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- Of Women and our Literature by William French
- Energy, Exploration, and Economics
Suddenly leaders in fiction.
In poetry sometimes bitter.
"The women are good," says
this well-known literary
critic, "by any standards"

Until 1929, strange to tell, women in
Canada were legally non-persons. A
historic judicial decision during that
year rescued them from their strange
limbs; if men could be persons, so could
women, and they have been ever since.
Fortunately, we don't need a court
verdict to prove Canadian women are
writers; the evidence is all around us, in
unprecedented abundance. Three of the
leading fiction writers in Canada today,
by common consent, are women -
Margaret Laurence, Margaret Atwood, and
Alice Munro. It was hardly a surprise
that in a recent novel-writing contest
sponsored by the government of Alberta,
two of the three top winners were wo-
men. And no one raised an eyebrow in
1973 when the founding meeting of the
Writers' Union of Canada chose a wo-
man, novelist, Marian Engel, as its first
chairman. And no discussion of current
Canadian literature could begin without
mention of Marie-Claire Blais, or end
without reference to Gabrielle Roy.
The situation is not unique to
Canada. In the United States, prolific
Joyce Carol Oates has been hailed by
"Ms." as perhaps the most significant
novelist to have emerged in the past
decade. (Actually she lives and teaches
in Windsor, Ont., but her novels and

The women in
our literary life

by William French

her citizenship are resolutely American.)
At what might be called the interna-
tional level, there are Mary McCarthy,
Doris Lessing, Iris Murdoch, and a
Canadian expatriate in Paris, Mavis
Gallant.

How come? Has the women's lib
movement secretly taken over all the
publishing houses? Have men become
mute and emasculated?

As far as Canada is concerned, there
are a number of reasons. First of all, the

Alice Munro
women are good by any standards. Their popularity and acclaim are justified; their predominance isn't synthetic or phony, something contrived by overzealous feminists. By coincidence, the women writers came along just at the time when women generally were searching for new status, becoming conscious of their repression, sensitized to their potential. The women writers saw the world with special vision, and spoke to and for their women readers. They were not antimal (with a few exceptions), but pro-women. The central characters in most of their novels are women who experience and solve (or fail to solve) the problems with which all women are familiar.

Male novelists, even those who understand and sympathize with women and their frustrations, can't reach women readers in the same way. Portraying a woman in fiction is very difficult for a man to do successfully. Mordecai Richler, for example, admits this is a weakness of his as a writer, and the evidence bears him out.

There's another reason, perhaps superficial. It's commonly believed none women than men read novels, an assumption I suspect is true. Thus, when the women writers burgeoned in the last few years, there was a ready market for their novels. Some of the currently popular women novelists are called "women's writers" in a rather disparaging tone by some men. But the fact is that if men want to keep up with the current literary scene in Canada, they must read the women writers. And they do.

Another circumstance was that the surge of women writers coincided with the nationalist revival of the late 1960s. Canadians were looking for Canadian writers and Canadian themes, and many of those writers just happened to be women.

It was no historical accident that so many came along at the same time. There has been nothing in our past that prevented or encouraged women from writing. We've always had a lot of women writers in Canada—a fact not routinely taught in our schools. But the evidence is there.

In fact, the very first "Canadian novel" was written by a woman—Frances Brooke, an Englishwoman who lived in Quebec City in the 1760s while her husband was chaplain to the British garrison. When she got back to England, she wrote an epistolary novel called _The History of Emily Montague_, published in 1769. It examined the society of Quebec City and in a way foreshadowed the two solitudes of French and English Canada.

Then, around the middle of the 19th century, came a spate of books by women writers that still make good reading—Anna Jamieson's _Winter Studies and Summer Rambles_ (1838), Susanna Moodie's _Roughing It in the Bush_ (1832), and her sister Catherine Parr Traill's _The Backwoods of Canada_ (1836).

No sooner had the women writers of Canada can overlook Nellie McClung. Her first novel, _Sewing Seeds in Dancy_, was published in 1909. It was a comic story of rural Canada, and while it didn't have the staying power of Lucy Maud Montgomery's _Anne of Green Gables_ (published the same year), it sold an astonishing 100,000 copies in the United States and Canada, earning its author $25,000.

McClung is an important figure, not only in the development of Canadian writing, but in the feminist movement. She has become something of a folk hero of women's rights groups. As a suffragette, she campaigned vigorously for the right to vote, and in her mind, religion, temperance, and female emancipation were inextricably linked. She was one of the key figures in the historic Canadian campaign to have Canadian women legally declared to be persons, a privilege denied them under the definition in the British North America Act. She and four other women carried the fight to the Supreme Court of Canada, which ruled against them in 1928. Women were not persons, said the highest judge in the land. They carried the fight to the Privy Council in London, which was then the last court of appeal for Canadians. The council upheld the women in 1929; they were persons. It was a monumental victory.

_Sewing Seeds in Dancy_ was the first of nine bestellers written by McClung. She wrote 17 books altogether, but most of them have now been forgotten. They were not polemics in favor of women's rights, although she used background from the feminist movement in some of them.

The big literary event of the 1920s was the appearance in 1927 of _John_, the first of Mazo De la Roche's series about the Whiteoaks family. It could have been set in an English country house, for all the Canadians contest it had, but the series made _La Roche_ and Canadian writing—known throughout the English-speaking world.

In the mid-1940s, two important novels appeared, and both were best-sellers, even by today's standards. Gwethalyn Graham's _Earth and High Heaven_ (1944) was a study of anti-Semitism in Montreal. Gabrielle Roy's _The Tin Flute_ (1947) was the forerunner of a new breed of fiction, that of urban protest, and was revolutionary for its time in Quebec. It was the first of her half-dozen distinguished novels set in Quebec and her native Manitoba.

The most important woman writer between the late 1940s and the flowering that began in the 1960s was Ethel Wilson, the South African-born Vancouver writer. Her novels and short stories were notable for their sensitivity and deft character sketches. Her 1954 novel, _Swamp Angel_, was a forerunner of later novels written by women. The heroine, searching for freedom, leaves her job, her husband, and Vancouver to find a new life in the British Columbian interior.

The current dominance of women writers began in 1961, with one of those small events that have significance only in retrospect. It was the publication of an obscure novel, _This Side Jordan_, by an unknown writer, Margaret Laurence, who had lived in Africa for several years with her engineer husband. The novel...
that rarity in Canada, the author as public figure; Alice Munro, turning the memories of her small-town adolescence into art; Marian Engel, with her studies of Ontario provincialism, and a host of others with impressive first novels or a sudden flowering after relative obscurity. Among them are Sylvia Fraser, Constance Berryford-Howe, Gwendolyn MacEwen, Adele Wiseman, Adrienne Clarkson, Sheila Watson, Audrey Thomas, Joy Fielding and, in Quebec, Anne Hébert, and Monique Bosco.

Constance Berryford-Howe is a good example of a writer who suddenly found her time and place. Her first four novels attracted little attention. Then, in 1973, her fifth, *The Book of Eve,* was published, and it took off. Its theme, significantly, was liberation; the 65-year-old heroine walked out on her invalid husband when her first-old-age pension cheque arrived, to start a new life of her own. Movie rights to the novel have been sold and it's being turned into a play for presentation at Ontario's Stratford Festival.

Of the leading women writers at present, the best-known and most-ver- satile is Margaret Atwood. Oddly enough, she has produced only two novels — *The Edible Woman* (1969) and *Surfacing* (1972). She originally attracted attention as a poet and has published six volumes of poetry. The ironic and sometimes bitter themes, especially on women's relationships with men, are handled with a poetry and gentleness of tone. One poem in Power Politics, for example, sums up a lover: "You fit into me/like a hook into an eye/your fish hook/is open eye."

*The Edible Woman* was praised by radical feminists because it shows how a woman can be consumed, exploited, and castrated by men. *Surfacing* is more anti-American than anti-men, but the male characters don't come off too well either.

But the work for which Atwood gained more attention was *Surfacing,* a book of criticism in which she searched for themes in Canadian literature. It was highly personal, with a strong argument that the dominant theme is of victim and victim, with Canadians being the victims, particularly of colonialism — first British, now American. The Toronto Globe and Mail reviewer, Phyllis Grosskurth, called it the most important book ever to come out of this country.

Atwood once said she had been described as the Barbara Streisand of Canadian literature, and she preferred to think of herself as Mary Pickford, spreading joy. *The comment is a fair indication of her flare for attracting publicity, who once said, 'I used to have a strong sense of myself as an artist, but now that I have a strong sense of myself as a public figure, I feel as though I have achieved something."

Margaret Atwood is the most prolific of the women fiction writers in English Canada, with five novels, two short story collections, a travel book about Africa, and a study of Somali literature. Of all the current female writers, she probably speaks most directly to women. A consistent theme in her work is of women trying to survive, and succeeding, more or less. The heroines in her novels are trying to break out and escape from something — either the tyranny of old age, as in *The Stone Angel,* a dominating mother, as in *A Jest of God,* she deftly routine of marriage, as in *The Fire-Dwellers,* or a painful past, as in *The Diviners.* In all three novels, she is critical of the way that the different age periods and aspects of womanhood, and dealing with problems that women often experience at some time or another.

Laurence, during her rise to prominence, was not as accessible to the kind of publicity that followed Margaret Atwood. She lived in England for several years after leaving Africa, but moved back to Canada three years ago and now lives in Lakefield, north of Peterborough. Out.

Did Major attempt to collect short stories and a novel, has chronicled, with impressive clarity, the adolescence of a young girl in small-town Ontario. A girl's theme is freedom — both from parents and the stifling conformity of small-town society.

Her books aren't women's books, in the narrow sense. They are about women — one of them is called *Lines of Girls and Women —* but their problems become universal problems. Men don't feel excluded. As Phyllis Grosskurth said of *Lines of Girls and Women.* "If this book has any purpose beyond itself, it may perhaps enlarge male understanding of the female and, more important, give women a tender and, at times, jolting recognition of themselves."

In her most recent work, *Something I've Been Meaning to Tell You,* Munro goes beyond the small town of her earlier books into the bigger world. Again, women are central figures, often women who are at the mercy of men.

Munro is writer-in-residence this year at the University of Western Ontario, which she attended as an undergradu- ate. University officials have not been slow to recognize the talent of women writers, and Margaret Laurence and Margaret Atwood have been writers-in- residence at the University of Toronto. If a man wants to know how a woman truly feels during pregnancy, all he need do is read Marian Engel's second novel, *The Honeycomb Festival.* This one was described as a women's book, even by women critics, and some of them complained that they didn't need to be reminded how it felt to be pregnant. (Male reviewers tended to be fascinated with the subject.)

The story was similar in theme to Engel's first novel, *No Clouds of Glory,* the liberating experience of a sojourn in Europe for a provincial Ontario woman. Her third novel, *Monsooners,* again takes a Canadian woman into a liberating setting, an island in the eastern Mediterranean. The experience this time is ultimately disillusioning.

In French Canada, the three most prominent members of the younger generation are Louise Champagne, Rejean Ducharme, and Marie-Claire Blais. All have remarkable talent, but Blais is unquestionably the most prodig- ious. At the age of 35, she has 14 novels and a collection of short stories to her credit, and has just embarked on a new series of novels about contemporary Quebec life.

Of all the Canadian women writers, Blais is least concerned with women's problems. Women are not the central characters in her novels. In *La bergère,* for example, published two years ago, the two characters are male homosexuals.

Her earlier works were harsh studies of dislocation and deprivation in Que- bec. These novels were full of foreboding and alienation; Edmund Wilson, the American critic who greatly admired her work, said they were among the most persistently painful novels he had ever read. They were properly regarded as metaphors of Quebec's repressive society before the quiet revolution.

Critics in recent years have com- plained that Blais was becoming an archetypical, writing about a society that no longer existed. She has not lived in Quebec for 12 years now, since she went to Harvard University on a Guggen- heim Fellowship arranged by Edmund Wilson. After a year, she moved to Cape Cod and spent seven years there. For the past four years, she has lived in a tiny village in Brittany, but this spring she will move back to Quebec. Her most recent novel, *La bellelette,* was ab- out a nose-thumbing gesture to show the critics she hasn't really lost touch with what's happening in Quebec.

For Blais, the future is uncertain, just as it is for Canadian women writers in general. They've come a long way since Frances Brooke published her novel about Quebec just 10 years after Welted's army captured the city. They've proved — if ever needed proving — that men have no monopoly on literary talent in Canada. Non-persons indeed! It's too bad those sixty Victorian judges of the Supreme Court of Canada who ruled against women in 1928 couldn't be around now; they might just change their minds.

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Into the tough future

The energy resources are there. But getting them?
A new time and new frontiers demand new approaches

In the autumn of 1973, the first deep fear of an energy crisis gripped all of North America. It spread through headlines about nightclubs in Europe forced to close early; in television film of Americans desperately hunting for gasoline, and dealers with none to sell. Indeed, the entire world seemed ready to start blowing on its hands.

In some countries, the fear quickly became reality. Italy, France, West Germany, and Britain staggered as the price of imported oil quadrupled from roughly $2.50 a barrel at the Persian Gulf to almost $10.

What has it meant? In Italy, the collective cost to the treasury went from just over $2 billion to $7 billion in a single year; in Britain, from about $3 billion to $9 billion. Trade balances were thrown more deeply into the red, and most European countries are running heavy deficits.

It’s worth looking more closely at two of them, Italy and France. In Italy, because of the energy crisis, the economy is on the edge of desperation. To pay the increased costs of the oil it needs just to get by, Italy has mortgaged about $2 billion of its large gold reserves to West Germany. As for France, much has been made of its effort to cut consumption (it ordered a 10 percent cut in oil consumption last year) and for understandable reasons. In 1973, it consumed 2.5 million barrels per day, while producing only 26,000. But as The Economist pointed out last September, “Its consumption has actually fallen less” than any other European country. The cabinet was reported considering bans on Sunday driving.

All of this is relevant to Canada, simply because it contrasts so vividly
with the Canadian experience. Along with every other country, Canada had a case of the shivers, but in the end, no case of the shivers. There were no two-block lineups at the pumps, nobody did pushups to keep warm. Just as important, there were no wide industrial cutbacks for want of power, heat, or light.

How come? Many reasons. Chief among them is the fact that Canada is the only industrialized nation in the western world that produces more oil than it consumes.

Canada managed comfortably last winter. And therein is a special danger. Having controlled the situation for a relatively short period we may quite understandably be tranquilized into complacency. That would be unwise, not on account of the real situation. And as Sam Johnson noted in a letter back in 1766, "He that voluntarily continues in ignorance is guilty of all the crimes which ignorance produces." In terms of energy and indeed our national economic stability, such ignorance could have serious consequences.

One thing we have to recognize is the simple fact that Canada is not isolated from the troubled economy that seems to cloud the future everywhere. In terms of oil itself, we are inescapably affected by the world-wide problems of production, pricing, and distribution, and by the volatile politics of the Middle East. So, as one observer put it, "What happens anywhere, matters everywhere."

Moreover, Canada has problems of its own to solve. We need to press on quickly and vigorously in our search for new sources of supply. New supplies won't be available in time to avoid greater dependence by Canada on imports of our current supplies become inadequate to our needs. So, for a period in the late 1970s and early 1980s, we'll be net importers of oil. Imperial estimates that if Canada is to regain by the late 1980s the self-sufficiency it enjoys on balance today, the nation will have to spend some $50 billion in exploration and development between now and 1985. Carrying it all off will depend mainly on Canadians recognizing two things: one, the serious nature of the problem, and two, the need for government attitudes that will help—not hinder—the search for economic new sources of oil.

The best available research indicates that the producing capacity of many existing Canadian fields will begin to decline in a very few years, even with the curtailment of exports recently announced by the federal government. Naturally, in a country such as Canada, which both exports and imports oil, that has serious economic effects. Today, crude oil production is a positive force in Canada's balance-of-payments position; by the early 1980s, our dependencies on imported oil will have tripled, and the growing volume of oil exports will have become a net import into the economy. By the end of the decade, this will have become a net drain on our balance-of-payments position.

Alone in the skies, a helicopter lifts supplies to camp in the high Arctic, clinching production of crude, combined with our increasing demand, will have a negative effect on that position by several billion dollars per year. In its simplest form, that means we could have less money to spend on things we don't grow or make here. Therefore, first goal for Canadians must be to develop new Canadian sources of oil supply. They are there. Geologists say there is a reasonably good chance that about 80 billion barrels of conventional, free-flowing oil remain to be discovered in Canada. That's enough to supply the entire energy needs of a city the size of Toronto for more than 350 years. But it will be highly expensive to find and produce, more expensive than present western oil. Some may be too costly. Why? Because most of it is in less accessible frontier areas—where a single well can cost more than $10 million—primary the Arctic and Atlantic basins. Moreover, something over 63 billion barrels is offshore, much of it in areas that call for drilling methods not yet developed.

There is, of course, the less remote area of the Athabasca tar sands in northeast Alberta. Some estimates say that the Athabasca deposit could hold up to 600 billion barrels of oil. Most of it is buried deeply below the surface under as much as 2,000 feet of rocky soil. No method has yet been developed to recover this deeply buried resource. In some locations—where deposits are near the surface—open-pit mining can be used to recover an estimated 6.5 billion barrels of oil. The oil-soaked sand can be removed and transported to a processing operation where the bitumen is extracted and converted to a free-flowing synthetic crude oil, which is pipelined to refineries. But it cannot be done quickly. There's a shortage of skilled manpower. Also, materials are in short supply, and these constraints make it impossible to build more than one plant with a
capacity of about 125,000 barrels per day every two years. That pace of construction will not produce enough oil to meet our needs. And such a plant costs $2 billion to build.

The reality is that the need remains pressing, and the petroleum believed to exist in the frontier areas of the Arctic and the Atlantic may be able to meet it. It is this opportunity that has sent the oil industry into the frontiers to search for new sources of petroleum. For more than a decade this search has gone on, at a cost already surpassing a billion dollars.

The search is not only expensive, it is not easy. For example, in the Arctic, only one well in eight has yielded significant shows of oil and gas.

Given the high costs, it is clear that investors—individuals or institutions—are a prime necessity to a secure oil future. However, investors need assurance of a just return if the venture is successful. If they don't have that assurance, it follows that the oil Canada requires can't be discovered and developed by private industry—the agency that even government concedes is best equipped to do the job. In a word, getting oil to the consumer in its many, many forms—from the gasoline in the car to the medicine in the pharmacy—depends more on geologists, engineers, and drilling contractors. It requires investors who will finance the expertise and fuel it over the long period necessary.

Attracting new investment, particularly in the large amounts needed by the oil industry, requires a set of circumstances worth examining. One aspect, of course, is an oil company's record. Imperial, for one, has been searching for gas and oil in the Canadian Arctic since 1964. Its first geological crew actually went to the Arctic back in 1947, and the discovery record over the years of Imperial and others has been promising. In the seventies, for example, there have been finds around the Mackenzie River Delta and work is proceeding in several other locations, on land and off shore.

A significant amount of the work has been financed by Imperial's own profits. In fact, profits have been the principal source of the money required in recent years. In 1973, for instance, Imperial's earnings were $228 million—it spent $333 million. Of that, $214 million came out of earnings. Another important source of these funds has been the capital market, but whether this market will continue to be a source of funds for petroleum energy development is critically dependent on the investor's perception of the return he can expect on his capital. In recent years, investors have had to take into account not only the experience and expertise of the industry, they have had to consider the size of government "take" from the production of oil and natural gas.

The amount of that, and the chance of it changing from period to period, have an influence on the enthusiasm of potential investors. Imperial Oil's chairman, J. A. Armstrong, noted this in an address to the Canadian Tax Foundation last fall. He pointed out that the amount an investor will receive is highly relevant in influencing him favorably. But beyond that, he is also swayed by the record of stability or instability in the regulations governing the amount of the government's portion. He said, "Given the fact that you are committing your money and will not obtain a payout for 10 to 15 years, you have to consider whether past experience suggests the rules are apt to change halfway through the game."

Over the years, governments have received vast sums of money from the operations of the oil industry. The province of Alberta is the obvious example. Since 1947, the year of the famous discovery at Leduc in that province (which began Canada's post-war oil prosperity), Alberta has collected nearly $5 billion as a result of the petroleum industry's exploration and development.

That came primarily from royalties, lease sales, and rentals. In addition, during the same period, federal and provincial governments claimed about $1 billion in income taxes as a result of the activities of the petroleum industry. Then, last year, the federal government alone took an additional $1.6 billion in export taxes. There is more to the full understanding. The figures stated here are for government revenues that come directly from the industry. To complete the picture, it is necessary to examine briefly the social and economic benefits that flow to Canada, simply because the industry exists. One statement from Alberta Premier Peter Lougheed is a window on these benefits. "Our assessment," he said more than a year ago, "is that the petroleum industry accounts directly or indirectly for over one-third of the total employment of our province."

Employment resulting from oil-industry operations varies in other provinces but the national totals are substantial. "This multiplier effect of the industry's operation in all parts of Canada," says Imperial Oil's president, R. G. Reid, "is one that cannot be over-emphasized—indeed, it is an element that must be kept in mind in all decisions affecting the industry's future."

Hence, the subsequent development of the petroleum industry and Canada's energy sufficiency are entwined with both investor confidence and government awareness of public need and how to fulfill it. The potential resources are there. The demand to develop them is as great as the risk inherent in the search.

It is inevitable that if the risk-taker sees the risks growing and the rewards diminishing, he will look elsewhere. As a result of the uncertainties created by the proposed federal budget of May 6, 1974, capital and skilled personnel began leaving Canada for other countries where their value and talents appeared to be better appreciated. The Nov. 16, 1974, budget provisions, combined with provincial tax and royalty rates, resulted in major reductions in planned expenditures by many companies; Imperial announced a reduction of $1.5 million in its capital and exploration budget for 1975. The explanation: government take had become so great the oil companies simply didn't have the cash required to carry on a high level of capital and exploration expenditure.

In the years surrounding the great Leduc find, our public policies encouraged vital investment in oil and natural gas development. It is to be hoped that government will return to venture-oriented public policies, for it is only through these that Canada can develop the energy its people need.

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Seen under construction last summer, Strathcona refinery reaching upward
As old reserves dwindle, the hunt continues on new frontiers. It’s not easy. But much of Canada’s future well-being is involved.

There is a natural law of human nature that states: the harder shall be left to the last. Thus, the first Canadian oil discoveries in Ontario in the 19th century were detected fairly easily by means of surface seeps, and dug fairly simply by pounding a cable tool into the ground. From then on, everything in oil exploration has been pretty much of an uphill grind.

The western Canada finds of the late forties and throughout the fifties came harder. A long, dry, frustrating search preceded Leduc Number 1, the well that indicated the existence of large oil reserves in the region. More science was required, more cost was involved, much deeper wells were drilled with rotary drills. Still, it could have been worse, as the oil explorers were to find out later. The pioneer terrain was accessible to oil crews year-round. The weather was bearable. Civilization was usually near at hand.

Now, with oil reserves dwindling in the western provinces, necessity has moved the search into the last and most difficult of Canada’s conventional oil-bearing regions—under the seas and along the Arctic frontier. It is a mad dash for oil reserves, full of surprises and fraught with expense.

Your well-rounded Arctic oil seeker should be fitted with webbed feet (for navigating snowdrifts in winter and soggy muskegs or offshore water in summer), polar bear fur (for winter temperatures down to 70 degrees below zero), and caribou hide (for resisting the attentions of blackflies and mosquitoes by the billion). It would help if he had x-ray eyes, to see through blizzards and to penetrate thousands of feet of permafrost, earth, and rock to locate oil deposits. It would be nice if his left arm were a printing press, capable of cranking out thousand-dollar bills to keep up with escalating costs.

In the absence of any such Six-Million-Dollar Man, today’s frontier oil explorer is a composite of geologist, geophysicist, and optimist. He has been actively searching for a decade, and he is keeping at it because all signs still indicate that the prospects are good. And much of Canada’s future well-being hangs on the frontier oilman’s eventual success.

Most people think Arctic exploration is a recent development. In fact, Imperial geologists were deep into the Northwest Territories in the winter of 1947, traveling by dog sleds in 40-below-zero weather, to examine rock outcroppings in the Caribou Hills and British Mountains. They chose this bleak season for their work because it is the best time for travel. In summer, much of the Arctic land area resembles a vast, water-logged sponge: muskeg land speckled with thousands of little lakes, channels, and potholes, almost impossible.

In any oil search, surface geology is the first main step. By studying the lay of the land and analyzing rock samples, geologists detect the kinds of formations that may be worthy of further investigation. In this case, they
Inching its way to Tuktoyaktuk, a tug with six barges, heavy with equipment, navigates the Mackenzie River.

reconnoitered that the Caribou Hills region might be underlain by a sedimentary rock basin comparable to the great oil-bearing gulf basin of the southern United States.

But just then Leduc was found, and the subsequent chain reaction of prairie oil discoveries dominated all exploration time and money for several years. By the early 1960s, however, long-range forecasts showed that prairie oil reserves were limited. Eventually, Canada would have to look elsewhere, if domestic and export markets were to be satisfied. Since it takes eight to 10 years to bring in a new oil field to production after discovery, the time to start looking for new reserves had already arrived.

In 1964, Imperial acquired exploration rights in the Arctic region to some eight million acres in the Peel Plateau and some 10 million acres in the Beaufort Basin, north of the Peel Plateau. Together they embrace a tract of land and water reaching south below the 68th parallel, west into the Yukon Territory, east to the Tuktoyaktuk Peninsula, and north some 40 miles off shore in the Beaufort Sea. Some-where in this vast area, there might be large reserves of oil and gas.

The search began in earnest. Geologists now traveled by helicopter, not dogsled. The first Arctic seismic operations began. Seismology takes the hunt a step beyond surface geology. Seismic crews detonate small explosive charges in the ground and record the shock waves that rebound from underground rock formations. Later, these are processed in a company data centre, producing a pattern of wavy lines representing a picture of the underground strata. To the trained geophysicist, these “pictures” indicate the kind of sedimentary rock formations that sometimes hold oil and natural gas in their pores.

In that first year, Imperial spent about a quarter of a million dollars on Arctic exploration, a small sample of what was to come. Seismic and geological surveys went on during 1965. The crews were discovering just how brutal the region can be. Compared to the Arctic, northern Alberta seemed like the banana belt. Years later, Oty Gorgichuk, who was chief of Imperial’s pioneer Arctic search party for a time, remarked, “There’s no other place in the world where you have to spend so much time on survival.”

One party worked 38 days at temperatures of 40 below or colder. Since the average camp thermometer bottomed out at 50 below, the crews generally brought the thermometer in at night to keep it from bursting.

Through December and January in the high latitudes, daylight ranges from five hours to none, depending on location and date. So, the crews worked mostly in the dark, sometimes wearing miners’ lamps strapped to their heads or arms.

Conversely, earlier in any given
winter, it sometimes wasn't cold enough. Other times, hidden under the first snowfall, wasn't frozen deeply enough to support the exploration vehicles. More than one truck or tracked vehicle had made it through the ice; more than one driver had to jump for his life.

There were blizzards – the dreaded Arctic whiteout – when visibility is nil and the safest tactic is to sit tight in your vehicle and wait it out. Throughout history, survival was very much dependent on their own resources. There was contact with home base by radio and aircraft – if the planes could fly and if the circuits and atmospheric conditions didn't jam radio transmission.

Yet the search went on. In 1965, Imperial drilled two exploratory wells on the Peel Plateau. Both were dry. Imperial, with two other companies, drilled the first well in the Beaufort region that same year. It was a dry hole, too. One aggravating fact of the oil business is that drilling is the only real test for oil. Geophysical studies can turn up two identical sedimentary basins – yet only drilling will determine that one may contain oil and one may not. So, every dry well – meaning one drilled on an unproven prospect – is a gamble.

In 1966 and 1967, Imperial drilled six more wells on the Peel Plateau, all dry. A dry hole is not a total loss. It brings up valuable rock cores that are studied for fossils; it delineates and verifies underground formations that can only be guessed at by other means. Each additional piece of information goes into a bank, adding sharper focus to the search in that particular region.

Nevertheless, a succession of dry holes is not cause for cheering. Neither are the special problems posed by the Arctic terrain. Much of the landmass lies beneath permafrost – a varying mixture of soil, gravel, rock, and ice, anywhere from a few inches to more than a thousand feet thick. Where there is a lot of ice in the mix, buildings must be erected on stilts; otherwise their warmth would melt the permafrost and cause the structure to sink. Permafrost also affects the velocity of seismic shock waves. Seismic crews had never encountered anything like this before; their readings had to be corrected according to the depth of the perma-

frost – just another headache they hadn't expected.

Then, in 1968, the Canadian exploration force got a psychological lift: oil was discovered in great quantity at Prudhoe Bay on the north slope of Alaska. Geologically, the U.S. north slope and the Beaufort Basin are in the same family. The implications were obvious. An "in-joke" among oilmen that summer was that while Canada was being swept by a new phenomenon called "Prudusmania", the oil industry was ripe with "Prudusmania".

Encouraged by Prudhoe, and with some solutions to the seismic problems in permafrost (produced by Imperial's Calgary research lab), the company stepped up seismic exploration in 1969. It also produced more dry wells. But in January, 1970 – bullseye! Oil flowed from Imperial's well at Atkinson Point. As well as being an object lesson in persistence, it illustrated the advantage to Canada of a competitive oil business: much of Imperial's northern holdings had already been explored – and abandoned – by other companies.

The elation was short-lived. Six other wells drilled that year were dry. In 1971, there were two discoveries – an oil well and a gas well. It went on like that in the early 1970s – hope, disappointment; discovery, failure. Meanwhile, the search had been going on since 1964, in conjunction with others, off shore on the Atlantic coast. There, seismic surveys must avoid the usual explosive, to protect marine life. A pulser, towed behind a boat, produces the necessary shock waves. Drilling is conducted from
great floating platforms, anchored against storms and waves, many miles off shore. An Atlantic off shore well costs over $2 million, roughly five times the expense of a well on the plains of Alberta. But building artificial islands in the Arctic off shore and drilling wells from them as Imperial is now doing in the Beaufort Sea – can cost more than $10 million per well.

Much of the enormous cost is in logistics: the moving of men, food, supplies, and machines. Although as much material as possible is barged down the Mackenzie River into the Arctic during the short ice-free season (maximum 18 weeks), much of it inevitably must be flown in. Most travel in the Arctic is also by fixed-wing aircraft or helicopter, partly for ecological reasons. Damage to the land must be kept to an absolute minimum. Winter roads are made of high-packed snow to prevent vehicles from leaving a trail that will remain after the spring thaw. Bull-dozers must not scrape away any of the delicate Arctic ground cover, since this would, in summer, set up "thermokarst" – a thawing and settling that leaves ugly gullies in the land. All of these conservation measures are necessary – and costly.

So far, in its 10 years of Beaufort exploration, Imperial has drilled 48 wells and made six discoveries. And in the decade ending in 1974, it had spent in excess of $150 million on Beaufort seismic work and on drilling.

By oil-industry standards in southern Canada, this was a good discovery rate – much better than the 133 consecutive dry holes that preceded the finding of Leduc Number 1. But what would be a big field in the south is an unacceptable risk in the Arctic. Imperial and others are admittedly looking for very large deposits that will justify the enormous costs of finding Arctic oil and transporting it to distant markets.

Costs of new supplies were indicated at the 1974 Petroleum Conference of Imperial Oil Limited, by J. A. Armstrong, the company chairman. In exploration and development of conventional oil and natural gas, he said, capital costs range from $1.2 billion and heavy-oil development, Armstrong foresaw Imperial spending between $4.5 billion and $6 billion on exploration and development in the years from 1974 to 1984. Of that amount, between 62.5 billion and $3 billion would be spent on exploration and development in the frontier areas – the Arctic and off the Labrador coast.

Several months after Armstrong's remarks, the federal budget of Nov. 18, 1974 revealed policies that deeply affected Imperial's current exploration program. In recognition of this, Armstrong wrote the company shareholders.

"The effect of the budget," he stated, "combined with provincial tax and royalty levels, will be to reduce severely the company's available cash flow, and capital and exploration expenditures will of necessity be about $115 million less than had been originally budgeted for the coming year." As 1974 came to an end, changes in Alberta's royalty provisions eased some of the pressure on the oil companies.

Imperial has stated, however, that further changes in both provincial royalties and federal tax provisions will have to be made if the industry is to be able to generate the revenues and attract the investment necessary to finance the high level of exploration and development required.

And some other factors still remain. For example, even when sufficient reserves are established, production of gas can't move to southern markets until at least 1979 – depending upon completion of the Arctic gas pipeline. Oil is not expected to start flowing south before the early 1980s.

Bases by climate, terrain, expense, and uncertain regulations, the Arctic hunger goes on. The pace will be determined by government regulations and tax policies.
The world cancer conference conjures up nightmares of pain, suffering, and inevitable death. We all know someone who died of cancer. My mother did. So did an uncle. So did my wife's father.

Facts and figures alone can't lessen that dread. For cancer is a particularly treacherous disease — actually a system of diseases. It turns the cells of your own body against you, by causing some of them to multiply out of control. Cancer is the world's second-largest medical cause of death. Each year in Canada alone, 30,000 people die of cancer; 100,000 are under medical care for it, and 65,000 new cases are diagnosed.

Bluntly put, one out of every three people will get cancer at some time in his life. One out of every six will die of it. And a number of specialists now believe that one out of one — everybody — may already have cancer. It's just waiting for the right conditions to develop.

But though such figures are frightening, they also are heartening. If you read them another way, two-thirds of us may already have defenses against cancer. Fully half of those who get it can be saved. That's a very different story from just 30 years ago.

"Before 1947," says Dr. Richard Hasseleck at Toronto's Princess Margaret Hospital, "we had no drugs for treating cancer. Now we have between 30 and 40, depending on where you draw the line between clinical and experimental use."

"When I was a student 20 years ago, childhood leukemia used to be a death sentence," recalls Dr. Tony Miller of the National Cancer Institute (NCI). "Now, most of these children can expect a normal lifespan."

Some forms of cancer offer better chances of survival than others. With lung cancer, the chance of recovery is only about five percent. But skin cancer, the most prevalent form of all, is almost 100 percent curable. Patients with cancers of the lip, larynx, breast, cervix, and lymphatic system, if treated in time, all have about 80 percent survival.

"We don't worry much about skin cancer anymore," says Hasseleck. "The real urgency for research pretty well ends as soon as you have a relatively simple diagnosis, reasonably economical treatment, and negligible side effects — even if you can only speculate on how or why it works."

Then why is there still so much fear of cancer? Christina Smith, who lost a breast to cancer, says: "The people you remember are the ones who died. Most people probably never hear about the ones who survive. They don't realize that cancer can be beaten."

Smith is living proof. You may have seen her on television, in a Canadian Cancer Society commercial, a red-haired, middle-aged woman playing tennis with her daughter.

Canada is a world leader in fighting cancer. During a forum, one specialist announced: "If I had cancer anywhere else in the world, I'd want to come to Canada for treatment."

Canadian researchers, headed by Dr. Harold E. John, developed the cobalt therapy unit (popularly and inappropriately called the cobalt bomb) at the University of Saskatchewan in 1951. It is now used in radiation therapy all over the world. Dr. R. L. Noble and a University of Western Ontario team extracted a potent, anti-cancer drug, vincristine, from the leaves of the periwinkle plant. Two Montreal doctors, S. O. Freedman and Phillip Gold, developed a blood test for cancer of the lower bowel. It's apparently not foolproof, and too expensive to give to everyone. But its use may...
enable surgeons to check that they did remove all the cancer cells.

And Canadian research is continuing. Barely a year ago, Dr. W. M. Mak and Dr. A. F. Hamilton of the Ontario Cancer Institute earned world fame among cancer researchers. In their laboratories in the Princess Margaret Hospital, they isolated a human leukemia virus. Hamilton has photographed it with an electron microscope. With characteristic caution, the two doctors describe it only as "particles having morphological and chemical properties strongly similar to known animal-tumor viruses."

"Virus" does not mean "contagious" in this case. Mak explains by speaking of mice, which are particularly prone to leukemia. As he talks, he jots graphs and charts on a blackboard. "You take a mouse, in complete isolation. You X-ray it. In two or three months, it will develop leukemia." A line on his graph suddenly shoots up to show the rapid increase in leukemia cells. "During the month before, we watch for evidence of a virus developing." A second line skyrocketts up the graph. "We have various ways of testing for it. We can filter away all the cells, even all the bacteria, and still find it. So it can only be a virus. And that virus could only have come from within the mouse itself, not from any other mouse."

Previously, there had been some evidence of such a virus in humans. But it's much easier to isolate in mice. "They're loaded with it," says Mak. Instead of trying to filter the virus from human blood, Hamilton and Mak started with bone marrow, the body's blood-cell factory. "We grew cultures under conditions in which leukemia cells seemed to be most comfortable and grew best." Suicide hasn't gone to Mak's head. "We were bloody lucky," he says with an unintended pun. "We were able to work on the guts of mice like Dr. James Till and Dr. E. A. McCulloagh." Till and McCulloagh are blood research specialists at Princess Margaret Hospital.

The practical applications of their discovery still have to be worked out. They'll depend on whether the virus actually causes the growth of cancer cells, or is merely an advance warning. "And you can't just grab a guinea pig and start him on the full virus to see if he gets leukemia," comments Mak. But if, after lab testing, the virus turns out to be the cause, drugs can be developed to act against the virus instead of against blood cells. Or, if the virus is an advance symptom, it could allow preventive treatment for some people with rare, high-risk blood disorders, interrupting leukemia before it really gets started.

The Ontario Cancer Institute's director of biological research is Dr. James Till. He carefully avoids speaking of a "breakthrough" or "cure." All too often, he suggests, such words get used by headline-hunting writers, or by quacks, and sometimes even by reputable researchers drawing up old developments for publicity to win more research funds. Instead of spectacular cures, he forecasts steady progress. "We've done all the easy things," he states. "To deal with what's left, we're going to have to know a lot more about why cells act the way they do."

That's his field. He's studying the cell membrane, the skin of the cell. "Leukemia is the extreme example of malignant cancers," he explains. "It has no tumor mass. But it's constantly disseminating its cells through the body. So surgery isn't feasible. You have to use drugs, which kill cancer cells, but also kill many normal blood cells. So in a sense, you can kill the patient with the cure."

But the blood also has what are called stem cells. Till was largely responsible for discovering them. The blood always has a lot of stem cells, just resting, waiting until they have to become one of several types of specialized blood cells doing a particular job. And these resting cells are much less affected by the drugs than the busy dividing cells. "If I could tell the stem cells when to go to sleep," Till says, "and then zap the cancer cells with drugs, and then tell the stem cells when to wake up, we'd really have something!"

"The evidence is that the signals that tell the genetic material inside the stem cells what to do are transmitted by the cell membrane. I just don't know how yet!"

While Till and others focus on the basic unit of cancer, the cell, some researchers take a different approach. They look for causes among the human race as a whole. For a long time, they've known that some people, in some places, have had much more or much less cancer than others. But why?

Why do Newfoundland men have 50 percent more stomach cancer than men elsewhere in Canada? Why does the United States have 50 percent less? For every 24 Canadian women who get breast cancer, why, proportionately, do only four Japanese women and one Eskimo woman get it? And why, when Japanese women move to North America, does that difference disappear in three generations?

Why does Canada have the world's third-highest rate of cancer in the lower bowel? Why does only one heavy smoker in 10 get lung cancer? Why is that risk greater if you come from Britain? "You and I are more susceptible than someone from France or Norway," Dr. Tony Miller of the NCI told me. "And I have more risk than you, because I came over here only three-and-a-half years ago."

NCI runs several wide-scale studies, looking for answers. They're studying diets, and finding relationships between the kind of cancer you get and the food you've eaten over a lifetime. They're giving about 150 Canadians who have had lung-cancer surgery a special cocktail each week. It contains BCG, a strain of bacteria used in anti-TB vaccinations. It stimulates immunity defenses," Miller explains. "We know it can't cope with a full tumor. But maybe these defences can destroy stray cells left behind when a tumor is removed."

"We see if we can reduce the risk of death from a subsequent cancer—which at the moment is very high indeed."

TB is also related to another NCI study, dealing with repeated exposure to low-level radiation. "Not many human populations have these data available," says Miller. "We're the only country I know of that's acting on it."

Up to 1956, hundreds of TB patients were treated by collapsing their lungs. Their progress was checked by regular fluorescent examinations, which give measurable doses of radiation. These patients' health records can be compared with TB patients who didn't get this treatment. But Miller notes a second level of comparison: "Nova Scotia used a different fluorescent practice. They turned their patients around, to cough at the machine instead of the operator. Consequently, women's breasts there, being closer to the radiation source, received roughly 10 times more radiation."

The study's results are not complete. But Miller says, "The breast cancer risk for these Nova Scotia women may be greater."

In a similar way, other hazards can be tracked down. Benzene and other compounds, aniline dyes, asbestos, and uranium dust, are all now known to be carcinogenic. Canadian medical records document the story of a chemical worker who told his doctor he had lung cancer. "How do you know that?" asked the doctor.

"Because the 11 guys who had the same job before me all had it," replied the worker. Soon after, the company he worked for installed covers on its vats of chemicals.

The electron microscope, capable of magnifying minute particles..."
More and more companies are recognizing these industrial hazards. “Most of the ones I ran across are trying to be good corporate citizens,” says Dr. Robert Morgan, head of the University of Toronto’s department of preventive medicine. Since 1971, he has worked with several oil companies and refineries, Imperial Oil among them. “I haven’t run into any resistance,” he says.

Morgan is a man who deliberately chooses blunt speech to make his points. He’s convinced that the only ultimate cure for any disease is prevention. But the problem is to prove that something that didn’t happen was prevented. Sometimes Morgan sounds quite weary when confronted by people’s apparent refusal to practice prevention. “Adles- too?” he explodes. “We know it’s related to lung cancer, and at least two other cancers. And yet men won’t wear respira-
tors on the job because they think it’s chicken or something! Then 30 years later, cancer hits them.”

It’s possible 80 percent of present cancers could be eliminated. That’s an arbitrary figure, derived from the lowest incidences of the different kinds of cancers around the world. “These people, wherever they are, have a lower cancer rate because they’re doing something that we aren’t – or maybe they’re not doing something we are,” Dr. Richard Hasselback explains. “If we can find out what it is, our rate could be as low as theirs.”

The trouble is, finding the problem is much easier than convincing us to change our habits. Morgan states tersely: “Breast cancer risks are related to the age at which a woman has her first child. At 15, it’s one-third the risk of waiting until 30. I can see this influencing a married woman who’s wondering whether to have a child now or wait a few years. But can you imagine parents encouraging their daughters to get pregnant at 15, for protection against future breast cancer?”

He has other examples. “A factor in cancer of the cervix is sexual activity, especially the number of partners. We could prevent it by stopping sexual intercourse. More rigid moral standards would reduce it. So how easy would that be to achieve?”

If judged by the success of anti-smoking campaigns, widespread cultural changes are unlikely. Cigarette smoking has been conclusively shown to affect cancers of the lungs, bladder, mouth, and throat – it has been linked to more human cancers than all other known cancer-causing agents together. Lung cancer is nine times more common among smokers than non-smokers. In Canada, it kills almost twice as many men as any other form of cancer. As well, smoking affects diseases of the heart and blood vessels. Yet many smokers won’t quit even after losing a lung. “We just haven’t made a dent in that problem,” admits Robert Morgan.

Yet the challenge is there. “Without any new medical advances, 30 percent of today’s cancer could be eliminated,” states Richard Hasselback. He wants every woman to take a Pap smear test at least every two years. He wants smoking abolished.

And success is possible. In the 1950s, British Columbia launched the world’s largest screening program for cancer of the cervix, using the simple, painless, Pap smear test. Dr. David Boyes, of the British Columbia Cancer Institute, credits the program with cutting this cancer’s incidence from 28.4 women per 100,000, to 9.2, and halved the death rate.

But abolishing smoking is more difficult. Some cancer specialists now argue that smoking should be legislated out of existence. “Other controls aren’t very effective,” admits biologist James Till. “Unfortunately, if you advocate legal controls to save people’s lives, you’re accused of either puritanism or extremism.”

“Smoking is our failure for excellence,” agrees NCI’s Tony Miller. “Mind you, it’s not a complete failure. Doctors are getting the message and already their death rate for lung cancer is dropping. But we’ve failed tragically in being unable to persuade young women not to start smoking.” (Traditionally, seven times more men than women died of lung cancer. Today, as more women smoke heavily, they are moving towards equality in death rates.)

A stumbling block in cancer prevention is human fear of the disease and its inevitability. “They think of cancer the way they used to think of leprosy,” said one bitter patient. Shortly before his death, the Rev. Eugene Lohnes, a United Church minister at Sunderland, Ont., noted: “If you have a heart attack, people assume you must have worked very hard to get it. But they seem to think you must have done something dreadful to be punished with cancer.”

Christian Smith now spends much of her time helping other cancer patients and their families adjust, mentally and physically, to a normal life. She recalls a visitor who accosted the already distraught wife of a cancer patient: “I guess you won’t be needing your boost next summer! How about letting us have it?”

Some patients are no more enlightened. Some husbands and wives won’t have intercourse for fear of infecting each other. One woman went home after a mastectomy or breast removal and used separate dishes, towels, and chairs. “She wouldn’t even pick up her little baby,” says Smith.

She encourages women who have lost a breast to talk about their feelings. “Many women go into complete depression,” she explains. “They’re afraid they’ve lost their sexual attractiveness. In many cases, it results in a separation – and the husbands may not even know what their wives are thinking.”

She was fortunate. She had no choice but total honesty. “I had a five-year-old at the time,” Smith laughs. “She begged that she had the only mother on the block with just one breast.”

Recently, there has been controversy about two kinds of breast surgery. Smith had the same operation as Betty Ford, the U.S. president’s wife. The entire breast is removed, along with the underlying muscles and the lymph glands in the armpit, in what is called a standard radical mastectomy. Some doctors believe a mastectomy is unnecessary. They prefer a “lumpectomy,” removing only the tumor. Survival rates are almost identical.

Which is preferable? No one really knows. And the decision is not easy for the doctor, or the woman, or the man who loves her. Richard Hasselback: “He wants every woman to have thought a mastectomy had mutilated her. A colleague, who chose to do a lumpectomy, now says: ‘I can see that patient growing steadily more fearful because I did not remove the whole breast.”’

Nowadays, when neither patient nor doctor knows which of two or more treatments is better for a particular type of cancer, they may take part in clinical group research. Richard Hasselback explains: “It’s a bit difficult for a doctor to compare results if he treats only 10 patients a year with that type of cancer. So we get together, agree to let chance decide which treatment will be used, and keep records to compare.”

After diagnosing the cancer, the doctor telephones the NCI on Adelaide Street in Toronto. They allocate, at random, one method of treatment for that patient.

“No one gets stuck with inferior treatment,” Hasselback hastens to add. “This is done only when the choices of treat-
ment are equally beneficial. If we find at any time by one method shows less value than another, we drop it, immediately.

“If the physician – or the patient, for that matter – has strong feelings that treatment A is preferable to treatment B, it would be immoral and unethical for him to take part in these clinical experiments.”

At the NCI, Tony Miller agrees. “You do this only when you simply do not know which choice to make. I don’t see any other way of finding out which is the best therapy.”

He speaks from experience. While working with the scientific unit of the British Medical Council, he was involved in lung cancer trials. One group got standard surgery. The second got surgery plus follow-up drugs. He learned the second group had higher hazards – and was just in time to stop the second method from being adopted as standard medical practice.

“I’m optimistic about cancer,” Miller says. “At least people are more realistic than they were; we know now there’s no magic silver bullet that will suddenly sly cancer. "We have to do now a apply what has already been discovered. And that’s the unanswerable question: are people prepared to modify their habits, their values, and maybe their lives, to prevent cancer?”

A technician checks the purity of a cancer drug
People who work in offices or factories or any other inside place don’t see the moon the way I do. I get into my truck — it’s a train, as we call it, or a double bottom, a long truck plus another long trailer that together weigh 138,000 pounds when they’re filled to capacity with fuel for delivery — and I drive out the highways heading north or east or west from Toronto. And when I’m on the night shift, I always see the moon in beautiful ways that city people wouldn’t believe.

I see the moon changing and growing so that it seems to be coming closer to me all the time. Some nights, all alone out there in the dark, I’ve felt like I could just about reach out and touch the moon. Does that sound funny? Not to me. I’ve been driving Imperial Oil trucks for 13 years, and almost every night that I’ve been on the highway, I’ve got a really good and peaceful sense of the beauty in nature all around me.

I think I see a lot more than other drivers do, especially car drivers. I’m not just talking about the moon and the rest of nature although that’s a big part of the pleasure in driving for me. I’m also talking about the highway habits of other drivers. I have to keep my eye on cars because, in my opinion, a whole heck of a lot of people in them don’t have half the training or skills they need to handle the big vehicles that so many of them drive. It only takes a small error, a split-second loss of concentration, and a fellow behind the wheel of a car can get himself and everybody around him into big trouble. And, believe me, it’s truck drivers with all the weight they have to look after who are most likely to run into danger from somebody else’s driving mistakes. Almost always, they’re mistakes that just couldn’t happen if people took defensive driving seriously, the kind of driving encouraged by the Canada Safety Council, which incidentally, Imperial Oil really supports.

I remember one time, after dark on a spring night, when I was driving my truck south on Highway 11 in the Muskoka district of southern Ontario, just driving along and minding my own business, and my gosh, I ran into one heck of a fix. I was going south. The highway had two lanes at that point. One was southbound, one northbound. And sitting way up high in my cab, I could see three vehicles heading toward me, a car, then a bus, then another car. The three of them were still half a mile or so away, but it was clear to me that the front car was coming on at full speed.

The guy was going north in the southbound lane, and I couldn’t figure out why. I put my high beams on to let him know I was there if he couldn’t already tell. No change. He held on in the southbound lane. I blinked my high beams at his headlights at him. Still no change. He was coming straight at me. This guy, I thought, has got to be crazy. I blinked again. He was really close to me by then and still coming on. The blinking did no good.

Well, it looked like it was up to me to make a move. I had no choice. The shoulder on the side of the road was very narrow, particularly for a truck like mine, a truck with 30 wheels. But at the last moment, with the car gunning down on me, I pulled hard on my steering wheel. I pulled hard to the right, and I kind of nudged the truck and all its tires onto the tiny shoulder. Inches off the highway, only inches. And just as I did the northbound car pulled past me, still in the southbound lane, still hitting a fast clip of speed.

I sat there in my cab wondering what in dickens that crazy guy had in mind, and as I was sitting and wondering, the bus that had been behind the car went by and the driver blinked his lights at me, as if to say what he was doing. He was saying thanks, thanks to me for avoiding the accident.

Anyway, that’s an example of the things I see from behind my steering wheel. That’s a quite extreme example, of course, but it’s still true that in my business there’s never a dull moment. In some cases, I can take in the beauty of the countryside — like all those changes in the moon — and in others, the kind I never look forward to, I have to act quickly to head off a driver who does something completely unexpected. Nothing really surprises me once I pull my rig onto the highway.

I guess the starting point for me, the reason I feel pretty comfortable no matter what, is that driving trucks is in my blood. I’ve been doing it since I was 14 and I’m 42 today. I grew up on my father’s farm 40 miles into the bush from my home in Glasgow, N.S. On a farm, you just naturally learn to drive all kinds of vehicles, and by the time I turned 14, I was behind the wheel of an old army truck hauling logs along rough trails in the bush. When I was 16, I built my own tractor out of a truck body and an old army tractor. At the same age, I went to work for a mill driving a truck that carried huge loads of lumber. The truck wasn’t exactly the up-to-date sort of model that I handle today at Imperial. I remember one day when I caught six flats with that old truck and had to repair them all by hand. I’d left loose at six in the morning and I didn’t get back again until two o’clock in the morning on the next day. That’s what I mean by driving trucks getting into your blood.

I learned about the insides and the outsides of trucks down there in Nova Scotia. I took a course in auto bodies and worked in repair shops at home and also in Toronto when I moved up here exactly 20 years ago.

Then I shifted to mechanic’s work in a garage. I liked the jobs fine, but I always missed something. It was the outdoors. In Nova Scotia, on the farm or at the mills, we were always in the open air. Oh, we might go indoors now and then in the winter to play cards — there was no TV back then, that’s for sure — but most of the time we’d be outside working or hunting or fishing or trapping through the woods and fields. I missed that feeling of life, and on Dec. 27, 1961 — I’ve never forgotten that date when, after the change to start driving for Imperial Oil, back in the outdoors, I didn’t hesitate for a second time.

I didn’t start right off on the trains. Instead I started on a small tank, one that held 2,000 gallons of fuel, then up to the straight trailers (5,000 gallons), then the pups (7,700 gallons), and on up to the trains that I handle today.

Toronto’s my home now. I married a Toronto girl in 1965. At vacation time, we like to travel. I’d probably be happy to sit behind the wheel of my ’68 Dodge convertible for the whole holiday — and we have gone on lots of good driving trips, especially back to Nova Scotia — but my wife isn’t as keen on the highway as I am. She gets impatient. Not me: I could drive forever.

When I work I really chalk up the miles. It’s nothing, for instance, to haul some turbu fuel up to Sudbury, break it, turn around, and drive straight back to Toronto. The round trip comes out to between 10 and 12 hours on the road, and with the occasional trip of that length, it’s easy to see how I average around 50,000 miles every year.

It’s also a privilege. I have plenty of chances to watch and think about the drivers who share the highways with me. I’ve seen my share of accidents, though I’ve never been personally involved in any serious collisions myself. I’ve seen plenty of examples of plain awful driving. As far from all that experience, I’d say that if there’s one single cause of danger and accidents it’s simply that, these days, people are in too much of a hurry for no good reason at all.

Let me give you some illustrations of what I mean.

One. There’s the fellow who roars up behind you on the highway, and you can tell that he’s impatient to get by you, gunning his motor, peering around the sides of your vehicle, giving you fits. Then he finally roars past you and heads up the highway. Where’s he going in such a rush? Well, sure as not, you’ll spot him in a couple of miles pulling into a restaurant where he’ll kill half an
hour over a cup of coffee. He’s risked his life getting to a cafe full of coffee. Two. Let’s suppose I’m on a big six-lane highway, like 400 or 401 in southern Ontario. I’m in my usual spot in the right-hand lane, and I notice a car on one of the side roads leading onto the highway. Now, does this fellow drive in such a way that the taxi driver is not safe in his lane? He does not. He sits like an arrow on an angle straight across the three lanes, in front of everyone, and he’s the second in the fast position in the far left-hand passing lane. He sits there for a mile or two and then he decides to get off the highway. The car behind him goes at 80 miles per hour. He’s behind the two of them and there’s no way he can pass because the trailers are blocking both the inside lane and the outside lane and because anybody driving a truck like mine is not allowed, by law, to use the left lane on multi-lane highways, certainly not Ontario’s highways, not 401 or 404. Well, okay, I suppose I could sit behind those trailers for the next several miles, letting a bit of resentment build up in me, getting pissed and impatient. But I don’t. I usually pull off the highway on to the shoulder, get out of the truck, walk around it once or twice, and check the tires. The point is to cool off and to let the trailers get out of sight so that when I move back onto the highway, I can drive comfortably at my normal 55 miles an hour. Two. I have another trick like that for when I’m driving behind a slow-moving truck on a small highway. Say there’s only one lane in my direction on this highway, and the truck in front is doing 40 or 45, I can’t let the situation bug me. And I don’t. Instead, I just drop back one gear, cut my speed, and give the truck a chance to pull out of my sight. This is the danger signal – is the rider’s head move upward as the first wind catches him. Then I might see the bike wobble. The worst, of all, I’ve seen some bike go over, through rider carelessness, in a lagoon, skidding crash.

None of these people – the rider in a rush for his coffee, the guy who whizzes across three lanes of traffic, the speeding motorcyclist – is this: be patient! I know that in a lot of cases they’re just people who are dedicated to their jobs and are anxious to get on with their tasks. They are the people driving on the highway who are talking on car telephones as they drive or who are speaking into dictation machines. They are not people who have secrets to keep, they are not people who have personal or business problems – but they and the others should recognize that it only takes a tiny, split-second loss of concentration on their driving to get them into big highway trouble.

They ought to take it easy. They ought to think about the point.

Here’s what I mean by patience from the standpoint of myself as a truck driver.

On any big, six-lane highway, I often run into the situation where there are two cars, both pulling trailers, driving along side by side at 70 miles per hour. I’m behind the two of them and there’s no way I can pass because the trailers are blocking both the inside lane and the outside lane and because anybody driving a truck like mine is not allowed, by law, to use the left lane on multi-lane highways, certainly not Ontario’s highways, not 401 or 404. Well, okay, I suppose I could sit behind those trailers for the next several miles, letting a bit of resentment build up in me, getting pissed and impatient. But I don’t. I usually pull off the highway on to the shoulder, get out of the truck, walk around it once or twice, and check the tires. The point is to cool off and to let the trailers get out of sight so that when I move back onto the highway, I can drive comfortably at my normal 55 miles an hour.

One of these people is trying to make actually come under the general heading of the group of people who are trying to do something I swear by. Imperial Oil gives its drivers a course in defensive driving, with film shown to the rules in the course, and every year or so, they bring us back to brush up on what those rules mean. All the drivers in Canada would find defensive driving less fatal to their safety. The Ontario Motor League, I know, gives a course in it, and so do other organizations like the OMNI, right across the country. I remember when my sister and brother-in-law studied it in Nova Scotia; they were amazed at the tips they picked up, and said that they had never entered their minds before.

I won’t go through the whole course in this article, for one thing, but I’ll just touch on some of the ideas that I’ve found helpful to me on the road. And one rule that comes to me right off the bat is this: At all times, even when you’re waiting to keep your vehicle between the highway’s white lines. You should treat those lines as if they were fences, because they can be just as effective in keeping your vehicle out. That way, you develop a feeling of protection.

I don’t know where they are in relation to the lines. They don’t appear to even exactly know where the sides of their cars stick out. They don’t have a sense of the size of their cars or of the road lines. I see them all the time, wandering across the white lines, putting into other drivers’ lanes, setting the scene for an accident. It was coming off 401 in Ontario not long ago, and I spotted one of those drivers in my rearview mirror. It was a woman and she kept driving across the white line from her lane into mine. At the same time, she was overtaking me, and as I watched, she was keeping coming closer and closer to my train. I crossed over as far as the guard rail would let me. But the woman still kept coming at me. She’d lost all notion of where her position was on the road. And so – swerves! – she Moved this thing into my left rear wheel. There wasn’t much damage to her and none to me, except to my nerves. She kept saying: "Oh, it was all my fault." I already knew that, and I thought to myself, brother, could you ever see defensive driving?

It’s even in winter, as defensive driving always emphasizes, when people lose track of where their cars are positioned on the Highway. Snow and ice and sand chip windshields until drivers are just guessing what part of the road their cars are on. I know that I have visibility problems – and I drive high with the best brand of windshield wipers available. So I can tell that the gray dust below, skipping along past me, is bound to be lost. He may not realize it, but underneath he’s trusting to luck that nothing dangerous happens to him.

What’s the answer? Easy. Keep to the right-hand lane of the highway and hold your car at least you can between the white lines. In winter, you really need those fences.

As for speed, well there are a couple of handy tricks I’ve learned from defensive driving. Let’s say, for example, that you’re cresting along a curve. That’s ridiculous. Whenever I find myself neck and neck with some guy, I cut down by five miles per hour. The way I figure it, I’m going to pass this way one. I may as well put it slowly and safely.

Besides, at a slower and more sensible pace, I get time to enjoy the scenery. As I was saying before, like the moon at night. And I like taking in the changes in the seasons. I like finding new highways and seeing new forest and fields. Just this past summer, I was driving back from Toronto to Collingwood up on Georgian Bay, on a road I’d never known before. I found beautiful hills and I went by terrific ski resorts I didn’t even know existed. I’ll go back that way again. I’d like to check on the look of the area in different seasons. I’ll drive by – and I’ll drive slowly and safely.

Everybody ought to do it that way.

Fitted with capacity for fuel, the truck ‘Jordan’ drives weighs 13,000 pounds

Impartial Oil Review 1976 Number 1
Anyone reading the newspapers these days or watching the discussions on television must be struck by the vast attention given to the problems of coping with change. The very words used by new social critics to define their worries seem drawn from a special language, at least a special vocabulary: overchoice, modular man, social futurism, fractured family, and of course, informational overload. There are a hundred other such terms, maybe thousands, each of them burdened with a dark worry that the changes people are facing are more than a mere ordeal.

So, on quiet days, when the politicians aren't acting up, or when no policemen have lost their tempers, a commentator has a ready theme. He may offer up his frightened vision of the future, warning us that it is already here, that many of us may be redundant, unable to find a place in the coming order of things. Stairlift leftovers of an age with the death rattle already in its throat. Man is a little lower than the sidewalks. As one such critic frets: "Man needs a special, inordinate amount of flexibility and future orientation just to face the future without trembling in his shoes."

I wonder. I've read -- at least I hope -- my dutiful share of the books, speeches, and articles of the new sages, and I don't mean to dismiss them. But on one important implication of their doctrine, I have trouble. They seem to have such shaken confidence in man. Naturally, in that feeling, they may merely reflect the disillusionment that pervades so much of the age. As one American film critic wrote recently: "The public votes with its dollars, selecting from a variety of visions those which confirm its own anxieties and aspirations. Up to now, they have embraced movies that reflect a despair abroad in this country."

Canadians, it appears, are in the same lineup, voting for the same screenplaybacks of our malaise, films in which man is not just victim, but fodder for whatever fates he bears.

It is too simple to say that the despair is the product of only vast, unnerving change. But it is largely that. "By stepping up the pace of scientific, technological changes," wrote Alvin Toffler in Future Shock, "we are tampering with the chemistry and biological stability of the human race."

In any case, the question for serious inquirers is how much of our social disease comes, not from disappointment with leaders, or despair of institutions, but, as Toffler suggests, the pace of current change. If that be true, we should examine change and ourselves to see if there may not be another, more optimistic perspective.

I can't join the pessimists, and am unable to wave the white flag of defeatism. Perhaps first of all because I'm not convinced that the changes we are asked to make -- in styles of life and work -- are all that ruinous. They may be difficult, but whether they are crippling depends on ourselves and how we respond to them, as a people, and as individuals. Anyone with a sense of history knows this: that some of the most trying times for the human race have become some of its best hours, not its worst.

It may suggest a death of appreciation for history in our own time that, faced with moral confusion, social change, and economic fear, so many of us fall into despair. After all, even in our own century, we've known times far more catastrophic than anything we now face. World War II, for example. Perhaps we are too young, many of us, to remember. It is said now that almost half of all Canadians have been born since World War II. What can they know of change in its deepest and most affecting form? Fathers going and not returning, battles waged by men who did not want to battle, the sight of ships sliding beneath seas. To face all these experiences, as an entire generation did, is to face a kind of change that seems -- looking back upon it now -- as destructive of the human spirit as anything could be.

But many of us know, either from personal memory or the recall of others, that men, women, and children faced them, endured them, and very often prevailed with quiet and heroic character. I am still moved by my memories of many of them.

In fact, this same strength -- to prevail over the shaking of one's personal foundation -- has always been around us. But we pay it small attention, at least publicly. Almost 20 years ago, I first encountered it in a man I know. He was in his early 20s and dying. Re-calling our conversations now, I do not remember melodrama, or pioussness, or great sadness. There was bafflement that it should have come to this. But what remains in memory is not resignation, but the courage, serene and confident, that a man may not have known he had.

Despite all the books, all the films, all the lamentations about despairing man, I find all around me individuals of principle and ideals, overcoming the malaise of their days with an optimism and resolution that inspires respect, though never headlines. Is it a sign of a decline in values that we seldom acknowledge such lives anymore? Our prevalent nihilism is more apt to applaud the life that parades its bitterness, exploiting its opportunism and placing the blame on the nearest target, or else some vague "system". Whether we've been made pliant by our discrimination to history, an educational program some fear too docile, or a materialism that has obscured the philosophic is an argument all its own. In our time such as ours, we need more than mere intellectual excursions.

We need to look at ourselves. We can't avoid the changes that are coming, most of them, despite our popular flirtations with nostalgia. The wise way may be to move straight into the future, facing the change, participating in it, always seeking to influence it with a humane imagination. In the disappointments that such testing will bring, we might take note of words written in a letter by Marie Antionette in the latter part of her life: "Tribulation first makes one realize what one is."
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