his wife, Berthe, and their four children would join him for the holidays.

For Guimond and his family, life on the island was idyllic. It was, recalled Laurier shortly before his death, covered with fir and spruce trees, and blueberries, raspberries, blackberries and wild pears were abundant. The family fished for sturgeon, salmon, trout and bass. The river water was so clean they could, and did, drink it. Berthe baked bread, and Laurier raised rabbits. The family was largely self-sufficient.

On Sundays people would travel in small boats from Berthier to visit the Guimonds. Often the parish priest
Berthier has somehow escaped the rhythms of modern life. It is not back years but life there seems kinder and gentler than in many places where the present has taken a strong hold.

I enjoyed every season in the village, but winter was my favorite. I loved those months when the earth seemed to hold its breath. The white snow and the snowy fields were an inducement to contemplation. Storms, snow squalls and strong winds often kept my home isolated. Around the house, all was white and frozen. In the end, though, I was eager for life to return and crack winter's lingering white carapace. Neighbors would dream of gardens as they shovelled away the last snowbanks. Talks of crop succession, icy cucumbers, marigolds and sage made my mouth water.

Then the sun would shine again, the bay would free itself of ice, sometimes with a tremendous roar, the fields would turn from white to ochre, and maple, oak, birch and apple trees would begin to stir. The earth would give birth to snowdrops and tulips, and slowly, slowly life was renewed.

Spring marked the return of the snow goose too. The sky would suddenly fill with thousands of geese, aligned like the silvery beads of a rosary. Often at low tide they would wash by the water. Chattering like neighborhood gossips, they terrified Romeos, my cat, with their noisy serenade. With bristling tail and arched back, he would scurry away and disappear into the bushes. At night, I would throw open my windows and go to sleep to the sound of the geese's joyous concert.

By the end of May, when the air was rich with lilac, most of the villagers were busy in their gardens. Rare were those in Berthier who didn't have a little plot of ground for growing summer vegetables and berries. In my garden, the sight of the first radishes and spinach leaves filled me with delight. This year again the earth would be generous. One summer the squash were so plentiful a baccalieu effort was required to keep them from taking over the entire garden.

Summer brought bords of vacationers, doubling Berthier's population of 1,300. Nearby caves, with their clusters of cottages, would come back to life.

Summer was the most carefree time of year. I walked barefoot in the grass and spent long hours just sitting and looking at the river. It fascinated and enchanted me. Sometimes it was as blue as a cloudless sky and as smooth as a woodland pond on a windless day, at other times swollen and brooding, and at still others a grey mass of foamy waves, fierce and angry.

In the evening I would often sit on my verandas swaying savouring the last moments of the day. I'd release the goat from her pen for her daily feed. She devoured dandelions and weeds, as well as—unknown to me—my roses. The sun would disappear amid a blaze of colour; some evenings it appeared to be on fire, passing from orange to candy pink and then to violet, finally giving way to the deep blue of night.

If the evening was fine I would walk to the end of the village, passing couples lingering on porches, vacationers on their bicycles or the cabinetmaker's wife returning from an outing on her tricycle, her little long-haired dog nestled in a basket. We'd talk about our vegetables like young mothers discussing their babies. Occasionally, a friendly little skunk would honour me with its presence. Sometimes I'd curse, but not at the skunk. I was cursing at the French fry stand, which on some evenings sent forth a much nastier smell than the skunk ever could. In our beautiful village, where people were so proud, the stand seemed out of place.

In summer nature seemed to attain a perfect balance. The houses of Berthier were surrounded by peonies, hollyhocks, roses and sunflowers. After a summer shower the rain would glint on the flowers, giving the village a festive look.

As fall took hold, the landscape turned russet and rifle shots would awaken me at dawn. On the sandbars at Montmagny, Cap-Saint-Ignace and Île-aux-Grues, hunters would gather to shoot the snow goose. After a summer spent in the Far North, the birds flock to the region in mid-October on their journey to a warmer climate.

It has been nearly a year since I left Berthier, but now, as I stand by the old wharf in the late-summer sun, I still feel it is home. This village has been part of my life since I was very young, and although it may not always be my place of dwelling, it will always be a sanctuary for my spirit.
Shopping the World for Oil

Canadian petroleum products are fashioned from many different types of crude oil, including shipments from a score of foreign countries.

BY RUSSELL FELTON

AT 7:30 IN THE MORNING ON APRIL 9 OF THIS YEAR, THE OIL tanker Velimir Skopjek, Spanish built and manned by an all-Croatian crew, entered Halifax harbour after a voyage of some 5,000 nautical miles that had taken 17 days.

By noon the Velimir Skopjek had secured her first line at the dock of Imperial Oil's Dartmouth refinery on the harbour's eastern passage. By late afternoon, after docking, safety surveys and other procedures had been completed, she began discharging her cargo of slightly less than 600,000 barrels of crude oil into the refinery's storage tanks.

There was nothing particularly unusual about the arrival, unloading and departure, two days later, of the Velimir Skopjek. The arrival of oil tankers is part of the regular life of Halifax harbour; on average, a tanker a week arrives with crude oil destined for Imperial's Dartmouth refinery. What was unusual - at least for Imperial - was the cargo's country of origin: the Republic of Gabon in equatorial west Africa. It was the first tankerload of this particular type of crude oil, known as Mundji Crude, to be imported by Imperial.

Why the company selected this particular type of crude from the literally scores of different varieties available to it from all over the world is a complex story and one that goes a long way towards explaining some of the intricacies involved in the process of providing the Canadian motorist with what is seen by many as the simplest and most mundane of products: gasoline.

Most of us, it's probably fair to say, take gasoline for granted. It's a product we rarely see and are generally reluctant to buy and one to which we are not inclined to give much thought. We expect it to power our vehicles efficiently, and it does. We expect it to be reliable and of high quality, which, in countries like Canada at least, it nearly always is. And the same applies to other products - diesel fuel, home heating oil, lubricants, grease, waxes, solvents and so on - that petroleum refiners extract from the same base raw material, crude oil.

Yet producing these various products in large volumes and to exacting quality standards is a highly complex business. And one basic reason for this is that crude oil is a commodity that can vary enormously in many different ways. The refiner's art lies in being able to transform this widely diverse raw material into consistent and high-quality products that meet consumers' exacting needs and can be sold at competitive prices.

The refining process involves breaking down crude oil into hundreds of constituent parts, which are then put back together in various combinations to form the many products of crude oil, from gasoline and naptha to lubricating oils and petroleum coke. The crude-oil components are divided and rearranged through a variety of processes including heating, fractionation, the application of pressure and reheating in the presence of catalysts. Some procedures are essential to the refining process. Others are only necessary if certain types of crude oil are being refined. And still others are only required for the manufacture of certain products.

"Each of the procedures requires specific and very expensive equipment," says Harold Wilkinson, vice-president and general manager of the supply department in Imperial's products division, "so it's not feasible for all refineries to be equipped to perform all procedures."

Historically, refineries have been built in three types of locations - close to oilfields, close to markets or on waterways - and typically they are equipped to refine the type of crude oil most available and to produce products most in demand by local markets.

For example, Imperial's refinery at its Norman Wells oilfield, which is located in the Northwest Territories just south of the Arctic Circle, refines the high-quality crude produced there into a variety of products to serve the needs of commercial and retail customers in the western Arctic.
Crude oil is produced in almost every region of the world, and each region is different. The various types are usually named after the fields from which they are produced or the ports from which they are shipped, and many of them have an aromatic ring: Maya, Inshas and Chilpancingo from Mexico; Orinoco from Venezuela; Caven Lomita from Colombia; Balanza, Cabo Matos from Cabinda; Tazik from Anguila, Iranian, Foroqez, Qoa Bore, Escravos and, oddly enough, Penang, all from Nigeria; Marib Light from North Yemen; Mnas from Iran; Men from Maltan; Cuibbali, Chibbi and Bak from Gabon; and Pennington, all from Nigeria; Marib Light from North Yemen; Minas from Indonesia; Muni from Malaka; Cugandali, Chad and Be, from Gabon; and Ayore and Abu Sothi from Saudi Arabia; Shenshef from China; Duk from Denmark.

Indeed, there are hundreds of varieties of crude oil, which come from countries and regions as diverse and widely separated as Boston and New Orleans, Tainui and the Congo, Italy and Iran, the North Sea and Australia's Bass Strait. Not to mention, of course, the various types of crude oil that are produced in Africa. As a crude-oil producer, Canada is more than self-sufficient. Imports of foreign crude oil to eastern Canada are exceeded by exports of crude from western Canada to the United States. The basic types or categories of crude oil are light, medium, and heavy. The "weight" relates to the oil's specific gravity, or density, as measured by a system known as API (American Petroleum Institute). The more dense the oil, the heavier it is. Light crude varieties yield higher proportions of "light" products—gasoline, distillates and liquid petroleum gases such as butane and propane. Heavy crude varieties yield lower proportions of so-called "heavy" products such as diesel fuel, home heating and other heavy fuel oils, lubricants, paraffins and asphalt.

Crude oil is classified as either "sweet" or "sour," a reflection of the oil's sulphur content. A third important consideration is the "pour point," which indicates the temperature below which the oil will not flow, an important consideration for refiners in colder climates such as Canada and Russia. These two latter factors, the specific gravity and the pour point, the proportions of paraffins and other "waxy" components determine the pour point.

There are many different types of crude oil that are produced in eastern Canada, and the types are classified as either "sweet" or "sour," depending on the amount of sulphur they contain. The sulphur content of crude oil is an important factor in determining its suitability for use as a fuel or as a feedstock for chemical production. Sweet crude oil, which contains less sulphur, is generally easier to process and has higher yields of valuable products. Sour crude oil, which contains more sulphur, is more difficult to process and has lower yields of valuable products.

The search for improved profitability through lower refining costs is now recognized to be the key factor in determining crude prices. Over the last 15 years, Imperial's crude oil has accounted for a significant portion of the growth in its own refining capacity. This trend is likely to continue as the company's refining capacity is expanded to meet the increasing demand for crude oil. In addition, the company is actively seeking to increase its crude oil production in order to maintain its competitive position in the refining market. As a result, the company's earnings are expected to continue to grow at a rate comparable to the growth in the global refining market.
Music Magic

After gaining international fame in England, Canadian-born Mario Bernardi returned home, where his prodigious talents have been guiding orchestras for more than 25 years

By Mario Pessamit

In December 1963, The Sadler's Wells Opera Company in London was about to unveil a new production of Handel and Gluck when the conductor, Colin Davis, who was also the company's artistic director, fell ill. That in itself was not unusual—Davis was not the first conductor to get sick just before an important premiere. What was unusual was the choice of his replacement.

It was not someone of Davis's tenure or even a longtime assistant conductor, but the renowned opera company's newest recruit. His name was Mario Bernardi. He was 37 years old. And he had almost no conducting experience in Europe. He was also that rarity of rarities in conducting circles—a Canadian. Indeed, he had left Toronto just a few months earlier as a coach and assistant conductor.

"I was the newest arrival, and they entrusted me with the job," says Bernardi, still astonished at his good fortune nearly three decades later. "It dawned on me how envious some of my colleagues must have been that this colonial, with a funny name like Bernardi, was given such a plum. It was unheard of.

It was also exceedingly risky, not just for the opera company but for Bernardi. If successful, his performance could open doors for him all over Europe; if not, it could seal a death knell for his hopes of international success. Bernardi responded with characteristic cage-fresh. "I had to succeed, of course," says the silver-haired, compact and impeccably attired Bernardi. And he did.

The opening performance of Handel and Gluck was greeted with sparkling reviews. Bernardi's conducting was praised by London's Financial Times for striking "an admirable balance between seriousness and unselfconsciousness," while The Times hailed Bernardi as a "reform from Canada" who played the music affectionately and paced it well." Says Bernardi: "I never looked back."

During the winter and spring of 1963-64, Bernardi conducted more than 30 performances of five separate operas. "That was more experience than I'd had up until then—all concentrated in six months," he chuckles.

After an auspicious first season, Bernardi signed a two-year contract with Sadler's Wells, becoming a fully fledged conductor with a tour to live operas a year to direct, each with as many as 30 to 40 performances. Then, in 1966, he was named co-musical director of Sadler's Wells (which has since been renamed the English National Opera), the first, and only, Canadian to be so honoured.

"He placed a very, very important part in my life in England in the 1960s," says Brian Dickie, the English-born general director of the Canadian Opera Company. Returning to Canada in 1969, Bernardi was appointed founding conductor of the National Arts Centre Orchestra in Ottawa, which he quickly moulded into one of the world's finest smaller ensembles. More recently, he performed a similar kind of magic at the Calgary Philharmonic Orchestra, which he led from 1984 until this past season, giving it an international presence. Somehow he has also found time to appear with such distinguished companies as New York's Metropolitan Opera, the San Francisco Opera and the New York City Opera. "I think he's the finest Canadian conductor of his generation," says William Littler, music critic for The Toronto Sun.

In fact, Littler compares Bernardi to Canada's most historically celebrated conductor, Sir Ernest MacMillan, who led the Toronto Symphony from 1931 to 1956. "Frankly, I've never heard a Canadian-born conductor since MacMillan who surpasses Bernardi in musicianship or interpretive skills. He is the best we have produced."

Bernardi and his wife of 30 years, the former Mona Kelle, a mezzo-soprano who has appeared with the Canadian Opera Company, live in an elegant brick home in midtown Toronto. Their daughter, Julia, recently graduated from university. Bernardi's sanctuary is on the second floor—a bright sunny room dominated by a black Steinway piano.

The walls are a shade of ochre that sets off an eclectic assortment of art—everything from Japanese prints to an exquisite fruit wall hanging. Scattered about is evidence of one of Bernardi's passions—mind-bending crossword puzzles in both Italian and English.

That is where Bernardi prepares for concerts. To start with, he pores over the score, a process that, in the case of an opera, can take months. "You learn every last detail of the score. That's to start with. And then you begin to think how it should build, the architecture of the piece, what sort of speed it should have."
The conductor was a relatively late arrival to the Western musical tradition. Until the early part of the 19th century, it had been up to the lead violinist or the key

Romantic composers - Mendelssohn and Berlioz, to name two - began crafting music so complex that it needed the coordination of a single individual. Initially, this was no

At first, Bernardi explains, the fundamentals of conducting are quite straightforward. "You have to start the orchestra and keep them together. You give the sign of attack, and you give them the pulse at which the music will proceed. Those are the basics."

Bernardi says, "You can do nothing but keep time - some people do that quite successfully. Or you can take your listeners to heaven - an inspired performance.

In 1947 Bernardi earned perfect marks in exams at the influential Venice Conservatory of Music.

George Souliotis

In 1943, when Bernardi was 12, he was adept enough at playing the organ to be named substitute organist under the collection and to play at his teacher's wedding. He made rapid progress both as a keyboardist and in his formal music studies. Indeed, in 1947, he earned perfect marks in exams at the influential Venice Conservatory of Music. He was, at 17, the youngest student to graduate that year.

In 1947, he returned to Kirkland Lake and found that, having mastered Italian, he had to relearn his native English. Canada proved to be a welcome change from Italy and the shortages of war. "The material things were all so

Bernardi was born in 1930 to a family of modest means in the Northern Ontario town best known for its rugged hockey players and as the place where Sir Harry Oakes had his gold mining fortune in the 1920s.

In 1950 Bernardi received a letter inviting him to join the Royal Conservatory of Music and workshops at the distinguished Curtis Institute of Music. Making ends meet was not easy. While Bernardi looked for work, his father sent what he could to help support his

Cellist Donald Whitton, who would later join the National Arts Centre Orchestra.

Little by little, Bernardi began to make a name for himself.

There were performances on CBC Radio and the corporation's national television network. And now and then there were conducting assignments, including his Canadian Opera Company debut in 1971.

As time passed, he realized that his calling was on the podium - not an easy goal to achieve in Canada, then or now.

"We don't offer much education in Canada for conduc
tors," says William Littler. "And we don't have opera hous
es where they can grow and develop in the same way the European conductors can."

Bernardi earned the title of Sadler's Wells management, which created a special position for him and a name to go with it - "senior assistant conductor." And because we don't have a major opera company, Bernardi, who generally assisted the conductor, had not heard the title before and eventually asked those who'd hired him at Sadler's Wells what it meant. "They said, 'It means nothing.' For Bernardi, it turned out to mean everything.

Early on a Saturday morning, Bernardi is in Toronto's glassed-in Royal Thomson Hall preparing for a guest appearance with the Toronto Symphony Orchestra that evening.

As a result of the orchestra's financial straits, only one rehearsal has been allotted - far from enough practice time for such a perfectionist.

"I'm really worried," he confided a few days earlier. "I've done it before and this is a very experienced orchestra, but it's not ideal. What you're best you can hope for is that everybody ends together."

The situation visibly troubles the musicians gathered in the lobby hall, but, particularly the featured pianist, the internationally renowned Arthur O'Connell of Toronto. His shoulders are stiff, his walk strained.

At one point, to ease matters, Bernardi resorts to an old gag, advising O'Connell to the orchestra as "my favourite soloist," he pues before adding "my only soloist." The timing is not quite worthy of a stand-up box, but it does elicit a ripple of laughter. And the anxiety seems to drain that energy, which enters a resonant district north of Toronto. Another member was the noted dark slacks, in a commanding figure - not surprising for someone who has conducted some of the world's finest orchestras, including the London Symphony, the Royal Philharmonic and the Chicago Symphony. He is also remarkably limber and light on his feet; his baton sways are full of grace and vigor.

On this Saturday morning, Bernardi is relentless, bent on giving his best to the 3,600 or 4,000 people in the hall. He is by turn musical and jovial, baroque and exacting.

"Quite nice," he tells the orchestra after a stirring passage.

Then, in the next breath, he sharply chides O'Connell: "You have to continue to move in time."

And to the violon section: "A bit faster." To emphasize his point, he taps the beat on the back of his hand. Bernardi is again living up to his billing as a stern perfectionist.

Bernardi said he "can't help but please," says Walter Przewozny, concertmaster at the National Arts Centre Orchestra, somewhat diplomatically: "He's very hard to satisfy.

All in all, this is a good thing, notes the critic William Littler. "If it's hard for the orchestra, it's wonderful for the audiences. I'm sure, because we don't have a major opera company, we can attract all kinds of really good people around in personality - we get the music as it should be.

Bernardi can be just as blunt in his public pronounce

ments as he is in the rehearsal hall. He once gave two local music critics in Ottawa a dressing-down that made the front pages of the Ottawa Citizen, calling one "a turd" and the other "a reporter" who didn't have an ear.

Bernardi's views on the current state of the arts in Canada.

"Every orchestra that I know of, with a couple of exceptions, is deeply in debt and getting more in debt," he says. "It would be easy to say that they're not doing things right, but I don't think it's really that.

The root cause of all these things, he says, is the sharp cuts in arts funding instituted since 1984. Especially painful for Bernardi is the current state of the agency that made him London debut possible. "The Canada Council has been practically starved to death.

When he was music co-concertmaster of Sadler's Wells in 1966, Bernardi couldn't help but feel a sense of irony. "There was a Canadian being given a position of great trust in London, one of the major centres of the world," he says. "Yet he had a small orchestra, on any positions of great trust [in the music field] in Canada.

At the time, the Toronto Symphony was under the direction of Seiji Ozawa of Japan, the Montreal Symphony Old String Quartet and the Ontario Opera. The orchestra's new conductor, Gerd Dressler, was directing a new opera. "It's a great thing," said Merchant Davies of England was at the helm at the
Young dynamic musicians – the majority Canadian – were recruited from around the world.

Even under former directors Seiji Ozawa and Andrew Davis, the Toronto Symphony never quite got the international profile it was looking for. The National Arts Centre Orchestra was never looking for such a profile but got it anyway.

In 1982, Bernardi left Ottawa for a two-month stint with the San Francisco Opera. That year he also became principal guest conductor for the CBC Vancouver Orchestra, a position he still holds and which takes him to Vancouver for eight or nine weeks a year. In 1984 he was persuaded to take the Calgary Philharmonic Orchestra under his wing as well. Part of the attraction of this was the large orchestra, capable of doing pieces that were beyond the scope of a smaller ensemble like the National Arts Centre Orchestra.

Under Bernardi, the Calgary Philharmonic expanded its repertoire, made some well-received recordings and toured both in Canada and the United States. "It was already a very capable orchestra," says Littler of The Toronto Star.

"Bernardi has turned it into an orchestra able to play and record at an international level – which no one, I assure you, expected would do when he started."

"The years with Mario have been some of the most fruitful, most, I might say, "spectacular," says Philippe Gourdon, principal flautist at the Calgary Philharmonic. "The orchestra has made a lot of progress."

Then, with a note of regret, she adds, "We'll really miss him." Bernardi handed over the reins of the orchestra at the end of the spring.

As to the future, Bernardi says that he'd like to reduce the burden of his obligations. "I'd like to go home. Yet no sooner does he say this than he begins to discuss future projects. Although this past season was his last in Calgary, he will continue to make guest appearances there. And, "Of course, there is a great deal of activity with the CBC Vancouver Orchestra. And, he says, there is always opera..."

This proved to be the right approach for an ensemble whose modest dimensions made even the smallest mistake stand out. It also helped the orchestra rapidly earn a top-notch reputation both in the recording studio and among critics. Time magazine called the orchestra "phenomenal."

"To Britain's Daily Telegraph it was an "accomplished ensemble," while The Times went so far as to say it was "apparently the beginning of a substantial English cello duet potential."

The string quartet played the Mozart and Haydn. Young dynamic musicians – the majority Canadian – were recruited from around the world. Among them was Walter Prystawski, who had been concertmaster in Basel, Switzerland. Joining the National Arts Centre Orchestra was "very exciting, he recalls, because "you didn't know what was going to happen, whether it was going to be a disaster or a great success."

Achieving the latter was a particularly pressing concern for Bernardi, who needed a great deal to come home.

"My contract was full of holes," says Bernardi. "There was a clause stating that if the orchestra's management felt it wasn't going well, all it had to do was pay me one month's salary and that was it. Next to my first performance of Händel and Gersch, the first concert I did with the National Arts Centre Orchestra was the most important I have ever conducted."

Although the orchestra had been together for only a few weeks, it made a strong debut on October 7, 1989. But Bernardi could not relax, for building an orchestra is tough slogging. During the early months he never had a moment of respite, he even studied scores on Christmas Day. Adding to the strain were personality conflicts – and, of course, Bernardi's exacting demands.

"I was hard on the musicians, and they were hard on me. It made a lot of difference to the end of the first year, one-third of the orchestra left."

Undaunted, Bernardi persevered, stressing precision, discipline and structure, the key elements of his music making, "with a lot more emphasis on emotional content," says Prystawski. "His strength was clarity and architecture."

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