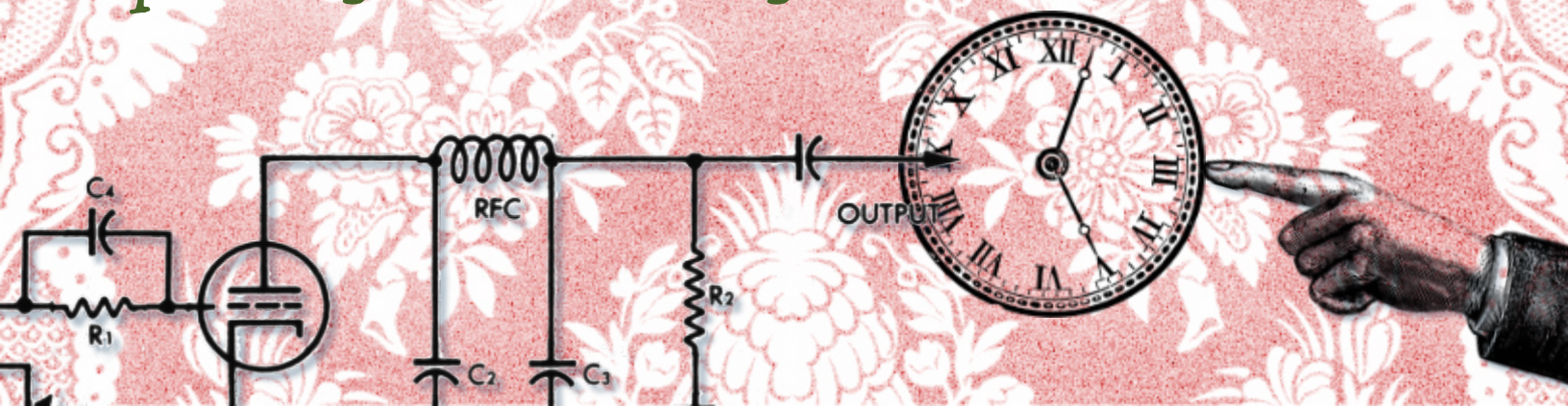


The Illuminating Adventure of Jake Calcutta and the Second Bite

Episode 2 of the Adventures of Jake Calcutta



Secretly pleased with her grandson but pretending to be annoyed, Raquel Kolkata reached up and pinched his cheek.

"You're not so old I can't tell you what to do anymore, boy."

"I'll never be that old, Gran."

Maybe her being pleased wasn't so secret. She turned back to the console.

"The new potentiometers increased spatial precision exponentially. I'll be able to drop you wherever I want, give or take three millimeters."

She paused her knob-fiddling. "Of course, the greater the distance, either spatial or temporal, the lesser the precision."

He stepped onto the small platform, a wooden box which protected the delicate machinery and electronics underneath.

"So a trip to ancient Rome could end up a mile above the Sahara."

Her scowl said he'd gotten her. She put one finger on the largest dial, squinting at him, and pointed with the other hand.

"Not accidentally, boy."

Jake laughed. "Yes ma'am."

His grandmother winked at him and went back to her fine-tuning.

"No rush, Gran. I've got all the time—"

"Shush, ógánach."

He shushed.

"Ready?"

"As I'll ever be."

"You might want to take firm hold of your glutes, lad. There's never been a ride like this in your life." She chuckled. "Or anyone else's."

There was no sensation, no sound, nothing apparent in his transference except he had been standing on a box in a bright laboratory, and he now stood on the flat commercial carpet in a dark closet.

He had thirty seconds. Putting his hands out, he oriented himself in the tiny closet and leaned toward the door, his head near the jamb on the latch side. He could hear a single voice, soft, but clear, not speaking English.

When his time was up, again, there was no sensation, no sound, nothing but the instantaneous swap of every single thing in his surroundings.

Disorienting. He hoped he'd adapt.

Gran Kolkata's face made it clear she wasn't as confident as she always pretended.

"I feel more like I do now than when I first got here."

Throwing her arms in the air, she lunged at him, gripping him in a crushing hug.

"At least you still understand the old speech even if you won't use it."

He pushed her away to look her in the eyes.

"That's what you want to talk about right now? What if we take a moment to congratulate the greatest temporal scientist of all time?"

Raquel Kolkata stepped back, and curtsied as if being presented to royalty.

"I accept this great honor in behalf of all mankind."

Then she straightened, waving both hands like herding cats.
"Now get off my equipment and help me write this report."

"Why send me backwards?"

The reports all typed, he and Gran were sharing a cup of sweet tea at her ancient wooden table. He preferred milk to sugar, but she'd made the tea and it was her celebration.

"Because sending you to now would be somewhat redundant."

As he opened his mouth she interrupted his retort.

"Yes, yes, there's also the future." She sipped her tea and made a face.

"Needs milk."

After she'd poured a little goat milk in her tea and allowed him to splash some into his own, she continued.

"The math won't allow it. Going into the future, I mean."

He slurped a bit too much and it was a bit too hot.

"Ouch. What do you mean, the math won't allow it? Since when have you allowed a little thing like reality to interfere in your work?"

She chuckled. "That's it in a word, boy. Reality." She downed the last of her tea and looked toward the kettle.

"I'll make more, Gran. Tell me about the reality of math." He went to the stove, shook the kettle, went to the sink and refilled it, and put it back on the heat, leaning against the counter while she talked.

"I ran the numbers. I wanted to send you one minute into the future. You'd disappear, then reappear sixty seconds later. But the numbers didn't add up. Specifically, the only way I could make it work was to finish the equations by having π equal to three. Exactly equal to three."

He knew better than to suggest she'd made an error. She'd obviously checked her work multiple times. He crossed his arms to show he was listening. Or confused.

"Thing is, as I shortened the time, the equation became more, well, equal. At zero temporal displacement, π equaled π ."

He loved how gas heated faster than electric. The kettle bubbled, and just as it started to whistle he picked it up and pulled the lever to open the spout. He poured the boiling water over the leaves in silence. When he sat again, he was clearly chewing on the problem.

"So then with negative temporal displacement, wouldn't the equation begin to swing the other direction?"

She snorted. "You'd think, right? But no. Einstein and company would be pointing and laughing, right up until they did the calcs themselves."

She stood, and did what she called pacing, but was more hobbling from one foot to the other.

"At any temporal displacement from zero to infinite time into the past, the numbers work. No problem. Child's play."

Down she flopped. "But one nanosecond into the future, and the numbers are broken to pieces."

He didn't think he'd made a noise, but maybe he'd grunted. She glared at him. "What?"

He scraped the side of his shoe on the oak boards under his chair. "Would you mind . . . ?"

Clearing his throat, he started again. "I would like to see. Yes, I trust you, you know that. But you also must know this is hard to accept, let alone understand. Will you show me?"

His final plea drove the storm clouds from her eyes.

"Yes. If it will help you accept so we can move forward, let's do that."

She didn't sound finished.

"What?"

The shape her mouth made was more grimace than smile. "There's more."

"I'm sorry. What?"

"There. Is. More."

"More than 'time travel breaks mathematics'?"

She was waving her hands and shaking her head before he finished. "No, no. Same problem, more effect."

"I don't understand."

"Because you haven't let me explain." As soon as she'd said it, her face softened.

"I'm sorry. If you're struggling with it, imagine how I feel? I'm on the razor's edge of being remembered as the old woman who couldn't do maths, rather than the Time Granny."

Their snorting laughter was decidedly undignified. It helped.

"Well, then, Professor Kolkata, what other effects?"

She stood, and adopted her didactic voice.

"Effect. Singular. So far as I know."

"Effect, then."

"Yes. Well. Check your watch."

"What's the rush?"

Her glare pulled his wrist up. The time was precisely correct and he said so, unsurprised.

"If you spent ninety seconds in the past, why is your watch correct?"

When he checked it this time, the hands told him more than the correct time.

"Why?"

She smiled her professorial smile.

"Why what? Spell it out."

"You didn't bring me back at the time I left. I came back ninety seconds after I left. Why?"

She patted her hands in silent applause.

"Well done, boy. That is the point. The other effect is that time is immutable. To spend one minute in the past, out of your usual place in the stream of time, costs one minute of the present, one minute of your normal time stream."

Now he was standing as well, marching back and forth behind his chair, running his hands through his hair.

"A week in the past, I mean that's what we're talking about, isn't it, long periods of time, and instead of coming back to the moment I left, I'll be missing days or weeks. Is that what you're saying?"

"Not missing, not in the manner you mean. If you went to New York for the summer, could you be here as well? We take the immutability of spatial displacement for granted. Why should time be any different?"

The simplicity of her argument stopped him. He dropped onto his chair, perched on the edge.

"It's no different, is it? Travel through space, travel through time. Gone a week, back in a week, not gone a week, back when I left. Yes. Yes."

She sat, leaned forward, and touched the back of his hand with one finger.

"You said it felt like cheating. When I first told you, you said it felt like cheating."

He took her hands in his. They looked fragile. They were not.

"You called it a second bite at the apple, a way to see more of what already was."

She gripped his hands, fierce. "You had doubts."

He gripped back, joyous. "Not anymore. I did, you're right, of course you're right, but this changes things."

He stood and pulled her to his feet, still holding her hands. Leaning, he looked deep into the blackness of her eyes.

"Let's go see the past."

All those years ago, Jake couldn't have known how much Gran Kolkata's vision would change, or rather, be changed by others. Founded when even she was young, NASA had become the natural parent of the Temporo-Existential Agency when it came into existence much later. Someone had to be responsible for the paperwork and red tape bureaucracy thrived on.

That wasn't fair. For a quasi-government agency, TEA was lean, efficient, and most bizarre, fun. That was what kept Jake locked solidly in step with his fellow workers. He was having the time of his life.

He'd never understood his grandmother's work, not the way a pure scientist would. A driver didn't have to understand internal combustion engines, and a time traveler didn't need the science. He knew more than most, true, but others knew far more than he ever would.

Right in the middle, that's where Jake was comfortable. His work required fitting in, becoming invisible to the creatures of history he interacted with. It suited him at headquarters as well. Let Featherstonehaugh and his gang manage the science and tweak the knobs; leave it to Felicity Bruttenholm to gently guide the whorls and breezes of her administrative meadows through the mad oceans of TEA's administration.

Ah, Felicity.

Where was he? Yes, in the middle.

He touched the simple wood frame of Gran's photo, sitting on his equally simple desk. It wasn't really a desk, it was a solid wooden table, scarred and dark with age. It was what he needed here at TEA, not some namby-pamby office furniture. A sturdy work table and a six-foot locking cabinet full of the tools of his trade, the tools of survival.

The others all had more traditional furniture and appurtenances. He'd come into the official version of TEA after them, the scientists and administrators. Despite his relationship to the reason for the agency's existence, once

the bureaucrats were involved, everything had to be in place and just so before he was invited back to meet the people who had become the caretakers of Gran's legacy. And of his life.

He no longer remembered the faceless drone who'd given him the tour, a young chap, blandly dressed, obsequious and twitchy, who had introduced him to the scientific team. The youngster had knocked at the lab door like it was the principal's office and waited until a robust mustached man opened it, puzzled, and boomed "Well come in, then."

The kid stammered and froze, then turned to Jake, perhaps so he couldn't see the Very Important Scientists, and made introductions with a uselessly vaguely waved hand.

"Jake Calcutta, meet Temporal Master Cranshaw Featherstonehaugh," at which that mustachioed man nodded, "Psychohistorian Brewster Worcester," whereupon a shortish roundish fellow without any mustache at all smiled and raised one hand in a motionless wave, leaving only an impossibly tall improbably thin fellow in the far corner, "and general factotum Zechariah Cholmondeley."

"I'm sorry, what?" Jake hadn't meant to interrupt, but the three names in rapid succession threw him.

"Factotum. Mr. Cholmondeley's title and responsibilities--"

Featherstonehaugh laughed, an even bigger boom than his voice. "Not what surprised him, boy."

Finally, he stepped close and held his hand out to Jake. His grip was firm, powerful, but not overdone. Jake found himself liking these three chaps.

"I knew Rachel Kolkata. Not well, of course, but enough to recognize that she operated in a different sphere from us mere mortals." Worcester gave a "hear, hear" to Featherstonehaugh's praise of Gran.

"Thank you. She was amazing in more ways than her science."

"Indeed. Marvelous cellist, and the finest ballroom dancer I ever knew."

Even after she was gone, Gran was still surprising Jake. Cello? Dancing? He smiled.

"I'll move along and let you gents get back to work. I think we're going to have fun."

Worcester tossed out another cheer and Cholmondeley saluted from the back of the sterile white room as Jake turned to follow the nameless blot down the hall to meet his communications liaison.

"With the advent of cross-temporal communication, the last piece of the time-travel puzzle fell into place." At the end his voice faded. Jake thought the kid realized he was sounding like a tour guide, telling Jake things he already knew well.

"Ahem. Anyway, your communications liaison is Felicity Bruttenholm, just down the hall."

After the three comic stereotypes in the lab, perhaps influenced by memories of his grandmother, Jake already had a mental image of this Felicity person: a staid old maid, sensible shoes and all. Solid, good at communicating and science, with, of course, no life other than this one. He

trudged down the Berber carpet hall to meet this school-librarian type.

The door was open. Faceless Drone peeked around, mumbled "Mr. Calcutta to see you" and ran, actually ran, around the corner to the suite of offices in that wing.

Jake's eyes were still on the hole left by the fleeing youth as he stepped into the office, speaking before he turned.

"Pleasure to heeze uh ton tun huh." Jake wondered who'd said that and what it meant. First half was okay, but as he turned, it turned to noises. In the same instant he realized that he was the one speaking, but he still wondered what the noises meant. His left boot, big and leather, kicked the back of his right, propelling him into the back of one of the matched leather chairs on this side of the desk.

"Mr. Calcutta. May I call you Jake? Please, sit."

He nodded. Nodded so hard his chin hurt and his eyes blurred. He suspected he was nodding in answer to her question, but without access to his reasoning faculties that wasn't certain.

He stood, leaning on the butter soft yellow leather chair for support. One red, one yellow. Red leather, yellow leather. Where was that from? She smiled at him, patiently, the seas of her eyes splashing with joy as the radiance of her perfect teeth reflected the light of ten thousand stars.

And he hadn't even gotten to her flaxen waves yet.

"Hamp." Nope. Still no clue to the meaning of the sounds his mouth was making. He struggled around the chair, sat on the

arm, bounced a little, and settled more or less into the seat, perched on the edge but leaning back. Immediately he started sliding, but rather than repositioning himself, he scooted, slid, scooted slid. It was wearing, both physically and emotionally, but he wasn't sure what to do about it.

His favorite Telemann symphony began. After a moment he realized it was her voice. She was speaking. He should listen. Catch the words, interpret them, understand. He must try to understand. He caught the word welcome, and her blue-green opalescent orbs had glanced toward the retreating denizen of the north wing. Jake made a stab at what she'd said, and a response.

"Thank." He paused. There was more, he was sure of it. "You." Yes, that was it.

Felicity Bruttenholm giggled. Telemann again, with overtones of Mozart's finest work.

"You're." She paused, giggling again. "Welcome."

His head lolled to the side. He tried to pull it upright, but there were no longer any muscles in his body. He didn't care. Now that he was dead and living in heaven, what use were muscles?

He smiled. Perhaps. He wasn't sure.

Her voice washed over him in a symphony from which he gathered no words or thoughts or meanings. He lolled, half supine, oblivious to his struggle with the chair, feeling the pulsing of his heart, the pull of his diaphragm bringing the sweet air into his lungs, letting it out again.

He caught something about the people upstairs but that can't be right, this floor was the only one above ground, but there, she said it again, the people upstairs, and a little laugh like water purling over small smooth stones.

Then, like Beethoven's masterworks, the sounds of nature and symphony delicately fluttered to silence. Jake's head jerked. He should do something. Speak, perhaps.

"Yes." Yes was good. Yes was cooperative, positive, amenable.

He understood the word. Still didn't know why he'd said it.

"Yes." When Felicity Bruttenholm repeated that single syllable, it was borne home to Jake Calcutta what a worthless thing his own voice was. He would never again speak in her presence. What would be the point?

She was smiling, but not speaking. Assuming his audience was at a finish, he struggled to his feet by sliding off the chair, sitting on his haunches, elbows on the chair's seat, then slowly straightening.

Before taking his leave he bowed from the waist, banged his head on her lamp, pressed one hand to his forehead to stop the blood from dripping on the desk, turned, and walked into the door. He bounced off the door, it bounced off the wall and back into his foot. He turned, went through the doorway, and dashed down the hall to a restroom to wash the blood off his face.

He'd had the conversation about change over tea with Gran. With others, she railed, ranted, refused. With Jake, she assumed he felt as she did.

"Consider every bit of science fiction written about fools changing timelines and whatnot. Nothing is so broken we humans can't make it worse."

He agreed, and she knew it, but sometimes she was a kettle venting steam to avoid exploding. He'd seen her explode and preferred a good venting.

"Gran, why do you think we're always trying to fix nature?"

She smiled and tapped his knee. "Don't patronize me. But I'll answer anyway. The writings say we were put here to care for the earth and all that's on it. We're designed to be caretakers, so we take care."

She picked up her tea and sipped it, eyes closed. "Preheating the pot makes such a difference. Where was I? Yes, we take care, but we don't do balance."

"Ah. That makes sense."

"Can't leave well enough alone. Most folks go far beyond caretaking, fixing what's genuinely broken. No, if we have something good, why not make it even better, eh?"

"Do you think it's outside our purview?"

She set her cup down, gently, precisely. "The flow of time, mankind's history? Oh, I'd say so. Do you disagree?"

"I couldn't, Gran. But you're the only one I can ask a question like that and get a sensible answer."

That made her smile again. They had a running joke about him patronizing her, but they both knew he couldn't possibly love and respect her more. When he said something kind or complimentary, it was his true opinion, nothing more.

"What do you think, boy? Are the grand formations of the universe our job?"

He had to shake his head at that. "No, you're right. Some things aren't our place. It's one thing, I suppose, to dream of flying through space, or to cut terraces in a hillside to turn it into farmland, or build engines so we can go faster than horses."

"Are all those things beneficial?"

She surprised him, as she often did.

"I think people growing their own food is important. Automobiles, I'd say the jury's still out. Flying through space is a dream, but a dream that includes seeing this beautiful planet from far above."

"We'll leave that to the side, then. Automobiles are evil. Time will prove me right, you'll see. But why should anyone be forced to cut their fields from a mountainside? Is there not more arable land than can possibly be tilled?"

"Are these people forced to live there, or do they choose it? The pictures I've seen, I'd live there in an instant in spite of the ups and downs, so to speak."

Gran finished her tea and collected the dishes. "Point, young man. I cannot say for certain the terracing of mountainsides is an unwilling adaptation rather than a joyful choice."

She stood with the dishes and headed toward her small kitchen. "But changing time? Bah! Madness of the highest order. The highest."

As the dishes clattered into the sink, Jake couldn't help but agree with her.

"Bruttenholm thinks it's a lost opportunity." Jake had been in the shiny white lab where Worcester was holding forth on the value, nay, the mandate, to fiddle with time.

The mention of Felicity charged the synapses in Jake's brain. Even though she wasn't present, he'd wondered if he could formulate and speak a full sentence when she was the topic of conversation. He tried something brief.

"Does she?"

Well. That came out right.

"So she says. And I agree. Why have access and not make use of it?"

"But we are making use of it," Cholmondeley countered. "We're learning more than the history books can ever tell us."

Turning to face Featherstonehaugh, Jake raised an eyebrow.

"Don't look at me. I was hired to do a job. I do the job. Have my fun in the lab, but don't take it home at the end of the day."

So there it was: clear, complete, absolute ambiguity from the triplets in the lab. The fact that Felicity Bruttenholm liked the

idea of fiddling about with history was, he admitted, neither here nor there, neither now nor then. She was not a scientist, and a citizen, while allowed their own opinion, was not allowed their own facts. The science was clear, Jake thought, as clear to him as it was to Gran Kolkata.

But he had interfered, hadn't he? He could reminisce all he wanted about those early days at TEA, about his staid stance on the immutability of the past.

It was balderdash. He'd mucked with the discovery of the source of the Nile, talked John Hanning Speke into falsifying his reports to ensure that history played out as it was recorded in Jake's own time.

It terrified him, pained him, galled him.

He also knew it was the right thing to do, and not because Miss Bruttenholm approved.

He knew it was right because the future had told him so.

"We're assuming this was a success, right Gran?"

Supper the evening of his first trip was colcannon and braised pork loin. Over dessert, thick slices (plural) of apple pie, Jake voiced a line of questioning he'd pondered much during Rachel Kolkata's research and experimentation.

A forkful of pie paused on the way to her mouth. "Unless you faked it."

The bite continued to hover, then lowered to the plate.

"No, nothing like that. Of course, I went back and returned. Time travel is real."

The bite finally went inside, and she answered him around a small chunk of apple. "Seems so. If you're making a point, get to it before I die."

He shuffled in the chair and pushed his half-eaten second slice away.

"Why hasn't anyone ever come from the future?"

Another forkful, buttery crust and creamy sauce, disappeared, was chewed thoughtfully, and swallowed.

"Truth is, when you returned, I fully expected a congratulatory visit from someone downstream. Silly, I know, but here I was, the inventor of the single most important scientific advancement in human history, and the future ignores me."

He knew she wasn't vain, that this wasn't whining about the lack of recognition. For the first time he realized she'd been thinking of this far longer than he had.

"Now that you say it, I'm surprised I didn't think of it. And surprised it didn't happen. What do you think? I guess you've been mulling it longer than I have. Why no visit?"

Nothing slowed Gran when she was eating apple pie. She'd often chided him about his nervous stomach. When he was under stress he either stopped eating entirely, or didn't stop at all.

After she swallowed another bite she waved her fork. "A few possibilities. One, they don't care. Unlikely. Two, something changes and it's no longer known in the future. Also unlikely. Three, and most likely, a visit from the future would act very much like a visit to the future, creating enormous potential for disaster."

She made sense, as usual. He thought about the first two ideas and agreed with her assessment of both. If he were a future man, he'd care about time travel. A lot.

And this toothpaste was out of the tube. No force on earth would put it back.

No, she was right, a visit from the future could have the same troublesome effects as a visit to the future. But another thought had already occurred to him.

"Not if we didn't know about it."

"Eh?" Spoken around more pie.

"A secret visit wouldn't cause any problems. After all, that's precisely what you're--"

He saw her smile growing and realized she'd been there long before him.

"Indeed. If we could pop back to 1492 and hide in the bushes on San Salvador without breaking history, someone a hundred years in the future could certainly find a way to lurk in the next room while you and I were conducting our little experiment."

The hair on the back of Jake's neck sizzled. "Do you think?"

Now she was laughing. "You look a fright, boy. I don't know, don't even have a suspicion, but what would you do? 'Oh well, let them have their moment.' I think not."

"Is there some way to know?"

"Ha. We'd best not get caught, and they'd better be better than us."

She still made sense. But he still had one more question.

"What if we muck it up? I mean, now that we have the ability, what if something we do is going to cause problems we can't foresee?"

"Still ahead of you, lad. If the choices were either end of temporal reality versus nudge us back on track, well, a polluted timeline is better than none at all."

The breath Jake had been holding whooshed out. "Can we assume, then, that no visits, at least, not that we know if, means all is well?"

Now Gran stopped eating. She laid her fork down.

"I sincerely hope so, my dear."

No visitors meant he was right. It had to. No one, not even a disinterested and impartial scientist, would allow all of humanity to disappear simply to avoid mucking about with the timeline.

His work was, therefore, on point. Even the change he'd made. Adjustment. Correction. He could use whatever word he wanted to justify it, because it was, in fact, justified by the lack of any hints from the future.

TEA was validated as well. Perhaps not all the rigamarole from upstairs, but the overall concept of taking a second bite of history's apple, learning a bit more about significant events in human history.

TEA was safe. TEA and all who served there. Including Felicity Bruttenholm.

It was time to stop mulling his reasons and move on. He had a writer to meet. No chance some scribbler, even a famous scribbler, would bring the danger of altering the timeline.

Jake's next mission, though he didn't know it yet, would involve bringing tragedy to the Bard. Or rather, bringing the Bard to tragedy.