Who is this “other guy”?

Over the next three summer months—June, July and August—hundreds of people will be killed, thousands maimed and injured and cars will be wrecked around the clock. These traffic accidents will happen in the best of weather and in many cases under ideal traveling conditions.

In view of this it might be a good idea to see who is going to cause all this death and destruction. According to a survey of driver attitudes in the United States the answer is nobody.

Nine out of 10 adults questioned (and all those with a record of traffic violations) rated themselves above average in driving skill, and better than average at obeying traffic laws. Typical traffic safety slogans such as “Drive Safely”, “Slow Down and Live” were not intended for them—or so they said. Each one questioned was sure that he drove safely and that traffic education was directed at the “other guy”.

Safety officials believe that drivers in Canada think along the same lines and are equally convinced that their driving skill and obedience to traffic regulations are above reproach.

It would appear that people really want to be good law-abiding drivers. In wanting to be good drivers, we tell ourselves we are—and therefore convince ourselves we are. It is always the “other guy” who is the bad driver.

It would seem the average driver behind the wheel lives in two worlds: one a mental world of fantasy where he sees himself as a good driver and the other the world of hard physical facts where he—often unknowingly—commits the driving sins, large and small, which cause traffic accidents.

While this schizophrenic condition is of undoubted interest to psychiatrists (see page 2: Psychological Quirks That Kill) it is also cause for thought by every Canadian. Because of it we are paying an annual toll of more than $300,000,000 in cash, and some 3,000 lives, plus about 66,000 people maimed and injured. It is time that all drivers discovered that there is no room—even on a divided highway—for a split personality.
Each of us is a potentially dangerous driver. Brief and seemingly harmless emotional upsets account for most of our traffic accidents, injuries and deaths.
that there is a close connection between psychological disturbances and bad driving habits, psychiatrists and psychologists admit that a tremendous amount of investigation must yet be done before they have even a fraction of the answers they're seeking.

"It will take years to build up records to prove every case," says Col. Walter Reynolds, Ontario's commissioner of highway safety, "but what practical evidence we have at present is damming enough."

Such evidence was found in London, Ont., where Dr. William Tiltman studied 76 taxi drivers to see if the accident-prone ones had common personality traits. They had. While drivers with accident-free records scored well on personality tests, two-thirds of the bad drivers showed up on the tests as antisocial, and all drivers with bad records were impulsive and immature.

"Unrecognized feelings of inferiority or hostility may be compensated for by a heavy foot on the accelerator," says Dr. E. J. Kelleher, director of Chicago's Psychiatric Institute, which subjected traffic violators to examinations similar to Dr. Tiltman's London tests. Dr. Kelleher believes that motorists who drive recklessly and "violate traffic laws just for the thrill or satisfaction of breaking them" are often trying to relieve emotional tension.

Again, not all violations are caused by ordinary quicks. Detroit's Traffic Safety Clinic—a sort of psychiatric court—found a high proportion of mental misfits among 532 traffic violators it examined. Of these, only 79 were people with no serious psychological problems. Ninety others were feeble-minded or borderline; 154 were of lower than average intelligence; and all the remaining 599 were suffering from such serious mental afflictions as psychoneurosis, senility, alcoholism, paranoia, disturbed personality or schizophrenia.

The most alarming aspect of such findings is that there are presumably thousands of people across Canada who are permitted to drive while their potentially dangerous afflictions go undetected.

"Some day," says Col. Reynolds, "we hope to be able to spot the accident-prone man when he applies for his license and take steps to improve his driving." Ontario has already made some progress in this direction. Both the applicant for a license and the traffic violator can be required to submit a doctor's certificate attesting to his physical or mental health whenever his ability to drive is questioned by the licensing authorities. These certificates, along with the man's driving record (if any), are studied by a medical board whose members include a psychiatrist, a psychologist and a general practitioner. The board may recommend the withholding of an applicant's license or the suspension or cancellation of an existing license until the person's condition is shown to be satisfactory. Ontario authorities admit that their system is far from thorough: in routine examinations many potentially dangerous drivers are likely to escape detection. But the system's proponents hope it will be improved and extended as the result of studies now being made by a special provincial government committee.

So far, other provinces lag behind. Ontario in this area of accident prevention—though not through lack of interest. Quebec authorities have been discussing the idea of such a program but have not yet put one into effect. Alberta hopes to set one up in the near future. Manitoba, though already conducting interviews with sub-standard drivers, does not subject them to psychological study. Other provinces recognize the need for psychological examination of drivers but believe that their limited funds are better spent on such fundamentals as public education and driver instruction.

Personal worries—usually concerning the driver's family or his job—are the commonest psychological cause of traffic accidents. Such emotional problems may be temporary or long-standing, trivial or serious. The man who has just had a quarrel with his wife, the woman whose mother just died—such people as these are likely prospects for the emergency ward—or the morose—if they attempt to drive. One night a motorists crashed into the rear of Dr. Lovett-Doust's car. Traffic was light and visibility good.

"The police questioned him, and I couldn't resist doing a little psychiatric research," says Dr. Lovett-Doust. "I found that he was a great family man. His family was still in Italy. He was chronically lonely, homesick and emotionally unbalanced. This condition distracted the man from his driving, and caused $400 damage."

Psychological causes are often much more obvious and immediate. One day last year the general sales manager of a firm in eastern Canada had a row with one of his salesmen. Storming out of the office, he climbed into his car and began speeding through the rush-hour traffic. He died instantly when his car smashed into a telephone pole at 80 miles an hour.

Even the least irritation can sometimes trigger a tense driver into a disastrous act. Dr. Lovett-Doust tells of a salesman who began driving home one evening while still keyed up from the tension of completing a big business deal. Part way home, he was passed by an older man in an older, less expensive car than his own. Seething with rage at this humiliation, the salesman trapped the gas pedal to the floor, passed, hit a truck that was coming out of a side road and demolished his car.

Mutilated, seeming respectable people can be deceptively dangerous as drivers. Their outward appearance of mild propriety may mask an almost uncontrolable inner tension. They dare on accuracy, punctuality and socially acceptable behavior. But often they are inflexible; they cannot adjust to a sudden threat or an unexpected change, and their inner tensions may explode with shattering results. A certain Toronto accountant always left home at 8:25 and arrived at the office at 8:45. One morning the street he always travelled was under repair. He took a side street. The traffic piled up. He tried another street. It was worse. He panicked. Trying to make a U turn, he hit the sidewalk, skidded into the oncoming traffic and spent the day in hospital.

Another deceptively dangerous condition is that of the socialist—who may be simply an absent-minded person, so immersed in his work that he lives half way between reality and his thoughts. This condition occurs more frequently in imaginative, creative people such as writers and artists than in hard-headed realists. It chronically affects an estimated 15 percent of all adult Canadians. But the man who prides himself on living with his feet on the ground is not immune either.

"A thorough search of almost anyone's conscience would tell him that at times he's a dreamer—and therefore slightly schizoid," says one psychiatrist. Day-dreaming can be harum-scarum and even useful—but not when you are behind the wheel of a car.

Happy souls, who see the world through rose-colored glasses and believe that nothing unpleasant can happen to them, may be in for a shock. Accident investigators find that this attitude blinds a person's natural sense of caution and slows his reflexes.

"The sheer joy of the car, the open air, the sun and the sense of freedom these people feel—these are the things which sometimes kill them," says Inspector Witt.

Such was the fate of the Edmonton housewife who—after 30 years without an accident—set off on his first holiday in decades and his first long drive in five years. An hour later he was dead. With perfect visibility and an automobile in top condition, he slumped into a locomotive at a level crossing. Psychiatrists who studied the case concluded that the man's elation over the prospect of the long-postponed holiday nearly blinded him.

Accident investigators have made much less sympathy for another type of driver, where they blame for 99 percent of all accidents. He's the man who knows he's driving recklessly but just doesn't care. One police-officer puts it this way: "The guy is on his way to make a big
deal. Thousands of bucks are in it for him. Why should he worry about other people or a $50 fine? We're always glad to give him a chance to think it all over for a while—in jail."

Psychiatrists find that this attitude has often been bred into the person in his early years by too much or too little discipline. In either case, he grows up lacking knowledge of the wrong or will to discipline himself. He exhibits this lack of self-discipline wherever he happens to be. Throughout much of his normal day he may be kept mostly in line by a dominant boss or a shrewish wife. Then, alone behind the wheel, he becomes the master of the world around him, with the car as his tool of destruction.

This same reckless attitude is often adopted by teen-age drivers who suffer from an even more severe psychiatric condition—the urge to show off. One southern Ontario teen-ager raced down the wrong side of a busy highway at 100 mph, killing six people in the ensuing crash. But with proper disciplinary training and driver instruction, most youngsters quickly outgrow their irresponsible habits. And when they do, they often prove to be better drivers than most adults, because of their superior reactions and physical abilities.

Much of the valuable psychological information so far compiled about drivers has come out of the Detroit clinic, which examines and tests large numbers of traffic offenders, including many who have not actually caused accidents. Offenders are given standard intelligence tests and tests for visual ability. Then they sit down behind a dummy steering wheel and operate floor pedals while a reactograph records their reaction times. Later they are questioned about traffic signs and regulations and about their personal lives: family background, physical ailments, jobs, friendships, marriages, likes, dislikes and prejudices.

After that, a psychiatrist conducts a full examination to discover each person's mental and emotional status. From all this data a report is compiled and turned over to the traffic court judge, who may order the driver a choice of a jail term or probation and a psychiatric course. Most choose the course which is designed to improve their driving by helping them understand and control their emotions.

Much of the same sort of data is compiled regularly in Ontario, but on a smaller scale. The most extensive investigations are usually limited to drivers who have been in accidents. Most of the information is gathered by trained investigators, rather than psychiatrists. The investigator begins by studying the police report on the accident. Then he conducts a series of interviews to learn all he can about the motorist's habits and personality. If the motorist is still alive, the interview begins with him and usually takes place in his own home.

"The questions I ask and the answers I get are confidential," explains one investigator, Walter Heaslip. "We want the motorist to understand we are not trying to get him for another rap. We are trying to help others, through him."

When he has obtained all possible clues from the driver himself, the investigator interviews the man's relatives and friends. If the driver is dead, friends and relatives are asked to provide all the data they can, in the interests of serving other lives.

When all information is gathered, psychiatrists study it, often adding another faulty habit or personality quirk to their ever-growing list of accident causes.

Some day, when they know more about these causes, they hope to advise authorities on how to distinguish between a potentially good driver and a potentially dangerous one before licenses are issued. Authorities may be able to help unfit drivers improve their attitudes and hence, their driving habits, so that they can take to the road in safety. And—perhaps most important of all—they may make every driver aware that he is the potential victim of his own personality traits.

"The most important step for all of us," says Inspector Witts, "is to realize we are all subject to psychiatric quirks."

"When even 50 percent of drivers admit to themselves that they are not perfect, the traffic accident rate will fall off faster than we can count!"

THE VILLAGE THAT ROSE FROM THE FLOOD

The St. Lawrence seaway and hydro project threatened to blot out a page from the past. Then historians and the people of the Morrisburg area turned the tables, and made Canadian history live as never before in a unique pioneer village

by Norman Riddough

While millions of Canadians were celebrating Dominion Day last year workmen touched off a blast which smashed the cofferdams on the St. Lawrence Seaway. For four days the waters flowed on the man-made lake, redetermining the historic shoreline and—seemingly—drowning an era of colonial life that dated back to the pioneer Loyalists.

The people of the valley watched with sadness. A few turned away and cried. But the flood did not wipe out the past; instead, it helped restore Canadian history.

A handful of foresighted historians had salvaged enough houses to launch a
project unique in Canada. Soon—in a demonstration of community spirit almost as rare as the project—housewives, farmers, grandmothers were flocking in to donate treasured heirlooms: the furnishings, tools, clothing and curios of a century ago. And, through them, the flood brought early Canada back to life.

The project is Upper Canada Village, a living monument to the time when British colonial life struggled into flower along the St. Lawrence. Located five miles east of Morrisburg, Ont., it preserves the customs and architectural styles of 1800-1860.

Thirty buildings, authentically furnished, will be "inhabited" by guides in period costumes who will bake bread, make cloth, grind wheat, serve in the tavern or tend cattle. Visitors will walk on planks or corduroy roads. Behind log, snake, shad and picket fences gardens will bloom with such forgotten favorites as Crown Imperial (a tall bell-shaped flower), Dame's violet, Flora's paintbrush and Marigold lily, once popular in early times. A hatoz will carry passengers down a small canal and through a replica of the first American-built lock. Nearby, sheep ("down-brid" to approximate pioneer breeds) will graze in pastures as they did long ago.

Canada's first colonial creation presented an opportunity not offered by any other restoration project (there are 24 in the eastern United States). Most of its buildings were in the path of the Seaway and had to be torn down or moved. A few were later bought from other districts.

The Village covers 42 acres in the 2,000-acre Chrysler Memorial Park, which will also contain:

—a battle monument commemorating the 1813 Battle of Chrysler's Farm where British and Loyalist soldiers repulsed American raiders in their bid to capture Montreal;

—a cenotaph, with the gravestones of pioneers inset in walls built from the rubble of buildings demolished by the Seaway;

—transportation, military and pioneer life museums;

—picnic areas, beaches and a children's playground.

Chrysler Park is in turn one of a chain of parks being built by the Ontario-St. Lawrence Development Commission between Adolphustown (west of Kingston) and the Quebec border. The scheme includes the widely-known military post of Old Fort Henry and a scenic drive linking most of the 18 new islands created by the Seaway flooding.

Some parks are ready now. The Village itself will be opened in 1961.

"And then," beams Dr. John Carroll, a retired Brockville dentist and vice-chairman of the Commission, "it'll be a showcase of colonial times."

Carroll, like many other Seaway residents, admits he once didn't care a hoot about pioneer life. Now he'll argue a point of history at the drop of a hat.

"We want to make history live, to make Canadians curious of their heritage and Americans conscious of our history," says persuasive Anthony Adamson, Toronto planning expert who drew up the first plans for Upper Canada Village. "Too often to the family on holiday, cultural facilities and museums have no appeal. Many museums contain only ill-assorted objects made for rich people who are dead. They have little attraction for people who are neither dead nor rich."

Adamson, who is also spilling out ideas for a future Ottawa as vice-chairman of the new National Capital Commission, was appointed consultant for the Village restoration three years ago by Carroll and his fellow commissioners, George Challies of Morrisburg and the late James Smart, one-time head of
Canada’s national parks. Scouring the Seaway from end to end, Adamson marked buildings to be saved from the flood, called in an advisory committee of eight experts in historical research to buttress his arguments, and put his findings before the Commission. At his suggestion two restoration experts were appointed: Peter Stokes, a bespectacled young man who chases architectural clues with the determination of a Sherlock Holmes, and Jeanne Mininhnic, who is an authority on 19th century furnishings.

Long before the village idea jelled, however, the Commission decided to open a museum dedicated to Loyalist settlers who had farmed the narrow lots fronting the St. Lawrence. Scholarly, white-haired Charles Rooke, a retired Brockville insurance man, with a passion for local history and an extensive knowledge of local people, was picked as curator.

“We began to tell our story in 1956,” says Rooke. “We made our sales pitch through local clubs, mostly women’s groups. The response was overwhelming. We spilled out of our first museum and had to build a place of our own in Morrisburg.”

Today only a small proportion of the 3,000 donations can be exhibited. The rest, plus another 3,000 items, which were bought, are in storage, earmarked as furnishings for Upper Canada Village. Altogether 6,500 people from eight communities were expelled from their properties by the Seaway development. Most moved into modern homes in the new communities of Inglewood, Long Sault and Riverside Heights, or the newer parts of Morrisburg and Iroquois. Although 252 chose to have their homes moved with them, it was a time of gigantic house-hunting for everyone. In the midst of this upheaval, the Commission launched its appeal, then stood back astonished as furniture, family records, portraits, quilts, linens, dresses, tools, farm implements, buggies, cutters, kitchen utensils, guns, swords and uniforms came pouring in.

None gave more than Miss Lottie Robertson, an old-time riverside resident from Mille Roches, now living in Cornwall. She has cherished the old things passed down from her ancestors—even odd pieces of cloth dyed with local juices. Much of her family furniture, clothing and utensils is now on display.

Another Seaway resident, Miss Isabel Farlinger, 92, of Morrisburg, gave most of her library, furniture and pictures from her former 22-room mansion.

“...and I’m going to give more,” she says. “I’m one of 13 children and only three of us are left. All my nieces and nephews have had their choices of things from the old place. Now I’m living in a two-bedroom bungalow. Where else should my things be but in a museum?”

The museum received its share of curious artifacts. Dr. E. L. Brown of Aultsville, now retired in Morrisburg, presented an iron claw with a corkscrew handle.

“Used to use it myself,” he chuckles. “It’s a primitive tooth puller.”

One day on the riverbank, Morrisburg fire chief Herb Clark picked up an iron fork which turned out to be a sugar auger, once used to break up hardened sugar in barrels arriving from the West Indies.

Many people donated heirlooms because of their ancestral connections with the valley. Col. John Cryer was a United Empire Loyalist who settled in the valley in 1784 and became a successful farmer, merchant, magistrate, militia leader and parliamentarian. His descendants, the John Bronesons of Prescott, gave a set of white china from the original homestead, and a piece of cloth which was being worn when the Battle of Cryer’s Farm drove the womenfolk from their homes. His great-great-grandson, Harvey C. Hensley of Freeport, Long Island, gave 15 pieces of Cryer furniture.

One of the old valley families was Locuckes. In 1793 Richard Locucks was fined $20 and clapped in a dungeon at Stone Arabia, N.Y., for refusing to join the revolutionaries. He escaped and settled in Morrisburg. One of his descendants, Richard M. Locuks of Kemptville, gave the family coat of arms and a receipt for the fine.

As place for the village grew, Carroll, Challies, Rooney, Stokes and Mrs. Minnhnic traveled thousands of miles along Eastern Ontario back roads, visiting auctions and chasing clues as vaguen as “my sister’s husband’s aunt knows someone who lives next door to a woman who might have something interesting.”

Some calls were fruitless but many paid off. Edmund Pett of Newboro, a retired lumberman, gave four truckloads of old tools and furniture. At Toronto, near Brockville, Mrs. René Breckenridge gave her father’s old-fashioned cobbler’s bench. All his tools, nails, lasts and even his old clay pipe were in the drawers.

In Brockville, Stokes and Mrs. Mininhnic bought a four-poster bed from an elderly woman. “Mind if I look around?” asked Stokes. “I’m interested in these old foundations.”

In the basement he literally bumped into a rare colonial hitch table, and immediately offered to buy it. “Why,” exclaimed the astonished owner, “it’s been here 35 years and I’ve always kept my preserves on it.”

“You often spot the most valuable items in an old kitchen corner as you’re leaving,” says diminutive bric-a-brac monger Shackleton who runs a photography business with her husband in Ottawa and two antique stores as a sideline.

Husband Phil, while poking around a garage loft during a Prescott auction, saw two legs sticking out from a pile of dusty lumber. So did another dealer, unfortunately. It was an unusual Windsor bench, not even on the auction list. Shackleton and the dealer matched wits and shot the price from an opening bid of $2 to $275 before the former got it for the Commission.

The Commission isn’t always so lucky. Jeanne Mininhnic rushed to one house, which had been sold after five generations in one family, to find only the unsyoungening remains of the documents of a hundred years of family history. In pieces on the woodpile was an attic-full of furniture, crafted by pioneers. Ironically, the new owner was out of work, trying to save money for stove wood. Intact, his firewood might have brought over $500.

A few people have asked exorbitant prices. One man owned a house with wall paintings directly on the plaster—the old-fashioned substitute for wallpaper. The Commission offered $38 for a piece of plaster. He demanded $3,500. The matter was dropped.

But most people have gone out of their way to assist the restorers, and none more than the Rev. John Schmiedier of St. Matthew’s, Kitchener. For the Village church buildings Stokes had found a Lutheran pastor’s house, built in 1843. To find authentic furnishings, Mrs. Mininhnic contacted several Lutheran churches. Schmiedier appealed from his pulpit. When his congregation offered books and records, he carefully documented them. When they offered furniture and clothing, he catalogued them.

“It was done so thoroughly that we could decide what we needed from his list. He even arranged the shipping,” she says.

Under Jeanne Mininhnic—who confuses a “slightly compulsive neurosis” about the 19th century ever since she was fascinated by the “Phiz” illustrations in Dickens’ works as a child—
the pastor’s house was the first Village building to be furnished. Behind it stands the buggy shed, bought for $2,000 from a country Presbyterian church. Beside it is the white frame church, once the Anglican church at Moulinaite.

On the other hand, one house that Stokes spotted for its historic interest was hard to get. It had been owned for generations by staunch Liberals and they weren’t selling to “those darned Tories in Toronto.” Months of patient negotiations finally swung the deal. Stokes has spent thousands of hours tracing clues to help restore the Village buildings in meticulous detail. In fact, this earnest young architect who came to Canada as a wartime schoolboy refugee, pokes about old houses as a hobby. "He and Mrs. Minixinick are purists," says Marge Shackleton. "If it isn't right, it isn't right." They have been helped by the tireless Ronald Way, of Kingston, who built up Old Fort Henry into one of Canada’s top tourist attractions, and who is now director of all military matters for the Commission.

Stokes’ difficulty is that most buildings have been enlarged or altered through the years and must be partially stripped to discover how the alterations were made. The country store baffled the Commission until records showed that a century ago it had been towed across the road and the rear opened up as the front. Many of the store’s groceries and dry goods will be facsimiles. But, there will be 35 pounds of wool, preserved in campshire for a century, and 150 bottles of herbal medicines stamped “Manchester, Canada West”.

The Village homes still need lamps and carpets.

"A lot of people once used campshire lamps," says Marge Shackleton. "Campshire was very volatile and used to explode frequently. Maybe that’s why there aren’t so many lamps left."

"Carpet is so hard to find that one day I was nearly demolished myself along with a church, while carpet hunting," says Mrs. Minixinick. "Everything had been stripped but the chancel carpet. The men were ready to set fire to the building. I hadn’t time to take out the tacks. I just took one end of the carpet and heaved. I’m using strips to cover ottomans, chairs and buffets.”

Apart from the Village and its furnishings, the Commission has attempted to capture the past in a series of paintings. They selected 12 sketches by C. W. Jefferys from among the more than 1,000 drawings and paintings in the Imperial Oil Jefferys collection. Fred Challener, a 91-year-old Toronto artist who has done similar historical paintings for the Ontario Legislature, was then commissioned to translate the sketches into oil paintings. Sketches by Jefferys will also be used for reference in the building of pioneer fences.

Other paintings by other artists will show some of the locks on the old canal system, a glimpse of pioneer transportation methods, and several old sawmills and grist mills.

And so the project is becoming a treasure house of Canadian—and more and more, a bond that draws the community together.

“My old home used to be out there,” said one Moulinaite man, pointing out to Seaway Lake. “Sure, they gave me a new bungalow, but I still like the old. I think that’s why most of us think this colonial village is alright—even though it will bring us too many people.”

Last year too many people did swarm through the village, using it as a viewpoint for the Dominion Day road run. It turned out to be an unspectacular event, but for Stokes it was a nightmare. Engraved in his mind is the sight of the village, he was jeered back to the present by a small girl at the door asking for a kettleful of water.

“We’re having a picnic and building a fire,” she said innocently.

Stokes rushed out to find scores of people poking round the buildings. Some were picking the rare flowers of the pioneers, transplanted there after weeks of search in the valley. One woman was happily digging them up.

That night workmen dug a ditch across the access road from Highway 2. Today guards permit the experts to work in peace to complete Canada’s showcase of the past by 1961.

**Management changes**

Floyd C. Lantz has been appointed general manager of the transportation and supply department. He succeeds Fred G. Cotile who died suddenly on March 6th.

Mr. Lantz joined Sarnia refinery in 1922 as assistant chemist. He moved to Calgary in 1923 and three years later was assistant superintendent of Calgary refinery. He was for six years refinery superintendent with an affiliated company in Colombia, returning to Imperial to superintend the Regina refinery. When war broke out he was in Victoria and in 1942 was appointed manager of the St. Clair Processing Corp., a subsidiary of Imperial Oil set up to help operate Polymer Corp., the government-owned rubber plant. He returned to Imperial in 1946 as assistant general manager of refineries, later taking over special duties in connection with the supply and transportation of crude oil and products.

Mr. Lantz took charge of the company’s pipe line activities in 1951 when a pipe line department was formed and held this post until last summer when he was appointed assistant general manager of the transportation and supply department.

A Maritime, Mr. Lantz attended Dalhousie University and holds a B.Sc. in chemical engineering from McGill University.

Herbert H. Moor, with a background of 36 years in the oil business, has been appointed management development counsellor. He succeeds Charles Scrymeour who has retired under the company’s pension plan.

A native of Toronto, Mr. Moor graduated with a master’s degree in chemical engineering from the University of Toronto. He joined Imperial in 1923 at its Sarnia refinery. He became a charter member of the technical and research department where, as assistant chief research chemist, he worked chiefly on lubricating oils.

In 1933 Mr. Moor was loaned to an oil company in France to help set up a new lubricating oil plant. He returned to Imperial in 1935 and later became technical assistant in charge of production control at Sarnia refinery. After serving as assistant superintendent in charge of No. 2 plant at Sarnia, he became the first superintendent of the Edmonton refinery which began operations in 1948. In 1955 he transferred to Halifax as refinery manager and three years later moved to the company’s executive offices in Toronto as deputy management development counsellor.
Plant by the 'Blue Lagoon'

The abstract shapes on our cover and the sentinellike towers on these pages have more in common than meets the eye. Both are views of Imperial's new $28,500,000 petrochemical plant at Sarnia, Ont. The cover shows part of the "cracking" towers reflected in the "blue lagoon", a large concrete tank into which waste products flow.

If both photographs seem to have a futuristic quality, they are well in keeping with Canada's newest petrochemical plant. No other Canadian plant turns out, in such variety or quantity, the chemical building blocks that ultimately find their way into hundreds of consumer goods. Its products—ethylene, propylene, butylene, butadiene—go to other manufacturers and, eventually, into such things as fabrics, antifreeze, automobile tires, detergents, plastic pipe and a multitude of housewares. It is an exciting development, no matter how you regard it. To the petrochemical industry, it signifies a potential lessening of Canada's dependence on imports. And to the perceptive cameraman it proves that artistry is everywhere—even in industry.

Photographs by Al Schoenborn.
Fifty-one years ago Imperial’s Vancouver manager C. M. Rolston set up Canada’s (and possibly North America’s) first service station by putting a kitchen water tank on a concrete pillar and running a garden hose from it to the curb.

Just how far service stations have come since then is shown by the current and historical pictures on these pages. But even they scarcely more than hint at the amount of creative energy that has gone into the development of service stations over the past half century.

Today a single station calls for an average of 900 man-hours of planning, including several steps that precede the work at the drafting board—such as market surveying, site selection and investigation of local building codes. One Imperial station took 18 months, from the time its construction was first proposed until the first gasoline was sold.

With more than 4½ million cars on the road in Canada at the last official count, service stations have to be carefully laid out if they are to do an efficient job of supplying the three billion gallons of gasoline which these cars need each year. Stations are built, of course, only as the need dictates. Given a good location, a modern, well-planned station can expect to pump 250,000 gallons a year. The busiest big outlets among Canada’s 35,000 stations have been known to exceed the million-gallon mark within a twelve-month period.

This is a service job that even Rolston, for all his vision, probably never dreamed of when he rebelled at the sight of early automobiles getting their gas tanks filled by bucket and funnel. His station was extremely simple. Besides the tank, the pillar and the garden hose, he had a shed with one side open to the street, a No Smoking sign and a wooden chair where the attendant sat when business was slow.

Even as late as the 1930s, motorists in many parts of Canada were still simply pulling over and honking for the local storekeeper to come out and “fill er up” from his curb-side pump.

Today’s fast, heavy traffic, on the other hand, calls for fast, drive-in service that demands a big lot and efficiently laid-out facilities. Most modern service stations stand on lots only slightly smaller than the ice surface at Toronto’s Maple Leaf Gardens. The parking area

look what MR. ROLSTON started

His kitchen water tank with garden hose was Canada’s first service station. Out of this evolved today’s well equipped and carefully-planned stations that supply the three billion gallons of gasoline our cars consume each year.

1908-1920

It all began in 1908 when a Vancouver motorist chased up to Rolston’s simple shed beside the boardwalk (opposite page) and cried “Fill er up!”. By 1916 cars and service stations were obviously here to stay. Dashing young men in straw boaters wheeled their horse-drawn carriages up to the increasingly-elaborate stations: gravelled lots, wall advertising, even electric lights! By 1919 the Toronto operator, above, had a formal gas pump, on a concrete island and a uniform—of sorts.
is usually about a quarter of an acre; grading and rolling such an expanse is a costly business and paving alone can cost $2,000 and up. The average cost of a site is about $25,000, but some have been as high as $150,000. The average building with equipment costs about $36,000 but, again, some have cost as much as $75,000.

Wherever a new station is proposed, the men who pick the site and lay out the station must consider such factors as the volume of passing traffic, motorists' buying habits and preferences, physical efficiency, safety and economy. Meanwhile they must weave their way through an often-frustrating maze of local regulations. Almost every municipality in Canada has its own particular set of by-laws regulating the construction of service stations. In Ontario alone there are more than 300 sets of regulations in force.

While oil company planners and architects believe that there are unnecessary and outdated zoning and building regulations which could well be abolished or revised, nobody pines for the "good old days" of early service stations. Typically, the "filling station" of early days was a converted storage shed, hardware store, blacksmith shop or even a sentry box. Gaudy posters advertising chewing tobacco, county fairs or circuses often served as thrifty—if unsightly—substitutes for exterior paint.

Then, during World War I, the service station began showing signs that it was here to stay. Brick became the most popular building material. Since it was usually red brick, the station usually looked like a cross between a small factory and the local jail. At the same time, gasoline pumps popped up in front of many a roadside general store.

In the late '20s as Canadian car registrations pushed past the 1,000,000 mark, the brick blockhouses gave way to fancier structures with towers, gables, tiled roofs and cute little windows.

Some of the austerity of the depression is reflected in the designs of the '30s. These looked like giant strawberry boxes. They had functional simplicity, but they were never designed to win any prizes for architectural beauty.

Today's service station is just as functional as ever, more so, in fact. But it is not nearly so simple—nor is it ugly. Increased competition, a greater need for efficiency, the increased tempo of the times—such factors have strongly influenced the most recent designs.

Service station designers are also borrowing more liberally from the designs of other modern buildings. For instance, greater areas of wall are being made of glass; and lighting—now less intense at most stations than it once was—is scientifically designed for maximum efficiency and pleasant appearance.

Most new Imperial stations are long.
1940–?

Today the service station is indispensable, and often as slick as the cars it serves. Pumps are squat and streamlined, multiple islands are commonplace; service increasingly complete. The station of the future? That’s anyone’s guess. Only one thing is sure: Mr. Robinson wouldn’t recognize it.

Low rectangular buildings with a floor area of about 1,200 square feet. Built of concrete block with smooth white stucco or structural glass finish, they have at one end a working and service area of about 600 square feet with expensive automatic servicing equipment. The balance of the station is composed of a salesroom, washrooms, work bench area and storage space.

The salesroom combines the function of a showroom with rows of oils and other motoring accessories and necessities on the shelves. The modern trend is to make the salesroom facilities as much like a business office as possible.

Behind the salesroom are the washrooms. Non-existent in early stations, they are a very important part of the modern station. And increasing attention is being given to them. They are now being decorated with pastel tiles and fixtures, and service station planners expect the day to come when they will rival hotel bathrooms with hand lotion, linen towels and easy chairs.

The largest single piece of equipment introduced into the modern service station is the hydraulic hoist, capable of lifting up to 8,000 pounds. It is the successor to the grease pit, a 16-foot long gash in the floor into which mechanics used to descend to service the under parts of a car. Besides providing standing access to all parts of the car, the modern hoist has speeded lubrication by some 30 percent.

Among the smaller equipment in the service area of a modern station are such things as the four-cycle detergent car wash; high pressure grease guns and the 60 second tire changing unit.

Outside the station building, the most dramatic changes have been made in the pumps. From the original kitchen sink and garden hose they have evolved into an electronic wonder which can automatically mix and dispense as many as nine different grades of gasoline at a rate of 18 gallons a minute.

As early as World War I pumps were being made with dials that showed gallons and in 1925 the hand pump was replaced by the electric pump. But it wasn’t until 1933 that “buying by the gallon” was replaced with “buying by the dollar”. At that time the first computer units were placed on pumps. What will the station and pump of the future look like? Nobody knows exactly, but it is safe to predict that future designs will be evolved for greater efficiency and, probably, bigger volumes of business. And whatever shape it may take, the service station of the future seems more certain than ever before to keep abreast with the changing needs of the motoring public.
Canadian railways are changing over entirely to the diesel: it's cleaner, smoother-riding, more economical and easier to maintain than the vanishing steam locomotive.

by Fergus Cronin

W. T. "Plunk" Muir, a stocky little man who has worked on CNR locomotives since 1916, sat back comfortably in his cab. At his fingertips were the controls of the two diesel-electric units that were pulling one baggage and 18 passenger cars along the first leg of the Toronto-Montreal run. The speedometer said 80 mph but the ride felt like 50 or less.

Muir and his fireman, Don Cook, relaxed behind the broad windshield, periodically calling "Green on top" or "Yellow" in conversational tones, as one or the other spotted a signal.

"There may be a few old-timers who miss steam engines," Muir told me over his shoulder, "but not me. They used to say you had to be strong in the back and weak in the head to drive a steam engine. Soera to me that still goes for anyone who prefers steam."

Later, on a wild ride back from Port Hope, Ont., to Toronto on a 28-year-old steam locomotive, I found out exactly what Muir meant. Somehow, engineer Frank Edgar and fireman Jack Lavery worked with reassuring professional calm. Somehow, they ignored the rattling, banging and swaying of engine and tender. They spoke in shouts and when the noise grew deafening they used hand signals. Throughout all this I clung to my seat and wondered if we were running on the ties.

"We seem to ride as much up and down as forward," Edgar admitted. "Of course, not all steamers are this rough. But some rides are rougher."

It was rough enough for me. My ears rang for two days and my shoulders were sore for a week. Yet I'm glad I had the experience, for that ride represented the end of an era. The steam locomotive that, for generations, helped open up and knit together this country, is vanishing. The diesel is the new workhorse of the rails.

By 1961 the steam locomotive will be as rare as the Model T Ford. In the past eight years Canada's two biggest railways have invested some $500 million in diesel engines and equipment. Most of all CPR rail work is now done by diesels. At the end of 1958, diesels were doing 88 percent of freight gross ton miles, 95 percent of yard engine hours and 83 percent of passenger car miles on the CNR.

"Diesels," says Alex Lighbody, the CPR's assistant manager of research in Montreal, "are the biggest single factor in the last 10 years to improve our railroad economy."

Other industries, of course, have also exploited the advantages of the diesel. Hundreds of thousands of diesel engines are used in trucks, buses, river and ocean vessels, construction, mining and farm machinery, electric power stations and oil drilling rigs. The diesel has even managed a modest but successful invasion of the passenger car field, proving especially popular with economy-conscious cab drivers.

But the diesel's greatest impact has been on the railways, and to a layman like me, the most obvious contrast between the old and the new is in the cab. While "Plunk" Muir facetiously revealed in the clean smooth progress of his train, Don Cook acted as co-pilot, spelling off Muir and helping watch the track. Cook also had time to show me how the combined 3,500 horsepower of the two units instantly obeyed the simple shift of a lever or flick of a switch.

On the steam engine, by comparison, Jack Lavery was almost constantly busy, even though his fire was automatically fed with coal from the tender. When he wasn't changing open the firebox door to check the fire, he was watching or adjusting one or more of his 20 odd gauges, cocks or valves. And while the diesel cab had been as clean as a clown car, the stemmer's dirty black smoke was always with us—at best a nuisance and at worst a menace. When it wasn't blowing back it was blowing ahead, obscuring Edgar's already-restricted vision as he peered through a small window and along the 40-foot length of the boiler.

But there is much more to the story of dieselization than new comfort and convenience, of course. To railway customers, the new engines mean better service. Diesels, with their faster acceleration and longer servicing needs, have lopped hours from timetables.

In 1955 when the CPR and CNR dieselized their transcontinental trains, they cut 12 to 16 hours from the Montreal-Vancouver runs. Last fall, the CNR cut one day off the time needed to deliver carload freight shipments from the east to principal western Canadian points—largely because of dieselization.

To the railways themselves, diesels mean new economy on almost every count. For one thing, they've cut the railways' fuel bills almost in half. Furthermore, each diesel unit is capable of more work than its steam counterpart.

"We had about 2,700 steam engines and we hope to do more work with about 2,000 diesels," says Douglas Pig-
got, assistant general superintendent of motive power for the CNR's central region.

A diesel does more work because it runs much farther without refueling, lubricating or overhauling. A steam engine needs fueling every 75 to 100 miles. A diesel—depending on its load—can run up to 500 miles without refueling. A steam engine needs greasing every 150 miles and a firebox cleaning every 500 to 600 miles. A diesel hauling freight servicing only every 9,000 miles and a passenger diesel can make the 6,000-mile return trip between Montreal and Vancouver with no servicing stops except for fuel and water.

Every 60,000 to 90,000 miles a steam engine may need a major overhaul that keeps it off the tracks 17 to 21 days. A diesel, on the other hand, can go 300,000 miles or more without a major overhaul—which may take only about five days. "Our big worry now," says one maintenance man, "is how to hold a unit long enough to paint the darn thing."

The diesel's cheaper, faster maintenance is partly due to a wide standardization of parts which steam locomotives never had. Steam engines were traditionally custom-built for such jobs as carrying passengers on long level prairie runs or hauling freight over the Rockies. Also, individual engineers had their own ideas of what they needed in a new engine, which often influenced their companies. As a result, each railroad acquired perhaps a hundred different types of steam engines—each with its own sets of parts requiring peculiar techniques of servicing. Diesels, on the other hand, are built and sold as standard units, much like automobiles. Since there are fewer basic types of diesels, and parts inventories are therefore less complex, older models can be more easily brought up to date.

Simplified maintenance in turn means a saving in manpower. While diesel maintenance has been consolidated at a relatively small number of shops, each employing a large working staff, there has been an overall reduction in personnel.

On the road diesels result in further savings in manpower. To get over the Rockies, for instance, an old CPR transcontinental passenger train needed two steam engines in front, each with its own crew. A diesel train also uses extra locomotive units on that run—but all can be operated by one crew up front.

Further economies result from the use of the self-propelled rail diesel car, a cheaply operated, tram-like passenger unit which carries engine and passengers in one vehicle. Faced with declining revenues and increasing costs in operations that have been money-losers for years anyway, both railways have gratefully introduced the rail car on many of their passenger runs. Nobody expects the rail car (called a "Dayliner" on the CPR and a "Railer" on the CNR) to pull passenger operations out of the red, but it has helped cut losses substantially.

Provided test engines. The lubricants were tested in northern Ontario and in the tortuous Spiral Tunnels west of Banff. Some had many good qualities but none of the first 10 measured up to all the requirements of lab and road. The eleventh did and now it is the most widely used crankcase oil on Canadian railways.

Imperial also produced a Canadian-made roller-bearing grease for high speed passenger and freight traffic. This high quality lubricant is expected to increase safety and efficiency. As the diesels take on more of the railway work load, more old steamers end up on the scrap pile. This year they are being broken up at a rate of about two every working day—so the everlasting sorrow of railway buffs.

As each old iron horse bites the dust, an amateur railroad fan somewhere asks for information about the steamers, or for photographs or permission to record the sound of old engines still in service. Such requests have been more numerous since 1951 when the railways embarked on extensive changeover. Actually, dieselization began a quarter century ago. North America's first diesel-electric went into service on November 1, 1925, when a single RDC rolled out of the CNR's Montreal shops, bound for Vancouver. It finished the 2,930 mile non-stop trip in slightly more than 67 hours, a transcontinental record that still stands.

In spite of this feat, the switch from steam to diesel was slow. It was interrupted first by the depression, then by World War II. Not until the early '50s did conversion gain full impetus.

Few railroadmen are sorry to see the steamers disappear. "The people who are most upset by their passing," says Mike Shaw, a CNR public relations man, "are the rail fans."

"They refuse to acknowledge the existence of the diesel," adds another railway man. "I asked one of them—the secretary of a club in Illinois, who had a tremendous knowledge of railroads—if he had a picture of the Alto Diesel, an engine that made history back in the '20s. He'd never heard of it."

Much of the sentiment surrounding the steam locomotive has to do with its whistle, a haunting wail that has thrilled three or four generations of Canadians. The major railways spent many dollars and uncounted man-hours trying to match that sound on their diesels. Finally they gave up. The diesel's compressed air lacks the pep the engine needed to imitate the horsecrash rush of steam from an old-time engine boiler.

The original diesel horn, on the other hand, sounded like the mauling call of a moose. It thrilled no one, with the possible exception of lazy moose. To draw bridge operators, diesel horns sounded like tugboats. Many a canal attendant, hearing a diesel in the distance, rushed to raise his bridge, wondering how he missed seeing the boat. Today however, under federal board of..."
Artwork takes a trip

A sizeable portion of our fan mail every year is directed at Review covers and story illustrations. Most of it, we’re happy to say, is complimentary. It ranges from the ecstatic reaction of laymen—a holy reader in the Bronx, N.Y., is so entranced with our covers, she keeps them for book jackets—to the measured approval of the experts.

Art teachers in Kitchener, Ont., and Smith’s Cove, N.S., for example, have used Review illustrations for instructional purposes. More than 20,000 sets of Harold Town’s abstract views of an oil refinery (October, 1954) were distributed, by request, among teachers, colleges and departments of education across Canada. Review artwork has regularly been hung in annual shows of the Toronto, Montreal and New York art directors’ clubs, and almost as regularly has taken awards for excellence.

And to remind us that, fortunately, all readers don’t think alike, there’ve been a few dissenters, such as the Albertan who wrote that “your artwork is perfectly horrible.”

This summer some of our friends and critics in western Canada are viewing the more popular and/or controversial Review originals. At the invitation of the member-galleries of the Western Canada Art Circuit, 31 of our covers and illustrations are now mid-way through a seven-month tour of British Columbia and the prairie provinces.

They’re called at Prince Albert, Sask., Calgary and Banff, and are presently re-visited Calgary. They’ll move on to Kelowna, B.C., Victoria, Edmonton and, in mid-September, to Brandon, Man.

For the exhibit, art director Gerry Moses and associate Who McCammon chose from the Review’s most unusual subject matter, in virtually every medium. There are oils, watercolors and lithographic prints, there are works in charcoal, ink, tempera (a kind of opaque watercolor) and even crayon.

There is the primitive vivid splash of Sohnany’s “Fighting Cocks,” April, 1957, one of our most popular covers, judging from reader response. (The U.S. Embassy in Ottawa requested a print suitable for framing; 200 reprints were distributed with an issue of Canadian Art Magazine.) And there is the stark, simple appeal of Leo Rampen’s “Children Crossing the Street,” August, 1957, which won an art directors’ club award but “just didn’t appeal” to at least one reader.

Brandon schoolboy David Watkin’s Christmas cover of 1954 is on display, in bold bright crayon. So are the soft reds and golds of Michael Snow’s “Autumn” of last October. And there are several offbeat treatments of familiar petroleum themes: prehistoric fossil structure, drillers and Eric Aldwinkle’s futuristic impression of petrochemicals on last August’s cover. All of which, we hope, exemplifies what a friendly critic calls the Review’s “broad and fresh approach to illustration and design.”

History’s his hobby

For writer Norman Riddick the story of Upper Canada Village, page 7, renewed a long-standing interest in history. Riddick, now a government information officer in Ottawa, graduated in honors English and history from the University of Manchester, after a World War II stint with the RAF. Later, while with the Midland, Ont., Free Press, he worked on the restoration of old Fort Penetangueishene under Willard Jury of the University of Western Ontario. Now he’s yearning to collect antiques of the Upper Canada vintage. “But where do you find the money? Most of mine goes into another antique—my car!”

To an adult—judged by the more speculative wonders of this 20th century— the driller’s “core sample,” ticking this small girl’s sense of smell (and humor), might be nothing more than rock, the subsurface rock that sometimes bears oil. But in the magic world of the young this is a wondrous thing, harboring secrets from perhaps a rifle beneath the earth; a thing to be forfeited, held, trifled and giggled at.

So it was with Jane Dixon and her Grade 6 classmates of Lakeview public school, Regina, who trudged through snow one afternoon to see Imperial’s petroleum exhibit in the Saskatchewan Museum of Natural History. The display, with drill bit, miniature drill rig and brightly illustrated panels telling the story of oil, is mid-way through a two-year showing in Regina. Already 7,000 grade-school children and thousands more adults have seen it.

How do students react to this “valuable new approach to display technique” (as museum officials call it)?

and dreaming eyes of wonder...

Lewis Carroll, with his rare understanding of children, had words for it in his introduction to Through the Looking Glass:

“Child of the pure unclouded brow
And dreaming eyes of wonder... The bright smile will surely hail
The love-gift of a fairy-tale.
Children hail this petroleum display-story as a sort of "true-life" fairy tale. And the "dreaming eyes" on these pages remind us that, after all, the creation of oil in the earth is still basically a wonder—as is a wonder as many man-made miracles in this space age.

Now it’s the railway, a boon to neighboring and still another example of the dead’s versatility

Imperial Oil Review, June 1959

Imperial Oil Review, June 1959
When you are young and all the world is new and exciting, the softly-lit corridors and showcases of a museum beckon like some unexplored foreign land. For these pupils, living in Canada's oil country, the museum with its petroleum exhibit was doubly exciting.

They stared at life-size mannikins of geologists at work, the job some of their fathers hold. They sniffed the pungent crude-oil odor of core samples ("Phew—smells like burnt rubber!") and gazed in awe at illustrations of tiny sea creatures that fell into watery graves, eons ago, to be ultimately changed into oil by heat, chemistry and pressure.

The boys gingerly fingered the huge teeth of real drill bits, and the "Christmas tree" (the maze of pipe that goes into completed oil wells) and the miniature drill rig. (One school class, after visiting the display, set up a classroom museum complete with model derrick.) They stood bemused before a panel of blinking lights which showed how seismic crews explode dynamite in the earth, measure the reverberating soundwaves and thus trace oil underground.

Then they went home, but a few paid the ultimate tribute: they came back later, on their own time.