

## PROLOGUE: THE AMERICAN JUNK BARN

An hour west of Wichita on US 54, in the early summer of 1999, Joe Larabee started to get nervous. It wasn't just that he and Dahlia weren't *really* going camping in the Grand Canyon as they'd planned for weeks, and that sometime soon, up ahead, she might smell the truth in his pheromones – the anxiety molecules that no deodorant was ever a match for, not with *his* pits. It wasn't the whole scam that worried him, because he considered himself a good planner, it was this raggedy old place called The American Junk Barn, just a few miles up on the left. Dahlia was *extremely* eager to go to The American Junk Barn to forage around for some extra camping gear – an old canteen, some cooking stuff – rather than buy it new at the Wal-Mart in Dodge. But there was no way he could let her do it, and the problem now was that she was driving, and she'd just drive in and do it anyway.

“Why not the Junk Barn?” she'd asked, about ten minutes ago when she'd seen the first road sign for it.

“Don't want someone like you in a ratty old place like that.”

“You said it's fun in there. You can get anything you want. You went once before to get an old compressor, you said you loved it.”

True, he'd made the mistake of telling her he'd been there before. “I loved the compressor, that was all.”

She set her jaw. Because she was so thin and bony, you could actually see her set her jaw, and hear something *snap* somewhere in her skull structure when she did it. Still, she was pretty, with

her big pale blue eyes and her off-centered smile. “Joe. You told me, that guy’s got lots of old stuff, cheap.”

“Some stuff cheap. Other stuff not.”

“Well, we are going to stop there. You can sit and sweat in the damn car if you want, but I’m definitely going inside to see what he’s got for camping gear. We *need* things.”

“Dahlia, listen to me,” he pleaded, and then instantly slapped his forehead in regret.

“I’m *not* Dahlia, the name’s Sage, and it’s been that way for better part of a month now, and I’m beginning to regard you as downright autistic, Joe. Damn, you’re my husband, get it right!”

“Sage. I got lots of folding green in my pocket. I want to buy new cooking gear at Wal-Mart.”

“Why?”

“Mainly for health reasons, that’s why.”

“I can wash the gear.”

“You just don’t know where it’s been at, that’s all. Gives me the creeps.”

“I’ll *wash* it.”

“It’s not the *same*. Just knowing someone else’s lips and tongues and whatnot were all over it, I mean, I can’t.”

“Joe? You’re losin’ me.”

She said this not to mean that his thinking was somehow beyond her, but to say he was really losing her, losing her as a wife, a lover and a friend. He replied with a firmness that she *should* understand as being final, “Sage, we are going to Wal-Mart.”

That seemed to quiet her for awhile, giving him time to think of another strategy. Eventually he believed he had it. Of course there was a small chance that if she did go into The American Junk Barn, she might not see all the stuff he’d taken out of the basement that was hers. It was an enormous place, and there wasn’t any rhyme or reason to how the stuff was arranged. Her family’s old dishes and glassware might have ended up on

a shelf with old paperbacks. The little oil paintings that, if you cleaned them up, would be pretty again, might hang on the back wall near the old tin advertising signs. There was also a box of little silver pitchers and sugar bowls, and a case of really old Mason jars with those lead-colored lids. Those were a special gift from Sage’s mother Rosemary, so as a new wife she could do some canning, but Sage didn’t know how to can and so they just sat in the basement.

He also scooped up a box of her old toys, and if there were any guilt in Joe’s heart, it was connected to these toys because they were so personal. There were some old dolls including a Ken and Barbie, a “Waltons” lunch box from the TV show about the southern family in the Depression – the one that ended, “Night, John-Boy” – a Boggle game with all the letters, and an old erector set that no girl should’ve had as a kid. Also in the box was a little rubber squeeze doll that looked just like an alien, whose eyes and ears and mouth popped out when you squeezed it. It was old and dirty and she called it a “Schmoo.” And also, a bunch of children’s jewelry. Okay, so they were all personal things, but Joe didn’t understand if they were so personal why they’d just be *stored* out of sight for so long. He wouldn’t stick *his* favorite things in the basement. So, if there were any question about the right or wrong of what he’d done, he could easily argue that raising the money was *essential* to helping her get well again.

The Mexican gave him over two hundred bucks for it all, and Joe needed every dime.

One thing he figured he could’ve gotten more money for was the Waltons lunch box. It was pristine, no scrapes or dents, and it made Joe think Sage was the kind of little kid, age nine or ten when of course she was Dahlia or “Dolly,” who never chucked her lunch box at some kid she hated on the playground. Maybe nobody ever teased her or called her names. Old lunch boxes were now bringing big money, as in hundreds of dollars,

and the Waltons lunch box was easily sixty or seventy-five, he thought. But the Mexican said he'd never seen the TV show, and had no idea about it.

"Love the smell of that old tarp," he said after awhile. His old oilskin tarp, for use as a ground cloth at the Grand Canyon, was sealed in the trunk, but there was some rot in the steel behind the back seat of the Cutlass, so anything smelly that was in the trunk would smell inside the car, too. "Reminds me of the ocean somehow."

"You been to the ocean once, when you were three," she said.

"You can remember a lot from three."

"Yeah, someone like you who's got so damn little to remember *after* it. Jeez, Joe, I don't know why I'm s'posed to still love someone who's so totally illiterate, and hasn't changed much in thirty years."

"I'm gonna ignore that," he said, and then discovered to his horror that they were *at* The American Junk Barn and she was slowing and turning hard left into the driveway.

"No!!" he cried out.

"Jeez, Joe, you got a hair, don't you?"

There was a single old Ford pickup truck, early 60s it looked like, in the lot by the big barn next to a flatbed trailer. On the back gate was what looked like a very faded homemade bumper sticker that you could just barely read in black letters, "Arcton Is A Fraud." Sage pulled the Cutlass up behind it and stopped, and Joe felt he had no choice but to grab her by the skinny shoulder strap of her tank top shirt.

"You're not goin' in."

"I'm *not*?"

"Sage, listen to me. On my Daddy's grave —"

"Your Daddy's grave's been getting a helluva workout lately."

Now a man about his own age emerged from the front door, carrying a small jar in his hands. Joe Larabee looked hard at

his young wife, who was looking hard at the dark-haired man strolling for the door of his pickup truck.

"Don't go in there, Sage. The man's *crazy*, that's what I was leading up to."

"Yeah? *Who's* crazy? You mean him?" She was pointing to the guy getting into his truck.

"Him, the Mexican owner, all crazy, you walk in there with your skimpy top, I get the feeling they're *stalkers*. You stay outa there, Sage, we got one less problem in our marriage. Sure don't need stalkers. I hear some stalkers *like* body hair on a woman, especially blond like you, so I'm telling you."

"Joe, you're nuts, you know that?" His wife closed her eyes, started the engine up, and started to back out, ahead of the man in his pickup truck.

"I feel protective, that's all," he said.

"Okay," she said as she stretched her neck to look backwards, "we're goin' to Dodge to find the Wal-Mart."

Joe congratulated himself on his effective use of persuasion, though he had an inkling she might have given in a little too easily. They were out again on US 54, headed west, safely through the first gate in his tortuous trail of deception.

He breathed a sigh of relief. With the sixteen hundred dollars he'd taken from their savings and the two hundred for Sage's stuff from the basement, he had all the cash he needed to pay the tuition for the four-week deprogramming session at Rancho Descartes. The Grand Canyon could wait another year or so. The important thing now was that his wife get well, get over her strange ideas, and from everything Joe had heard about it, Rancho Descartes was the best place in America to be deprogrammed from crazy cult stuff. In fact, they guaranteed it.

# one

## FLUID DYNAMICS: GAS

When Reese Archuleta pumped gas into the tank of his '64 Ford pickup – and at this moment it was at a Texaco station in Ramone, Oklahoma, a grain silo town plunked down on the panhandle – it was habitual for him to focus on the very action of pumping gas. His mind did not wander to think of women, of shooting pool, or of the curiosity of his tenuous existence. Instead, he thought of the turbulent surge of the aromatic liquid, its tricky chemistry, the board rooms packed with older white males who manipulated its price, and ultimately the primitiveness of gasoline when virtually free energy was right at the doorstep of science. One brand new modular function in string theory just might do it, and automakers would find themselves in a frenzy of retrofitting – to make automobiles run on *gravitons*.

As the conveyors of the gravitational force between one object and another, gravitons were by far the most elusive of

all imagined particles, still purely theoretical and never-observed in this early summer of 1999. But they were intricately snarled in the mathematics of string theory and existed powerfully in the minds of the world's most brilliant physicists.

All is physics. All is small. So small that ten quintillion strings can squeeze into a single proton. There were no things smaller, no things more numerous, and no things more important. The Nobel people in Stockholm knew this – their Prize was a lock for the scientist who might make a major breakthrough in string theory, at long last uniting quantum mechanics (which explained matter and energy) with relativity (time and space).

Reese believed his work could someday be good enough for a Nobel, but he'd been warned to lay low and out of the public spotlight, so he could never become a serious candidate. He was different from other physicists that way. He didn't like it, but he had to live with it.

"Sir? Just lift the handle to start pumping." The drawling adolescent voice was crackling at him from a tinny loudspeaker in the pump. Reese lifted the handle to start the flow of gas, now all too aware that he had missed this one simple step.

Sometimes these things happened.

"Thanks," he said reflexively.

Across the street a car door slammed. It was a slam of anger, not an overeager response to a gust of wind. The car – an old American coupe with plenty of engine under the hood – sped away. A woman was left behind, with dust whirling around her. Toward the disappearing car she raised a hand and extended her middle finger. Now a large van wheeled in on the other side of the pumps to block his view, but Reese kept the woman's image in his mind: she was thin like a model, with tofu colored skin, bony shoulders and lightish hair, maybe ash-blonde. She carried a small duffel and a handbag.

The family in the van just a few feet away revealed themselves as Texans ("Burtie, you touch her again you're goin' right

back to Dallas all by yerself on a bus!”), with the father trying to figure out how the pump worked (“Jeez, they got more stuff to read here on this damn pump than a whole Reader’s Digest!”) and their boisterousness erupting through the calm of the tiny town of Ramone like summer thunder. “Gol’ darn,” the father went on, rubbing beads of sweat from his pink forehead, “do I stick my damn *card* in first, or do I gotta push some damn button?”

Reese tried to filter out the vapid content of the Texans’ conversation so that only the layered music of their voices was left. As he imagined how prettily melodic their voices were if you ignored the words themselves, the pump’s automatic shutoff clicked, the hose in his hand went limp with inactivity, and the woman who’d been across the street was not but ten feet away on the pavement staring at him with her thin arms crossed and her weight cocked toward her left side. The duffel was at her feet and the handbag hung heavy from her shoulder.

“I *stuck* my damn card in, why don’t I get all the zeroes?” the Texan sang to himself. In the van the wife was screaming at Burtie: “You fart one more time next to your sister I’m gonna tape up your butt!”

Reese chuckled at the thought of *the dynamics of gas* and hung up the hose nozzle. He squinted briefly at the woman. He retrieved his gas cap from the shoulder of his rear fender, slipped it onto the flanges of his filler pipe, and squeezed it closed. He turned to see her again and she lifted one side of her mouth into a kind of half-smile, the way some people look at you when you’ve said something funny that they don’t quite understand.

“Old as hell. Does it run?” she said.

Reese believed he was nodding at her, *of course it runs, how the hell you think I got to Ramone, Oklahoma in the first place – it’s obvious I don’t live here, it’s got New Mexico plates*, but his attention was absorbed by the refraction of sunlight around her

thin frame, a brilliant halo effect with the sun lowering in the west behind her. Her face was hard to make out in shadow, but she wore a beige-colored tank top that was frayed and nappy from too many washings, and the sun flared around this fuzzy garment and her shoulders and arms in the most astonishing display of gauzy brightness he’d ever seen around a woman’s body.

“If you gassed up, I guess it runs.”

The mother was instructing Burtie on the proper uses of the great outdoors for flatulence, Burtie was protesting that it was mostly the fault of the fish sandwich, and to understand why the woman looked this way Reese stepped away from his truck to see if the gauzy aura of her shoulders and arms was body hair.

“It got here from Red Cliff, New Mexico,” he said, “and there’s nothing to keep it from going back.” In the new angle of light he confirmed that it was body hair, in the sort of gleaming abundance that at first diverts the eye, then in a curious and unknowable way pleases it, the color of summer wheat, a shiny coat on her skinny forearms, a bright spray of parallel streaks on her upper arms lightening to a sunny haze along her shoulders. He maneuvered his observation out of the realm of fascination into the neutral territory of fact – that it’s just DNA, inherited follicles – but when his eyes drifted to her folded arms one more time she took exception.

“So maybe I’m too funny looking to ride with you?”

“A person can’t be too anything to ride with me. But that was your boyfriend driving, and he’ll be back for you.”

“That was my husband, and if he comes back I’ll kill him.”

“Excuse me?”

“Look, I’m goin’ west, and so are you.”

“I need to pay for the gas.” He turned to go.

“If I ride with you, I’m buying.”

“No, it’s LANL – that’s the Labs at Los Alamos – expense account – you keep your money.” LANL, which he said as the word “Lannel,” was shorthand for Los Alamos National Laboratories.

“You’re a scientist?”

“Yes. Physicist.”

When he saw that she was not the least impressed nor put off by his reply, Reese went inside and gave cash to the large sour-faced woman at the register. Almost every time Reese took cash from his wallet, he was reminded of his first wallet, the one before this one, that had been stolen by Poncho eight years ago, when Reese was about thirty years old and was less cautious in his choice of opponents for a few racks of straight pool or eight ball. Knowing the answer ahead of time, he nevertheless asked the large woman if she’d run across a burly Hispanic man named Poncho, now middle-aged, with an angry scar under his left eye and carrying his heft with an attitude that spoke of delight in intimidating people. Can’t say I have, she said, needing to add that they didn’t see too many Mexicans through this way, the panhandle. More of them down south, below Amarillo, or west of the Sangres in northern New Mexico, or headed over toward Trinidad and the San Luis Valley in Colorado. Here, she hastened to add, was mostly *Americans*, but there weren’t so many of *them* either, just hardly any people at all. He looked past the large woman toward the rebellious young wife outside, leaning against the side of his truck and staring in at him, or else at her reflection in the window, with her slender arms still crossed in front of her narrow torso. The Texans and their van were gone. Reese gathered up his change and the receipt, and walked out, feeling his chest tighten in anticipation of having to explain some things to his would-be traveling partner about himself that she would have to find disconcerting. It wasn’t just that his life began at about age twenty-three in an arroyo *inside* the heavily secured compound of the Los Alamos

National Laboratories as if he’d dropped from the sky. Forget the amnesia that dispersed all memory before age twenty-three into impenetrable blackness, irretrievable even after several rounds of hypnosis. It was all the *other stuff* that doctors conjectured came from the nasty bump on his head. The anomalies with spacetime.

“Hey, next time somebody leaves their change here, I just might keep it,” said the large woman before Reese had reached the door. “Might put enough by to move back to San Antonio.”

Reese spun back to the counter and *again* gathered up his change and the receipt. When he got outside, the Texans were still gone and, surprisingly, so was the fuzzy woman. He checked to see if his gas cap was tight and secure. Then he climbed into the cab and turned the key on to confirm that the gas tank was full. The needle crept up to approach the “F” line, finally hit it, kissed it, and held. Satisfied that he’d truly done what he remembered he’d done, he started the engine, shifted into first gear, and moved away from the gas pumps into the sunlight toward the street where, on the far side, the young woman in the tan tank top was in animated conversation with an unseen driver in the same car that had been there a few minutes earlier, a car he recognized as an Olds Cutlass coupe.

## ORDER

As a physicist at Los Alamos, Reese Archuleta was familiar with the laws, the theories, and even the wildest speculations about “order.” A tightly racked equilateral triangle of fifteen billiard balls is, in an ideal sense, perfect “first degree” order, because the balls share identical spatial relationships to each other. If you lay out the balls in a straight line of successively squared distances between them – one centimeter, two centimeters, four, eight, and so on, we would call this “second degree” order. The higher the order, the less apparent it is that there’s

any order at all, because the ratios become mathematically more obscure. In the most violent thunderstorm there is apparently no order at all – the bullets of rain come down randomly, the patterns of moving air in the top of the thunderhead seem absolutely chaotic, lightning strikes when it wants to, and so on – but the complexity guys, with their incredibly powerful computers, would be inclined to disagree. Some apparently random systems, they say, are in fact pseudorandom. If there is a mathematical way of describing the system, however lengthy that description may be, then the system isn't random, it's just very complex. Even if its description includes a hundred thousand words and numbers, the description is conferring order upon the system.

Years ago, the math guys found surprising magnitudes of order in systems of chaos. In that same chaotic thunderstorm, in the drifting of smoke from a cigarette or the whorls of ink dispersing in a beaker of glycerin, they discovered algorithms and visual geometries that implied something orderly at work, even in the most random-looking systems.

Reese believed the strangeness of his own life was far beyond the reach of complexity theory. The pump handle he thought he lifted, the dollars and coins he thought he'd picked up off the counter, the gaping hole of twenty-three years of amnesia – “The Big Blank” – these were not elements of a random system. Something far more mysterious was at work. Just like this unstoppable urge to intervene in what seemed to be a pretty nasty marital dispute.

### DAHLIA (SAGE) STIPES

Reese parked his truck a block behind the Cutlass, got out and slowly walked toward the warring couple. If he were thrust into the role of peacemaker with these two, he believed he had a pretty good chance to calm things down – largely by dint

of his above-average height, his appearance of strength, and whatever words of persuasion might come to him.

But this one would be tough: the husband, invisible in the car, was howling “I dare you” and the wife was waving a handgun at him through the passenger's side window and screaming back at him with neck veins bulging. When Reese was close enough, her head jerked to see him.

“Not now, honey,” she barked at Reese.

“*Honey!?*” screamed the husband.

“Please drop the gun,” Reese said.

“Last night in Wichita,” she said through the open window to her husband, “this is the man.”

“Is that what the voices are telling you? Fuck any man you want?”

“You been fuckin' what's-her-name!”

“Lies!”

“You tie me up and kidnap me, Joe!”

“Then go ahead, shoot me now!”

She grimaced at him, lowered the gun about eight degrees, and just as Reese put his hand out to try to take the gun from her, she actually shot Joe, and he yowled “*Owww!* You nicked me in my *butt!*”

“Want another?” she said.

“You're fuckin' crazy, Dahlia!”

“Don't you ever fuckin' call me that again!!” and she fired the gun again, this time angling the shot over the steering wheel through a corner of the front windshield.

Hardly anyone lived in Ramone, Oklahoma, and at that moment the only ones who could have heard the gunshots were the large-bodied woman and the teenage boy inside the Texaco station. Both ambled out into the sunshine as Reese's truck peeled down the street with Dahlia now seated inside with her duffel and handbag, roaring past Joe, who was bent over in the driver's seat grimacing in pain. Dahlia used the truck's

passenger side rear view mirror to make sure neither Joe nor any law officer was following them, and she did not say a word to Reese until they were about thirty miles east of Boise City, with the sun rimming the horizon of the Comanche Grasslands.

Finally, she said “Thank you.”

“That was really unfortunate.”

“Spect it was.”

“I actually thought I could stop it. I tried.”

“Well, your hand was reaching out for my gun. I thought, if this man takes the gun from me, I won’t be able to shoot it. So I decided I had to shoot before your hand got too close.”

“Yeah, quick thinking.”

“I aimed at the seat but I missed and shot him low in the ass. Took out about a tablespoon o’ lard, messed up his bucket seat. That’s all.”

“Your name’s Dahlia?” Reese asked safely.

“No, it’s Sage, Sage Stipes. My given name was Dahlia, but I changed it. I don’t answer to it any more.”

“Okay, Sage Stipes it is.”

“And you’re a physicist, you said.”

“I’m Reese Archuleta,” he told her, feeling great relief that in fact they *had* met before the shooting. “Is it Sage as in the plant, or as in wise?”

“Mostly the plant,” she said. “But both, if I live my life right.”

“Just for the record, I haven’t been to Wichita in five, six years.”

“Well just for the record, Mr. Archuleta, you must go places you don’t know about. You’ve got some kind of real ability there, buster.”

“Well, you’re mistaken, ‘cause I know I haven’t been to Wichita since, oh, maybe five years ago.”

“I’m not talkin’ Wichita,” she said. “I’m talkin’ Texaco. Look, I’m not gonna need this any more, am I?” Reese watched her

remove the gun from her handbag and palm it for him – a sturdy-looking revolver. He believed it was a Smith & Wesson Chief’s Special .38, a stylish-looking five-shooter that some of the LANL guards used. “I mean, it’s obvious you’re a decent sort, not gonna do anything funny, and this gun here is a back door deal at a pawn shop with no papers on it, and right now if we get stopped it’s evidence.”

She wound down her window.

“Am I right? I don’t need it, right?”

“You don’t need it,” he said.

She backhanded the weapon hard through the open window. The gun easily cleared a stretch of barbed wire fence and disappeared into the tall grass.

“I *must* be safe, because I’m riding along with a guy who’s probably not even human.” And she laughed and shook her head, and exhaled a lengthy *eeeeeyaaahh* that Reese tried to identify as some regional argot. Her voice was neither southern nor western, but a piece of each. “So what *are* you?”

“Human.”

“Uh *uh*. You disappeared.”

## FUZZY LOGIC

Reese tried to process what he heard from Sage. It seemed then that any kind of rational approach to understanding this clearly volatile woman would be futile. Instead, he looked at her face and then past it to her right arm resting on the window sill with the blond hairs blowing wildly in the wind, shining at him in the mirror from the sinking sun.

And so, he thought, *fuzzy logic*. Wherever it might lead him.

“You saw me disappear.”

“At Texaco, we’d just started talking. You went inside to pay for your gas. I watched you inside, and you came out.”

“Right, I did that.”



“And you came out twice.”

“No I didn’t.” He knew he’d done it in his mind, but not *really*, not in the everyday world. It had happened many times before. Every time it happened, he swept it aside as a phenomenon that was a trick of his brain, a metaphysical artifact, or some potent combination of the two he had yet to understand.

“No, listen to me: You came outside like you had something on your mind, and you were stuffing money into your pocket. I heard a car coming, turned and saw Joe driving back into town. Then I looked back for you, and you’d disappeared.”

“Maybe I just ducked down or something.”

“Uh *uh*. No way, you weren’t hidden by the truck. I didn’t turn to see the Cutlass more than one second. See, you’d come out the first time, you were right near the truck about to talk to me, I heard Joe’s car, looked at it, looked back at you, you were gone. No *way* you’d get back inside that fast, unless you’re some kind of magician.”

“Huh,” he said.

“You came out twice.”

“I don’t think so.” He had picked up his change and receipt from the counter and walked to the door and gone outside, and the next thing he knew he was back *inside* near the door and the large woman was correctly informing him that he hadn’t yet picked up his change and his receipt, because they were still on the counter. But Sage couldn’t possibly have seen what he’d only *thought* he’d done.

“I *know* so,” she said. “The second time you came out, you were doing the same thing, stuffing money into your pocket.”

“The money. It should be four dollars and forty cents out of twenty. If I did it twice, then it’s eight-eighty, with two receipts, and you’re right.”

“I’m right anyway, four-forty or eight-eighty,” she said.

Reese stretched his body up, reached into his left jeans pocket and felt for the bills and the coins, clutching them into

a manageable wad and producing them for his witness, Sage. Four ones, a quarter and a nickel, and a crumpled receipt. He patted his pocket.

“Dime’s still in there.”

“So you got change once. But you came out twice.”

Reese looked far down the road and could see the first twiggy apparition of Boise City’s grain silos, like far off skyscrapers shimmering in the heat. Long views were a fact of the Great Plains, but distances out here were as uncertain as the pull of gravity. With what Sage was reporting to him, he could not help but feel a new, stronger anchoring to an earth that sometimes seemed barely able to hold him.

“You saw what I *thought* I did.”

“Hey bub, I saw what you *did*.”

“You saw me. I didn’t do it, but you saw it.”

“I’m telling you, you did it, you disappeared.”

“I disappeared.”

“I feel like Judy Garland talkin’ to the Scarecrow. Look, if you’re supposed to be so smart, find out how you did that.”

“It’s not what I did, it’s what you saw.”

“What I saw was not something a human could do.”

“You saw a human – who –” and he fumbled, wanting to find the best words of *so many* that described, but didn’t adequately define, what he was – “who may have unusual qualities.”

“Well, I’m studying Buddhism, so I’m not s’posed to be distressed by magical things.”

“That’s good.”

She scrunched her face at him. “So. You are human.”

“I hope so.”

“I was imagining, he’s probably alien or interdimensional or something, no way Joe’s gonna beat him up, that’s why I told the lie about fucking you in Wichita. I didn’t fuck anybody in

Wichita. I just left the motel and went out and got drunk, just to get away from him. I'm glad I shot him. I'm glad he's gone."

"I'm not an alien or interdimensional, I'm very human. But these things do happen to me, and I have no idea why."

She smiled a great wide smile that seemed too big for her narrow face. "I guess I'm your angel."

"Well. We'll see." Reese felt this was the right opportunity to tell her that he could be thought of as less than perfect goods. Perhaps, on the heels of her excitement about what she'd seen, this revelation wouldn't seem so alarming. "I had an accident, about fifteen years ago. I don't remember anything before the accident."

Her face scrunched again, but now with concern. She started chewing on a thumbnail.

"But I'm fine," he added. "Except for these anomalies."

"Anomalies?"

"These strange experiences, like doing things twice, or seeming to."

"You hit your head?"

"So they tell me. It caused severe amnesia."

Over the years, he had disclosed this information to a very few, trusted people. He hardly knew this woman and therefore should have no reason to trust her, but in this case he was guided by instinct. She seemed perfectly safe to him, in spite of her behavior with her husband.

"Huh," she said at last.

"You cannot tell anyone. You have to keep it to yourself."

"Okay, I can deal."

"My brain's very active and perfectly okay. But it's not delivering anything to me before age twenty-three."

"Wow."

"Everything before that is a Big Blank."

"Huh." She chewed her thumbnail and added, "But you got a name, so can't you, like, look yourself up? Find out things?"

"I've only had my name since twenty-three."

"Huh."

"I was going to warn you back at the gas station that things can happen to me. I thought I'd tell you, 'cause it's a long ride from the Oklahoma panhandle to Red Cliff."

"You must've gone to school. You must've had friends –"

"Nothing before twenty-three."

"Well then," she said with a hint of impatience. "Let's just start at twenty-three. What happened?"

"Okay." But he had to think about it for a few seconds, because he'd never been asked to explain his strange origins in just a few sentences – to someone who evidently liked her explanations short and sweet. "Somehow, I landed inside the lab compound. I fell into an arroyo. I was unconscious, I had no wallet or identification. I was named after the guard who found me and a candy wrapper they found in my pocket."

He saw her eyes widen in total disbelief, until she seemed to accept that it might be true.

"I play very good pool, and I don't know why."

"Huh."

For another mile or so her brow was scunching, as if these few tidbits required strenuous processing.

At last, he asked her: "And you?"

"Can't match what you got," she said.

"That's okay, hardly anyone can."

"I'm just searching for the vortex."

"The vortex?"

"Yeah, whichever one it is they talk about, somewhere in New Mexico."

"Huh."

After another two minutes or so he turned to her and asked, "Why?"

"I think I've been told to."

Again she seemed to slip into a mode of intense concentration, biting her thumbnail and scrunching her eyebrows.

“And Joe was going with you to the vortex?”

She shook her head. “No, Joe had other plans.”

### BOSONS' MATE

For the rest of the drive into New Mexico, he kept many other things secret. Like his visit earlier that day with Raul Chacon, his crazy old friend who lived in a trailer in southwestern Kansas, where the Great Plains spread like a mirror to the sky. Raul owned and operated a huge falling-down building full of collectibles and discarded stuff, a place he called The American Junk Barn. At the door, customers were greeted with a hand-painted sign that proclaimed “Someone’s Past Is In Your Future.” In the barn, Raul would sit and talk about his days as a particle physicist, the kind who knew too much and, by dint of his exalted knowledge, was a certain target of unknown dark forces within the government. Raul didn’t care much about quarks or nuons or muons fractionally charged dyons or even strings, but he was fanatical about Higgs bosons. Higgs bosons were thought to confer mass to other particles, but now, in 1999, they were far more *proposed* than actual, and currently unfindable by the world’s largest accelerator. It was perhaps their very dubiousness that inspired Raul to cherish having them around the Junk Barn. Once a month or so, to maintain a friendship he had come to value, Reese would make a delivery of Higgs bosons in an old Hellman’s mayonnaise jar that sat beside him on the truck’s bench seat. Fresh batch, he’d tell Raul, who would delightedly unscrew the cap (slooowwwly), and release them with his own sound effects – a voluble *whoosh* – that no Higgs boson could ever utter by itself.

Of course there was nothing in the jar but air and the faint trace of mayonnaise. The air itself was a transparent soup of

nitrogen, oxygen, hydrogen, argon, xenon, neon. The mayo residue added whiffs of carbon and more hydrogen. Everything that was in the jar was, of course, clumped into atoms, within which boiled a quantum potpourri of subatomic curiosities, including, if they existed, Higgs bosons. When Raul opened the jar, he would squint his eyes and insist he saw photon emissions – simple twinklings of light – from Higgs boson interactions with one hadron or another. He would breathe deeply, inhaling a trillion-trillion unbelievably small things that may have existed only in the minds of physicists. Then Raul would produce very cold beer, and he and Reese would start to talk about problems of relativity theory on the fringes of black holes, secret government operations, and women. Reese didn’t think for one minute that Raul was really an ex-physicist. He was crazy, all right, but not physicist-crazy. Tellingly, his mathematics were weak – he could scarcely put a pencil to the most basic differential equation. And Raul would not likely pass for a physicist at a big convention. In the way Hispanic-looking people were stereotyped, he might look like part of linen service, with his big belly and bowed legs, his saddle-colored skin and sorrowful eyes.

Sitting on a sagging couch in the Junk Barn, surrounded by cracked crockery from Taiwan and boxes of plastic hair dryers and curling irons, Reese would listen to his host’s lyrical tales about women, threaded with tributes to their physiologies, wiles and ways, but as he listened he found himself tabulating his own litany of disappointments in love and romance. He had dated sporadically over the last fifteen years: Texas panhandle ranchers’ daughters with anthill-sized hair, adobe-skinned middle-aged divorcées from Taos and Santa Fe with nervous eyes that spoke of identity crises, and the occasional earth-mother Light Worker with incense-smelling skin. Soon after his arrival at LANL, he’d become intrigued with a young lab worker named Charone, with her fast wit, angular cheekbones

and wise, dark eyes, until Charone declared her true lover to be a giant blond god named Arcton from Zeta Reticuli II. Then, as now with Sage in the cab of his truck headed west across the prairie from Springer to Cimarron, he thought of women as equal parts mystery and exasperation. For the most part, he believed, they liked him, and a few may have loved him, but then the anomalous stuff would happen and they never called back.

It had not yet occurred to Reese that he could love someone like Sage. He had no clue who she really was. But he felt a curious attraction to her that puzzled him, and he enjoyed her company in the truck.

“I gotta eat,” she said as they came into Cimarron, snug in the eastern foothills of the Sangre de Christos. On the far side of the mountains was Taos, then a forty-minute drive west across the Rio Grande to Tres Piedras, and another hour south to Red Cliff.

“Fine. There’s a good place, right up ahead.”

### INDETERMINACY IN THE RED HEN LOUNGE

Werner Heisenberg, famous for his Uncertainty Principle in physics, would have loved the knockwurst here. *Observation* of the knockwurst rips off part of our knowledge of it – as, when observing an electron, one can’t know both its momentum and its position at the same time – but simply *believing* the knockwurst allows it to yield the most precise account of itself.

The Red Hen sizzled with the kind of indeterminacy Heisenberg died too soon to appreciate on the grand scale of solid state physics. After many months of journeying through here to visit Raul, Reese had become friendly with the principal owner, Buzz Geier, originally an oilfield worker from Amarillo who moved first into brokering cattle, and then into barbecuing them. His second wife was an unlikely choice – a wiry dark-haired New Yorker named Nadelle Tannenbaum who, upon

encountering the landscapes and quirky cultures of north-central New Mexico, changed her name to Krystl. Buzz adorned the place with stuff to delight the senses of ranchers, hunters, and loggers: cowboy art, elk horns, arrowheads under glass and, behind the cash register on the wall, a box of Spotted Owl Helper – dummied up so authentically it might have been plucked off a supermarket shelf. Krystl countered with images of clouds and rainbows and swirly mystical paintings suggestive of boundless love and enlightenment. Uncertainty kept Krystl and Buzz in a cloudy but stable orbit around their work. She, humming an Enya melody, would sneak a few morsels of greasy T-bone while building soy burgers; he would drawl with Texans at one table while serving the soy burgers with a smile, along with one of Krystl’s kale and pine nut salads, to a pair of aging hippies at another. Such was the paradox of the Red Hen, of Cimarron, and much of northern New Mexico.

Sage’s appetite coordinated nicely with the Red Hen’s schizophrenic culture. She ordered a bean sprout vinaigrette salad, hummus and corn chips, and barbecued pork short ribs that, when they came, displayed a thick sheath of gelatinous fat. She picked at the salad daintily with her fork, then lustily attacked the meaty ribs with her hands. Reese watched in fascination as sauce and grease trickled down her wrists in trails before getting trapped in the blaze of blond hairs on her arms. One miniature red rivulet coursed toward a wayward bean sprout that dangled green near her elbow. Somewhat to his consternation, Reese acknowledged a tingle of arousal that thwarted whatever appetite he had for his curried chicken salad.

Setting his fork down, he said, “You’ve got a sprout on your arm.”

“Mm.” She investigated herself, smiled at the tendril of legume clinging to the hairs (*not* touching her skin), and plucked it off. “There.”

Reese discovered, as she was staring at him in a kind of unconcentrated, middle-distance way, that Sage's eyes were pale blue and quite large, as if nature had designed her to expect nothing but surprises. With a twitch of her head, her staring focused on him, and she offered a cocked smile.

"Don't hear that much, do you?" she said.

"What?"

"You got a sprout on your arm. That's not something you hear – those words are *unusual* together. They're funny."

"I see what you mean," he agreed.

"Here's another one. 'I shot him low in the ass.' I remember that's what I said."

"You'd actually have to do it to say it."

"I know. It's one of those rare sentences that people just never *say*. I should keep track of them. *Eeeeyaaah!* I shot him low in the ass! I got a sprout on my arm!" She laughed.

"Very rare sentence," Reese agreed.

"It's funny. It's funny we met, too."

"It is?"

"Yeah. Nothing happens for nothing, right?"

Then it occurred to him that he could now ask, "What happened between you two?" but at that very moment the bear-bodied, whiffle-haircutted form of Buzz Geier appeared next to their table, happy and enthusiastic to see his friend Reese, offering a hearty handshake and wanting a fast introduction to the young woman with him.

"This is Sage Stipes," Reese said to him.

"See you got my ribs. That's three days marinating, my own recipe, hope you like 'em."

"They're incredible," she said.

"Not too fatty?" he tested her.

"Nope. Just right," she replied with a sincere smile, in spite of the streaks of red grease on her arms and oily splotches on her sleeveless shirt.

Buzz turned back to Reese. "Seein' your buddy up in Kansas again?"

"Yup. Raul. He's still fine."

"Still doin' the bison thing?"

For years, it seemed, Reese had played along with Buzz's initial but lasting error in hearing the word *bison* for *boson*, perhaps believing that Reese just didn't know his ruminant mammals as well as his physics. And so an elaborate mythology had evolved around Raul's fixation on bisons, with Reese making monthly deliveries of *bison sperm* in Hellman's mayonnaise jars for Raul to use in secret fertilization experiments that might, ultimately, lead to the world's finest barbecued buffalo short ribs.

"Who's that fella down at Los Alamos who gives you the sperm?" Buzz needed reminding again.

"Peter Higgs," Reese told him, providing the real name of the Scottish physicist who first proposed the existence of the particle. "But his ranch is up near Tres Piedras."

"Oh yeah, Higgs, and his great big field. And he's helping you on that theory, right?"

"Gravitons or strings?" Reese asked, now totally lost.

"Yeah, strings."

"Strings?" asked Sage, equally lost, but not visibly annoyed that Buzz had cut her out of the conversation.

"It's not my theory," Reese said, but no one heard him.

"You better explain it to her, I can't," said Buzz happily. "Anyway, back to the grill."

When he had left, Sage looked at him again. "What about strings?"

Reese nibbled a bit more chicken salad, and looked calmly at Sage, whose eyes were wide with curiosity. "You want to know about string theory?"

"Yeah." Her tone became almost defiant. "It sounds like I should know it."

“Okay. Hang on.”

“I’m not too dumb for it, am I?”

“No, and I didn’t mean that.”

“Then try me.”

“It’s actually more like, we’re all too dumb for it.”

“Wow.”

“Okay, here goes. It starts like a hundred years ago, when scientists thought that all the stuff around us could be reduced to tinier and tinier bits of matter, down to cells or tiny crystals and then molecules and then atoms. They knew something about atoms, and they were basically right when they said an atom has a nucleus made up of protons and neutrons, and orbiting around the nucleus were tiny balls of negative electrical charge called electrons.”

“I know about that,” she said. “It’s like the sun, and the planets.”

“*Kind* of. That was their model, like the sun and the planets. They thought these particles, these protons and neutrons and electrons, were like little balls. I mean, *hard*.”

“They’re not?”

“No. Not really. That whole idea started to fall apart when scientists started playing with light. Plain old light. They weren’t quite sure what light was, but they leaned toward the theory that light was made up of photons, which they saw as particles.”

“Little balls.”

“Little balls, each being its own twinkle. But the little ball theory fell apart when they did experiments with light that lots of times showed it behaved like a *wave*. That it wasn’t always a thing, sometimes it was a *motion*. A wave on the ocean isn’t something you can catch and study and hold in your hand, because it’s always moving. This became known as the wave-particle duality of light. And it extended from photons to other particles, like electrons. And it opened the door to quantum theory, which was born in the early 1900s.”

“I’ve heard of quantum theory.”

“Scientists learned that electrons weren’t whirling around in orbits like balls or planets, they would *jump* from one orbit to another in a specific amount of a leap. That jump was called a quantum jump, because the jump would either absorb or emit a given amount of energy – a quantum. These little electron balls could actually jump to a higher or lower orbit, and never be in between. It sounds strange, but it’s true.”

“What about the strings?”

“Okay. For a long time – and it’s still going on – physicists have been discovering all these bizarre little particles that seem to be like secret partners to protons, neutrons, and electrons, or somehow act between them. There are hundreds of them. It all grew out of quantum theory, and a lot of experiments with atom smashers. There are muons and gluons and mesons and Higgs bosons and you name it. And some of them, like positrons, are too strange to comprehend, because they act like electrons, except they move *back* in time.”

Sage seemed to be with him, up until then.

“No,” she said.

“I’m afraid so. It’s not *much* time, it’s only like a trillionth of a trillionth of a second that it goes backward in time, but the positron fits quantum theory pretty well, even if you can’t grab on to it and hold it. I’ve got to mention Heisenberg. Werner Heisenberg said, when you observe a subatomic particle like an electron, either its location or its momentum, the more you know of one property the less you know of the other. In other words, you can’t know both its speed and its position at the same time.”

“Why not?”

“Because just measuring the thing interferes with it, and how it behaves. So, the point is, this made everybody feel very humble about what they could and couldn’t know. It’s called Heisenberg’s uncertainty principle, or else the indeterminacy

principle. It was a principle that told science, ‘Hey, if you want good knowledge of one thing, you’re going to have to be ignorant of another thing.’ It made physicists nuts for awhile, till they decided they had to get used to it. Einstein was annoyed by it, because it got in the way of some of his work in relativity theory. To put it mildly.”

“I thought, I mean, isn’t Einstein right?”

“Yes! Absolutely – but some things about quantum theory contradict Einstein. Like, the speed of light. Okay, nothing travels faster than light, that’s a really solid rule. But at the quantum level, certain things seem to happen backwards in time, or instantaneously. Paired particles relate to each other instantaneously – it’s been proven. Faster than light. Einstein hated this. He called it ‘Spooky action at a distance.’ Physicists call it ‘nonlocality,’ and they’re still trying to deal with what it means.”

“Well, they *should*.”

“It’s not their favorite pastime, dealing with impossible contradictions.”

“Strings,” she said.

“Right. Okay, so in the 1960s physicists started discovering or theorizing about things like quarks, which have really exotic properties and make up particles like protons and neutrons, but then they asked, could there be something inside a quark? What’s the tiniest tiniest thing? Well, remember, we’re dealing with things that sometimes act like particles, and sometimes act like waves, and maybe they’re really neither.”

“What?”

“Look. They’re *quantities*. I mean, forget the little ball idea. An electron doesn’t *have* mass, charge, and spin, it *is* mass, charge, and spin. It doesn’t have properties, it *is* properties. This is why we can’t picture them. This is why most physicists drool and play with their toes.” Reese drew a breath, leaned back and wondered if she thought he was nuts. “Okay, look.

The letter S is just a symbol. It’s not really a *thing*. An electron is like an S that way.”

“So, what goes inside the S isn’t a thing either.”

“Right, back to strings, the tiniest tiniest thing, but it’s more of an *idea*, like a unit of information. So. String theory gets a boost with a lot of thought experiments about black holes, but this gets really tricky so let’s try another approach. Okay, that bean sprout, where’d it go?”

“I ate them all.”

“Okay.” Reese found his right hand edging across the table, where his forefinger extended and seemed to touch the area of her arm where the sprout had lodged, but he was held in the thrall of indeterminacy, not knowing if the touch would actually *be* a touch. “Right there, string theory is working.” The tip of his forefinger did not feel the hair that it visibly nudged. Sage was staring at her arm in wonder, where his forefinger poked. “In that little wisp of a blond follicle are cells made up of molecules made up of atoms. In the atoms are protons, neutrons, which are made up of even tinier apparent things called quarks, and whirling around them are electrons. Now string theory says, in this string, in this hair, in a *single* proton there’s room for ten to the twentieth strings. Give or take. Ten to the twentieth power is an extremely large number. It’s a hundred quintillion.”

“What *are* they?” she asked. “If it’s part of me, I should know.”

“Yes, you should. Strings are highly, what do I say, *gossamer*.”

“Gossamer. Like a spider web.”

“Right, but much more gossamer. See, strings are nothing more than vibrations. They’re like twitchings of something, eyelash flickings, and they’re unbelievably elastic because in extreme conditions, like on the surface of a black hole, a single string can stretch for hundreds or thousands of miles. So it’s been theorized. Can you believe it? Imagine how that’s possible.”

“I can’t.”

“Lots of people can’t. But get this, a string *does* act like a unit of information, like a single digital bit in a computer. It vibrates so many times a second. It can be either a squiggly string, or else a closed loop.”

“But it’s not a thing.”

“Not *really*. We will never see one or touch one, they’re so enormously tiny. We can only make them up to fit a theory, and then play with the theory until we’re pretty sure we’re right that they actually exist.”

“So they may not exist.”

“Right, they may not. It’s just a theory, and no one’s smart enough to prove it.” Reese finally withdrew his finger from the exemplary filament of protein that had held his attention for so long. “Some people say string theory is physics from the future that accidentally fell into the present.”

Sage seemed to slip into a little trance; her eyes narrowed to slits, she twitched her head to look past him, and every muscle in her body froze. After a few seconds, Reese became concerned.

“Are you all right?”

Two seconds later, she snapped out of it, her eyes widening again. “I was trying to see it, this theory, the energy of it. I pick things up sometimes.”

Reese smiled at her. He had no idea what she was talking about, but she spoke with a beguiling sincerity.

“So, if strings do exist,” she went on, “they’re still not things.”

“No, not the way we *think* of things. A string is a resonance, a frequency. A violin string resonates and makes a sound. Imagine the vibration itself, without the string really being there. That’s kind of what this is all about.”

“If it’s not a thing, then what about all this hard stuff around us?”

“Yeah, it’s tricky. See, at really super miniature levels, matter and energy and information begin to look more and more alike. Hardness, *thingness* only begins to appear when we move out of atoms into molecules. But way down deep into this tiny scale, everything’s this enormous roiling sea of vibrations, ten to the twentieth strings per proton. I mean, figure that’s about all the water droplets in the entire world’s oceans.”

“But droplets are *things*.”

“Yeah. Picture them as *non-things*, more like a note of music you can hear but can’t roll between your thumb and forefinger, and maybe that helps.”

“A note of music you can stretch across a black hole for a hundred miles?”

“Well, that’s one extension of the theory, and not everyone buys it. But strings *do* twitch and vibrate and move, and when they move through space and time they make sheets or tubes, which everyone’s calling membranes.”

“I think I might be getting lost.”

“No, hang on, one last idea. Take a closed string, a loop, and waft it through space, like a plastic ring that makes soap bubbles. Okay, do you see it?”

“Yes.”

“Well, you can make a soap bubble tube, right? Kind of? In string theory, when a string wafts through space and time, it can make a sheet or a tube, and they call that a membrane. Actually, they call it a ‘brane,’ for short.”

“A brane. So that proves it’s just in your head.”

He had to smile. “We talk of branes so much, we never think of it that way.”

“Well, words do that for a reason. The law of causation.”

“Okay. But mathematically, string theory really works! It’s very powerful.”

“Math for something that may not exist. That can stretch for hundreds of miles —”



“See, Sage, this is why we’re crazy! I mean, I gave a talk last week you wouldn’t believe –”

“Tell me.”

“It’s gobbledygook.”

“I want to hear it.”

“It was about proving the existence of the world-sheet supercurrent by showing that the relevant twist automorphism exists in some lattice, and I referred to the important role of the compactification lattice for toroidal orbifolds. I mean, give me a break! I said, with a  $Z_2$  twist, we got a chiral model in D-6 with a nontrivial anomaly structure!”

She smiled oddly and said, “It’s scary how smart that sounds. Brainy.”

“Hey, there’s no really good way to picture these things, these ideas. Common sense doesn’t work. Physicists have been telling each other for decades, if you understand all this stuff, then you don’t get it. If you can visualize it, then you’re a fool. If you insist you know something for sure, chances are you’re crazy.”

“That’s so like Buddhism,” she said. “You’re not crazy.”

“Well, thank you for saying that. Many of my colleagues are. A lot of them are completely pissed at string theory because it makes a mess of ordinary dimensions and space-time and even a bean sprout salad, but it sure helps in lots of other ways. I just don’t know. I can tell you a little about the theory, but I prefer to get pulled back to this larger scale and it feels safer here. Which makes no sense at all, because almost all my work is related to string theory.”

“You don’t feel safe in your work?”

“Sage, what I’m trying to do is contribute to a *proof* for the theory that doesn’t require me to blow up the universe with an atom smasher that needs to be too huge to be made. That’s the hard part – the more obscure a thing is, the more energy it takes to set it free and find it.”

“God, Buddhism again.”

“Well, you might have a point. See, it doesn’t feel safe because every rational part of my being tells me it’s a fruitless pursuit. But there’s another side that tells me to keep going. Because string theory is a single system for *all* the forces – the weak, the strong, electromagnetism, *and* gravity. If we can ever prove it –”

“Cops,” she said, and immediately arose from the table. Reese looked out past his reflection in the window and saw what looked like a state trooper’s cruiser parked outside, in the space next to his truck. A flashlight beam danced erratically near the truck, perhaps peering in through the driver’s side window. And now in the lobby a Stacie stood tall by the register counter as Buzz Geier emerged from the kitchen, wiping his hands on a sauce-stained dishtowel.

In the dining room there were people eating at six or seven tables, laughing and guffawing and drawling, but Sage was gone.

Reese looked toward the lobby, where Buzz cast a quick glance in his direction. Trouble. The Stacie was half-hidden behind a potted yucca plant. Buzz was nodding politely at him, but his brow was furrowed with concern. Next to him Krystl appeared, and husband and wife exchanged some words before Buzz split off and came over to Reese.

“Well. They got nothin’ better to do,” Buzz sighed, even as he was clearing away Sage’s dishes and table setting.

“Than what?”

“Than to chase down some poor woman who accidentally discharged her weapon toward her abusive husband.” Buzz set down the load on a small table on the far side of a pair of aging hippies, then came back and sat down. “You might want to talk to them, just to ease their minds, since they like your truck so much. ‘Course, you came here alone, right? I just served one of you.”

“If that’s what it is.”

“She’s prob’ly holing up in the ladies room. There’s a crank-out window there, if she gets nervous.”

With Buzz close behind, Reese straightened up and ambled slowly toward the lobby, adopting as best he could that sensibility, that feeling, one acquires when entering a pool hall knowing you’re the best pool player in the place. Perfect calm, the body moving like liquid. Krystl slipped back into the kitchen, and Buzz followed.

“Evening,” he said to the Statie, whose badge said Martinez. “I’m Dr. Reese Archuleta.”

“Sergeant Martinez.”

Martinez limply shook his hand and eyed him curiously, as so many did when they heard the Hispanic surname and tried to match it with his evidently Anglo features.

“Dr. Archuleta?”

“Yes. I’m a physicist at Los Alamos. What’s the problem?”

“Well, sir, we got a report of a shooting in Ramone, Oklahoma, and some witnesses who thought they saw your truck there, New Mexico plates, and you gave a ride to the young lady who’s the suspect. Name’s Dahlia Stipes.”

“Well, if they got the tag number,” said Reese, “it must’ve been my truck.”

Martinez’ cool brown eyes betrayed no hint of distraction. “No sir, they didn’t get a tag number, but they described it as light green with a white top, which is what you’ve got outside. That is your truck, right?”

“It’s my truck. Did they say it was an old Ford, a ‘64?”

“They said it was an older pickup, they *thought* it was a Ford, but they said it was green and white.”

“What did this woman do?”

“Well, sir, the fella says it was his wife and she shot him in the backside, but what I’m tryin’ to *get at* here is, were you in Ramone today, and if you were did you give this woman a ride?”

Before him lay the *break*, where you choose to blow the whole rack of fifteen balls wide open, or you ease the cue ball into them gently enough to keep them snugly, frustratingly tight to play the close-in game. In either case, the game becomes fixed. A blatant lie was the first option – a wide open table where you risk a long table-clearing run by your opponent and you just sit back to take your punishment. Fuzzy logic was the second choice. Just as Reese was deciding how much to lie, he caught a glimpse of Sage’s thin frame through the hallway in the kitchen, where Krystl was helping her don a cook’s uniform – white shirt and apron.

He looked back to Martinez, whose features started to shimmer, as if the space around him were suddenly electrified, ionized. Reese tightened his focus on the man.

“I was not, and I didn’t.”

Martinez didn’t even blink. “The woman at the gas station described a fellow like you who gassed up, mid to late 30s, little over six feet, dark brown hair. You can help us out, if you’d like to think about it.”

“Sergeant, I’ve been around here for awhile, and most older trucks I see are Chevys. People here don’t even know old Fords. And green and white, well, that fits a lot of old Chevs I’ve seen.” *Fuzzy logic.*

“Can you tell me where you were today?”

“Kansas, on highway 54. I came back via Boise City.”

“And you didn’t go through Ramone?”

Sage was pretending to make little salads on the work table back there, but her eyes were on Reese and Sergeant Martinez in the lobby.

“Fact is,” Martinez continued, “if you’re driving on 54 to Boise City you damn near have to go through Ramone, less’n you’re goin’ way outa your way.”

*Balls were sinking.* It was a strong run by the other guy, with the cue ball caroming slickly off rails and settling perfectly into position for another easy shot. Good shots, *great leaves.*

“I don’t recall going through Ramone.”

“See, Dr. Archuleta, when you know there’s been a crime and you help the perpetrator, that’s a crime, too. I s’pose I don’t have to spell that out for you. This is serious, it’s assault with a deadly weapon.”

“I understand.”

“Do I need a warrant to do forensics on your truck?”

“What did this woman look like?”

Finally Martinez reacted, turning his head and letting his eyes roll to the ceiling. “You mean, maybe you picked up a woman, but you’re not sure it was the same woman?” He leaked one of those tiny laughs, just a little sputter of surprised air. “You remember a woman who’s about five-five, thin build, with dirty blond hair, wearing jeans and a tan colored shirt with no sleeves?”

At the counter the aging hippie couple arrived to pay their bill, and Krystl came out to take their money. Sage was close behind. In her hand was a large stainless steel vegetable chopping knife which she lay noiselessly on the glass top counter. The way the hippie couple stood, Martinez could get a clear look at Sage’s face, but not what she had done with her hands. To his amazement, Reese found himself edging his back toward the knife on the counter, even as the hippie couple were chatting cheerfully with Krystl and Sage about what a great little restaurant this was, with its eclectic menu. His right hand came to rest on the edge of the counter.

“No,” he said, now certain of failure, “I didn’t pick up that woman.”

“Did you pick up *any* woman?” Martinez said with obvious irritation, at the same moment Reese felt the wooden handle of the knife slide into contact with his fingertips. Martinez

glanced over his shoulder at Sage, held her in his view for a few seconds, then looked back to Reese. “You *were* in Ramone, weren’t you? You got gas there.”

*The eight ball was sitting on the lip of a corner pocket.*

“There’s a lot of uncertainty here –”

“Dr. Archuleta, I’m gonna need to arrest you in a second. Shall we go outside?” The eight ball dropped, *kachunk*, and it was over.

Reese left the knife behind, balled his right hand into a fist, and plunged it as hard as he could into Martinez’ ample gut, doubling the man over with a gush of a groan. *Hey*, cried the hippie couple, *outa here* said Sage, rushing around the end of the counter, Krystl yelped in alarm as Martinez dropped to his knees on the floor and gasped violently.

“C’mon!” Sage said, grabbing Reese’s hand. He couldn’t move.

“Get back there,” he said, with a jerk of his head to the kitchen.

“No, this way!”

Martinez was recovering, sucking air, trying to get up.

“No, go back,” Reese said. “I’ve never hurt anyone, never could.”

For a second, Sage’s jaw dropped. But she quickly recovered – and the corner of her mouth twitched up into that quizzical smile. She turned, shrugged, and went back to the kitchen.

Reese extended a hand to Martinez to help him to his feet, hardly feeling the other man’s hand. Reese blinked, and the cop was upright. The two aging hippies were not there, and Krystl, Buzz and Sage were back together doing their work in the kitchen.

“It didn’t happen,” Reese believed he said to Sergeant Martinez.

“Well, sir, the fella says it was his wife and she shot him in the backside, but what I’m tryin’ to *get at* here is, were you in Ramone today, and if you were did you give this woman a ride?”

A wedge of visibility into the kitchen revealed Sage chopping vegetables with the same large knife, making salads, but her eyes and ears were with him.

“Yeah, I got gas there today, this woman needed a ride west, I said fine, hop in, but I never got her name. Gunshots, though. Didn’t hear them, I must’ve been too far away – no wait, that’s right, I heard a couple of *pops*, and I thought firecrackers, ‘cause it’s the end of June, it made sense to me in some way, coming up to the Fourth.”

“So I can take it she’s not still with you?”

“No, she got out in Boise City. She wanted to go to Colorado. Sergeant, believe me, I didn’t see any shooting. I picked her up on the side of the road. She seemed perfectly calm, not like anything happened. I had no awareness of anything out of the ordinary.”

“Remember what she looked like?”

“Yeah. Thin, kind of dirty blond hair, she had jeans and a beige-colored tank top.”

Martinez nodded and asked, “You know where in Colorado she was headed?”

“She said the Rockies, that’s all.”

“Well, I suppose she did,” Martinez said, finally acquiescing. “Thanks for your time.”

The close-in game prevailed. For the several hundredth time in his fifteen years of life, Reese absorbed the possibility that, with hindsight behaving like foresight, his consciousness – if any of it could be thought to reside in the brain – was a seething foam of what both can be and can’t be true. He socked Martinez in the gut, and he did not sock Martinez in the gut. He was about to be arrested, and he was thanked for his time.

*Buy One Reality, Get One Free!*

It was all very much like the certain bipolar state of Erwin Schrödinger’s cat – sharing simultaneous states of absolute deadness and aliveness. Schrödinger, a physicist with a quirky sense of humor, presented his “cat puzzle” in 1935 as an illustration of the absurdity of quantum theory. He imagined a quantum situation where there was a precise 50-50 chance of a radioactive source emitting a subatomic particle toward a detector, which would subsequently trigger a mechanism releasing a deadly poison inside a sealed box. Also in the box was a cat. The puzzle asked, after enough time had elapsed to assure an exactly equal chance of the particle being released toward the detector, would the cat in the box be dead or alive?

The normal answer is: it has an equal chance of being either dead or alive, but you can’t tell until you open the box.

The most popular interpretation of quantum theory scoffed loudly at that kind of common sense. The correct answer is that the cat is in a superposition of two states, being both dead and alive at the same time. If dead is black and alive is white, then the cat is gray. It is a *smearing* of two opposite conditions, because the radioactive particle itself is a smearing of probabilities. Yes, it strikes the detector and, no, it does not strike the detector – at the same time.

Reese liked to think that this was the first time in history that science chose to be ridiculous in order to be sublime, when Niels Bohr – with some help from Werner Heisenberg and Max Born – established the “Copenhagen Interpretation” of quantum mechanics back in 1930. So named because this was Bohr’s home town, the Copenhagen Interpretation ruled the roost for some fifty years, and still held sway with most traditional physicists. It enshrined the wave-particle duality of subatomic things, declaring that they traveled as waves of probability until detected (seen, measured), at which time their waves “collapsed” and they became “real” particles. The Copenhagen Interpretation installed the human observer as a critical compo-

ment of the system. It made consciousness part of the equation. It endowed Schrödinger's cat with simultaneous life and death.

Reese considered the story of the cat a useful if somewhat morbid allegory for the deepest mystery of particle physics: what is *really* happening down there in those exquisitely small places?

What really happened with Martinez? For Reese, one scenario smeared into the other.

But in the eyes and ears of the world around him, the second, better scenario was the "real" one. No one in the restaurant witnessed the sucker punch to the cop's stomach. No one except this spindly-bodied, wide-eyed gun-toting wastrel from Wichita, whom he'd accepted as his traveling companion purely on a whim.

Martinez' cruiser vanished into the dark hills of northeastern New Mexico. The aging hippies came out again to pay, Sage thanked Buzz and Krystl for their quick thinking, and Reese assured Buzz of a gift of overproof, small-batch bourbon on his next trip through delivering bison sperm to Raul at The American Junk Barn. Outside, the stars were sprayed atop the dark ridges of the Sangres to the west, and as Reese stood on the gravel driveway admiring their brilliance he felt Sage's hand come to rest on his shoulder.

"Hey. Guess why the knife," she said. Half her face was stained red from the restaurant sign.

"I've been guessing stuff all my life. It has to stop."

"Then you'll have to *deduce* it, and I expect you'll get it pretty quick, since I know you're a whole lot smarter than what I saw in there."

"How do you see these things that I do that I don't do?"

"I'm workin' on it," she said, flashing a grin of giddy self-satisfaction. She slipped around to the far side of the truck, then from the darkness let out a squeal of delight. "And I'm starting to *get it*."

### TAKE CARE OF YOUR PEONIES AND...

In the tiny town of Eagle Nest, Reese turned right, the wrong way. To cross the mountains and get to Taos, you simply stay on the road through Eagle Nest to the little ski village of Angel Fire, stay on the road to descend the western slope of the mountains down through Taos Canyon, stay on the road all the time, there are no decisions until you're in the heart of Taos with the Plaza coming up in your headlights. But in Eagle Nest – a scatter of log homes and old-west style bars and motels – Reese didn't stay on the main road. He took a right turn, heading north, the wrong way, for a reason he could not remember. It may have been Sage's influence, the faint memory of a command like *gotta see them*, but he may have said those words himself, if indeed they were spoken at all.

Around them the black mountains shouldered high against the moonless night sky and for awhile, it seemed, the stars winked out. It was silly, there was *nothing here* except the sensation of entering a black cloud that had an intelligence to it, something electrical that he could feel in the fur on Sage's arm as he held it tight to keep her safely inside the truck and take care of her, since Dahlias, right now, could not take care of themselves.