

Michael Carroll

Plato's Labyrinth

Dinosaurs, Ancient Greeks,
and Time Travelers

 Springer

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Dinosaurs, Ancient Greeks, and Time
Travelers

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Michael Carroll
Parker, CO, USA

ISSN 2197-1188

Science and Fiction

ISBN 978-3-030-91708-1

<https://doi.org/10.1007/978-3-030-91709-8>

ISSN 2197-1196 (electronic)

ISBN 978-3-030-91709-8 (eBook)

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The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

*I'd like to dedicate this little story to my fellow traveler and decades-long friend,
Bill Gerrish.*

“Time’s wheel runs back or stops: potter and clay endure.”

-Robert Browning

“Anyone who is not shocked by quantum theory has not understood it.”

-Niels Bohr

“Time is what keeps everything from happening at once.”

-Ray Cummings

Acknowledgements

First, and always, my loving thanks goes to my wife, who helps me see the holes in my plots and gives me energy on those off days when I want to give up. My fellow artist Marilynn Flynn is always there for critique and encouragement. As with other projects, Hannah Kaufman, Springer editor extraordinaire, husbanded this project through the many hoops through which a book must leap to see the light of day. My gratitude to both her and Mark Alpert, the Science and Fiction series editor. Special commendation goes to my quantum physicist buddies Kara Szathmary and Mark Garlick, who are not only fine scientists but also excellent artists (some people get all the talent!). Physicist Ronald Mallett put up with silly questions to help me portray a reasonable time travel scenario.

Speaking of physicists, talented physicist/author Randy Ingermanson, an award-winning writer, provided invaluable (that means *really* valuable) feedback and wisdom on my manuscript. Brent Breithaupt, Regional Paleontologist at the BLM, offered valuable background on all those prehistoric beasts, as well as the workings of the dinosaur-digging profession. Andy and Vicki Chaikin provided moral support and New York bus line details. Thanks to Betty, Alan, and all my friends at Doug's Diner for pumping me full of coffee at just the right times, and my Life Group buddy Ken Anderson for advice on firearms and holsters. Jan Siegel, Rare Book Librarian of Columbia University's Rare Book and Manuscript Library, opened the world of ancient documents to me, helping me form a more realistic view of how curators would handle those sketches by Benjamin Waterhouse Hawkins. Tamar McKee of the Stephen H. Hart Research Center at History Colorado helped me obtain some great materials related to document preservation.

A special shoutout goes to Dr. Kristin Heineman, Associate Teaching Professor in Colorado State University's history department, for her valuable insights and advice on the Neopalatial Minoans. I wish you had been teaching back when I was at CSU! Denver University's Dr. Victor Castellani offered his

linguistic expertise to the story. My own brother-in-law, Russ Wiggam, gave me road directions for Como Bluff and Medicine Bow, lending an air of “hey, this-author-knows-what-he’s-talking-about” to the text, even though when it comes to Wyoming, I don’t. My favorite travel agent, Terri Engel, checked my details for the Bahamas (since I haven’t made it there yet). My writing comrades, Michelle McCorkle and Carol Eaton, along with the Mile High Scribes, provided insights both grammatical and motivational, to flesh out my characters and plot. They also helped me to keep my head on straight.

A good story takes many experiences, and a book takes a team. Thank you all.

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Part I

Novel



1

Bradley Glenn The Present, New York City

Bradley Glenn had yet to down his first cup of coffee when the phone rang. It was the museum's landline, and the only outlet rested across the room on the boss's desk. The Director of Paleontology, Ivan Trask, held up the handset in his beefy paw.

"Brad, you want to take this?"

"Is that a real question?"

A grin split the Director's wide face. "It's the foreman of some construction site across the Park. Bones. Sounds very important. Could be the find of the century."

The find of the century was code for yet another looney who thinks he's found a dinosaur in the backyard.

Brad sauntered across the room, weaving his way between piles of dusty file folders, snaking computer cables, and shelves of bone fragments. He gazed ruefully back at his cooling mug of Columbian Dark. Emblazoned across its face were the words *American Museum of Nature and Science*. He grabbed the phone from his boss in mock fury.

"Paleontology. Dr. Glenn here."

"Hello, Dr. Glenn. This is Neil Battaglia. I'm on the crew who's renovating the zoo. The Central Park Zoo?"

"Yes, I've dealt with the traffic. Seems like you all are doing some major things down there."

Battaglia let out a primal grunt. "We're workin' on the Birds and Penguins exhibit. Water. It's the worst. Ask any architect, any bricklayer, any electrician. Water's your worst enemy. You drain everything and then fix and then you

don't find the real problems until you fill it all up again. It's a real pile of sh—a real hassle.”

“Sounds like.” Bradley tried to sound sympathetic. “I understand you think you found some dinosaur bones.”

“Not bones, exactly. Hold on.” The man's voice cranked up an octave away from the phone. “Not there, guys, over there. No...there. Don't you guys read? And brace that thing. We don't want somebody gettin' hurt again.” He dropped his tone to a confidential level. “Assholes. Sorry mister— *Doctor*—Glenn.”

“You were saying?” Bradley encouraged.

“So, yeah, not dinosaurs, exactly. Not bones, but the real thing.”

He had Bradley's attention. “The real thing?”

“Put it this way: one of 'em's staring at me right now.”

* * *

Bradley wasn't sure what Ivan Trask would make of him dashing across Central Park to see a “real” dinosaur, but he knew his boss was all in when Ivan said, “This I gotta see.”

In the workstation next to Bradley, Delaney Delgado peered over her monitor, her bleached hair forming a wispy halo around her mahogany face. Around the pencil in her mouth, she said, “Sounds like another Laurel and Hardy escapade.” The two men grinned.

Ivan stood. “Delaney, can you hold down the fort?”

She tossed the pencil down onto the desk. “This smacks of sexism.”

“What this smacks of is you're the newest one here, and you got to go on the Colorado Springs trip when we left Brad behind.”

She punched her glasses up the bridge of her nose, eyes blazing beneath her faux-blond bangs. “You two always run off on the fun boondoggles and leave the hardware store runs for me. We got nothin' going on here until Exhibits sends us the order for ‘Hadrosaurs of Hudson River.’ You need me to come along. You two hoodlums need stability. If I didn't know you better, I'd suspect it was all because I'm a member of a gender not yours.”

“It could be because you are a member of Looney Tunes,” Ivan retorted. “Do you think you could present a professional front to our public?”

She grabbed a Triceratops hat from her desk, stuffed it behind some files, and sat up straight. As Triceratops hats went, this one was fairly conservative, but she was on company time. “Of course boss.”

“It does seem reasonable,” Bradley said.

Ivan nodded at Delaney. “Three heads are better than two. Besides, you’re the best preparator this place has had in a zillion years, not that I would ever admit that out loud.”

“Might go to her head,” Bradley added.

“We may need your expertise for digging out whatever these folks have uncovered.”

They could have taken a crosstown bus from Central Park West, but Ivan popped for a taxi, faster and not much more. The walk from the cab to the zoo was bustling, loud, and sunny. The City offered its curious combinations of aromas—diesel fuel and curbside hot dogs, cool concrete and hot glass, cigarette smoke and sidewalk fruit stands.

The guard at the entrance let them through and pointed them toward the penguin enclosure. The once-arctic concrete pond was a mass of yellow construction tape, plastic cones, and big machines chewing up asphalt slabs and sidewalks. At the far side, a man in a hardhat waved enthusiastically and approached. He looked as though he had started his five-o’clock shadow a week ago.

“Neil Battaglia,” he barked, jamming a hand toward Ivan. Introductions were made, and Battaglia stretched his arm out behind him. “Welcome to my kingdom. Shall we?”

Delaney grinned at Bradley, who stifled his smile.

At the far end of the excavation, several rusted pipes protruded from a bank of rich soil. One was leaking. Battaglia cast a baleful glance at it and leaned in toward Ivan. “See? Water. Bah.”

He led them into the pit. The fresh morning air carried the scent of wet loam and rusted metal. The four of them stood in a row, baffled. Concrete scraps, many with patterns or faded paint, lay scattered across the bank. Bradley kept himself from nudging the closest fragment, a greenish, beachball-sized cement chunk with scales and one large, reptilian eye staring at him.

“Don’t make eye contact,” Delaney whispered urgently. “They don’t eat you unless they see you.”

The three paleontologists stood motionless.

Battaglia broke the silence. “Course they’re not *real* dinosaurs. They’re statues or somethin’. Like in a museum. Guess you’d know all about that.”

Bradley spoke up. “I do indeed. In fact, you’ve made a very important discovery. Not so much for us paleontologists, but certainly for historians.”

Battaglia looked lost.

Bradley straightened. “If I’m right—”

Delaney put in, “And he’s almost never right.”

Ignoring her, he went on, “I think—not sure, but I think—these may be the long-lost sculptures of Waterhouse Hawkins. And if they are, even broken up like this, they’re priceless.”

Battaglia shoved a hand under his helmet and scratched. “And who was he?”

“*Benjamin* Waterhouse Hawkins,” Delaney added. “British sculptor.”

Battaglia let his helmet fall back into place. “What are all his statues doing in here?”

Bradley leaned over and picked up a concrete tube with a point on the end of it. “Well, Mr. Battaglia, as they say, therein lies a tail.”



2

Waterhouse Hawkins in Central Park 1871, New York City

Waterhouse Hawkins paced the concrete-powdered floor like one of the caged leopards in the zoo across the greenway, his hands clasped behind the small of his back. “The Crystal Palace was fine, yes. *The Times* called it a masterpiece. But this: *this* would have been my true masterpiece. How could they do this? I thought this country was founded on some degree of democracy. How can a handful of miscreants—”

A young man, scarcely out of his teens, cowered in the corner. “Mr. Hawkins, you can’t go around talking like that. If anybody from Tammany Hall—”

Hawkins didn’t hear. “The idea. How can they just heave out every one of the Central Park Commissioners? Every one, without so much as a how do you do?”

“If you can’t calm yourself you may have a fit or something.”

Hawkins tossed the boy a withering glare. He still found the American accent difficult to interpret. “That sounds like something your parents would say.”

“I’m twenty. Totally independent. Have my own place and all.”

Hawkins pulled a pair of pince-nez spectacles from his pocket. He had been told they were the hottest in Paris fashion, but he had no time for fashion. He simply liked the way they stayed put while he leaned over a drawing table. He polished the glasses on his handkerchief and began his pacing once again. “And all the work outside. This is about more than our little menagerie here. It’s, it’s everything else. No more Paleozoic Museum, after all of Mr. Olmstead’s work.”

The young man glanced from side to side, as if assuring himself that no one was listening. “They say Boss Tweed is mighty powerful. Too powerful to fight.”

“Well, your William Tweed is certainly no fan of higher education for the common man,” Hawkins blustered. “Just look at it, Tommy. All we’ve done.” Hawkins gestured toward the nearest statue, and then quieted. He sauntered across the room, taking it all in as if it were a scene he had just discovered. “You see, Tommy, there is power in what we do here. Potential. Do you know what that word means?”

“Yessir.”

“When the scientist discovers something—a new aspect of God’s creation—the world is inspired. And inspiration breeds exploration, and more discovery. And then, best of all, when the artist takes that science and brings it to life in sculpture or painting or literature, the common man shares in an even deeper way. Science and knowledge are like that. They come with responsibility, of course. And Boss Tweed does not understand responsibility. He does not understand the power behind science and invention.” Hawkins shook his head, looking away from the sculptures. “Where will my beauties go now?”

He stared out the window into the park. The grounds in the distance had been shoveled and sculpted and manicured, prepared for the gardens and foundations and lovely museum to come. But the workmen were gone, vanished as surely as the funds had disappeared. His eye fell upon one of the beasts this side of the window. It was his favorite, his great Iguanodon, bigger even than his famous Megalosaurus back in Sydenham. The concrete façade had hardened nicely. It sat in a stately pose, legs bent like a reclining dog or lizard, tail curled around itself. All 39 glorious feet of it.

Hawkins had listened carefully to Richard Owen, the man from the museum in London, about the arrangement of scales and the form of claws. But Hawkins had already observed so many reptiles that he knew how the scales should go on his giant lizard. They fit uniformly, like the plates on a knight’s armor. Transverse rows spiraled around the body naturally, with scales at the joints smaller than scales on the flank or stomach. Hawkins had given a nod to iguanas and crocodiles when he laid larger scales along the backs of the fingers and toes, and along the edge of the jaw. But he was most proud of the skin—of how it draped like curtains from the back over the shoulders. The belly bulged where it rested against the ground, and the muscles of the limbs rippled beneath the skin. The creature strained against gravity with its hulking weight. No one could tell that within the soft folds of flesh lay an iron frame and bulwarks of brick. That was the trick—Hawkins knew.

“Masterpiece,” he murmured.

“Beg pardon?” Tommy said.

“There’s good reason that the press called them a masterpiece, but they don’t truly understand. My *Iguanodon* is a case in point: four iron pillars, thirty tons—metric tons, mind you—of clay; six hundred bricks. Why, Tom, it’s like building a house upon four columns. And we did it! You and I.”

“My back remembers every one of your ninety casks of stone.”

“And worth it?” Hawkins asked, somewhat tentatively.

“Well worth it, sir. Well worth it. You’ll find a home for the lovely beasts. You and the museum. You’ll see.”

There was a loud thump on the side door, and then another. It was scarcely one in the afternoon. No one came by so near the American luncheon hour. Hawkins gestured to Tom. “See to that, will you, son?”

“Yessir.” Tommy took two steps toward the door when it burst open. Four large oafs stepped in, three carrying sledgehammers, one carrying a clipboard. They could have been part of any construction crew in the park these days, but somehow Hawkins didn’t think they had their minds on creating anything. Destruction was more their forte.

The gentleman without a hammer stepped forward and took off his hat with a flourish. “Mr. Benjamin Hawkins, I presume?”

“That is I,” Hawkins said. He detected a slight Irish brogue in the man’s speech. “Would you like some tea?”

The man turned to his crew and they let fly a chorus of laughter. He turned back to Hawkins, but the mirth in his expression had faded to something more unsettling. The man now spoke in a poorly done American caricature of a cockney accent.

“Actually, your highness, we’ve come with a message. You know of who it’s from.”

Hawkins’ inner thoughts corrected the man with a *whom*, but his vocal cords were petrified. The unwanted visitor continued, “Our benefactor doesn’t like pasty Englishmen interfering in his business, sayin’ things about crooked deals and kickbacks and so forth. Isn’t that how you put it? ‘Kickbacks’, you said. That was a mistake. So if you’ll please just vacate the premises, we’ll be finished shortly.” He jerked his face toward the door.

The bile rose in Hawkins’ throat. He could feel the sweat roll down his back, feel their eyes on him, just hoping he would put up a fight, offer an argument. He did not.

“Tommy. Come,” he said, guiding the young man out the door.

“Very reasonable,” the man chided as he shut the door behind them.

“Should we call the police?” Tommy asked eagerly when they were outside. But Hawkins had already made contact; a cop on the corner was watching him. His eyes were glued to Hawkins; the frown on his face spoke volumes about where his allegiances truly lay.

“No, Tommy, most of the bobbies around here know already. Come.”

Hawkins ushered them to a park bench. They sat, and Hawkins eyed the bobby, who at least had the decency to act as if he were ignoring them. Keeping his gaze on the cop, Hawkins leaned toward Tommy and lowered his voice.

“You see, Tommy, there is power in science. From science comes technology, and there is power in technology, too. It has the power to heal or to destroy, to build up or to tear down. Power confuses some people, makes them afraid. Science can be used for good or evil, and it must be treated responsibly. But this...” He gestured back toward their building with a subtle jerk of his chin. “This is so uncalled for. People like that bobby or Boss Tweed are not ready for such advances.”

“Or not interested,” Tommy said.

“So true, lad. So true.”

They could hear the crash of heavy objects, the thud of hammers and the crack of concrete and brick. For good measure, someone tossed a loose brick through the glass windowpane facing them. Hawkins grimaced and moved Tommy further away from the wall.

The door opened, and they could smell the chalk dust and taste the powdered brick on their tongues. The men exited, grinning, covered in white grime. The leader and his troupe set out across the commons, but one of the toadies stepped back and stage-whispered to Hawkins, “Don't you bother so much about dead animals. There are lots of live animals; you can make models of them.” He started to walk away, but paused for an aside over his shoulder. “Some chaps will be along soon to clean all this up for you.”

The man joined the others and disappeared into the crowds walking the park on the sunny spring day. Tommy was shaking.

“You don't have to go back in, young man. You've done plenty of work for the day. Why don't you head home?”

Tommy wouldn't take his eyes from the open door. “No, I want to see. I want to see what's still...standing.”

Hawkins patted the boy on his shoulder and realized that he himself was shaking, too. He squared his shoulders. “Brave young man. Let's see what Boss Tweed has left us.”



3

The Lecture The Present, Washington, D.C.

The lecturer glowed beneath the spotlight, looking like some biblical messenger from the celestial sphere. But she didn't float across the stage. She stomped, gesticulating energetically, emphasizing every other word.

"We're told by some of my colleagues that time is a river, that it flows along in an inexorable stream, unreeling the events that we see as our lives. I ask you, on whose authority? No, time does *not* flow. It simply transpires. And because it has no 'flow' to it—" Here the speaker used air quotes, "—then the concept of a direction of time vanishes. What seems like a forward current, a tide through the quantum universe, is simply the causal parade of events. Eddington's arrow of time is a convenient mirage."

The speaker pushed a button on her remote. Her laptop advanced to the next screen. White letters against a black background.

*Time flies like an arrow,
But fruit flies like an apple*
anonymous

The audience laughed as she continued, "This misguided idea of time as an arrow, as a flowing force, deceives us into thinking that time has forward momentum, and that in turn lulls even the most discerning of us into believing that we may move within that imaginary continuum."

The man sitting in the dark at the back of the hall thought very little about spiritual matters, but the biblical analogy was irresistible. When the light hit the speaker right, her blonde hair glowed like a halo.

“Which brings us to...” The angelic speaker changed her computer’s slide. “Closed time-like curves. Now this concept is one of the most exaggerated and certainly misinterpreted concepts from Einstein’s General Theory of Relativity.”

The listener sat up. He was tall and thin, and the tuft of white hair on top of his head showed even in the gloom of the back row. This was what he came for. The speaker—a genius in her field—seemed to be speaking directly to him.

“All of us, and all things, exist in physical space and in what we call time. In our mathematics, closed time-like curves define a sort of pathway, a trajectory of an object that travels through space/time and ends up at the same point in both space and time. The implication is that travel through time is possible if the math lines up just right. But I encourage you to take note that CTCs are mathematical models. They have absolutely no counterpart in physical reality. CTCs have been called upon as ‘time machines.’” The speaker sent up her air quotes again. “But I can assure you: there are no technological components that we can cobble together to create such a thing.”

The observer let out an involuntary *humph*. He glanced around to make sure no one heard.

“It’s not a matter of technology catching up,” she continued. “No: the fact is that despite decades of research, argument, and speculation, often *wild* speculation, at the heart of CTCs lies the central component of *time*. The simple problem is that the physics community has yet to decide whether time really exists.”

The man tried to swallow a chuckle, but he could feel it building. He began to snicker and headed for the door, trying desperately to exit the room before his reaction became gales of laughter. He was only partially successful.



4

Katya Joshi

The Present, Fort Collins, Colorado

Katya Joshi seldom took lunch. Her boss told her she was driven. “In a good way,” he had added weakly. After her morning run, she preferred to stay at work, watching the circus around her. She was surrounded by clowns, but—as her boss would have said—the good kind. The kind who hid their genius behind office antics, practical jokes, and freewheeling postulations. The circus was too good to miss. But today she was making up for lost time, leaving half an hour early. ChronoCorp was laid back enough that it really didn’t matter, but it did to her. She liked things in their place, at the right time. Ironic that she would be employed here, where the overarching byproduct was to play with established timelines.

Katya stepped out to the front pavement and glanced back at the glass and steel building, one of a handful of structures in Fort Collins that stood over a couple stories high. Few people knew what really took place on those top few floors. ChronoCorp preferred it that way, for now.

It was a beautiful autumn day, and she had plenty of time to walk the three short blocks to Old Town. The snows would come soon enough, and then everyone would be driving everywhere. She had broken her prescription sunglasses a month ago and was filling in with some Mini-Mouse shades her niece had lent her. A quick right on Mountain Avenue took her directly to the brick pavement of Old Town Square. The rough-hewn Lyons Sandstone buildings rose above sidewalk tables crowned by cheery blue umbrellas. Students gathered around a street performer near a faux waterfall. Beyond the historic buildings and the umbrellas and streets of “The Fort” rose the undulating blue wall of the Rocky Mountains. A dusting of snow lay across the foothills, just

enough to give them some definition. Beyond those low hills rose the bastions of granite: Mount Evans, Bierstadt, Long's Peak.

Her dad was waiting at Goldsmythe's Pub & Grille. These days, his back bent a bit more than it used to, and his salt and pepper hair had faded to a snowy white—a dramatic frame around his caramel face. All this was crowned by an omnipresent white straw hat. His smile lines were bona fide wrinkles now, but he still had that essence of dad. All his friends had become the faded people: hair and skin drained of color, parchment cheeks and hands, thinning and crooked limbs. But not him. His Indian heritage kept his complexion rich, it was his work in the field that kept him young.

As she stepped through the door, a tsunami of aromas washed over her: grilling onions, smoky bacon, a whiff of singed oil.

"Hey old man!" she cried as she slid into the booth.

He grabbed her hands across the table. "How's my baby?"

She pulled her pink plastic sunglasses off and pointed them at him. "Livin' the dream." She reached over and straightened his nametag. "No one can read who you are at this dinosaur conference of yours." Her voice rose to a squeaky soprano. "Well, what kinda crazy name is that, anyway? Ajit? Is that your first name or last name?"

"I meant to take it off. Meetings, you know?" Hope you don't mind." He gestured toward the table, already set with a burger for her and a Reuben for him. He leaned toward her. "I still can't get over it: Fort Collins. Not Silicon Valley, not Urbana Illinois, but Fort Collins? All that technology and—"

"Dad, we talked about this," she shushed over the general bedlam of the pub.

"Oh, I know," he said conspiratorially, lowering his voice. "Proprietary. Mum's the word. Did you see this, by the way?" He handed her his phone. On the screen was a news story about old dinosaur sculptures in Central Park.

"I did. Isn't that crazy? After all this time? Quite the find. You should be so lucky in Como."

"Como Bluff will not keep its secrets from my team. Not for long. We'll be finding lots of beasts much older than those Central Park critters." He tapped the screen; the photo of a face appeared in the scrolling text.

She waved a French fry at the article. "Know that guy?"

"Sure do. Bright young man. He's with the museum. American Museum of Nature and Science."

Katya nodded, her cheeks stuffed with cheeseburger. "New York."

"Yes." He was peering over the top of his glasses with that look she dreaded. Here it came. "He's very sharp. Definitely your type."

"What, AB positive?"

“More likely negative,” he grumbled. “I would never suggest you need someone to ‘complete you’ as a person. You know that. I just thought the two of you could have some laughs, share some science stuff.”

“If we were ever in the same state, I’m sure we’d have lots to talk about.”

“You actually met. You were young. My awards banquet.”

She dragged a French fry across the catsup on her plate, doodling an abstract design. A smile lit her face.

Her father laughed, holding up his hand defensively. “I know what you’re thinking, I know. David Sandwell...my mistake. I cry uncle!”

Now they were both laughing, until suddenly, Ajit quieted.

“So you still think you can do it? ChronoCorp’s little project?”

She had to be careful not to show her hand. Her father couldn’t know that she had already made three trips—three “Q-slips.”

She folded her hands in front of her and dropped her chin, drilling him with her eyes and taking on the tone of a patient grade-school principal. “I do. It’s just a matter of time.”

Ajit pointed a pickle spear at her. “‘Matter of time.’ Good one!” A flicker of long-suffering played across his face. “I’ve been thinking about it a lot, of course. My daughter running off into the *Land Before Time* or into *Futurama*. It gives one pause. But I just can’t help coming to the conclusion that—”

“That it’s impossible? With all that’s happened in just the span of your own lifetime? The human genome? The Higgs boson? Moon landings? It’s quite a list you can add up.”

“I have to admit, it was pretty cool when they invented the catapult,” he said to his empty dish. Then he looked up, met her eyes with a weak smile. “No: unless you know something I don’t, I’m afraid we’re bolted to this moment.” He paused and studied her. “Is there something you know that I don’t?”

She didn’t answer.

He went on, “I suspect you’ll find that there is no wandering, except the kind we can do with our minds and imaginations.”

“Like Verne and Wells? Their wanderings were well done.”

Ajit grinned. “Or like me and my colleagues uncovering treasures on Como Bluff. Or the archeologists unveiling the past to us through their work in...” He searched for an example. “In Greece, digging up the treasures of the Minoans and such.”

Kat felt herself stiffen. She hoped he didn’t notice. Why would he pick Greece, of all places? “I really shouldn’t talk about it, anything specific, because we’re not sure of causal variables.”

“Long-term ramifications. Ripples in the pond. Certainly, I understand.” He mimed zipping his mouth, then looked out the window at the people passing by. “It still worries me. If it all does work out, you know.”

“It’s being carried out very conservatively. At first we’ll limit ourselves to just a few minutes at a time, with solo trips. And Xavier was—Xavier will be the first.” She waited, hoping he hadn’t noticed her slip.

Ajit shrugged. “Dr. Stengel’s the boss. I’m surprised he can fit those long legs of his into your contraption. He looks loosely put together, like his limbs are longer than they should be. And his head sort of bobbles around on top.”

“Yeah, he’d be the first to admit it. He does have to get into the pod in a fetal position. But it makes sense for him to go first. He’s got the background for the engineering and he knows the history. Todd Tanaka gets to go next, a little further. Xavier is taking things slow until we’re sure all the tech works and it’s safe and blah-blah-woof-woof.” She said the last in a sing-song.

“Don’t be cavalier, Kat. The kind of technology you’re exploiting comes with responsibility. Xavier is being prudent.”

Katya smiled and shook her head. “His words exactly.”

“Sounds like a boy’s club dynamic, if Xavier and Todd get to go first. Is that frustrating?”

“My colleagues are good guys.” She looked down at the table and took in a deep breath. “Xavier wants me in charge if anything goes wrong with the slips.”

Ajit didn’t reply immediately. He stared into his glass, studying the little icebergs bobbing against the sides. “I suppose that’s a compliment to your leadership skills.” He looked up again. “You know, though, I’ve been thinking a lot about those Hawkins statues in Central Park. About your work.” He leaned closer. “Maybe science could be put ahead, given a nudge, if someone traveled back in time. Say, to the Triassic, to a major extinction event.”

Katya shook her head firmly. “Can’t go any farther back than when modern humans were present. We can’t even go to New Zealand or Australia or Hawaii until humans made it there—we’ve done the math. Something about the nature of the time flow.”

“What if you went back to visit one of *them*? A paleontologist who was around before anybody invented the word. Maybe not just any bone digger, but somebody who knew lots of scientists in the field. Well connected. And what if you showed this strategically chosen person ideas, just hints, of how dinosaurs really stood and walked? Go back to London’s Royal Museum, or Philadelphia with Cope. It could put us way ahead. Twenty years before now, instead of drawing our dinosaurs with scales, we’d already be giving them feathers and wrinkled skin. Think where we’d be now; think of it!”