

# *A Stone, a Leaf, a Door*

*by William Illsey Atkinson*

You're going where? McCaffee's director said, and McCaffee shrugged. Just driving, he said. The glower deepened; McCaffee could have sworn the old man's eyebrows bushed out. It's your first vacation in six years, the director said: Why drive? Go to Paris, go to Nairobi, Vienna waits for you. I don't need all that, McCaffee said. The director damped his glower and leaned back in his chair. Well, hell, he said, maybe you're right. Sam Johnson said some people could see more from the local stagecoach than the average guy got on the Grand Tour. Maybe you're a stagecoach guy, Mac. How's the project?

McCaffee was ready for the question. Nothing definite, he said. But? prompted the director. But we're on to something, McCaffee said. The team can feel it, I can feel it. So what's the holdup? the director asked. Where are your results? McCaffee spread his hands. It's that old dictum, he said, I think it was Bohr. That anyone who isn't troubled by quantum theory doesn't understand it. The director leaned forward like a retriever, his eyebrows bushy again. And *you* understand it? he said. McCaffee shrugged, meeting the glower with his mild Oppenheimer stare. Maybe a little, he said. That's why I'm getting away. Not to Vienna. Not to *do* things. To be a blank slate so I can think this through.

So, said the director. So so so. It's not really a vacation. You're continuing the project offsite, is all. Yes, McCaffee said. He hoped it was true.

McCaffee was principal investigator on Fermilab's virtual antiboson project. There had been a grimness about the place ever since CERN had beat them to the Higgs particle, first detecting it and then characterizing it. Everyone said the achievement ranked with *Principia*, general relativity, Watson and Crick. CERN had decoded mass, one of the fundamentals of nature. In an eyeblink, that had attracted fifteen billion dollars to Geneva. The three Nobels were almost incidental.

The burst of venture capital galled Fermilab's director more than the scientific achievement. Europe's on to synthetic inertia and reactionless drives, he moaned to McCaffee. Why use rockets to launch a satellite, why finish the Tower? They've left us in the dust.

The Tower was the Fixed Space Facility in Ecuador, its upper fifty miles still under construction. According to the director, the CERN equations said you could blast astronauts into orbit using artillery. Five hundred gravities wouldn't matter if you cancelled out inertia at the flick of a switch. Even if something as violent as ballistic spaceflight can't be marketed, the director said, people could just float to orbit on a raft outfitted with CERN-patented antigravity. Anywhere there's a gravity well you'll be able to fly, he said. Like a balloon that works without an atmosphere, at long last the reactionless drive. No need for a launch elevator.

McCaffee told him it was a long way from equations to inventions, and the director nodded and said Yes, good, and didn't hear him. Hence the VB crash project at Fermilab. The director told them they'd get nowhere playing catchup: they had to leapfrog to the next big discovery.

Now the director thought they were closing in on it. The virtual antiboson that McCaffee's new equations implied might do anything a synthetic CERN-Higgs field could do, but six orders of magnitude cheaper, faster and more efficiently. CERN, shit! said the director, ebullient again. CERN just wired up a lightning rod. You – meaning McCaffee's group – will

make a dynamo that makes or breaks inertia on demand. Synthetic impetus! We'll show those Swiss bastards what H-E physics means.

McCaffee, the director's fair-haired boy, wasn't sure. VB was a hell of a gamble for Fermilab, like trying to clear the bases on a 3-2 count with two out in the ninth. If you won, you were a hero. If you didn't, your career was toast and you may as well go open a bed and breakfast in Zagreb.

Were they that close? McCaffee wasn't sure. He didn't have the director's absolute confidence, which was why he'd never be director. Besides, even close was no cigar. Six years after Congress handed them twenty billion dollars, Fermilab had nothing but ambivalent data. The facts didn't disprove McCaffee's nascent theory, but they didn't prove it, either. Seventy-five hadron-antihadron runs, sixty quadrillion discrete subatomic interactions, a person-millennium of analysis, and still not one clear footprint of what they sought. Gnat's-whisker close a couple of times, McCaffee suspected, but nothing definite. So McCaffee had thrown up his hands, booked two weeks off, got his old sedan the brake job it needed, and planned a trip.

Well, not *planned* exactly. He had no idea where he'd go. Maybe he'd skirt Lake Michigan, maybe he'd take Route 66 southwest to Los Angeles or stay on two-lane blacktop east to New York. Or Boston, he hadn't seen Boston in a while. Oysters at Faneuil, the BSO at Wolf Trap. All travel is mental travel, Saul Bellow said. McCaffee planned to think every inch of the way.

Or rather not think, God no. In the last six years he'd had enough formal thought for a lifetime. Pacing the floor in front of a blackboard, or motionless at a desk with his head in his hands, trying to see the core of things and ending up as just another failed equation jockey like old Einstein. Jiggle this progression, tweak this index, calculate the consequences.

But there were never any consequences. The new equations that McCaffee tried to link to the Standard Model were so fragile that the smallest perturbation burst them like balloons.

$F = MA$ ,  $E = MC^2$ , Buy Low Sell High, correlations like that were cast-iron dependable: not so McCaffee's wonky math. McCaffee was sick of trying to build a house from bubbles. He needed to plan without planning, to anti-plan, to not-plan. He needed to drive. Driving east proved to be the course of least resistance.

Two days out of Chicago, on a blank part of his E-map of upstate New York, McCaffee found himself on a twisty mountain road miles from nowhere. The only sign he saw blinked **MAX 50 SPEED**. McCaffee's GPS unit was glitching and he had no idea where he was. It was August, sidereal noon, and the glare beyond his windshield was intense. McCaffee kept one eye on his sinking gas gauge and wondered what he'd do if it dropped to zero. Hitchhike, probably. At least the road was paved, so some kind of vehicle would have to pass along it sometime.

At that moment he topped a rise and saw a gas station. It was no more than two pumps and a shed, and even that took up most of the clearing that the station owner had hacked into the forest. The trees came up to the back of the shed and down to the road shoulder on either side of a tiny gravel turnaround. OPEN, read a battered sign. McCaffee wheeled in and killed his hybrid motor. Out of the car it was as hot as a hydrogen furnace; the heat of the day hit him like an offensive lineman and he was sweating in ten seconds. No one came to greet him. McCaffee swiped his arm across his forehead and stalked over to the shed. The lintel was low and he ducked to pass it. He stepped through an abrupt transition. The place was astoundingly fresh; a loud machine in the back wall poured out chilled air. To judge by its groans and rattles it was as old as creation, but it worked well enough.

McCaffee slapped his palm on a shiny desk-bell that sat beside a beautiful old nickel-plated manual cash register. Still nobody came. McCaffee hit the bell again, leaned on the cluttered counter, and looked around, waiting. As he did so, he got an odd feeling. The place

was eerie but familiar, like something seen in a dream. It made him feel like that Bach aria that compares death to sleep. The place wasn't evil, but it was spooky: intimate and awesome at the same time. McCaffee's bald head tried to bristle.

Then it hit him: he had known a place like this in his childhood. His parents, both teachers, once spent summers in an Ohio village that had a clone of this store. Same patchwork of stuff piled head-high on swayback shelves, same two-or-three of everything – cotton balls, baking soda, paint brushes, chocolate bars. Varsol by the gallon and cloth by the yard.

In a corner, adding its clanking voice to that of the air conditioner, stood a swing-top tank. McCaffee walked over and lifted the lid. The tank was full of chilled water in which stood rows of pop bottles. Glass bottles, not polycarbonate, and with old-fashioned caps you had to pry off with an opener in the tank's side. Coca-Cola, one kind and not forty. Hires Root Beer, Orange Crush. Six ounces only, not the current eighty-four. The bottles jiggled against one another, chiming rhythmically like sailboat fittings on a windy day. It was a cheerful sound that said *vacation*. McCaffee smiled, remembering.

When no one came after ten minutes and five slaps of the bell, McCaffee went out into the day-glare and examined the gas pumps. There was no slot in which to stick a credit card; the things didn't even have electricity. TETRAETHYL LEAD ADDED TO PREVENT ENGINE KNOCK, a sticker said. Christ! McCaffee muttered. Leaded gas hadn't been legal for sixty-five years and might bugger his car's converter. But he had no choice: It was pump or walk, and a P.I. at Fermilab could afford the repairs.

The pump nozzles were too wide to fit into his fill pipe, which stumped him for a minute. When did these relics date from? But McCaffee found that if he held male and female fittings an inch apart and slowly cranked a hand pump, gasoline would trickle into his tank without spilling.

McCaffee kept one eye on the pump dial. Sixty bucks' worth, a fifth of a tank, should get him back to civilization. To his surprise, his tank overflowed when the upper pump dial said \$2.88. McCaffee looked at the price readout: Twenty, it said. Christ, McCaffee said, out loud this time. Twenty cents per *gallon*? Must be: his tank was full. Shaking his head, he went back into the store and slid a three-dollar coin beneath the desk-bell. He paused at the door on the way out, thinking he'd heard voices, but nobody came. He went through the heat to his car, got in, and drove away.

The cheap gas stopped him two miles down the road. Not content with coating the platinum arsenide in McCaffee's converter and dissolving the proton exchange membrane in his port fuel cell, it clogged his fuel-injector nozzle and brought his old two-banger to a lurching, chuffing stall. McCaffee tried the starter till the remaining fuel cell died, then punched his steering wheel in frustration. He looked around. The forest, the whole forest, and nothing but the forest. Only one thing for it. He'd have to hike back to the little store.

Clouds slid across the sun, bringing a groan of far-off thunder. A cool breeze came up and felt good on his sweat. McCaffee estimated forty minutes to the store. He might be stuck there till the owner returned, but he could live with that. Almost without willing it, he'd started formulating some tensor equations that he wanted to get down.

McCaffee reached into his car's back seat, grabbed some papers and a deck-of-cards computer, and started hiking. The thunder built, but his luck held: the first few raindrops punched holes in the dust just as he sprinted towards the shed's screen door. He pushed through it as the skies opened. Lightning snapped around him and the roar of thunder was continuous. McCaffee felt happy and exhilarated. Damn, he thought, I'm having an adventure! He'd felt like this in those vanished Ohio summers.

A close lightning strike made a crack like a gunshot, and the lights died. Never mind, his card-deck microcells gave him ten hours on low-power display. McCaffee sat on the

counter and started working. The rain hissed down and hammered like marbles on the corrugated roof.

*The VB project is blocked because its interim equations are fragile, McCaffee typed. They are full of factors containing root-minus-one. Imaginary numbers they're called, as if all numbers weren't as imaginary as souls. So far I've taken the i-terms as a confession of inadequacy. If my math were correct they'd cancel out and disappear. But what if those i's ought to be there? What if the things they imply are real effects? Tachyons in the Feynman diagrams, reverse time flow maybe. So this would follow, and this...*

McCaffee went over and tried to pull an orange pop from the chilled-water tank. The slot wouldn't accept his three-dollar coin. On impulse he tried a nickel; the mechanism snicked and the pop out lifted out. It tasted terrific, with an icy sting like the ones he'd had back in Ohio. McCaffee sat on the counter beside the cash register and went back to work.

His eye fell on a single expression on page three, the one that contained the first *i*. McCaffee's postdocs called it the Atlas Equation because it enshrined the role of the observer in physics. Something is real if and only if it is detected, the equation said. That was ancient history, but as McCaffee stared at it another meaning peeked out at him. Maybe you could interpret Bohr's hundred-year-old quantum paradox differently. *i for intentionality*, the expression might be saying.

McCaffee opened his mouth and left it open. That was it, that was the answer: *i* stood for intent. That was the meaning behind the quantum paradox. The thing that had boggled scientists for a century wasn't a conundrum at all: it had simply been waiting for its second half. Quantum chromodynamics at the VB level needed more than a mere observer. It demanded a mind whose focus was intense, almost furious. Someone who remembered the past, sensed the present, and anticipated the future: who swam through energy and matter as a

fish swims through water. A mind that not only saw the cosmos, but interacted with it – and so directed it. An intelligence with intent. The All-Seeing *i*.

McCaffee felt a twinge in his hands. Well, no wonder: he had been holding his notebook for three hours. Now he had it in a cast-iron grip. He looked down at his hands. They still held a notebook. But it was a real notebook, not a parallel-analog nanocomputer. Thick cream pages with a deckle edge, cemented across the top by green elastomer. The fingers that gripped this out-of-date notebook were his – but they no longer belonged to Alasdair John McCaffee, B.Sc., M.Ed., Ph.D. (Oxon). The hands that emerged from his shirt-cuffs were thin, gnarled, arthritic, and covered with age spots. They were his great-grandfather's hands. I'm forty-two in two weeks, McCaffee thought. Forty-two.

Shaking with fright, McCaffee set his notebook on the counter. The top sheet showed the Atlas Equation, but handwritten with blue ink in a trembling, spidery script. He looked around the store. It was *his* store – he knew that instantly. He ran it, owned it, lived in it. No wonder he hadn't been able to find the storekeeper. He *was* the storekeeper. A storekeeper who remembered everything about Dr. A.J. McCaffee.

Or not quite everything. McCaffee sensed his old life as a vivid dream from which he was awakening. The details had faded: Where he lived, the face of his director, the smell of his ex-wife, the reasons she gave for divorcing him. McCaffee felt blurred around the edges.

A cracked mirror hung on the grey plank wall above the pop cooler. The cooler worked quietly, as if it were new. A bare electric bulb in a porcelain ceiling fixture showed a thin, bald seventy-year-old with a bad shave, a big nose, and a thunderstruck expression. Beside the mirror was a calendar, as new as the pop tank. It showed a pretty woman in a low-cut gown, sitting on the fender of an old-fashioned fourteen-wheeler. READY TO ROLL, said the cutline. AUGUST 1946.

Wheels crunched on gravel beyond the screen door, and a chime sounded. McCaffee didn't wonder about the chime. He knew it was powered by air, compressed when a car tire ran over a black rubber tube that snaked across the gravel by the pumps. McCaffee had laid out the tube at nine AM, six hours ago, when he'd opened for the day. At least the store owner had done so. The ancient, tottering man whose body McCaffee now wore like a baggy suit.

Haltingly, jerkily, like a puppet on strings, McCaffee opened the screen door and shuffled outside. The door clapped shut behind him. A new Oldsmobile was on the gravel, its hood up and its radiator cap spilling clouds of dense white vapor. *Dilute half-mole ethylene glycol in aqueous solution*, McCaffee's mind said. The car looked vintage nineteen-forties, deep maroon with grey cloth seats and wide-stripe whitewalls. It was in mint trim. A young woman in a sun dress walked through the vaporized coolant, waving it away with a straw hat in her hand. She put the hat on her head, smiled at McCaffee, and stepped toward him with her hand outstretched. McCaffee shook hands automatically.

Steep hills around here! the woman shouted above the rad-hiss. I'm afraid they were too much for my motor! She was twenty, brunette, solidly built and as pretty as the girl on the calendar. McCaffee nodded, still on autopilot. The Atlas Equation slid through his mind. The girl came into an incredibly sharp focus. And instantly McCaffee *was* the woman, looking at a bewildered old codger in dirty overalls and feeling himself – herself? – wearing clean unwrinkled skin that tingled with perspiration.

McCaffee had idly wondered at certain points what it was to be a woman; now he knew. It was subtle, simple, and impossible to express in words. You had to be there, McCaffee thought to himself, and with the thought he flashed the old man a dazzling smile. *In human interaction as in canine*, said his mind, *the female is dominant*.

The old man, no longer McCaffee, shuffled away back into his shed, shaking his head as if to collect his thoughts. A minute later he emerged with a two-gallon pail full of water.

Is that hot? McCaffee asked him. The old man looked at her, then shook his head. Let it warm up while the engine cools, McCaffee said. If you pour it straight into the radiator you could warp the block. The man looked at her oddly. My uncle's a mechanic, McCaffee added, justifying her unladylike knowledge of car engines.

The old man set the pail down on the hot gravel and folded his arms; the two waited silently for a minute. Should be good now, the man said, and McCaffee nodded. The old man filled the radiator and the boiled-over vapor thinned and disappeared. McCaffee took off her white gloves, torqued on the rad cap with both hands, and put on her gloves again.

How much do I owe you? she asked, and the old man gave her a shy smile. Nothin', nothin', miss, he said. Pleasure t'be a'service. You need anything else? McCaffee shook her head. How far is it to the next town? she asked. The old man pointed. Champlain's ten mile south, he said. Finger Lakes back the other way, thirty-eight-forty mile.

McCaffee got into the big humpbacked car and looked for the air conditioning controls. There weren't any. At least the transmission was automatic; a manual shift would have stranded her – her, him, the All-seeing *i* – indefinitely. Pretty young Miss McCaffee put her right pump on the brake, slipped the gear selector into D, and wheeled out onto the unpaved road.

Champlain was tranquil, dusty, and as heavily treed as the surrounding Adirondacks. Red, white and blue bunting hung from lampposts and the corners of a bandstand in the park, left over from the Fourth of July. Elms and chestnuts threw thick shadows across trim paths and lawns. A pedestal clock standing where paths met said five PM. McCaffee pulled into a shaded parking spot, turned off the engine, and leaned back in her seat to think.

I should be worried, she thought. I don't really understand this. But I'm not afraid. I've done what I set out to do. I've solved the riddle of the V-A boson equations and it's set me

free. Freer than anyone in history, unless someone somebody sometime made the same conceptual breakthrough I did. But that's not likely. We assembled the equations only a month ago – well, a month plus ninety-two years.

So where does that leave me?

McCaffee looked down at herself. Free, white, twenty-one, and female: not bad. She had a sudden urge to find a hotel room, strip naked, and examine herself in front of a full-length mirror. Body of a woman, mind of a man. Or was it a man's mind still? Hadn't it already adjusted to its new form?

McCaffee looked around the car's interior. On the back seat was a large straw purse that matched her hat. She pulled the purse into her lap and rummaged through it. It held money – cash – a hundred dollars in fives and tens. No credit cards; but those hadn't been invented. Ownership papers for a 1946 Oldsmobile Royal Four-Door. *Jeanne Jennifer Court*, said her driver's licence: *DOB 11/5/25. Hair BR, Eyes BL, Race CN.*

Okay, McCaffee thought, let's form a working hypothesis. Say for argument's sake I'm freely mobile throughout an N-dimensional meta-continuum. Say further that my intuition was correct and that intent is the basis of QED effects, therefore of the whole damned universe. Intent rules here and everywhere.

So. Consequences? The observer paradox is my sail, my motor. It gives me mobility, but also sets me adrift. Intent gives me direction. It's my rudder. It's all there in the new equations.

There, but latent. I was the first to see. And seeing it, made it happen. The observer defines, creates, reality. I am *i*. It's dumb, it's impossible, but it's the only thing that fits. Holmes said it: *The truth is what is left when one eliminates all other explanations, no matter how odd it seems.*

Okay. Having jumped here, I can also jump around. Move from one outlook to another. As if that old concept of the soul really applies. I shift instantly from viewpoint to viewpoint, between two sets of eyes, without ruffling feathers. When I arrive, the preexistent consciousness slides over to accommodate me like a fan in the bleachers. And it doesn't remember me once I move on.

So: intent. The product of consciousness, right? Yes, but not entirely. Evidently there's *unconscious* intent as well. I must have wanted to come back here, to swap Fermilab for this simple rock-solid postwar America with its chilled-water pop tanks and humpbacked cars and formal manners and white-gloved young ladies and kind, polite old men and citizens who vote. I must have aimed for this intent-space, only unconsciously. Thank God I never studied history, I might have gone back to Byzantium. Or anthropology, my God; showing proto-hominids what a weapon is, teaching them language and fire. I'm a physicist, always have been, I don't know anything beyond my discipline and a few pop songs. But eidetically, in my depths, I remembered that village store: and I came straight to the spacetime that contained it. Did I use the past tense, *contained*? That's wrong. Now, always and forever, this store is in the present. My intent was unconscious, but it wasn't irrational. Paris be damned, I'm on my dream vacation. I'm where I want to be.

McCaffee raised her head, rolled down her window, and looked about her at the little town. So far so good, then, but she had to take care. Having understood this much, she couldn't leave her destinations to her coin-flipping unconscious. It had worked once, but next time she might find herself eyeless in Gaza at the mill with slaves. Or on the moon without a spacesuit. Or in a war. She had to determine – no, *predetermine* – an exact target before she jumped. She must keep her future intent strictly rational if she wanted to navigate the meta-continuum with success.

Navigate where? Maybe the safest course was to get back home. Home, right: Where was home? Fermilab 2034, a political director and a pack of interchangeable postdocs? Bag 'em, McCaffee thought in sudden anger, there's nothing there for me any more. Probably there never was. That's why I wanted to hit the road in the first place: that's the source of my irrational intent. No: I've escaped 'em: To hell with them all.

McCaffee looked up at the village with her jaw set. Time for the first experiment. A short man in a rumpled suit and brown fedora was walking down the street. McCaffee caught his eye, but without his equation-summoning focus. Just looked at him and held her breath, waiting for the transfer. It didn't happen. The man looked at her quizzically, raised his hat, and walked on. Inside the car, McCaffee grew a dazzling smile. Intent, she thought, rational intent. I'll jump when I'm ready, and where I decide.

Yet how to decide? Maybe that *could* be left to the unconscious. Cruise randomly, pick a transfer that feels right, then move to it – him, her – with conscious intent. McCaffee knew that approach from music. Musicians who relied solely on their forebrains were technically flawless and emotionally cold, like machines transcribing notation. There was a place for intuition, just as there was a place for strict analysis. Both blended in the thinking, feeling, acting consciousness of a human being. The totality. The *i*.

McCaffee's smile became an ear-to-ear grin. She twisted the rear-view mirror to look at her face, and touched up her powder and lipstick. The half-veil was a little high. There: now she looked presentable. McCaffee thumbed the starter button and the Oldsmobile's straight-eight engine roared to life. She hand-signalled, cranked over the wheel, checked nonexistent traffic, and turned out into the hushed summer street. The greatest voyage in the history of the worlds began as simply as that.

Woodstock, Vermont, Christmas Eve, 1949. McCaffee – a tall, well-muscled man with salt-and-pepper hair – stood at his living-room window. Snowflakes sifted down through children's shouting and the songs of carollers; white candles in neighbours' gables leaked glamor onto drifted snow. What had Charlie said at supper? *It's a pretty bright day for night.*

McCaffee bent his head, flared a match, lit his pipe. His wife came up behind him and put her arms around his waist. McCaffee felt the warmth and weight of her head and the softness of her hair between his shoulders. His pipe smoke blended with her perfume.

It's perfect, she said after a minute. Mmm, McCaffee said, it will be when you model that new nightgown. He could feel her smile. Kids asleep? he asked, and she nodded. Jim went *klunk* the second his head hit the pillow, she said, but Charlie's tossing and turning. Maybe you should go upstairs and talk to him. I'll wait a minute, McCaffee said. I'd wake him if he's drifted off. He blew a smoke ring.

The felt-smile. You don't want to leave this, do you? his wife asked him. Her name was Joanne and she was a wonderful dancer. I thought you were crazy when you wanted to move way up here, but I was wrong. It's the best place in the world to raise kids.

Want to raise another? he asked her. Give me a minute, she said, I'll go change.

At three AM McCaffee slipped from bed, kissed a strand of Joanne's hair that lay across his pillow, put on his dressing gown, and went downstairs. It had stopped snowing and through the window-frost the stars glared sharp and silver. Chimney-smoke rose straight up. Fifteen below at least, McCaffee thought, and came back from the window to pour himself a Scotch. His leather chair creaked as he sat down.

What a ride the last three years had been! McCaffee had circumnavigated the world by plane, train, ship, truck, tank and camel. He had been a hundred people in a dozen countries. A glance, a choice, and there he was: undetectably another. Except that he was *not* another: he

remained McCaffee still. It was like entering a house where everything was instantly familiar and you were as welcome as family. At each jump McCaffee recalled his past, yet had access to every skill and memory that his host possessed. The first few times he'd felt like a sneak-thief. But one night he'd jumped from friend to friend while the two were playing cards, and spoken to his former host. *Howard? You feel okay? Feel fine. You look funny, is all.* Frank, y'old fool, stop mouthin' an' play gin.

When McCaffee moved, he left no trace or artifact. *Who thinks he is indispensable should thrust his hand into water and note the hole remaining when he withdraws it*, K'ung Fu-tse had said. The instant McCaffee departed, the bodies he had shared blinked once and forgot him. If afterwards they thought about the shared time, they'd scratch their heads and say, Now why did I do that? [Make a snowman, take a month off work, write poetry, drive to Mexico.] But then, immediately and always, they put the wonder from their minds. Must have had my reasons, they'd say, and get on with the lives that McCaffee had made.

At first his opportunities seemed endless. McCaffee had been president of an Omaha bank, the French Minister for Marine, a hunter-gatherer in Rotorua. He had been a tramp-steamer skipper, an opium addict, a Nashville dentist, the Chairman of the Joint Chiefs of Staff. He had been men and women, girls and boys, straight and gay, in every color of the human rainbow. *A stone, a leaf, a door*, Tom Wolfe wrote, listing the tiny things that could evoke human yearning. McCaffee never had to yearn. The instant he willed it, he could be the man polishing stone, the child collecting leaves, the tousled housewife at an open door.

All he had to fear was sudden death. McCaffee hated to drive now: cars had no seatbelts and a bump in a parking lot could kill. He'd moved to small-town New England so he could walk wherever he needed. He'd had a scare a year ago when he'd fractured his shinbone skiing; before that he hadn't realized how primitive medicine was back here, even in the most advanced country on Earth. All through his hospital stay, people in adjacent wards were

dropping off from things that in 2034 were manageable or nonexistent. Nineteen-forty-nine had no lithotrippers, transplants, renal dialysis, trypanosome chelators, catalytic TN factors, magic bullets, or antitumor pills.

On the other hand, there were no AIDS or urban tuberculosis; no shortage of clean, well-staffed hospital wards; no plague of obesity; no drug-crazed ghettos. Despite the Red Menace and the Yellow Peril, things were pretty simple in 1949. The bad guys were beaten and the good guys were in charge. US cities were safe and Europe was rebuilding. Best of all, the world still had wild places, unclimbed mountains, white spaces on the maps. McCaffee was glad he didn't know history. He had no idea what each evening's paper would unfold to him.

Sometimes McCaffee thought he should drift back to Fermilab. It would be easy – find a series of youngsters, stay with them as they aged, jump to the next youth as required. But McCaffee didn't consider it for long. Say he arrived: how could he prove who he was or where he'd been? If he showed up in Chicago and pounded on the door tricked out as someone else, they'd lock him up and try to cure his delusion. They might succeed, too.

Anyway, where was the real-McCoy McCaffee? The man who four generations in the future had arrived at an isolated gas station in New York, and been transformed? McCaffee didn't know and didn't care. Whether his initial self was still functioning, or a walking zombie with its soul sucked out, or gone entirely in a blast of energy, it wasn't him any more. Yet that former McCaffee was all that Fermilab 2040 knew.

And there was a stronger reason for not going back: the threat of Armageddon. Obviously, since both McCaffee and the universe still existed, the universe could handle one loose-cannon observer. But that might be its saturation point. If anyone at Fermilab replicated what he'd done, chaos might ensue. The last VB equation hinted that McCaffee's exile in this semi-barbarous spacetime might embody a strict conservation law. Perhaps the universe had sent him away to contain the damage: encysted him: put him into spatiotemporal isolation.

Of course all exiles could end. After four years of being a gypsy, McCaffee had achieved the perfection of the age, the envy of the planet. He was utterly mainstream, a white-bread graphic artist who freelanced for mass-circulation magazines out of Los Angeles and New York. His life, his house, his work and family were as perfect as his illustrations.

And it wasn't enough. Perfection was like death, McCaffee realized: both meant the end of things. Life was hoping, aiming at the impossible, and alone of humankind McCaffee didn't need to hope. What others dreamed about, he did. Now everything on Earth was stale to him. He couldn't face another forty years of raking leaves.

Jo and the kids wouldn't miss him, because he'd still be around. The kids might wonder why Dad didn't exercise as much or talked a little differently. But everyone changes, and the family would adapt. Charlie and Jim would go to college. Joanne would join a bridge club, take up golf. McCaffee remembered one fact from recent history: the glossy magazines had another twenty years to run before television throttled them. That was enough to take McCaffee's handsome host to retirement painting covers for *Life* and *Liberty*. Cleaning downspouts, raising children, raking leaves.

That didn't work for McCaffee. He needed travel, not arrival. There was so much more to do, see, be; to sense, to explore, to feast on. All the joy of his current position was just a speck of that. You can't go home again, Wolfe said. That wasn't the half of it. You couldn't stay home if you got there, because what was once home never stayed that way. Home – true home – was motion; home was somewhere else. Home was a running river. That was the lasting part of the quantum paradox, the part that the equations couldn't solve. The smallest things destroyed contentment. They evoked the world beyond. A stone, a leaf, a door.

McCaffee swallowed the rest of his drink, set down his glass, stood up. He looked at Joanne's house for the last time, took a deep breath, and stepped out into the night. The door

clicked shut behind him. It was silent and deathly cold. McCaffee looked up into the maze of starshine.

There! A fleck of light in the Big Dipper's handle, Zeta Ursae Majoris. Mizar and Alcor. Equations entered McCaffee's mind. He focused –

And was off among the stars.