

**Riley Towers**, Chapter 4: “Strange Dreams”

Jack didn't sleep well, per usual when drinking before going to sleep; he never had a huge tolerance for alcohol probably because he didn't often drink to excess or that much or that often. Excess drinking for Jack was 3 or 4 beers, a liquor or two in lieu of beer, or a few glasses of wine, sparsely over time. He wasn't anti-drinking, Jack kept beer around, but generally 1 or 2 beers on a Friday night was just about right by him – he did love his coffee, however, and he could be seen at work lurking around the Keurig machine ... eying its magical ability to dispense one perfect cup of coffee after another. Amanda, one of Jack's co-workers, admonished him for the “wasteful nature” of that infernal device; Jack just laughed and shook his head.

Jack observed Amanda, driving her PRIUS ... pretending that she cared more for the environment than anyone else, but Amanda had to have the latest iPad or iPhone when it came out, she would camp out and stand in line for these Apple product releases, and she never really wanted to know or understand the toxic industrial processes that made that economic arrangement work (or any of the other nefarious “business inputs”). Jack once said to Amanda, “you know girl, they use slave labor in China to make that phone”, and Amanda, befuddled in her search for a retort, merely replied, “well ... I don't know those people”. So Jack was ok with his throwaway Keurig coffee, and he knew he tended to waste coffee while making it himself – so for him it was actually less wasteful. Jack also suspected, in the recesses of his critical mind's eye, that the days of “WALMART wastage” were coming to a close – that era was over. He didn't know what was coming next, he just knew it wouldn't involve “Keurig machines, iPads, and the PRIUS”.

This particular morning, Thursday, Jack was a little jaded – and, he'd left clothes in the laundry room ... in the dryer ... that he was supposed to get yesterday, but didn't ... he had a few extra beers instead and obsessed over a girl he'd never met – a woman from a foggy and impossible world of yesterday.

Jack hated the laundry room, it creeped him out. It had a dark, dank, sticky feeling to it that made his skin crawl – and it always seemed empty, even when you would expect there to be people ... like on Sunday afternoon ... or Monday night. “Shit ... that place smells” was Jack's general feeling about the laundry room, “ ... and nothing good happens there, at that fucking place”.

Jack made his way to his kitchenette, started his own Keurig (he had one at home, which he loved). He dropped in the “Donut Shoppe” style coffee cylinder and waited for it to be finished. He sat at the window, staring at the Indianapolis sunrise – his apartment, like Tess' and “Nancy's”, faced East.

The sun rose, the “day star” as he often called it, and in the beams of orange and yellow was a mocking proof that no amount of human effort amounts to much at all. He sipped his coffee, scanned the news sites, his RSS feeds, his favorite YOUTUBE channels, and contemplated a word that he woke to – a work he couldn't get out of his head: “Nora”.

After finishing his coffee and his web surfing, Jack put on his sneakers and a pair of jeans and made his way down to the laundry room of Riley Towers (building number 3). The elevator had the scent of technological frailty – the buttons were covered in layers of oil, dust, dirt, and the plastic on the surface told the story of the age. Every button was “touch sensitive” - which meant that hundreds of fingers, hundreds of times a day, left their impression on those floor keys. All that time, that wear, and in the patina of the lighted display was a story – a crude history of ordinary folk living in extraordinary times. “There were no elevators for my great-great grandfather, there will be none for my grandson”.

Jack understood the truth of his age ...

Jack was living at the tail end of the biggest party in the history of the world – the “fossil fuel gala”. As his contemporaries claimed “the Earth makes its own oil” out of ignorance and fear, Jack could only smirk – and then feel a deep sadness. “They're coming up with excuses, bargaining positions, but there's no bargaining with the universe – and the entropy<sup>1</sup> tax must always be paid in full”, Jack knew that the technological utopia he lived in, that reached its zenith in the 20<sup>th</sup> Century, was slowly grinding to an undignified halt. No amount of iPhones or iPads or solar cells or hybrid cars would change this – it was inevitable, implacable, and is not amenable to negotiation tactics. “You cannot bargain with the Laws of Thermodynamics<sup>2</sup> ...” – as one of his old MIT professors use to say.

- 1 There are far better scientific definitions of “entropy” than the one found here, but for the sake of clarity I will state the following: entropy, understood on a simplistic level, is the tendency of systems to move from relative 'order' to relative 'disorder'. The conversion of fuel into work is an entropic activity. On a social/historical scale, the decline of a civilization into chaos and anarchy is a movement of a given culture from relative stability or low entropy to high entropy - which is often characterized by feudalism and localism. But like I said – entropy, per se, is a big fucking topic ... and I do it no service, as a concept, by oversimplifying here. Entropy can be “managed” by expending massive amounts of energy, and the fossil fuel arrangement made it seem as if we, humans, had done this – but that was an illusion. Certain aspects of life, like DNA, appear to be counter-entropic – but this is an illusion too. The truth is “life” bargains with nature via consumption/reproduction. Kill all life and in thousands, perhaps millions, of years even the DNA degrades to nothing – nothing but stray segments of meaningless organic data.
- 2 The four laws of thermodynamics are: a). If two systems are in thermal equilibrium respectively with a third system, they must be in thermal equilibrium with each other. This law helps define the notion of temperature - in many ways this is simply the application of logical transitivity to the natural world. b). When energy passes, as work, as heat, or with matter, into or out from a system, its internal energy changes in accord with the law of conservation of energy. Equivalently, perpetual motion machines of the first kind are impossible. c). In a natural thermodynamic process, the sum of the entropies of the interacting thermodynamic systems increases. Equivalently, perpetual motion machines of the second kind are impossible. d). The entropy of a system approaches a constant value as the temperature approaches absolute zero. With the exception of non-crystalline solids (glasses) the entropy of a system at absolute zero is typically close to zero, and is equal to the log of the multiplicity of the quantum ground states.

As Jack expected, the laundry room was empty but the basement wasn't; there were technicians in overalls working on something, down one of the corridors leading away from the laundry room. They were talking, arguing, and looked kind of stressed out, though Jack had no clue about the nature of their conversation – they were too far away ... but Jack was curious ...

Someone had placed Jack's clothes on top of the dryer, despite the fact that there were probably many other dryers available and his clothes were still damp - “fuck, asshole ...”. Jack slid his wrinkled, and slightly wet, clothes into the basket and was making his way to the elevator when he heard one of the “technicians” yelling at him:

“Hey ... EXCUSE ME ... SIR! ... can you come down here for a second?”

Jack could have kept going, maybe he should have, but there was something eerily portentous about the place, the voice, the moment. Jack didn't know what to say – he didn't believe in supernatural “voo-doo” as he so condescendingly referred to it. Jack was an Atheist, his parents were Atheists – they believed that life was magical, but they didn't believe in magical explanations. Jack didn't believe in “déjà vu” - but despite his own cynicism, rationalism, faith in science over superstition ... well ... there was something funny about that moment, and that stranger in overalls summoning him down the narrow, dark, hallway, that gave Jack pause.

Jack should have gone back upstairs ...

Jack should have taken a shower, and got on his bike, and headed into work ...

Jack should have listened to his rational brain, instead of the mammalian clump of neurons that symbolized “intuition” and “emotion” and other unclean leftovers of evolution ...

But Jack was curious, he had been curious his whole life.

“Dude ... I'm sorry ... but can you run up to the concierge desk at building one and tell the guy to notify the tenants to not use the garbage shoots for the next ... what do you think Rick?”

Rick was the other technician - the one talking to Jack was Bob (sewn on name-tags and all).

“ ... shit ... 12 hours man ...”, Rick responded without enthusiasm (he seemed a little drunk).

“So yeah, can you tell the concierge to send out an email blast to the tenants of Riley Towers to not use the garbage shoots for the next day ... er ... until we get this fixed ... fuck.”

“What's wrong with it?”, Jack new about the incinerator in the basement – one of his physics professors at MIT was actually consulted on the project. The entire system required very little energy to operate, and once the fly wheel was up to full speed – which took a minute or so – the system had a net energy cost, per unit of garbage consumed, of 3%; this could be compared to the 20% unit cost for

transportation and dumping. One of the reasons for the “savings” was the mineral retrieval and re-sale – the system super-heated the garbage, in a plasma vortex, allowing the centrifuge and electromagnetic fields to separate elements from the debris. Hell – several pounds of silver, and a few ounces of gold and platinum, were recovered, each year, which paid for most of the operating cost. But, as with most forms of complex technology, the system did periodically breakdown.

“Sure man ... I'll tell him ...”, Jack turned around to walk back towards the elevator – as he was walking away, he could hear Bob scream “FUCK, HOW MANY CHICKEN BONES HAVE THEY BEEN SHOVING DOWN THIS FUCK! I'VE NEVER SEEN THIS MUCH CALCIUM COLLECTED BETWEEN SERVICES! FUCK!” (those weren't chicken bones).

Jack was almost to the elevator when he heard another scream – this one less coherent, grisly – and then the lights went out, and the emergency lights kicked on ... they were red, and ghastly, and only added to the blood-curdling tension of the moment.

Jack was too curious ...

The elevator did not operate during a power outage, and Jack had no interest in tramping up the stairwell to the light of emergency lanterns. Jack was not fearless – quite the opposite – but he did not spend his day weighing mortality either. He was a “man of science”, even as a software engineer – and he could not countenance mysteries or phantasms or other misplaced fears in an age of reason.

Jack turned back down the walkway, he walked passed the laundry room and back to where the technicians were working – what he saw sent chills down his spine ...

One technician, Bob, who had been working on the flywheel, lay twitching with both arms ripped off – Jack could see his arms lodged between the wheel and the permanent magnets that created the EMF fields used by the incinerator. Bob was not conscious, and was nearly dead – the blood draining out of his arms and on to the floor. Bob didn't have long though.

Rick had less luck ...

Rick looked like the charcoal version of a man – his entire body dessicated, black, crispy, and the parts which weren't “crispy” were dripping with the melted fat from his arms and legs. Bob stopped twitching only moments after Jack got back there, Rick was never going to be revived – Rick was mostly a cinder at this point. Jack couldn't help it, he grabbed Rick's left arm – it broke off easily and then when Jack dropped it, in disgust, the arm exploded into a pile of dust.

And then ...

As if this charnal scene could not get any worse ...

A door slid open underneath Bob and Bob's body fell through it ...

Jack could have ran back to the elevators – right? But he didn't, because he wouldn't be “Jack” if he had. Jack walked up to the opening and saw that there was a ladder, and lighting, down below – so he knelt down, put his legs through the opening, and descended into that strange new place – rung by rung. It was another level, a hidden sub-basement, below the basement of Riley Towers, Building 3.

When Jack reached the bottom he saw what appeared to be a control room – like something from a movie, but an old movie ... from the 60's. The floor was polished concrete, the lighting was fluorescent and flickering, the consoles were a pattern of grids and rectangles of annunciators and backlit buttons, and dials, all hooked up to an old school reel-to-reel magnetic tape drive. There was a layer of dust on everything, but the room appeared undamaged, functional, only requiring a visit from janitorial services. A nasty smell permeated the room ... a mix of ozone and “rotten eggs”.

Jack recognized the computer in the control room as a UNIVAC-12 – something he and his classmates at MIT had seen pictures of during the introductory computer science class. The UNIVAC-12 was the first multi-user computer that functioned on the basis of something called “batch swapping” - a primitive form of multi-user operating system interface that UNIX would later perfect into a true multi-user system. The U-12 (as it was called) would halt segments of execution and back up processor state to another set of reel-to-reel tape drives called “swaps” - in order to have several simultaneous batch programs, that swapped on some interval (usually 60 seconds), this configuration required one swap reel-to-reel drive per each process. This U-12 looked like it had 20 swap drives and 20 process drives; it had a monitor, which was active, and a keyboard wired into it.

Jack couldn't help himself, he was too much of a hacker to not try ...

Jack sat down at the console and began querying the interface, assuming that standard computer terminology that he learned – working with UNIX – had some primitive variant extant within the U-12; like the relation between Spanish and ancient Latin.

Jack tried every combination of commands he could think of, including abbreviations, and none of it had any effect ...

Then jack glanced around the control console, reviewing the buttons and lighted displays and dials. Jack found one button labeled “ALIGNMENT” ... so he pressed it, leading to a whole new set of confusion and noise ... an alarm began to sound and red/white strobe lights, mounted on the ceiling, began to spin ... the room now had the feel of a police car turned inside out.

Jack found another button, labeled “SEND” - that button turned on just moments after he had

pressed the one labeled “ALIGNMENT”. After pressing “send” a depressed set of dials and indicators rose from the surface of the console, “ ... this has got to be bullshit ... ”, Jack's mind was recoiling at the insanity of it all ... the dials were separated into increments of years, months, days, hours, seconds, longitude and latitude.

“There's no fucking way ... no way ... ”, Jack began fiddling with the dials ... he had his phone on him, and despite having no cell-phone coverage in the basement, he had an app that contained road maps of every major nation on earth, with a built-in latitude and longitude calculator, and it worked without cell phone service (that was the point of the app). Jack looked up the lat/long coordinates for his location, Riley Towers, but just outside near the street; he adjusted the dials and set the control dingle under each – as he did this, words began to show up on the computer console:

*LAT: LOCK*

*LONG: LOCK*

:>

Jack saw a pattern in this, and it seems that the computer was waiting for him to input a year, a date, a time ...

Jack stood up for a moment, wary of his mind and his intentions ...

Jack shook his head, “this is one fucked up dream” ...

Too many things about yesterday were flooding back to him, too many coincidental effects ...

Too many morbid obsessions over a girl he'd never met, a girl that was murdered several decades earlier – “Nora”.

Jack knew this entire situation was impossible, so he assumed this was a lucid dream – it felt real, but 100% the result of a “temporal lobe seizure ... or lack of oxygen to the brain ... or too much beer before sleep”. Jack convinced himself that none of it, including Bob's armless body lying near him, was actually there – actually happening. In this incredulous state, he saw no risk in completing what looked to be a command sequence – a command, of some sort, that had time and space as inputs.

Jack adjusted the dials for the year, date, of Nora's death – but offsetting by a few hours ... making it afternoon, rather than evening, when Dan had said Nora was killed. After Jack set the last dingle switch the console displayed “QUANTUM ALIGNMENT RUNNING” - Jack was still confused as to what it all meant.

The room was still filled with the noise from the klaxon sirens and the flashing red and light strobe lights, but Jack did notice a door that had opened across the room – a hatch that looked something like the hatch on a ship or submarine. The hatch was heavy, steel, had a turning wheel-style lock on the front and tiny oval shaped glass viewing portal. Jack walked over, and just outside the hatch, and on a red and white warning placard near the “door” read the following:

*ATTENTION: WHEN ENTERING SPATIO-TEMPORAL FLUX, DO NOT FORGET TO BRING THE VORTEX INITIATOR. YOU CANNOT RETURN WITHOUT THIS. PLEASE BE AWARE THAT NO MORE THAN 300 MINUTES ELAPSES BEFORE INITIATOR IS UNUSABLE!*

Jack, despite being a genius, had no idea what this meant; he was good at “guessing”, but it didn't appear there was time for that, time for guess-work ...

Jack grabbed the rectangular metal box that was hanging from a hook below the placard; the box was also lit-up, with what appeared to be a large red button, in a see-through plastic latched enclosure, and a clock going in reverse ... counting down from 300 minutes ... it was reading 299. Jack still believed this was just his brain dealing with alcohol poisoning ... nothing more ... just a dehydration induced nightmare ... he would be awake in minutes – but it was best to keep moving the “dream” along. “Somehow I hope I run into Scarlett Johansson down here, that would make up for the rest ...”

Jack grabbed the “initiator” and stepped into the metal closet – the hatch closed behind him ...

Jack began to feel a growing pressure on his arms, legs, torso, and a sense of dread – it was as if some invisible force was squeezing him ... it became very uncomfortable. He could hear a ringing noise in his ears that grew louder and louder, and a burning sensation on his skin. He had been in the “closet” for 2 minutes, but it felt like hours ... and then ... just at the moment the uncomfortable sensations felt unbearable ... he heard a loud BANG! He saw flash of light! And then, in a daze, he was standing, on the street, out in front of Riley Towers – it was barely recognizable though, because the condos that were across the street were gone – what was there “now” was an empty and abandoned lot. “No fucking way ... this might be the best dream ever”, is all Jack could think.

Then a car, an old 1960's mustang coupe, drove down the street ... Alabama Street ... not far from where he was standing there ... the windows were down and he could hear AC/DC playing ...

*We're just a battery for hire with the guitar fire,  
ready and aimed at you,  
pick up your balls and load up your cannon,  
for a twenty one gun salute,  
for those about to rock,  
fire ...*

“What the fuck?!?!” kept repeating on endless loop in Jack's brain.

Jack stood there, startled, confused, not quite grasping the reality of his situation. This was not a dream, it was also not quite real – either. Jack had slipped back in time to that day, in 1983, that day Nora – Dan's sister – was murdered. He was early, a few hours before Nora's death, and he knew where she would be, but he had no proper identification and the cash in his pocket, upon close inspection, had treasury dates decades in the future.

His credit cards were useless ...

Added to all this, Jack had this *Radio Shack* looking box in his right hand – it made him stand out, or at least he assumed it did ...

But luckily this was Indianapolis - the passers-by, the people walking the streets, barely noticed him, he didn't look that out of place ...

Jack was wearing jeans, a nondescript t-shirt, and converse sneakers that hadn't undergone a major re-design since the middle of the last century. The box in his hand was weird looking, but this was the early 80's – and lots of “kids” and adults were moving about with brick-sized mobile phones and walk-men attached to their belts ... so, Jack didn't really stand out. Jack's hair was ordinary, closely cut – nothing gave him away as a time traveler from the future.

Jack was slowly coming to the realization that this wasn't a “dream”, some hallucination brought on from drinking ...

As Jack awakened to the facts, he noticed a middle aged gentleman walking down the street – and asked him for the time ...

“You should really get a watch son, my CASIO was very cheap ...”

The man told him it was 6:15 PM, Jack had set the dial for six ... so he figured he had been standing there, in shock, or a trance, for about 15 minutes.

“What did Dan say ... Nora was out with friends ... she was at some pub downtown having

drinks ... fuck ... SULLIVAN'S! FUCKING SULLIVAN'S BAR!”

*Sullivan's Bar* had been in business, continuously, since the 1850's – it is still in business today (or rather, in the time that Jack just left). It was originally a bar created because of Irish segregation and prejudice, a place for the Irish immigrants in Indianapolis to get a drink without being concerned for their safety – many knew what happened when they ventured into the wrong part of the city at night, and had bruises and broken bones to show for it<sup>3</sup>. By the early 1980's *Sullivan's* had become a hangout for yuppies and college students – this pub featured craft beer and an amazing assortment of video game arcade machines (Space Invaders, Donkey Kong, Galaxga, Red Barron, etc.). Nora would be at *Sullivan's* by 7 PM, that's what Dan had said ... that she “hung out with friends there until 10 PM, and then on her walk back to her car she was shot”.

*Sullivan's* was/is located about a mile away from the Riley Towers. Jack ignored for the moment the “why” or “how” of that secret basement level in his apartment complex; things had happened too fast and he was simply not ready for the deeper questions to come. He was driven, by a force concealed in his heart, to find Nora – to save her. He knew she was removed from the time-line in 1983, and that implied the causal impact of absconding with her would be negligible – to nil. He knew that he had only 280 minutes at this point to find her and pull her aside ... somewhere private ... where he could trigger the initiator. He didn't know how the initiator worked, but he assumed he would need to return to the spot on which he was standing, right there, in order to use it – it actually didn't matter, but he didn't know this, he didn't know about the top secret work that was done there, back in the early 1960's.

Before Riley Towers were built the United States Department of Defense had a program – working with Purdue University – to experiment in “exotic energy”. The tacit or assumed purpose was fusion energy research – the true purpose was darker, more hidden, more dangerous ...

By the late 1950's the Eisenhower administration became aware that the Soviet Union had a queer “crash program” for experimenting with crude forms of “space-time displacement” - also known as “time travel” amongst the science fiction crowd. The rather naive fear at the time, within the corridors of power, was that the U.S.S.R. would manage to change history, perhaps send technical diagrams of the atom bomb or jet engines or transistors back in time to the 1930's; thereby changing the course of World War II and history itself. What they discovered, as a result of their “Project Kronos<sup>4</sup>”,

3 On October 14<sup>th</sup>, 1849, following the first major wave of immigration from Ireland, the city fathers of the still young town of Indianapolis formed a mob and attacked the shanty town where most of the Irish were living. Out of 200 recent migrants, 50 were killed, another 75 were severely beaten. This is sometimes referred to as “10-14” by the Irish of Indy, and it is still celebrated to this day as a convenient excuse to get drunk.

4 Kronos (or Chronos) was/is the ancient Greek god of Time; sometimes referred to as “Father Time”.

was that “time” was immutable. You cannot travel backwards in time along any given chain of causality and change it – this was a universal law. A person or persons might, however, “time trip” - which amounted to hopping from one chain of causality, to another, within the multiverse<sup>5</sup>. They theorized that all “possible outcomes” were co-opted within the general cosmos, almost like a normal distribution of cosmic reality, and that the means by which the universe avoided logical contradictions was by, even within the multiverse, obeying the “arrow of time” and the Laws of Thermodynamics. So, no – you can't go back and kill “your Hitler”, but you can skip to another time-line and kill someone else's Hitler ... that's ok ... that creates no problems ... perhaps that has happened more often than we know (or can know), given the aforesaid.

The members of “Project Kronos” also believed there was an inverse and non-linear relationship between the relative “likelihood” of some given universe and the amount of energy required to travel there – the more freaky and impossible the universe, with flying pink-elephants and shit, the more energy that was required to break through the “quantum membrane” as they called it and travel there.

Halion Corporation, which built the Riley Towers in the 1960's, bought the land and facilities from the U.S. Government when the project was shut down – they promised to demolish the facilities as part of the deal, but for some strange reason (only known to Halion) they did not. The Riley Towers were built on top of the facility, and even the architects and construction workers were mostly unaware of what they were building on top of - mostly. Some Halion employees and owners had to know, someone built that hidden trap door that opened up for Jack, but whomever that was ... well ... he was likely dead by the time Jack moved in to the Towers, probably.

Jack didn't know any of this ...

Jack barely believed this was happening, and it was – happening.

Jack was smart but immersed in a haze of confused emotion and thought; he was a man driven ... to some impossible goal ... to find Nora and save her, even though he wasn't really sure if he could or should do it. “Could I rescue her ... should I?” was being whispered in his mind, by his conscience, as he walked briskly towards *Sullivan's*.

So Jack walked ...

And he pondered ...

5 The “multiverse” is a theoretical construct describing the concrete manifestation of the infinitude of co-existing, and contradictory, quantum states. The idea is that there might be a functional equivalence between Schrödinger's superposition (see Schrödinger's Cat thought experiment) and actual real universes – all of which are clustered around the material likelihood of each super-chain of causality. Fuck ... this is complicated shit.

He meditated, ruminated ...

He could hear the sounds and feel the other sensations of “1983” - the sights, the voices, the smells, but it was all too eldritch, removed from the ordinary. He still hoped he had been dreaming, that he was still dreaming, but he knew in his heart he wasn't asleep.

Jack also knew, no matter what happened, he was never going home again.

Whatever future unraveled for him, down the road, would be a tangle of causality and quantum possibility and forgone conclusions.

Jack didn't know this, not yet, not for certain – but he had left his universe behind. Whatever universe he was in now was likely just a few degrees removed from his own – almost indistinguishable. There was one difference, however, that was becoming blatantly obvious to Jack's perpetual logic engine of a mind:

*“Fuck ... this is the universe where Jack goes back in time ... this is the universe where Jack attempts to be the hero ... damn ... this is the universe of strange dreams.”*