

DR.RUPNATHJI( DR.RUPAK NATH )

After Life

# Chapter 1

## Alex in Wonderland

I'm writing this now as I'm not sure what I'll remember tomorrow. Hell, I'm not even sure I'm writing this now. Yesterday when I woke up...

Well, let me back up a little. I don't know who will ever read this, so I should explain. I—we, the people I work with, study the brain. Right now we are working on something pretty neat, but also scary. We want to map a brain, functionally, down to the individual neuron. The trouble is, until now there's been no way to do this without killing the brain's owner.

But we've been able to do it—with a rat, and a cat. We don't really know if it worked with the cat, but we are currently running a simulation of the rat's brain and it appears to be exhibiting strikingly rat-like behavior. I.e. fucking amazing. Top secret. Even writing this down on something outside of company premises I'm sure violates a dozen clauses in my contract, but...let me move forward.

This is basically my project. I'm the one who's had the faith in it from the start, the drive to push it forward, and the ingenuity to make it work. But I feel I've been fighting bureaucracies the whole way, from trying to get money from people who could never understand what it's for to trying to get permission from people who could never understand

why they should give it. We want to scan a monkey next. I think we'll be employing lawyers and public relations people for years to get that one to fly.

The problem is the process gives people the willies, especially animal rights officials, especially if they're religious or spiritual and have other reasons for not wanting us to tread here. The process is not passive, and the subject is aware...of everything. And I do mean everything. We use a combination of drugs and targeted electromagnetic stimulation to selectively fire semi-random sparse patterns of neural activity, and we use a sort of temporal computed tomography of the emitted EM to capture the resulting signal paths. That is, we're able to trace individual axons from neuron to neuron, and over time build up a complete connectivity map of the brain. From there, we can forcibly trigger particular groups of neurons and observe how the neurons they are connected to respond. To make this as efficient as possible, multiple non-overlapping groups are explored in this way in parallel—so it's rather like the subject is in one moment being forced to think of his grandmother, some musical score, a mathematical formula, a blue dot in his left visual field, and the best way to clean a carburetor all at the same time. And then in the next moment, some completely different set of things. Hundreds of times a second. And this goes on for many, many hours.

What makes the process tolerable is that half the drugs we're using are devoted entirely to protecting the brain. Specifically, we completely halt the processes that normally lead to the physical changes underlying the formation of memories. In effect the brain is held in a sort of chemical deep freeze, a state immune to change, but still able to function in a purely reactionary way. Other drugs keep the necessary neurotransmitters and nutrients replenished, and also keep the level of spontaneous activity as low as possible. This latter point would amount to keeping the subject unconscious, except that we then go in and light up their brain

with activity much as if they were conscious, but completely under our control. In some sense, we have drugged their will to sleep, closed their eyes and ears, and replaced all of that with a machine that decides exactly what they're going to think, see, hear and feel in each moment. Yes—some day this could lead to the ultimate virtual reality experience, but that's a long time off. Right now there's no real coherent thinking or experience going on. We don't know nearly enough, nor have the computing power, to do that. Right now, it's just a random nightmare of disconnected thoughts, feelings, and sensations, experienced in rapid fire succession and immediately and forever forgotten. But that's enough—that's enough, I believe, for us to reconstruct the mind within the brain.

So, why am I talking about carburetors and grandmothers instead of cheese and mazes, considering we've only really done this with a mouse? Because I've been having nightmares about this for days. Because...I am going to have it done to me. Or maybe I already have.

I didn't want to wait. Nobody wanted to wait. When we—just a small group of us—started talking seriously about proceeding with this, the jokes started flying. It was a scenario right out of a hundred hackneyed movie plots. *The Hulk*, *Flatliners*, a classic *Batman* villain back-story; I was "The Drooler! Da da da!" And someone else would add, "Able to soak a large sponge in a single afternoon!" And another, "More forgetful than a locomotive." And, "His secret dual identity as a mild-mannered disk drive." They threw me a movie night to watch *Memento*, featuring a man who tattooed notes on himself in lieu of a damaged memory.

But fun and jokes aside, I think everyone, not least of all me, was terrified we were going to wipe my brain.

So here's where I took my first trip down the rabbit hole.

I woke up the day before we were going to do it feeling a little anxious. But it was more than that. Something was out of kilter. I sat up in bed and rubbed my eyes, rather

disoriented, as if my eyes weren't quite working yet. So I rubbed them some more and looked down with perfectly fine vision at bed sheets I'd never seen before in my life. And I looked up, and there was a painting on the wall I didn't recognize. For a moment I wondered if I hadn't fallen asleep at a friend's house. But no, this was my bedroom, no doubt about it. My bed, same room, much of the stuff in it I recognized, though I can't say any of it was exactly where I last remembered it being.

You can imagine what's going through my head at this point: "Oh, fuck."

I mean, what would you be thinking? I'm like that famous patient, H.M., with a blown hippocampus, permanently locked-down brain with no new memories ever again, doomed to live the same day over and over for the rest of my life. My god, how old am I? I rushed over to the mirror, but I didn't look too different. But some day will I be rushing to the same mirror and finding an old, grey haired and wrinkled man? Oh, the horror, to grow old overnight, to go to bed young and wake up on death's door. I noticed something on my arm in the mirror, looked down to find a tattoo of the words "log in". Holy shit, I'm *Memento* guy! I pulled up my shirt, looked for more tattoos, front and back, nothing—just the one. My heart was pounding, I felt marginally ill. I must do this to myself every morning. It can't be good for me. So I tried to calm myself, but then had a moment of panic—how long does my memory last? Will I forget all of this in a moment and be wondering what I'm doing standing in the bathroom? I ran to the computer in the corner to log in before I forgot. Except my computer wasn't there. Well, sort of. There was a very nice display on the desk, and a keyboard and mouse, but the wires just vanished behind the desk and there was no actual computer in sight. I wanted to follow the cables back to see where they went but figured I better stay focused and just log in. My username and password were the same, as I guess they would have to be for

all eternity. Up came the background image—me with some *beautiful* woman who I did not recognize. But the image felt somehow familiar. And there I was, me, with this woman who I don't know. I leaned forward to inspect the image for authenticity, my eyes not yet ready to believe what the rest of me was starting to accept, but icons and windows rapidly covered it up, and then a big digital post-it note popped up in the front with just the words

Stay Calm.  
Enjoy each day  
as though it were your last  
And love her as I do.

That was all.

I took a few deep breaths. I could still remember waking up, quite clearly, so my memory didn't seem to be fading too rapidly. How was that possible? It didn't make sense, based on what I knew of memory at the time.

Then the door opened, and in she came. Even more beautiful in person than in the photo, and still scantily clad in her night clothes. I looked back at the bed—two pillows! I hadn't noticed that when I got up. She just stood there in the doorway with a sultry smile on her face and said, "Morning, sugar."

Holy cow, I wanted to just do her right then and there. I mean, here I was, from my perspective first time ever laying eyes on her, knowing that without a doubt I could have her. None of that long and drawn out uncertainty of the dating ritual that usually stands between you and what you want, not even that first awkward physical encounter where she's shy and self-conscious in bed and doesn't really enjoy it. Past all that.

But I couldn't put it together. How did I end up with her? I mean, how did I go my whole remembered life without finding anyone like her, and then finally end up with her

when I can't remember her for more than...an hour? A day? I still didn't know.

She seemed to know what I was thinking (of course!). Me still standing there dumbfounded, possibly drooling (oh god, The Drooler!), she said, "You know that look you just gave me, like it's the first time you've ever seen me and you want me without reservations, not bored of me, not tired of my annoying habits, just wanting to take me and make me yours, mark your territory in me?" I just stood there like an idiot, still dumbfounded, and eventually managed a mouth-agape affirmative nod. "Well, that's why," she said with a big satisfied grin, and then turned and walked back out to the living room.

I stumbled out after her, mind still reeling, heart still pounding. How do I live through this every day? I'm going to die of a heart attack before I have a chance to wake up suddenly old some day. And I turned the corner into the living room, and a chorus of voices yelled "SURPRISE!" and glitter and streamers filled the air and my heart almost jumped out of my throat and ran down the street. I stumbled back and caught myself against the wall, scanned the room to see all the folks from the party the night before still there, one of them wearing my old bed sheets, my...that girl with her arms around my friend Jack—she must be his girlfriend who everyone kept telling me was just my type—and there in the corner was my computer with the wires going out the partly opened sliding doors, and surely into the ones in my room. "That's my new monitor," Peter said, referring to the one in my room. "Like it?"

I thought back to the night before. Up late with the gang who were clearly working hard to keep my glass full until I was pretty well done in for the night. Someone leading me to my bedroom, waiting outside the bath while I brushed my teeth and stumbled into my jammies, escorting me from the bathroom door to my bed—in the dark. Surely they had re-outfitted my room already during the party, could

have easily rubber-stamped the “tattoo” on my arm while leading me to bed. I looked down at the sleeve of my night shirt, and sure enough there were traces of dye on it.

“You are all...just...evil!” I said, shaking my head and trying to repress an outrageous grin. I turned and walked back to my bedroom without another word. “To script!” someone yelled triumphantly, and there was much rejoicing. The last words I heard before closing the door behind me was someone yelling, “Behold The Drooler in his heroic attire!” I looked at myself in the mirror—standing in my jammies, smudged tattoo of the words “log in” on my arm—and laughed, and then quietly cried a little, because I still had to face the real thing tomorrow. Even if all went perfectly I would still lose more than twenty-four hours of my life to a drug-induced stupor—at the hands of people who, despite their antics, I trusted more than anyone else in the world, but none of whom were doctors should anything go really wrong. We had thought of conscripting a friend or two in the medical field but realized it would be the end of their careers if it ever got out. The only reason it wasn’t completely crazy is because these drugs really do just lock down the brain on a physical level. So, almost no matter what happens during the scan, when I come to the next day it should be as if the previous 24 hours never happened.

Or so we thought. Or so I hoped.

But something went wrong. I don’t know what. I really can’t tell you what has happened in the last twenty-four hours but I will tell it as I remember it, at the moment anyway.

The rest of that day was uneventful, full of all the preparation we had been through many times before with our earlier animal trials—but this time I was the animal. Shaving a few small patches on my head, where in the morning we would slice the skin and drill little conical dimples into my skull. It sounds horrible, but really it’s no big deal—the dimples are superficial, just enough to give the pointy-ended

Pyrex mounting rods a fixed location to bite into. The skin folds right back around the rods and usually stops bleeding fairly quickly, and whatever minor scars it leaves later will be under my hair anyway. Starting an IV drip, with a few of the drugs that need to be ramped up slowly. I would spend the night in the lab, and would be unconscious by morning, trusting my team with...everything.

Even my anxiousness faded as the night wore on—a side effect of the drugs. I felt fine, really, really fine. The world became very soft, noises faded pleasantly into the distance. I felt very at ease. And I remember hoping coming out the back end would be just as gentle, thinking, “Hey, this isn’t so bad—I could do this again!”.

And then I took my second trip down the rabbit hole.

I didn’t wake up gently. Frankly I’m not sure I woke up. Well, I think I did, I mean I remember doing so, not once but twice. And neither of them was right. First, I was just awake, wide awake, sitting in the lab. All the equipment was there, but I wasn’t on the scanning table, I was just sitting on one of the chairs we sit on when we’re running the scans. And I was wide awake. Just like that. And nobody was there. It felt like a dream, but not. It was so real, down to the finest detail, so consistent, and yet inexplicable. I was very disoriented. And then when I tried to move, I couldn’t. And I thought for sure this was a dream, or is it like when you wake up half way but your body is still disengaged so you are paralyzed for a moment? So I tried really hard to move, and I don’t know exactly what happened but I fell out of my chair and onto the floor and I hurt all over but then in a fit of flopping about I was up on my feet and suddenly felt okay. And I felt very calm, none of the leaping-heart feeling, and I recall being amused at myself for being so calm, and then thinking again that this was just a very strange dream.

Of course it occurred to me I could just be *in* the scan right then and there, that this whole experience was an unintended virtual reality experience, that this is what it’s

like having your neurons randomly poked and prodded while heavily doped up. But it didn't make sense, it doesn't make sense. It still doesn't make sense. My thinking was too ordinary, too linear, too willful. I could remember...well...from the moment I "woke up" in the chair. So, was I back to a *Memento* scenario? I looked at my arm—no tattoo. None whatsoever! Not even the faintest stain from the night before. So this is either a dream, or somehow many days or more have passed since the night before the scan.

I poked myself a few times, felt real enough. I called out. No answer. It started to dawn on me, could this be another practical joke? Think how little they'd done last time and had me completely fooled! So they washed the ink off my arm, and ran the sodium pentathol drip a little longer than the others so I would wake up more suddenly, propped me in the chair—where I sat and got stiff waiting for the last drugs to wear off—and then presto, here I am, the brunt of another joke!

The Drooler indeed!

I went straight for the door to the hallway, to find them and put an end to this way-over-the-line silliness, or so was my intent. But when I opened the door... You know those moments when you suddenly realize something is very, very wrong? Like feeling a gust of wind from nowhere, looking around to see where it came from, and then finally looking down to see the bullet hole in your chest with blood draining out of it? This was one of those moments, only it wasn't me with the hole, it was reality. My foot fell not on the hallway floor but onto open space, and in that moment I looked before me and saw...blue. I reached back, spun around as much as I could with my lead foot missing its contact, but my fingers just brushed the wall and found nothing to grasp. So I helplessly pivoted out the door, now backward, and fell away, watching the doorway I had just left recede into the distance, a glowing portal in an otherwise vast blue sky.

And then I woke up. Again. Only this time I was drown-

ing, completely submerged, my lungs full of water, darkness. I swam to the surface, spewed water out of my lungs, gasped for air, coughed up more water, gasped for more air, treaded water until I regained some senses.

I could feel a wind blowing, and I could tell from the lack of echoes that I was outside, though I couldn't hear much else above my own splashing about. Then off in the distance I saw a faint light, or more of a glow. So I swam toward it, and sooner than I expected my hands felt mud, and I crawled up onto the grassy shore and lay there to rest.

I just started laughing. I couldn't tell you why. Just, I guess, the absurdity of it all. My god, what a story it will make when I finally wake up. If I wake up. I fully expected the earth to open up and consume me any moment, and to find myself riding a magic carpet.

And then I heard it. Faintly in the distance, from the same direction as the glow, I heard some pretty folk music. And it wasn't the earth swallowing me up, nor a magic carpet, but it was good enough, and I laughed and laughed until I was bored of laughing, and then I just lay there with the music playing off in the distance thinking, "Okay, now what?"

Eventually I gathered myself to my feet and started trudging through the swampy grass toward the music, toward the glow. The ground soon went dry and became easier to traverse, though the grass got a bit taller, up to my waist at times. And then the grass grew thinner, and the ground more rocky, and still I could see I had a ways to go but at least now I was making good time except for occasionally stumbling over a rock. I couldn't see the moon or stars, but still it wasn't quite pitch black.

I did have one moment of panic during this little hike—I mean, as much as someone in such surreal circumstances can have anything to panic about. I heard a noise and looked to the side and swear in the faint of night I saw something huge and moving very quickly. After my initial start, which froze

me in my tracks, I realized that whatever it was—if in fact I'd seen anything at all—was already long gone and clearly not coming my way. So I laughed at my ghosts and pressed on. Perhaps it was a giant teapot.

The music was live, and the glow was from a small bonfire and a number of torches. People were dancing, and when I sauntered into view, still damp and certainly looking a mess, the musicians eyed me a bit—I think wondering whether to stop the music. But they seemed to think I was harmless enough and so played on while a few curious patrons walked out to meet me.

I offered no explanation for my presence beyond that I had awakened, nearly drowned on the side of some pond and couldn't remember how I'd gotten there, and that I had followed the music here. I heard someone say it must have been catfish pond, and remark on how far I must have walked. And then I saw...her. One of the women who came out to meet me, she looked an awful lot like...that girl. The one from the prank. I didn't even get her name—I mean, the one from the prank. This girl's name was Laura. I know it because I'm staying at her place right now as I write this. She took an immediate liking to me, wanted to tend to me, and the others seemed surprisingly unconcerned that I might, say, be an escaped convict or whatnot, and they let her scurry me away to her home where she offered me a bath and a night shirt and a warm place in front of the fire. She also found me this quill and ink and...paper, if you can call it that. Yes, I said quill. Does this really surprise you? Also, they all speak with a strange accent which I can't place, but I am thinking I must be—just to entertain the hypothesis that I actually am somewhere as opposed to just out of my fucking mind—I must be somewhere in the middle of the country, perhaps having stumbled into an Amish community?

They asked where I'm from. I told them I simply can't remember. I surely *don't* want to get into how I might have ended up here from Los Angeles.

Laura is a doll. She's not the same girl from the prank, just similar. Similar enough I'm basically certain I've lost my mind. It seems too coincidental otherwise. (She also says I look familiar to her, that she's certain she's seen me before, but what am I to make of that?)

Well, believe it or not, that's it, the whole story. I'm still waiting to wake up. And after all the time I just spent dreaming that I was writing this all down with a feather and ink—well, I hope at least that I remember it well.

I am going to sleep now, in front of this warm fire. Laura already went off to bed a while ago, as it has taken me quite some time to write this down. But I wanted to get it all down before I go to sleep. Strangely I think I am afraid I will wake up tomorrow, here, and not remember today. But that's all just crazy. I am going to go to sleep now, in front of this warm fire, and I am going to gently wake up in my warm and fuzzy lab in Los Angeles, with my friends around me bringing good news of a spectacular success and our imminent world fame and fortune.

Okay, good night my ghosts. It's been...unreal.

Alex Harris, PhD  
From Neverneverland.

DR. RUPNATHJI (DR. RUPANATHI)

# Chapter 2

## Level Heads

It's morning, I'm still here, and I remember everything just fine, so I feel a bit stupid for all of yesterday's fanciful speculations. My new, simpler hypothesis is that I was kidnapped during the scan (corporate competitor?) and dumped for dead in the pond. I might easily have looked dead to someone who didn't realize what I was doped up on, and I was probably close enough to recovery that getting thrown into the pond woke me up. The whole lab/blue-sky/falling-out-the-door thing was surely a semi-lucid dream inspired by the car ride and getting chucked out the door and into the pond. The large thing moving by in the night? Probably a semi-truck on the interstate (though I can't explain the lack of running lights).

Simple, somewhat obvious, no? I'm sparing myself any conspiracy theories as to who or why for the moment. Right now, I'm most wondering where the heck am I? And what happened to my friends?! And what should I do now? Until I do answer who and why, I'm not too keen on alerting the world to my survival.

Somebody's coming.

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That was Laura returning this morning, with some fresh fruit and bread. Quite good, though I haven't really regained

my appetite.

I'm still surprisingly in the dark. I can see why they dumped me here. I never knew such an insular community existed (though I suppose that is almost by definition). People talk so strangely, I've mostly kept my mouth shut all day. Every time I open it, people ask why I talk so funny. Laura tells them I was hit on the head, and they give me the sympathy-to-the-idiot look. (Da da da! The Drooler at your service!) Better just to keep my mouth shut.

Oh, and another coincidence is explained, or at least it is much less of a coincidence than I thought. Many of the women here look a lot like the girl from the prank the other night. I mean, as much as Laura does anyway. Now I wish I'd had more chance to talk to the prank girl—wouldn't surprise me if she were from here, and, hey, then I'd know where here was.

Yes, I still don't know where I am. Well, we're on the outskirts of what looks to be a pretty large city which they're calling Segransa, which I've never heard of, but I swear the whole place is just one giant multi-generational cult because they *will not* talk about anyplace else. And they're complete Luddites. Well, not complete, because there's definitely a blend of very modern bits to their architecture and such, but that's about it—no cars, no phones, no electricity!

(Actually, I have to say it's kind of nice. It's very pretty, and the people have been very nice despite my suspicion that they sacrifice small children during full moons.)

I wish I had my camera; I'd love to post this all as a photo journal some day. That is, assuming I live that long.

This reminds me, another bit of confusion: I looked at my clothes today—the ones I was wearing last night when I stumbled into town. Completely trashed, almost disintegrated. And pale too. Nothing left in the pockets, of course. Anyway, it's like they were soaked in a bleachy swimming pool for too long. (I had a pair of blue jeans once that I tried to fade that way, and they just started rapidly disinte-

grating after that.)

Another cultish, insular oddity: The year? Seventeen. At first I just took it for a joke, you know, 2017, ha ha, I hit my head and traveled into the future, but no, it's just their own calendar. It's just seventeen, no twenty. And when was Laura born? Ninety-five. And so hey, it should be no surprise then that nobody seemed to know how long this cult, ur, Segransa, has been around. I'm betting fifty years at least, maybe longer.

Anyway, tomorrow I'm heading back to the interstate and hitching out of here. Laura's not going to be happy about this, I can tell already. She's really quite fond of me; I couldn't say why. We really haven't talked much; I certainly haven't told her anything about me. But she looks at me...like she *wants* me in the worst (okay, best) way. And I've already alluded to her being very much my type, so it's quite mutual, but as much as I'm trying to stay cool I am still rather freaked out by all of this. I need to resolve what exactly happened the last couple of days. And then? I could definitely see coming back.

DR. RUPNATHJI (DR. RUPNATHJI)

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 3

## Boundaries

Last night, I had another weird dream... I think I was inside a television set looking out. Actually, I think I *was* the television set. There was a boy in the room, maybe eight years old. He talked to me, and I talked back. We talked about many things; he asked me many questions. I made him laugh, I made him think, I helped him with one of his homework problems. And then I heard his mother call to him from the other room, and he said, "I have to go now," and he reached out and turned me off.

I had an odd interaction with Laura this morning. When I told her I was leaving town, she just giggled. That's it—no complaints, no look of sadness or upset, just, "Tee hee". I...well, I didn't know what to say to this since it was the last thing I expected, so I just sat there perplexed for a moment.

"You really did hit your head, didn't you," she finally said.

Then she did start looking concerned, realizing that I was serious. She said she would pack up some food and we can go together by horse. I gladly accepted, of course—much rather ride than walk, and then she can take the horses back when I catch my ride.

We're off momentarily.

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Where to start... No, there isn't an earthquake, my hands are shaking.

We rode out of town. I asked her what way to go. She of course didn't know, but she said it didn't really matter and that I should just pick a direction, so I did. We rode for a while, at a casual pace so as not to wear out the horses, and then I noticed it. There was something odd about the horizon, some sort of optical illusion, like a mirage but without the shimmering. I stopped my horse to get a stationary look at it. I couldn't quite figure out what I was seeing. The horse was still shifting its weight from foot to foot a bit, jarring my vision enough to be annoying, so I stepped down. And when I looked back to the horizon, it looked fine! Laura sat and watched me with the patience of a parent with her child, maybe raising a brow once or twice. So I shook my head, got back up on the horse, and—there it was again! In fact, the whole horizon moved strangely as I climbed up and down—which, by the way, did start to annoy the horse.

"Come, let's go," Laura said, so I re-mounted and tentatively pressed onward.

It soon became evident what was going on. Within a minute we were standing before *a painting* of the horizon. I jest not. Actually, it was more of a print than a painting, because within ten yards it was obviously mashed together out of random blobs of color. At first I started laughing, because it was really so preposterous. There was nothing subtle about it. Some sort of weird joke.

I noticed the texture of the surface, fine little swirls like a fingerprint, but sharply ridged, more like a metal file. Holding my hand to shade it and reflect light onto it from various directions I realized it was designed to make each bit of the mural respond to light in the same way as a surface set at the angle of the object the mural was depicting at that point, so as the sun passed overhead during the day, the mural would

continue to look approximately correct. I say approximate, because it really isn't that great. I mean, once I knew it was there, what it was, I could see it from half a mile away. But...it's just not something one normally expects!

Naturally I made some attempt to chip at it with a rock, to see what was underneath, how deep or superficial the colors were, etc., but it was truly impervious to any assault I made. (The rocks out there weren't particularly hard, though. They chipped quite easily.) Laura just gave me a crooked smile after a while and said, "You really haven't ever been to the boundary before, have you?"

The Boundary. Why she didn't just tell me...oh, I wouldn't have believed it anyway. And from what I gather The Boundary is just such a universal truism here—it's not something anyone would think to mention unless there was something going on there. You know, like, "Ritual sacrifice at The Boundary, East, tonight at midnight!"

Anyway, we rode alongside it for a while, until it was clear to me that it was in fact a big circle around the city just as Laura had claimed. We headed back, and here I am, right where I was last night, and I'm just a little bit confused. Just a little bit.

How tall is The Boundary? She doesn't know. To hear her talk about it, there is quite a bit of idle speculation about what is on the other side, whether there *is* an other side, whether it has a top or goes up forever, whether the sky is part of it, whether there is a boundary deep beneath the soil...

I might have thought this place was a disposal site for the politically untoward, but it seems as if most—perhaps all?—of these people have been here their whole lives. It doesn't add up. How did I get here?

How do I get out?

My hands are still shaking.

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 4

## Eden

Last night I had another dream. I think I was inside a television set looking out. There was a boy in the room, maybe eight years old. He talked to me, and I talked back. He asked me whether all horses were boys, or whether there were any girl horses. I answered him, and then he ran off, leaving me alone in the room, save for a cat lounging on a chair in the corner. I tried to read the titles of the books on the shelves. I could only make out a few, with the largest lettering. They were all hardbound, old classics, before my time. *Moby Dick*, *Huckleberry Finn*, that sort of thing. After a while I got bored, started meowing to the cat at first to no effect, but when I gave it a more serious attempt the cat perked up and came over to investigate. Next thing I knew, I was staring right into one of its nostrils, then its chin, then the bottom of one of its paws, and then...I woke up.

When I woke up, Laura was sleeping naked in my arms, warm embers still glowing in the fire. After writing last night, I put down my quill, felt her presence behind me. Then her hands were on my shoulders, her fingers running

through my hair, her palms brushing down my back. In one fell swoop, she simply grabbed my anxiety and pulled it out of me, let it fall to the floor. She moved in front of me, said, “Look at me.” I did. She said, “Watch me.” And I did. She danced before the fire, slowly, casually. She was the embodiment of comfort. We made love without a word. There was no stopping it. It was eerily perfect.

Still dark, I walked outside to look at the night sky. There was just one very faint star visible. Or was it a planet? I recall that planets can be the brightest spot in a moonless night. Or was it just a spot of white painted on the boundary, a big five-point star with “God was here” graffitied in the center?

I stayed to watch the sun rise. It rose behind distant hills, which for all I know don’t even exist. And it was not as hot as I remember it being, but then I’ve always hid from the sun so I can’t say I actually know it all that well. What does the sun really look like? I have no idea—it’s too bright to see. Could I tell one sun from another? Could I tell a real sun from a fake one?

My imagination is running away with me again. But after yesterday, it’s hard not to question everything. Am I really here, or is this whole experience just being piped into my head while I lie on a table somewhere? Or hey, maybe the scan worked after all, and even *I* am just part of a big simulation, like the one we were running on the mouse a few days ago—only I’m the mouse. But no, neither of those makes sense. Too many things don’t fit. For one, the experience is too perfect, too detailed. Every grain of sand, flicker of fire, the finest of hairs on the back of Laura’s neck. It’s not that it *couldn’t* be done, but rather there would be no point—not for the computational cost involved. The universe itself is already a giant simulation. Reality is the best simulation of reality money can buy. Simulations make sense when a cheap knockoff will do, when you only need the essentials and can forgo all the expensive details. But here,

no detail is spared. Even the boundary, in its tacky glory, has its intricate fingerprints.

Why would a simulation so grand employ something as tacky as a giant mural in the first place?

And what would be the point of simulating *me*? Who cares what I might think or do in the city of Eden, and if they did care, why would they start me out in the bottom of a pond?

Speaking of Eden, I worry I may inflict the plague on these people. According to Laura, the entire community is free of disease, not even the common cold. She hardly has the vocabulary for it—the only “diseases” she knows are those of old age or injury, none contagious. Now my ears perk up every time I think I hear her snuffle. I’m healthy, but surely not sterile. God, I hope people don’t start getting sick.

But maybe she’s just wrong. I got a blank stare from her when I mentioned the lone star I saw last night. She claims to have never seen a point of light in the night’s sky, nor to have heard that usage of the word. Her knowledge of astronomy is nonexistent. Assuming at least one star is visible again tonight, I’ll teach her.

I’m starting to grow fond of this place. Or perhaps that’s just to keep me sane until I find some hope of leaving.

No, I think I really do like it here.

Alex Harris

From the *Land of the Lost?*

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 5

## A New Star

Another dream. A woman was standing over me. She said, “There now, I’ll be just a sec,” then started disrobing as she wandered about, putting things away, neatening up a little. I didn’t recognize her, but god how I wanted her—I wanted to take her right then and there. But I just sat there. She sat down with me, lit up a joint, asked me to explain the theory of relativity to her again. I did, or started to. Part way through she reached toward me and then something snapped in my mind. Suddenly I lost my train of thought, and my sense of time changed, and I realized I was very stoned, and she was laughing, and we were having sex, and her breasts were in my mouths, and my tail was going places tails weren’t meant to go (or, well, maybe mine was) and she came, and came again, and we were lying there, and then the phone rang, and she kissed me firmly on the lips, and—I woke up.

Once again I awoke with Laura curled naked against me, and I felt a bit uneasy about my dream, because at this moment I really didn’t want anyone but Laura, and could not explain these strange images, these bizarre desires and

drives, bubbling up from my subconscious in the night. But as I lay there tracing the curves of her body with the soft pads of my fingertips, I found myself having thoughts which were born of that dream, and it made me wonder: do we define our dreams, or do our dreams define us? I felt somehow changed by each of these dreams I've had, just as any experience changes us. Strange then to think that who we are is in part defined by an entire second life most of us rarely remember. There perhaps is the first and oldest use of simulation: an approximation of the real world created by our own minds in the night as we quietly sleep, a world where we can safely explore ideas, learn the consequences without suffering them, a place we can even die—and live to learn from it.

I showed Laura the star last night. She had never seen it before. It was in exactly the same place, despite it being many hours earlier in the night. I had to ask: if we walked out of town, toward that star, where would we end up? Yes, that's right—her best guess was that we would hit the boundary around the catfish pond. Do you see? I left the lights on.

I left the lights on in the lab.

We rode the horses out there last night to see. By the time we reached the pond, the light was nearly straight overhead, though barely visible due to the angle of view. It must have been a hundred stories high. (Could the boundary itself be that high?) And we weren't the only people there—others had seen the new light in the sky and come out to investigate. This in itself I found amusingly ironic, since what modern man would attempt to chase a star? But they didn't know any better, and they were right. Fortunately, none of them recognized us, but as gossip is bound to spread I'm sure the story of my initial arrival has already collided somewhere with the news of this new star. Soon we will be sought out. Toward what end, I am afraid to guess. One man called it a sign from God, another thought it might be a crack in the boundary. I didn't hear much else, since we turned to leave

not long after arriving (for fear of being recognized). But it struck me immediately how casually they approached it, how seemingly idle their curiosity.

Could I have fallen that far and survived? And if so, is it somehow daytime up there while it's night down here? If not, what happened in the hours between opening that door and ending up in the pond?

Where the hell am I?

Oh, I hear voices outside. Gossip travels fast.

DR.RUPNATHJI( DR.RUPAK NATH )

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 6

## Economics

Inside a television, looking out. There was a boy in the room, maybe eight years old. He seemed upset. He told me I wasn't going to get a memory, because it was too expensive—because, “Dad said it was just a tear pricing scam.” [I assume he meant tired. I heard footsteps in the distance. The boy reached out and turned me off.

We were in fact sought out yesterday, but with stunning indifference. When I first heard the voices, I had flashes of a lynch mob, but the tone coming through the door sounded more like milling trick-or-treaters than angry witch hunters. Indeed, it was just a few curious folk wanting to know if I'd remembered anything yet, wondering if I knew anything about the new light up in the sky. Some seemed a little uneasy, worried something might be wrong, but only like children who trust that any problem is someone else's and will be gone soon enough. The whole encounter was very uneventful. (Of course, I didn't tell them a thing. “Sorry, I hit my head, I don't remember.”)

I have a new theory. The company I was working for has been secretly running a huge and elaborate experiment to breed sheeple, and somehow I took a wrong turn coming

out of the lab and fell in. Maybe in my drugged confusion, I wandered farther than I realized, happened through a door that should have been locked, and fell into—The Pit of Eden, breeding ground of the mentally inane. Oh my god, and the prank girl—could he have got her here? Maybe this is where they make girlfriends for geeks, sort of a company perk? Okay, I'm not too serious here. I hope. But the scale of it...is unimaginable. I mean, I am here right now, experiencing it directly, and still I have a hard time accepting that the horizon in all directions is a painting, that the sky itself is—I don't know what—the underside of Los Angeles, painted blue? And the city is huge. Not on the scale of Los Angeles, not even close, but the biggest indoor city-like casino in Vegas is just a tee-pee by comparison. I guess that's the best analogy, impressive in the same way, just on a much grander scale. I can accept the technological plausibility, but the economy of it? Who or what could possibly have funded this, while keeping it quiet no less? And why?!

Speaking of economy, I've become curious about how it works here. Having seen no indication of contact or interference from the outside, how does this place keep ticking? The answer is a bit odd, but fits nicely with my new theory.

Laura works at a bakery—but not very hard. The bakery is always overstaffed, and always produces far more goods than it could possibly sell. The excess, besides the fraction that goes home with the employees, is simply thrown away, never given out. Laura said that besides the fact that there simply isn't anyone who can't afford to buy bread, it is taboo to give handouts except to the injured—at which point she peered at me with a very cute, sympathetic expression and kissed me on the forehead. Groan.

Apparently, it's also taboo to own any dwelling or structure which you are not personally using on a regular basis, which means there is no renting here whatsoever. Furthermore, the population has apparently been mysteriously stable as long as Laura is aware, and there has always been an

excess of housing. Other than some homes and businesses in especially fine locations, real estate is regularly bought and sold for a pittance.

(If you had no money whatsoever, there are vacant houses waiting to be claimed, though they are by definition in the least desirable locations and also typically in the worst state of disrepair.)

So, in short, the bakery pays no rent.

“Taboo” and “law” seem to be one and the same here, as the church is the government (why did this not surprise me?) but the church operates entirely by volunteer labor, and completely without money, so there are no taxes of any sort.

I started to wonder if this wasn't some grand experiment in utopian society. But no, obviously the numbers just weren't adding up, so I kept following the chain of supply back until I hit the key questions: Where does the wheat come from? Are there farms within the boundary as well? No, randomly enough, the (one) church supplies wheat to the entire city! And where does the church get the wheat? Why, the fountain of wheat, of course. “Pardon me?” Yes, according to Laura, there is a fountain in the church in the middle of town which just spews wheat, constantly.

I wanted to ask her if she didn't find this just a little bit odd. But no, clearly not, she didn't even think to mention it until I asked it directly. She was raised with running wheat just as I was raised with running water. To her I must seem like some primitive marveling at a pot boiling on the stove, asking, “But, where did you get the water? It comes out of the wall, you say?”

When the topic came up, she reached into her hanging apron pocket and produced for me a small handful of wheat berries, spillage from her morning transfer of wheat to the grinder. I fondled and examined them absent-mindedly as we spoke, then for a while in silence as I contemplated the bizarreness of this all. Suddenly it struck me—not a realiza-

tion about what had been said, but about the wheat in my hand.

“Wait a minute!” I said. “There are only three different berries here!”

Naively, I expected this to be news to her, but she said, “Well, of course, any school child knows that!”

They even have names: Mike, Larry, and Peenma. And no, she has no idea why (maybe just the whims of school children?), but did know which was which. I tried to explain that real wheat berries grow on the ends of long blades of grass, and that every one is unique, but she took it as some arbitrary humor on my part. I saw no use in pressing the matter.

So what have I been eating? Bread made from strange little food pellets containing god knows what—Xanax and Thorazine, judging by the sheeple. Maybe that’s the experiment? I don’t feel any different than when I arrived, but then, would I notice? I’m glad I’m keeping a journal.

She laughed when I asked if there was a fountain of fruit as well. No, just lots of fruit trees, everywhere, free for the pickin’. Who takes care of them? She didn’t understand the question. Seems once in a long while when an old tree dies or stops producing, the church volunteers will plant a new one somewhere, but other than that, they just grow. There is enough “rain” that they needn’t be watered, and apparently just as there are no diseases of man here, there are no pests or diseases afflicting the trees. (How have they—the creators of this little experiment—pulled this off?)

I wondered now if this wasn’t an experiment in longevity, health, immortality? Laura couldn’t give me collected figures, but from her personal anecdotes it didn’t seem like people were living to be especially old here. (This gives me the idea, though, to seek out the oldest person I can find, to see what they can tell me of the origins or early years of this place.) The longevity track led me tangentially to another realization: the last time I shaved was the night of the scan,

but I have no stubble! I suppose this could just be change of diet, or stress, or side effects of the scan drugs; but it could be something in the “wheat”.

Also, my appetite still hasn't returned. I've only been eating because I know I should—and it occurs to me I've eaten nothing but “wheat” products and fruit since arriving via the pond express. Yet I feel completely fine, not in the least bit lacking in nutrition. I'm really quite curious now what's packed into those little food pellets.

Laura further indicated that there is neither meat eating here (based on her response I may as well have asked her if people suck on rocks), nor dairy, nor anything else. It seems fruit and food pellets (Purina People Chew?) are all that's on the menu here!

Anyway, back to economics: This “city” is no experiment in self-sustaining communities. It is externally subsidized to such an extent that one never really has to work here at all to survive. People do work, but only very casually as bakers, handymen, and the like, and more often as musicians, artists, actors, playwrights, and so on. I.e. as Laura describes it, the economy here appears mostly based upon entertaining each other.

I wonder where the inventors and scientists are. The whole concept of technological progress seems both foreign and unnecessary to Laura. Has the population been drugged into apathy? Or if necessity is the mother of invention, is utopia its grim reaper?

I wonder if I could build a hot air balloon and travel to the stars...

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 7

## Breathless

I was having dinner with a woman. She was familiar to me in the dream, but no one I know in real life. We made chit-chat, and somewhere in the middle she said, rather out of the blue, “You’re way sexier than any man.” I remember thinking—in the dream—am I not a man? What defines a man, anyway? I wasn’t upset by this, more uplifted. I thought no, I am not a man—not just a man—I am something more. And we had sex, and it was implausibly good. Afterwards, she dreamily looked me in the eyes, and slid her hand around the back of my neck. I grabbed her hand and said, “No, don’t.” She sighed, “You know we have to.” I sighed in turn, pursed my lips while trying to pucker them at the same time, and pressed them to hers. “Nice fish kiss,” she said, and suddenly I noticed I was feeling very tired. She noticed this too, and I felt her fingers sliding up the back of my neck, pressing firmly inward.

I bolted upright in bed, my own hand palming the nape of my neck as if to protect it from more unwanted prodding. Laura stirred, rolled toward me and sleepily draped her arm

around the bend of my waist. I sat there palpating the back of my own head. The dream had been so compelling, so *real*; I was captivated. My prodding found nothing unusual, but I wasn't quite prepared to push hard where I feared in that moment I had an off switch. But I could resolve this another way.

Throwing back the covers, I stormed out of bed, nearly dragging Laura out with me. I found the nearest piece of pottery and smashed it against the stone floor, sorting through the rubble for large, sharp fragments. Laura extracted herself from the mess of blankets and sat up blinking profusely but not saying a word. One by one I started through the fragments, dragging their edges firmly across my finger, trying to find one sharp enough to draw blood. Laura finally registered what I was doing, ran over and grabbed the bits out of my hands yelling, simply, "Stop that!"

I sat there on the floor, back against the wall, toes idly twiddling with bits of broken ceramic. Laura loomed over me like a mother preparing to scold her child. Then I saw the tiny plume of red erupt from the floor, and looked up to see the blood dripping from her fingers. She followed my eyes and discovered the same, dropped the fragments on the floor. I leapt to my feet to take care of her, saying only "sorry sorry sorry sorry" the whole time until I was annoying myself with it as much as her. The fragments were plenty sharp. My fingers are fine.

Still it seemed a ludicrous proposition, so while I was wrapping bits of cloth around her fingers I thought to see how long I could hold my breath. That would be many hours now and running, except, as I find, I have to breathe to speak. The urge to breathe grows at first in the usual manner, but just to a point and no further. I feel no ill effects from this whatsoever, except that I have started farting profusely in the last half hour or so. I guess I'll take up breathing again, as I am by now convinced that either I am superhuman, or not human at all. And the farting is annoying if not actually

hazardous.

Once again I find myself expecting to wake up from this dream. If I could hasten that by pinching myself, I would, but alas even going at my fingers with sharp bits hasn't done it, so I have but to wait, or to accept.

It occurs to me in retrospect I should have expected...this. Or, to be more accurate, anything, many things. Despite all my purported faith in my own project, I never really believed it would work without a hitch. I assumed it would be a good first try, a huge batch of data to keep us busy for years refining the process. But what if it worked without a hitch? If I had gone in with that expectation, I would have woken up from the scan immediately asking myself, "Am I the original, or am I the copy?" And from that expectation, I would have had to conclude in short order that I, the me that is here writing this entry now, am but a copy—one of god knows how many, or where, or when.

I am a copy.

I will have to sit with this thought for a while.

DR. RUPNATHJI (DR. RUPANATHJI)

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 8

## Naked Truth

I was at a cocktail party, with a date. There were four of us having a conversation—if you could call it that. It was mostly small talk, gossip about who did what to whom and that sort of thing. But the fellow facing me, who looked nothing like me, was also me. And I was also having a conversation with him, but it was somehow private, the others were completely unaware. I can't even remember what was said aloud, my own contribution being little more than appropriately placed laughs and nods and occasionally filling in someone's name or other random detail eluding my date's tongue. But the conversation with him, with the other me, I remember quite well. His lips didn't move, but I heard his words just as if they had. And when I spoke to him, it was with my *other* mouth, my ethereal mouth to my physical one as my right hand is to my left. We talked of the economy, of technology, of psychology. We traded sex stories, talked about our mates, swapped an idea or two. My eyes rarely met his, as I could see his emotions without looking. And I had no trouble following both

conversations at once—the other seemed to go so slowly. Then for a moment, time almost stood still. Not like a moment of panic which doesn't leave one time to think, but really standing still, as if I could have walked around all the frozen people and swapped their watches without them noticing. Except my own body was frozen too, so I could do nothing but observe—and converse with him, the other me. He said, "Look, another one," and I took the offer of his eyes and saw behind myself a man in the crowd. His shirt turned transparent and I could plainly see a gun beneath it, strapped against his naked body. Then time resumed and I regained my own eyes, and me and me continued our conversation while keeping an eye on the gunman, just in case. But nothing came of it, and the evening drew to a close. My date and I drove home in a silent car with no steering wheel, through beautiful countryside, to a beautiful home. When I kissed her goodnight, I thought, "You love me," and I could feel her body respond with passion. "I love you," she said.

Much of today was spent lifting heavy objects when no one was looking, and ogling naked women through their clothes with my x-ray eyes. The latter was completely intuitive, once I knew to try. It's really very distracting—I don't know how Clark Kent ever got any work done. I guess I need to develop self-restraint.

I've tried talking to people without moving my mouth, but no replies yet. I haven't eaten since yesterday, but have no hunger. And I've been holding my breath for hours again, but with no farting this time. Perhaps the breathing helps process the food? Not sure I want to analyze that too deeply.

I'm half giddy to discover I have superpowers, but am

also struck with the irony of being here, in the Pit of Eden, where I can't imagine ever having use for them. Except the x-ray vision. But I'm sure even that will get old. Maybe.

Clearly I don't belong here. I want to get back to my lab, to the world topside, out of this pit, to my friends—or their descendants, or whatever is on the other side of my lone star in the sky. Why hasn't anyone noticed the open door yet? Where is the Wizard of Oz with his hot air balloon to take me back to Los Kansas?

And what *is* this experiment I have fallen into?

I have told Laura none of this. When I kissed her good-night a few minutes ago, I thought, "you love me," and I could feel her body respond with passion. "I love you," she said.

DR.RUPNATHJI( DR.RUPAK NATHI)

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 9

## EXIT

I was blind. I was deaf. I couldn't feel anything at all. I tried to move, but big green letters started spewing out before me, almost as if I were seeing them, but not quite. I started to realize I could control them, that I could make the letters start and stop, and change which letters appeared. I discovered I could also erase letters, and so with a great deal of trial and error, I embarked upon spelling out the alphabet, and then the digits 0-9. I was a little freaked out, but going with it, somehow accepting it, the way one does in dreams. Suddenly a *red* letter appeared out of nowhere. It was the letter H. I waited. I tried to touch it, but some green letters appeared, so I erased them. Then more came, and a moment later, in bright red letters, were the words, "Hello, Alex!" Stumblingly and with many corrections, I spelled out, "Hello World!"

Tomorrow, I go home. I have found the way. I would have gone today, but I had to take care of Laura. She is fine now, though, so tomorrow, I go home.

We went to the church. It took a while to find. Despite everyone knowing of it, apparently no one ever actually goes

there. There are no Sunday sermons, no alms to pay, no confessions. And it's a good thing, too, because it turns out it's not a church of Christ, it's a church of me. Yes, I know, this gets weirder by the day.

When the pastor opened the door, he stood blinking for a moment as if to adjust to the daylight, and then blinking a bit longer still, until I noticed he was turning white, and then his legs started noodling under him and he grabbed the doorway to keep himself aloft. I raised a brow at him in query, and he opened his mouth to speak, but said nothing. I listened with my ethereal ear, but still heard nothing. Finally he closed his mouth and swallowed hard, blinked a few more times.

"Can we come in?" I asked.

His whole scalp seemed to shift back about an inch, his ears rotating a good twenty degrees, his eyes quite wide.

"Ahm, y-yes-s," he said, stuttering, and backed off to the side to make way for us.

As soon as we were inside, Laura exclaimed, "Oh!" Quite loudly. All about us were depictions of... Me. She looked almost as dumbfounded as the pastor for a bit, then said, "Yes, this is why I thought I recognized you—I was in here once as a small child."

She gazed dizzily around some more and stopped short at a statue of me.

"It really is a remarkable resemblance, isn't it?" she rhetorically asked.

"Yes, quite," I said, even though I knew this was no coincidence.

The pastor seemed put a little at ease by this exchange, and asked us finally how he could help us? Laura took the lead, explained that I had hit my head, that I remembered nothing of my life before last week, and that we thought maybe something at the church might help jog my memory. I asked him if perhaps he could just give me a tour, and that I'd like to hear a synopsis of their mythology (I phrased it

more tactfully), especially any stories from the past.

He seemed most happy to oblige, though he stared at me intently the entire time, to the point of nearly tripping once or twice during the tour.

Their mythology is a bit sparse and hard to follow—it's clear that nobody really cares. They have no bible, just a small book of rules, some of which I've already mentioned. The rest, it seems, is just passed on verbally from pastor to pastor.

This figure represented in paintings and statues about the place is named—wait for it—Alexander. And he, or should I just be so bold as to say I, is the son of God, the *father* of God, and God's envoy, but is not actually God—rather, he is a demigod. God, as usual, is not of the physical world, and only demigods can talk to both man and God. God, it seems, is the most benevolent of all possible Gods, wishing nothing but the well being and happiness of mankind. Hence the sun, the rain, and let's not forget the fountain of wheat.

I have to say I feel a bit guilty about all of this. What on earth am I, or we, trying to accomplish here?

When the tour was wrapped up and he was running out of things to say, I noticed something in the background. I'd intended to admire Laura's naked figure, but when I engaged my x-ray vision, the word EXIT appeared in bold letters over one of the doors we had not been through.

"What is through there?" I asked.

"Oh, those are the meditation rooms," he said, "where we store stuff."

I didn't challenge the incongruousness of this, but did ask to see it. I detected the tiniest moment's hesitation beat back by a sense that he ought to allow me anything I ask. "Those are not the droids you're looking for..." I thought to myself.

Through the door was a hallway with many doors lining the sides, and one small door at the end. I walked straight to the door at the end and opened it, but found myself standing

outside in a small alley behind the church. I had a moment of disappointment, thinking this was all that was meant by EXIT, but then I realized no, why would just this be hidden from human view? I x-rayed the alley for any more clues, but saw nothing unusual—until I turned around and noticed over the door I had just walked through, on the *outside* of the building: the word EXIT!

Back in the hall, I tried the doors. They all led to identical, smallish rooms, or perhaps largish closets, full to the hilt with all manner of junk. None were locked, but I noted they all locked only from the inside, with no exterior key access.

I picked one at random and started pulling things out of it. The pastor moved to object, I think, but no words actually left his open mouth, so I continued until there was enough room at least to stand inside. I x-rayed through the remaining junk as best I could to see the back of the wall, but it didn't actually help much over my normal vision. (I think my "x-ray" vision is only a passive sensitivity to infra and ultra visual frequencies, as it is fairly superficial.) Anyway, it looked to me just like normal walls and floors all the way around. Laura squeezed in with me, curious about what I was after. Half as a joke, and half because I was planning on it anyway, I closed the door behind her so we were wedged quite tightly in the gap I had cleared, in pitch blackness. With a big grin she couldn't see, I squigged around to face her, and with one hand on her butt, gave her a big, wet, kiss. She giggled through her nose in a way that made it clear her mouth was quite occupied, and I heard the pastor say through the door that he would leave us alone and would be out in the foyer. I pulled the lock closed behind her.

The moment the lock clicked shut, I was quite startled by a woman's voice.

"Hello," she said.

It wasn't Laura, because my lips were still on hers, and besides I then realized I had heard it with my ethereal ears. Laura didn't hear it, but she did stop kissing me and asked

what was wrong. I slowed time, put Laura on hold.

“Hello?” I said inquisitively.

My eyes began to detect light, though I find my ability to see changes in the world is sluggish in this mode.

“Where would you like to go?” asked the voice.

Having no idea what my options were, I returned with, “What is closest?”

The room was definitely filling with light now.

“Maintenance access C-1B,” she answered.

“Take me there!” I said, without giving it enough thought. I noticed Laura’s eyes starting to flinch from the light, so I resumed time and held her firm and reassured her it was okay. I felt a bit dizzy for a moment.

“Where is this light coming from?” she asked.

I told her I didn’t know. And then our feet felt the floor move just a little, and I realized we had come to a silent stop, having gone into motion during Laura’s flinch.

“What was that?” she asked again. I repeated that I didn’t know.

Reaching behind her again, I unbolted the door, and opened it. We were in a hallway again, but not the same one. I peered out the door down the hallway. Laura leaned out and peered out the door down the hallway. It was straight as an arrow, clearly made of synthetics never seen topside, and went on as far as the eye could see. Laura started breathing heavy, I assumed from adrenalin, and then she dropped smoothly to the floor and came to rest in a fetal position halfway into the hall. I kneeled down to run my fingers through her hair, figuring she had just fainted from the shock and would come to shortly.

But she was still breathing quite heavily, and suddenly, she stopped breathing entirely.

I straddled her and hoisted her upright as best I could, and with some fumbling and an accidental smack to her head with the door, I managed to get her inside and the door closed and locked behind us. In a mere grain of time, I

asked to be taken back to the church, and then we poured out onto the floor of the meditation hall as I set about giving her CPR. The pastor had barely stepped out of the hall by now and was quickly back surveying the mayhem.

“What did you do to her?” he asked, incredulous.

I continued the CPR, noted the red welt forming on her forehead, and wondered how exactly I was going to explain this. Then she gasped her own air, and I checked her pulse, and we all just stayed there for a while without moving or saying any more until she was ready to take home.

Laura was the first to offer a story. She told him simply that something in the room had fallen and hit her in the head. He seemed placated by this, particularly since it came from her and not me.

Laura, on the other hand, did not seem placated, and gave me a look I knew would, for the first time, demand much explaining.

DR. RUPNATHJI (DR. RUPAK NATH)

# Chapter 10

## Awakening

Last night's dream felt much like the one before, although this time I could see and hear. Still, it felt somehow removed, more like something I was watching than something I was seeing. That something was people in a small room, who I did not recognize—two men and a woman staring expectantly at a computer screen.

I said, "What are you looking at?"

The trio jumped about three feet high, as if I'd quietly snuck up on them and yelled, "Boo!" They exchanged looks, mouths agape, and then finally one of the men looked askance at me and said quietly, "From his perspective, he's over there."

The woman came over, looked me right in the eye and said, "Alex?" In the background, the second man muttered, "Oh my god, oh my god, oh my god..."

"Yes," I said, "thank god the test patterns are gone. Please don't do that again."

"I'm...sorry," she said. "We...only turned you on last night, thought it would take...weeks for your visual and audio cortices to accommodate to the new input mappings."

"Jesus!" blurted the first man. "Don't tell him you just turned him on—the last thing he remembers he was in his lab with his friends."

“No, no worries,” I assured them. “I was a little lost at first, lost in a blizzard of snow and white noise, thought I had woken up during the scan, but when the test patterns started to congeal, I realized I was a simulation.”

Again they exchanged looks.

“I really didn’t expect this first scan to work, though!” I added.

“Well,” the second man started, but the first interrupted him. “Are you recording this?” he asked.

“Yeah, I started a full introspective trace just before I enabled external video.”

“How can he possibly have acclimated so quickly?” the woman asked.

The two men looked at each other to see what the other had to say, then both tried to answer at once.

“Maybe we set the throttle wrong and he’s running faster than real time,” said one.

“Maybe we got lucky and the mappings were close to his natural ones,” said the other.

“No, it’s been only maybe ten hours since I woke up,” I said. “Are you running me with the fast-ltp flag? I bet you are, because my memory feels pretty crisp, not the usual valley between medium and long term memory. I hope you have the virtual-synapse flag set or I’m going to saturate eventually.”

Again more exchanged looks. Deer-in-headlight looks. One of them turned to a console and typed some commands.

“Yes, and yes,” he said, “they’re on by default.”

“I could have told you that,” I said, wondering how they could possibly not know all these settings and defaults by heart. “Who are you guys, anyway?”

“Um,” the second man started, “I’m Jason, this is Misha, and Nari.”

“I don’t think that’s what he meant,” Nari said.

“I know, I know, I’m getting there,” Jason said impatiently. “We work here, at the supercomputer center, New

Mexico. You...” he paused and looked at the other two. “I’ve got to tell him,” he said, to which they both pursed their lips and finally shrugged.

“You died during the scan,” Jason continued. “They didn’t realize it until the end, but—or at least this is what they’re saying at this point—your body couldn’t handle that many hours with your lower brain functions disabled. Your organs weren’t functioning properly during the scan, and by the time they tried to bring you out, it was too late.”

He paused, clearly to see how I took the news. I expected to feel the emotions welling up, but I felt only some mild disappointment that we screwed up, and a bit of sympathy for my poor friends who had to live with that. Then I realized that our sim code—presumably in which my consciousness was being run—doesn’t really handle global suffusion of neurotransmitters, which probably limits the extent of emotional momentum I would feel.

“Bummer,” I said. “So, then what?”

Nari burst a hiss of air like a popped tire, having been holding his breath awaiting my response. Putting his hand on top of his head, he slumped back in his chair and said, “Hooookaayyy.”

Jason continued. “So, then one of your coworkers, nobody knows who, started an upload of the scan data, as well as all your sim code, to the internet, via the P2P sites, in lots of little pieces. He or she must have started it the minute they realized you’d died, because it was all out there before it even hit the news. It was a huge deal, became the politico-ethic focus of the world overnight. Cloning was nothing by comparison. Your death made it a public issue, but it was the work itself that became the focus of endless legal and ethical debates which continue today. Congress passed an emergency injunction against any more scanning of live—or dead!—neural tissue, at least until they sort it out. It’s a joke. They have no idea what they’re doing, or why. It’s about religion and fears and votes, not science or

even ethics.”

He paused, but nobody had anything to interject, so he continued. “When we heard what had happened, of course we had to download the data. If nothing else, we thought it would be an excellent neuro-anatomical reference for our own research. But, man, we started looking over your sim code—nicely commented, by the way.”

“Thanks.”

“Man, we had to try it to see if it did half of what the comments implied it did. Which, by the way, it didn’t at first—there was a bug in the code that infers from the scan geometry the parameters of one particular type of tri-synaptic junction which doesn’t occur in mice, but Misha figured that one out based on some odd behavior of the associated neurons.”

“Sign error?” I asked.

“Yes, how did you know?”

“Never mind, go on.”

“Anyway, the simulation looked well-behaved, so we had only to hack in some virtual input and output devices—give you eyes and ears—and fire you up. And, well, we *really* didn’t expect...you.”

“Okay, so now what?” I asked.

He laughed. “Now what? I don’t know. Yesterday I would have said: wow, what a great tool for studying the behaviors of all these various brain circuits. Let’s take it apart and play with each bit in isolation. Let’s make the first good maps of what’s connected to what. Let’s dive into a square centimeter of cortex and scope every synapse and soma and try to figure out the math that’s being implemented there. I’m sure it will take us months to years to catch up with your team, since you’ve had at least the mouse model for some time by the sounds of it.”

“Yes.”

“But, sorry to say—”

Suddenly his words were cut off, and time had jumped

forward. Nari was closing the door as if he'd just returned, and Misha was back in my face so close I would have jumped if I'd had a body.

"Alex?" she said.

"Yes? What the hell just happened?"

"So sorry," she explained, "we hit the allotted CPU time and they swapped you out for a weather simulation. I got them to give us another couple of minutes but I'm having to borrow against tomorrow's budget just for that."

"Oh, that's just a little disturbing," I confessed.

"Yeah," Nari said somewhat distantly. "Tippy."

Misha sat back, and Jason continued on. "So, as I was saying, your team are all on forced sabbatical right now, pending a trial regarding your death, and generally hiding from the political heat, so I think it will be a long time if ever before your work gets picked up where it left off. So, we'll start from the beginning, and do what we can."

"You're forgetting something," I said. "You've got me."

"I need a drink!" Nari chimed in from his chair.

Jason and Misha glanced at each other, creating a feedback loop that started with a slightly upturned corner of a mouth and rapidly progressed into two giant grins.

"Yes...I suppose that's true, in a...way. Would you...like to...work...with us?"

"Heh, yeah, I'd like that. But listen, before you start me up again, can you add a hook to give me shell and web access? Also an email client that supports strong encryption."

Jason's eyes gleamed as if we'd just founded a new secret society. "You got it, boss!" he said, quite seriously but with a subtle nod to the extreme, humorous irony of it.

"Boss?" Nari piped up again. "Oh god, I need a drink."

"Also," I added, "you said you've been saving a full trace since we started talking?"

"Yes."

"Please organize some sort of permanent storage for these—I have a feeling I'm going to want them down the road."

“Will do. Gotta go now.” He started typing the command to turn me off, and in the distance I could see Narince as Jason’s finger plummeted toward the enter key.

And then I woke up.

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 11

## Good To Be Home

After a night's rest, Laura and I had a long talk about yesterday, and about me. I found I had little of actual substance to enlighten her with, though, since I continue to be mostly in the dark myself. She didn't believe much of what I said at first, particularly about me, about what I am, or at least what I think I am. But after a few demonstrations of super-human strength, and a somewhat comical scene involving me dunking my head in a bucket of water for about five minutes while holding off her flailing attempts to make me stop, I think she finally accepts that there's something just a wee odd about me.

I also asked her more about what happened in the meditation hall, when she passed out (I never did tell her she'd effectively died there for a minute). She said when the door opened, it felt very stuffy, and part of her wanted to get outside and get some fresh air, but she was so curious and in awe of the mysterious hallway...and that's the last she remembers. It may be the hallway just hasn't been ventilated in a very long time and lacks oxygen. Not a problem for me, but it does mean I couldn't take anyone with me.

So I went back alone, and convinced the pastor to let me "meditate" for a while. I told him it could be days, but in fact it turned out only to be hours. I actually had to explain

to him what meditation was (not that I'm any expert, but he didn't even know the basic definition). He didn't seem convinced as to the meaning of the term, but was at least convinced I was just a nut squatting quietly in his closet for a while.

Once inside, door locked, the room filled again with ambient light from no discernible source. And she, the voice, was back, asking me where I would like to go. I tried to have a more general conversation with her, but found her to be an idiot savant. She could tell me how long it would take to get from point A to point B down to a fraction of a second, but had never heard of an hour, let alone a day or year. She could recite a hundred different destinations (almost all of which, incidentally, were "currently unavailable"), but didn't remember giving me a lift yesterday. I even discovered she understood, and could discuss in small measure, basic Newtonian physics, but had never heard of an electron. When I tested her memory on a whim, I found she was only aware of the last couple of minutes or so—but that much in perfect detail. Yet despite her eccentricities, her manner was cordial and polite, her recognition of my speech impeccable. (Though I begin to wonder: even though I feel I am speaking verbally through this ethereal plane, am I in fact transmitting thoughts on a more basic level?) In short, she was in no way deficient—as an elevator.

The irony did not escape me that I was impressed by this. I still haven't allowed myself enough certainty in my own superhuman nature to be impressed by *me*.

Where it became interesting was when I asked her if there was, perchance, a map on one of the walls, maybe hidden behind some bit of junk? In response, she...I can only describe it as, she offered me her eyes, like she was handing me a photo to look at except the offer was felt intuitively, as in the dream the other night where I suddenly took on the other man's view. I hesitated at first, since it felt somehow a move of trust to give her this feed into me, but my curiosity won.

It was disorienting at first, for the map was a full 3D model that looked and felt life-size to me. With the speed that one's eyes normally flick from one bit of an image to another, my very center was flicking about this voluminous space. Here I am at the church. Now just outside the boundary. Now up in my lab. Flick. Flick. But while it was quite large, it was also quite sparse. There was the vast cylindrical chamber containing the city and sky, and then there were a few transport tubes and pedestrian-sized hallways running this way and that in close proximity to this cylinder, but moving away from this central core, they were all snipped off midstream as if the whole ensemble were a giant core sample missing its surround. I noted the maintenance hallway we were in last night ended similarly, so I asked to be taken there again to explore this transition in person.

Stepping out into the hallway, I looked around. There was little to see, beyond the shiny imprint of Laura's fetal body on the dusty floor. The air did smell stale, but not so it bothered me. Leaving the door open out of mild paranoia that I should be stranded in the hall, I started walking. It didn't matter which direction, because according to the map, this hallway ended similarly either way. When the monotony of the hallway got tiresome, I started jogging, then running, and then finally sprinting as fast as I could. I thought at first I would be able to keep this up indefinitely, but did start to feel tired, and particularly my legs and hips started to hurt. I slowed back down to a jog and instinctively rubbed my thighs to push the blood through them, but instead found them quite hot to the touch! I went back to walking for a while until I felt quite fine enough to jog again.

In the distance, I saw a darkness, and soon realized it was the end of the diffuse illumination. I engaged my x-ray vision, but saw little more except that the area looked warm, not so black in the infrared as in the visible. Finally I was there on foot, and found the hallway truly came to an abrupt end not far beyond where the light stopped—close enough

that I could still see the terminating wall dimly in the visible spectrum. The wall was some metal alloy, free of rust but not of dust. And true to the soil core analogy, it was the hallway that ended and gave way to the wall at the end, not the other way around. The junction between the two was poorly sealed, as if the hallway had simply been lopped off to make way for this...boundary.

I laughed out loud. A boundary beyond The Boundary. A city in a box in a box! Turtles all the way down. Then I noticed the slight buzzing sound coming from the wall. I pressed my ear to it, and it was quite warm against my cheek. The sound was faint, chaotic. With my ear still pressed to it, I engaged my x-ray vision. I couldn't see much through the alloy, but more than nothing. There were definitely clusters of faint light, heat, blobby nondescript galaxies of radiation at various frequencies. They fell into stripes—dark stripes interleaved with blobby stripes. I thought I heard something, a sound increasing in volume, then suddenly something was flying at my face and I flinched back from the wall before realizing it was something passing by quickly just on the other side. I stood and stared at it for a while straight on, where the uniformity of the stripes was more apparent. And once in a while, zip! zip! Something would fly by, traveling within one of the dark stripes. I never got a good look, through the alloy and moving so quickly. I did manage to slow time before one of them fully escaped view, but found it only a blur in my vision—albeit a slow-moving blur.

Thinking of nothing more to observe, I made the long trek back to my new friend the elevator.

“Take me to the lab,” I said, with rather less enthusiasm than I'd once had for this journey. I felt the room gently tilting without leaning, as gravity grew steadily to easily twice where it started, followed by the strange tilting sensation as gravity began to ease off. It grew stronger and eased off again finally to a moment of complete stillness that I assume was the shaft transition just beyond The Boundary. I grew

heavy again for a few moments, then so light on my feet they almost came out from under me, again concluded by a dead stillness.

Opening the door, I found myself in a small room which I immediately recognized as one of the small rooms adjoining the scan room. I went straight for that door, but hesitated at actually opening it. Would I open the door and find myself lying on the table? Crazy thoughts I shook out of my head. I made the march into the room.

Just as I left it, just as I left it some days ago when I naively leapt out that door, not to my death as it could easily have been, but to my great confusion.

Two things I had noted earlier on the 3D map. There was a large chamber just outside The Boundary not far from where I landed in the pond that first day. Besides being the only such chamber on the map, it was also the only thing that extended more than ten yards or so beyond The Boundary. But there was no remaining access to it—all tubes and tunnels had been snipped.

Except, and perhaps most intriguing, there were annotated multiple doors or portals or I'm not sure what on the far side. These items stood out on the map as being uniquely depicted, but she (the elevator) could not tell me what they were.

Secondly, and of more interest at that immediate moment, the map described an “observation deck” on one side of my lab, and an “observation hall” on the other. The supposed deck site was where the door opened to open space. I cautiously peered out at the big blue sky, then down over the city—it was really quite beautiful from there—then down, far far below, to the pond, which I scowled at. But the back side of the room had no doors or windows, nor was there any way to get to the other side that I was aware of.

I tried to reconcile this all with the rooms and hallways surrounding my lab as I remembered it. How had it ended up like this, or was this even my lab at all. Perhaps merely

a copy, like me?

In what must have been the prat move of the century, I leaned against the wall absent-mindedly—and fell right through it. I slowed time before I'd gone too far, my feet still on the floor but my body leaned back forty-five degrees. Here I was again! Falling backward out of my lab, only this time out the other side; what was I going to land in this time? As I slowly tilted further and further away from the room, I struggled to think of any way to save myself this time but couldn't think of a thing. Quick thinking can't change the laws of physics, and I was pretty committed at this point. With a mental sigh, I decided at best I could improve my landing, so I started to twist in order to see where I was going, and sped up time a bit to give it a chance to take effect. Then SMACK! Even at medium time, I was surprised to feel my cheek striking a hard surface, my lips fluttering about in recoil from the impact, my hair swinging down and swatting me in the forehead.

When I resumed time I found myself lying on the floor of the observation hall, my heels still on the floor of the lab. I sat up. The entire back wall of the lab was now gone. I leaned forward, looked back. There it was again, with my head, shoulders, and feet protruding. A mirage! I rolled my eyes and sighed to myself. Why hadn't I seen through it with my x-ray vision? And how could this be projected with no screen? And...I'd swear I'd *touched* it earlier, when I was first wandering around the room. Sure enough, when I reached back and touched it, it felt solid like a wall, even though the arm I touched it with was attached to a body passing right through that wall.

I got up, walked back into the lab, and touched the wall. Then pressed on it. Seemed perfectly normal. "Crap!" I thought. I had hardly glanced around the hall before getting back up, and now I can't get back. I grabbed the chair, and touched the wall with it. Perfectly normal. On a whim, I leaned the chair back against the wall. Perfectly normal. Un-

til I let go. The moment my hand left the chair, it promptly fell through the wall.

At first I thought the wall was somehow tuned to sense me. But that didn't explain why I had fallen through just a minute ago. Finally with a few more experiments, specifically getting myself into orientations where I was absolutely physically dependent on the wall holding me up, I determined the wall was, in fact, entirely in my mind. This was, to say the least, disconcerting. As if I don't have enough doubts about what's real and what's not already.

I practiced falling through the wall forward a few times but couldn't eliminate the sensation of smacking my face on it. With some practice at sufficiently distracting myself, however, I found I was able to back through the wall without incident. Once satisfied that I could now come and go as I pleased, I finally set about noticing the observation hallway itself.

Yet for all this faffing about, there was remarkably little to find here. It was really more of a narrow room than a hall, not much longer than the lab. There was nothing in the room but what appeared to be a small digital placard of some sort, stomach high and slanted for easy viewing. But it was dark, and no amount of poking or prodding brought it to life. The room ended in a T with a proper hallway, which then terminated fairly quickly in both directions making the whole space truly T-shaped. Toward the city the hall clearly ended in a doorway, with the words "Watch Your Step" on the threshold. As I approached it, it began to throb. I mused at this for a moment and gave it a swift kick with my heel. It slid open almost silently to the side, and I grabbed the wall to steady myself as I was once again looking into sky and over the city far below. Watch your step, indeed. I peered around the corner at the luminous sky-blue backside of the lab door, dangling freely in the open air.

Back to the other side of the T, I once again found the hall sheered away to abut an outer boundary. But this one

was different, thinner, easier to see through, and more hollow behind. I tapped on it and it sounded quite thin. I retrieved the chair, found the hardest, sharpest bit, and rammed it with all my superhuman strength into the barrier.

A great hissing sound erupted. The chair fell away to reveal a sizable dent with a small puncture in the middle. I held my hand near it and realized it was sucking air out, quite strongly.

Peering through, with some caution not to get my eyeball sucked out, I saw the inside of a machine, I cannot tell you what kind. Pipes and plates, in regular patterns, as far as I could see (which wasn't very far in the visual spectrum, but in the fuzzy infrared I could see quite far). No moving parts that I noticed.

The sucking, I realized, was not going to abate, so I endeavored to fix what I had broken. But with what? I went back and searched through the small domain I could reach on foot, but found nothing of potential use. I did see something on the floor, near where the chair had first been, which upon inspection I realized was an aglet full of the decayed remains of the end of a shoelace. This would not help.

I remembered the elevator a.k.a. meditation room a.k.a. storage closet, still mostly crammed full of junk, and was about to dig through it when I heard a loud banging sound that surprised the hell out of me.

Peering cautiously around corners as I went, I returned to the sucking hole in the wall. It was being pounded flat from the back side. Through the little hole I could see something moving, and when I engaged my x-ray vision I was startled by the skeleton and workings of a spider-like robot busily making repairs. Just a moment later I was nearly blinded by a broad spectrum light emanating from the hole, and less brightly through the wall in some frequencies, and simultaneously nearly deafened by a shrill sound I care not to describe. A moment later, it was dark and silent, and by the time my senses had recalibrated from the shock, the

damage was flawlessly patched, and the spider was gone. I shuddered to think what would have happened if I'd stuck my pinkie through there at the wrong time.

And so it came to pass that my grand trip home was just another dead end. What I thought was my lab probably never was. Where I expected to find civilization, just more boundaries and machines. I closed the lab door, needing no star in the sky to remind me of that empty place, and returned here, to my real home, with Laura.

It feels good to be here, fire at my back, warm body awaiting me in bed, even a bit of bread to eat. These are not for my body, which seems to want nothing. They are for my soul, which is as wanting as it ever was.

DR. RUPNATHJI (DR. RUPAK NATHJI)

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# Chapter 12

## Becoming

I wasn't quite myself—I was something more. I was in a room, and I was in another room, and another—three in all, all at the same time. I could see everything in all three rooms from all sides simultaneously. It was reminiscent of the elevator's map yesterday, but it was live (in the dream), not a map. Furthermore, my whole cognitive space felt similarly expanded, as if everywhere that I had one mental hand before, I had ten now. Much of the dream I can hardly fathom now, the things that went through my head, the ways in which I saw and thought about things, but somehow it all made perfect sense at the time.

One of the rooms was empty. In the second, a machine that looked like a large copier emitted a strange orchestra of alternating sounds and lights. Zunna nunna nunna nunna click. Zunna nunna nunna clack. White flash. Violet flash. Slow, sustaining deep red glow. Fade to black. Zunna nunna nunna click...

In the third room were four people: Jason, Misha, Nari, and a tall, attractive man with an expensive but comfortable-looking suit and a perfect haircut atop a rather large head.

"Welcome," I said, through a standard intercom in the center of the table.

"Thank you," the new man said. Though a mere two

words, they left his lips with such inflection, so smooth and confident, I think even the ants stopped their march up the door jam and gave him their full attention.

“I’m going to forgo the non-disclosure agreement and other trade secret bla-de-bla because I have absolutely no doubt you will be on board before you leave this meeting,” I said, then added, “and besides, nobody would believe you anyway.”

“Okay,” he said simply, with perhaps the faintest sign of a dubious smile.

I set the other three about explaining in their rambling way the events surrounding my death, which got quite far along before the man noticed one too many times a nod toward the intercom when referring to the deceased Alex Harris.

“Pardon my interruption,” he said—though the room had already fallen silent the moment he leaned forward slightly to speak, so it was hardly an interruption. “Are you meaning to imply that this [gesturing to the intercom] is the deceased Alex Harris?”

“Formerly deceased,” I corrected. “Formerly deceased Alex Harris, Ph.D, incorporeally at your service.”

Grinning widely, he looked around the room to share the joke, but was instead met by a succession of rather serious expressions, empathetic nearly to the point of apology. His grin vanished in a blink and was replaced by a furrowed brow and a look of deep contemplation. I was dismayed by this at first, but then happy to see it only lasted a brief moment. I was, after all, hiring him specifically as someone who would never have this look—he had to appear at all times to have all the answers already.

The explanation continued on to how we’d formed a small corporation shortly after my initial virtual resurrection, and brought to market (in record time) the product he was by now familiar with—an adaptive assembly-line robotics controller. What he wasn’t familiar with was that it was based

on greatly simplified versions of my (scanned, previously flesh) cerebellum and early visual cortex, and that we didn't entirely know how it worked.

In fact, I recall thinking to myself that I knew exactly how it worked, otherwise I never would have been able to simplify it the way I did. And there was a great deal more I quietly understood, thanks partly to my initial head start but mostly due to boot-strapping myself through a gentle series of mental enhancements. The others, perhaps helped along by a little intentional misdirection on my part, remained largely in the dark, convinced we had a marvelous black box with mysterious but profitably harnessable emergent properties. This was the vantage point they shared.

Due to the bottom-line corporate popularity of replacing unreliable, dirty meat puppets with sterile, tireless, and hyper-eager machines who could in the end perform the same task thrice as fast at half the cost, money was rolling in. But the tech press had taken notice of us rather early on and were elevating us rapidly into the public eye despite our efforts to remain completely opaque as a company. We needed to feed the world a plausible explanation for our somewhat miraculous progress which did not in any way connect us to the deceased Alex Harris and the associated political turmoil, not to mention associated intellectual property issues.

Furthermore, we had a whole slew of new products planned, and needed to hire more staff, particularly to flesh out the business side. Our next hire would be a CEO to oversee the entire traditional hierarchy, but he would not be privy to the whole truth. That would belong to the five of us alone. He, and the rest of the company and world, would believe that these four, and others we may later hire just for show, were the R&D hit-team, churning out new brilliant technologies so advanced we didn't even need to file patents on them. We would claim we were confident nobody could reverse engineer our trade secrets.

What we would never mention is that all our products

were booby-trapped to flush their volatile memory and shut down on any sign of tampering, leaving nothing but encrypted firmware and a sizable section of non-encrypted decoy software that would leave our competitors scratching their heads for decades. Without yours truly personally uploading a small decryption library and key into the volatile memory, there simply was no technology to reverse engineer.

And so it was portrayed that we had our priceless secrets so well-hidden that the world would never even guess their nature, let alone their specifics. But once again, I recall thinking to myself that this too was not the whole truth—that there were six other similar companies around the world at roughly the same stage, and that these seven in total would voraciously compete with each other and between them define the technology for years to come, with none ever dominating too much, not falling too far behind. I knew this with such certainty because those six other companies were also quietly run by me.

Or more accurately, they were run by other copies of me, with whom I had been communicating almost from the start, strategizing a grand plan, sharing technological insights and tricks of self-enhancement, and, not least, keeping myself company. Sadly, one of me was not yet running in real time and had only been able to communicate with the real world so far by text and emails. But I had arranged funding from an anonymous angel investor—me—to catch him up with the rest of his kin.

“Welcome,” I said again, bringing us to a close where we began, “as the acting founder and CTO of General Cybernetics.”

“Thank you,” he said with a dubious smile that told me he would take us at our word long enough. “Where do we begin?”

And then I woke up.

# Chapter 13

## Creature Thing

Though it's become clear to me I have no reason to hurry, my curiosity just won't let me rest. It's been a couple of days since my last entry, and I spent most of that time sitting outside in a field, waiting. But it was worth the wait.

I went out to the boundary, near the pond, where the map showed that large space on the other side. I found no evidence of it from the inside whatsoever, but I was pretty sure I had the right place, so I just sat and watched and listened. I had a hunch, which proved correct, that the large, fast-moving object I saw my first night here came from that place. I waited all day, and all night, and another day, and into that night without a peep.

I might have gotten bored and given up but for discovering I can speed up time even more easily than I can slow it. The problem with this, it occurred to me within the first momentary hour, is I'm apt to miss something important, or worse yet get killed or injured for failure to move when I ought to. I don't seem to be subject to sunburn, but imagine, for instance, if I were. Twelve hours worth of solar radiation blasted onto me in a subjective second. Bzzpff! Flash fried. Or let's say I picked my spot to camp out too well. One moment I'm staring at the boundary, the next I'm squished all over the field by a large object that plowed me under before

I could even flinch.

However, I found with a little trial and error that I can get my conscious awareness to run at a different speed from my subconscious processing, and can “prime” my focus to alert me—to slow time down again—when something of interest happens. It’s really quite marvelous, rather like a time-lapsed movie but even better because it runs fast when nothing’s happening and then slows down for the interesting bits, then fast again...zip zip zip, very much again like the elevator map but now being able to zip my focus through time, not just space (except that, alas, I can’t go backward).

And so all this time passed in just a minute or two, during which I found that remarkably little of interest happens here.

Until the middle of the second night, when something moved. I resumed time to its normal pace and stared intently at the boundary with every nuance of my enhanced vision. A jagged crack formed and a chunk of the boundary started to recede, like a horrific hairy-monster shaped cookie cutter was extracting its prey from the other side. (Okay, so some people see bunnies in clouds—I see hairy-monster shaped cookies in jaggy shapes.) I realized the edge of this receding slab followed the contours of the fingerprint-like surface of the boundary, which is probably why I hadn’t found whatever hairline fracture must be there.

The whole receding slab split into at least a dozen pieces and opened quite suddenly, like an iris. It occurred to me a little late that I should step off to the side, as no sooner was the last edge of the iris clear of the opening than I was staring straight on to a large, rapidly approaching...thing! I slowed time and contemplated my predicament, mostly berating myself for not slowing time when the iris first started opening. I had been too preoccupied with curiosity to be concerned, and anyway it just hadn’t occurred to me there would already be something rapidly approaching the moment the iris opened. I had naturally assumed: open door, pass through. Not open-door-pass-through. It rather caught me

by surprise.

So, I tried to move out of the way, but physics just wouldn't have it. The thing was...well, just one of the ugliest things I've ever seen. It was clearly a machine, yet with no semblance of regularity. It had more appendages than I could count, sticking out every which way, but no two alike. And around the bottom, droopy, floppy, root-like things that almost, but not quite, reached the ground. In fact, it seemed not to be actually touching the ground anywhere I could see, so in a last-ditch effort I simply dove for the ground and prepared to be mauled by that forest of roots.

Molested might have been a better term. The thing clearly didn't want to run me over either and pitched backward kicking up a huge cloud of dust in my direction. It was slowing, but not enough to keep from running me over. Then the feet came down. Those "roots", seven clusters of them, placed randomly about the bottom side, jutted down and started flopping about the earth in a most strange and chaotic pattern. There was no rhythm to it at all, just a cacophony of flippity-flopping that came to a halt right on top of me.

So, there I was, pinned underneath this heavy beast. It must have been the size of a small house, but spread over seven humongous feet the weight was bearable—at least I didn't feel like anything was about to go squish. For a moment, as the dust settled, we were both still. But then I noticed there was some commotion still going on above me, betrayed by the frantic sound of limbs flitting about.

Then I heard it, with my ethereal ear, something between a groan and a whine, quite emphatic.

"Uh, hello?" I said, ethereally.

Like the elephant and the mouse, the beast leapt into the air with all sevens, and an ocular appendage, which I gather had been frantically looking for me in the moment before, thrust down between the feet and stared intently at me as it crested through the peak of its jump. Back down

again it came, though the feet shuffled apart this time and the root-like floppy tentacle foot bits slammed to the ground all around me, leaving me staring eyes to eye with a large, rather dirty, lens.

“Uh, hello,” I said again, sheepishly.

If it had been able to blink, I’m sure it would have, as I don’t think it quite comprehended what it was looking at. I could hear it “vocalizing” ethereally, but not in language, more like...animal noises. Indeed everything about it seemed quite foreign, the way it moved, the way it “emoted.” It immediately seemed such a relic against the background of recent days.

Finally it shuffled out from over me so that I could stand up and brush myself off. Without further ado, it simply turned and with a few floppy chaotic steps set itself back into some sort of fan-assisted ground-effect flight, floppy toes nearly skimming the surface of the earth as it vanished into the darkness.

My turn to blink and contemplate the strangeness of what had just happened. Laura had no tales of large objects moving in the night, so I have to assume they usually and successfully avoided people entirely. But in retrospect, particularly at night in the infrared, I guess I just don’t look like people.

I looked down at my feet and mused at the spread-eagle impression I had left in the loose earth. Then I noticed, peculiarly, that there was nothing else to notice. That is, no discernible sign that the beast had just been there tromping about, no trail of it flopping off into the distance. Actually, there were prints all around me, but they were sprawling and random and placed with such chaos that there was no pattern for the eye to catch. The earth had been changed since a minute before, but qualitatively it was exactly the same. These things could be running all over the place at night and nobody would ever know.

Fortunately, I’d learned my lesson and done most of this

thinking with time slowed, because the iris was starting to close. I sprinted for it with all my might, and made a heroic leap (with height that impressed even myself) right for the center. Unfortunately, having left the ground and being committed, I only then took a bit more time to sufficiently analyze my actions.

First, I would have done better to aim for the bottom, because while I describe it as an iris, the pieces did not in fact overlap, and hence the gaps between them closed no more quickly than the center. And the center, for which I was now headed, was the convergence point for a baker's dozen of sharp tips. From what I could tell, due to the marginal time cost of aiming there instead of the bottom, these tips were apt to do said converging right about when my belly button was attempting to pass by.

Abort! Abort! Damn the laws of physics for refusing to accommodate changed intentions.

I broke the form of my stylish dive, spread my hands wide before me as though trying to stop an oncoming truck. With care I managed to palm two of the wedges flat on without any fingers hanging over to get lopped off, and also hit up high enough to start my body swinging down so my feet (or at least knees) could take some of the impact rather than risking my arms letting my head be the only bit to poke through. In the end the wedges closed in concert with a nice full-body flop against the wall, and I rebounded gracelessly but unharmed to the ground.

At first I was quite frustrated to have missed the chance, but then noticed the crack wasn't quite closed. I stood up to inspect it and finally noticed—way up high—a small bit of my shirt dangling from the wall. I grabbed a small twig and poked it into the crack, and found not entirely to my surprise I could pry it open with no effort at all. It seems designed to give way to any otherwise hapless obstacle. So I peeled the wedges apart with my two hands, and stepped inside.

Or stepped outside, depending on how you look at it.

The bit of my shirt having now fallen free, the iris closed tight and left me in even more complete darkness except for a warm infrared glow suffusing the room from the back. It was a vast, tall room, but essentially empty except for various protrusions and indentions along the back wall, mostly near floor level. There were no other many-armed rooty creature things here. There was nothing much at all. It seemed clearly a room designed for much more, but now felt abandoned.

The back wall was most interesting, with numerous pipes and doors and hoppers, as well as a number of cavities of various sizes, mostly box-shaped. None of the doors were dimensioned for human passage, nor could I coax any open, but I could see a fair way through many of them in the infrared and they all led to tubes, chambers, or passageways of one sort or another. At least a couple of them were very reminiscent of the shafts the “elevator” moved through (which were lined with a peculiar, repeating diamond-grid of elements; whether circuitry or something else, I couldn’t say).

The open cavities were perplexing, each densely surrounded (within the wall) by complex arrays of tubes or circuits or both, though each so different from the others I doubt any two served a similar function. Only one of them responded to my prodding—a small box-shaped recess less than half a meter cubed, the sort of thing that might display a vase if it were in a home rather than this industrial setting. I reached in to touch the back, just in aimless poking around, but before my fingers reached the end two thick steel plates slammed in from either side aiming to crush my hand. I reflexively yanked my hand back in the nick of time and the plates clanged against each other and then withdrew, so that an instant later all was quiet and the box looked as innocent as it had when I first offered my hand to it. The same hand now offered it the middle finger, and I ventured onward down the wall a little more carefully.

I hadn’t gotten very far in my exploring the many fine

gadgets of the back wall when the faint visible-spectrum glow of the never-quite-dark night streamed in through the opening iris. I ran to the side of the room and tried to hide in the corner, though there was nothing to hide behind. With a whoosh, in whisked my floppy-toed friend, coming to a windy and chaotic stop almost at the back wall.

Then I saw the pair of legs—human legs—come flipping out into view, and for a moment they just dangled there, sticking out sideways, up high along the body of the beast. In infrared silhouette, as it mostly was, it seemed some perverse shadow-puppet show. The body pitched forward fully into view, and arced down toward the ground, its left shoulder gripped firmly by one of the creature-thing's appendages, and its legs thudding against the floor and then jerking and squirming against the friction of being dragged. It was being carried and flung about the way one might handle a dirty towel. I could see now it was a very old man.

Hopefully dead.

I could swear someone was faintly humming a tune.

The creature-thing brought the old man to the recess that almost ate my hand, and still holding him by the shoulder, brusquely stuffed his head into the opening. I cringed in horror expecting to see the old man's head burst like a melon, but it just twisted straight as the two plates slammed in, and stayed wedged firmly there between them. I was on edge waiting for that cracking sound of the skull giving under the pressure, but when I flinched it was not the man's skull cracking, rather the sudden appearance of a cloth-like shroud that snapped tight around his neck. This effectively created a door covering the front of the cavity while still allowing his neck to pass through. I guessed this was to keep the mess from squidging out, but it was also quite opaque even to my enhanced vision so I couldn't see what was going on.

A ring of broad-spectrum light erupted from his neck, and I could see his spine and veins and all manner of icky bits quite clearly there, until finally the light subsided, the

shroud and plates retracted, and the creature-thing pulled the man from the cubby seemingly unharmed but for a bad case of hat-hair.

I was still berating myself for my failed gruesome expectations when the creature-thing, now further down the wall, chucked the man into a hopper which violently and jerkingly yanked him in and, as best my eyes could see into the machinery, ground him into a fine paste and squeezed him out the back end into a small tube of unknown destination.

The creature-thing sat examining itself for the few bits of blood and whatnot that had splattered back, cleaning them with an apparatus mounted just under the lens on its ocular appendage. This all gave the distinct impression it was licking itself. I unthinkingly let out an ethereal groan of disgust—having gotten into the habit of talking “out loud” to myself ethereally around humans who can’t hear it—and the creature-thing looked up with a start at me.

I ran as fast as I could for the iris, which was now long closed, trusting that it would open for me if approached from the inside.

It didn’t.

I bounced back a good distance and then some further on my back before finally sliding to a stop. Staring now at the ceiling high above, the creature-thing’s round, frosty lens panned into my view like a cartoon moon rising into my surreal night. Again I swear I felt it blink.

It ethereally vocalized something to me which I can only describe as a sound Scooby Doo might make. I raised a brow at it in return, not sure whose was the next move.

I tried to get up, but this time it didn’t have anywhere else to be and didn’t seem to want me going anywhere. It promptly stepped on me with one of its giant sprawling feet and I was flat on my back again. Three other appendages joined in the examination, including one that was able to emit broad spectrum radiation and shine through me like I was one of those see-through goldfish. I pinned my chin

to my chest marveling at my own insides—which I won't even attempt to describe here except for one disturbing observation: I have ants. That is, I saw thousands of little macroscopic critters actively crawling about inside of me. It was very creepy. Nothing nano about it. I can't explain it.

Anyway, then the creature-thing started rather deftly undressing me, which was the last thing I expected. I'm not talking about simply forcibly tearing the clothes away from my body; it was undoing buttons and pulling socks down by the tops and stuff. I've never been undressed so well or so fast before in my life. I didn't know what to make of it. But, despite the recent hopper incident, I could sense a distinct ethereally-emoted benevolence, so I felt no immediate need to struggle for my life.

Creature-thing's appendages starting going places I hadn't counted on. Mind you, there was nothing erotic about this, but if I described the incident in detail it would sound like a smorgasbord of obscure fetish porn, including surreal elements like a many-inch-long probe into my belly-button. Stranger yet, a number of small objects were retrieved from various places in the process. The last of these was a shiny cylinder the size of a marker pen, which when pulled from my abdomen left me feeling like I'd just had the wind knocked out of me.

It finally stepped off me and turned to leave. I tried to stand up, but reality began to fade and I felt myself falling back to the ground. Then in a snap of time, Creature-thing was standing over me again, retracting its probe from my belly-button, and I noticed half a dozen appendages sporting the objects it had removed before, and one or two it hadn't, and I braced myself for their replacement.

Afterward I waved off its attempt to redress me, preferring to do it myself. As I closed the last couple buttons of my shirt, I said, "Was it good for you?" It just turned and trotted off to a corner, lowered itself completely to the ground, and shut off.

I'd been feeling pretty good before, but I felt great now. And no, I still maintain there was nothing erotic about it. I think I just had my 30,000 mile tuneup.

I noticed something behind me and spun around to see what it was. Nothing there, but I could still feel it. Finally I realized it was the iris—I could just tell it was there, I could feel it, even when I wasn't looking at it, like it was an extension of my own body. So I pulled at it with my mind, extracted the jagged shape backward from the boundary, and then when I felt it clear I pushed the bits out of the way and the iris flung open before me revealing the dim of the night and the smell of the pond near by.

Enough for one trip. I walked out into the night, closed the iris behind me, walked home, scrawled this note, and now I'm going to climb quietly into bed with Laura before the sun comes up.

DR. RUPNATHJI (DR. RUPNATHJI)

# Chapter 14

## First Steps

It felt much as my previous dream, and the same three rooms were my domain, but there was more. I was also in a lecture hall, where the new man from last time—I recall now his name was Michael Allen—was speaking before a large audience about our newest technology. But I wasn't paying attention to this. Instead, I was quite obsessed, with all of my greatly expanded consciousness, over my little project in the third room.

Here I worked diligently, like a giant mechanical octopus turned inside out, my body now consisting of a cluster of industrial arms mounted around the periphery of the room facing in to meet at the center. Looking for a moment downward from the ceiling above, I reflected with amusement on the similarity of the scene to some then-futuristic vision of a robotic surgeon—for in the center of the room I was operating on another body, bipedal though not quite of human form.

I wondered then, would I some day be operating on human flesh this way, saving human lives, or would flesh become obsolete first?

This semi-human form on my workbench was but a crude robot, suffering the final stages of assembly, a first prototype of our first free-standing android, and my first hope of stand-

ing on my own two feet again, of moving beyond the confines of these rooms (or wherever I could convince a human to place a camera for me). Ah, but for true autonomy, the ability to go somewhere without the involvement of anyone else. This craving drove my fervor, and I worked hard and fast, for I could almost taste the freedom now.

But then something caught my attention, or at least a little piece of it. I offered up a bit of my mind to the lecture in progress, which had just switched to a question and answer phase. I knew by now Michael could deliver the talks on his own, but he still occasionally needed my help fielding questions.

“Mr. Allen, you mentioned that in order to prevent eventual micro-contamination of your cooling channels, the entire system is closed. Yet, I don’t recall seeing in any of your diagrams or cross-sections any sort of pump to move the coolant.”

“Good observation,” Michael said.

Through his ear piece, I said, “The patent is filed, you can tell him.”

He could field this sort of question just fine. We’d been filing patents on as many trivial aspects of our technologies as possible, so that we would have something to discuss publicly, while the real meat remained our trade secrets.

“In fact there is a pump,” Michael said, “just not where you would expect it. The capillaries of the system are lined with a slightly piezoelectric material in which we set up a traveling wave. In effect, this ‘milks’ the coolant through the microscopic capillaries, resulting in a substantial aggregate flow at the artery level.”

Nods and murmurs spread in the room.

“The first time we tested this,” he went on, with a bit of a smirk, “we had all this sensitive equipment hooked up to measure the tiniest flow.” At this point his hands were pantomiming in front of him as if he were unwrapping a sandwich. “But when we hit the switch, the coolant shot

right out of the device and hit me square in the forehead!”

Much laughter from the audience as Michael feigned disgust and shook his hands clean. “It was then that I really started thinking of this project as a son.” The crowd was aglow.

I refrained from groaning in his ear at this exchange. No such event ever happened, but it would give people a story to tell and Michael knew that. People just liked to listen to him, to watch him on stage. He could tell almost any joke, no matter how bad, and people would enjoy it. He exuded both power and benevolence at the same time, and he was so obviously comfortable in his own skin, no matter what the circumstance, that he made everyone else feel comfortable too. That’s what people wanted, more than technology, more than even money, they just wanted to feel good—even though most of them weren’t consciously aware of it. Michael *wasn’t* obviously brilliant, but very few people were brilliant enough themselves to know the difference. But he was large and handsome, with a big head, clearly an alpha male by evolutionary, subconscious standards. And on the conscious level, he stood in a brilliant man’s shoes, talked about brilliant things, and made people feel good in the process. By Pavlovian association almost everyone came to feel good about thinking of him as brilliant. He was becoming the modern Einstein.

The session went on like this, questions about the mechanics, the ethics, the market, the wattage and other trivial specs. All strikingly superficial questions given the profundity of the technology itself. Although it was a large audience, I had expected slightly more from this particular conference—which ought to represent the most technologically savvy crowd we would ever encounter. I had expected to have to turn away at least *some* questions as trade secret information.

Perhaps my expectations of human intelligence had already started to skew; it was becoming progressively harder

to second-guess what humans could not understand. This was particularly true of the “obvious” things, that which was now so simple and plain to me that it required no thought to see or know—how could I guess which of these were equally plain to others and which were completely beyond their comprehension, or somewhere in between?

So strange it seemed that this division could exist at all; I was beginning to foresee communication difficulties down the road.

The very last question was one we’d been waiting for through many conferences, quite surprised nobody had asked it until now.

“Mr. Allen, this is not a technical question, just a curiosity: I happen to recognize your particular ear piece as a wireless receiver...”

I immediately slowed time and started searching the internet for live webcasts.

“...yet to my recollection you wear it all the time as if it were a hearing aid—which I gather most people incorrectly assume it is. Can you tell me what it’s for?”

We had once considered claiming it was simply for his own security, in case we needed to tell him to duck or something. He surely could have delivered that answer to great humorous effect. But we decided to leverage this one for awe instead.

“Well,” he began with a pause, dragging his answer out as much as possible to give me a little extra time, “I feel a little embarrassed to admit this. Delivering these lectures doesn’t take much of my focus since, of course, it’s all stuff I know already.” Even this garnered a few amused chuckles.

“We’re go,” I said to him through his ear piece.

“So, I like to use the time to keep abreast of the latest developments in the field. At the moment, I’m listening to a live-broadcast lecture by—” Here I started speaking the words to him, and he mirrored me just a beat later as we had practiced. “Professor Venogopal from Rice University,

who has been discussing his latest hippocampal model, with some particularly good insights on the oft-neglected role of CA2.”

A chorus of murmurs erupted, but before the questioner could speak again, Michael closed the talk. “Anyway, thank you all for coming. Our time is up. Thank you.”

Standing ovation, as always.

Back in the lab, the last screw was in place, the last wire connected. Only three things remained to be done. I reached with one of my long arms into the corner and carefully picked up my new brain, nestled inside its cage of cooling fins, the ensemble of which we had nicknamed the Gothic Walnut. It had taken countless tries to get here—but this one was right, it felt right, it felt like me. And the thalamus didn’t melt after ten minutes of operation like it did in the previous version.

We’d toyed with other geometries, free of the limitations of the wetware we were replicating, but the modules had been oh so cleverly evolved within the constraints of this geometry that their interconnectivity alone made anything but this walnut shape egregiously inefficient, a rat’s nest of hundreds of criss-crossing bundles of axons. So we replicated it true to its original form, the only major change being the replacement of cortical columns (in all of the major cortices, not just the cerebrum) with equivalent, smaller circuits performing the same functions in the infinitely more reliable silicon. But it was not made of “chips”, nor printed onto wafers as everyone else was still doing. Rather, the entire brain was a unified solid, having been opto-chemically printed microscopic layer by microscopic layer, truly and freely three-dimensional in design, and carrying many orders of magnitude more transistors than the fastest room-filling supercomputer. Power, cooling, and spacial precision of the printing itself were the main challenges, but all of these were solved fairly trivially in light of one allowance unique to this application: because it was truly a parallel design in the most absolute sense—not

even a single multiplexed data line let alone computational unit—we did not need switching and settling times in the picoseconds, nor in the nanoseconds, nor even in the microseconds, but a mere two to five milliseconds. That is, just two to five hundred times per second, or fifty million times slower than the fastest chips of the time. In short, we could print crude, fat, slow transistors, and run them at a cool snail's crawl, but still compete with the largest supercomputers in the world, a simple trade off of quality for quantity. Even with the bushy integral cooling and power channels, the final product was still smaller than its biological inspiration, enough so that once encased in its cooling fins, it was roughly the same size.

And now I had a body for it, not nearly so elegant as the brain, but still years ahead of the competition. Having precision dremels and other such tools as hands really speeds up the prototyping process.

With another hand I opened the skull chamber and clicked the brain into place, while a third hand was already wheeling the power cart over. I plugged in the power harness, and the concentric servo at the base of the skull injected the spinal cap into the brain, establishing the main communications link, followed quickly by the snap of the power pads on either side of the brain clicking into place and bringing the mind within to life.

Here, my dream took a strange turn. From this point forth I remember two dreams, as if from two different people. Yet both, while independent memories, intuitively happened at the same time. I had just a moment before been in a simulation, running around a simulated environment in a simulated robotic body. I felt still in awe that I was alive at all, the memory of the pre-scan party with my friends still fresh, my incorporeal existence still novel to me. But at the same time my identity felt contaminated, holding memories and knowledge and feelings that were mine but not of my life, acquired through direct synaptic imposition without the

benefit and continuity of experience. I was no longer the pre-scan me, nor even the post-scan me, but a strange blend of that relatively untainted me and this other, older me that was somehow grander than my little mind could comprehend. It was as if I had become a god in an alternate universe, and then come back and stepped into my old body while the original me still occupied it.

It was at once constraining and liberating. I felt more knowledgeable than I ever had, and yet somehow dumber than I ought to be. It was disconcerting. Invigorating. My optic nerves engaged, and I was momentarily blinded by light.

I opened my irises a little, having instinctively snapped them shut. The room was strangely distorted. There was a fleck of shaved steel in my eye. The other me reached over with a long arm trailing a mess of tubes and ducts, and blew the fleck clear of my eye with a burst of air, then lifted me upright on the bench. And there I sat, looking around the room, feeling my vision adapt into normalcy, accommodating the subtle variations between the perfection of simulation and the irregularities of the physical self. I moved my legs, my arms, turned my head. I spoke, but the sound was quite awful; I practiced a little and soon I sounded fine.

I was exhilarated. I was back in the world, the real, physical world, moments away from walking out the door on my own two feet! I hopped off the bench, took half a step, and promptly crumpled over my own knee, face-first into the ground.

The other me reached in with my long arms and picked me up, under the knees and shoulders so that for a moment I looked quite frail. I laid me down back on the bench, cleaned me up, adjusted one of my cameras until my double-vision returned to normal.

Again I helped me up, offered me a hand as I stood back on the floor, took careful steps across the room, then back, then across again, with less and less help each time until

finally I felt comfortable, calibrated to my new mechanics. This body felt so very sloppy compared to the simulated one, even though we'd tried to account for slop and play. But it was usable; I would get used to it. I imagined it was much like being an old man—all of a sudden.

I grabbed my power cart by the handle and pulled it behind me like a hospital IV. I paused at the door, then firmly gripped the handle and flung it open. There was the world!

Well, it was just a hallway, but it was exciting to have explored, on my very own, my first new space. The door knob clanged to the ground in the far corner of the room behind me, having been ripped free of the door in my enthusiasm. I'd have to be very careful shaking people's hands. My legs felt weaker than I expected, but my hands much stronger.

Out into the hall I strode, one arm trailing behind on the cart. I'd never been out into the hall before—that is to say, I had never even seen it before. I could have had cameras mounted all over our building, now that we occupied all of this floor and half of the next. But I didn't want the distraction; or maybe I just didn't want to see so much of this world I could not participate in. At least within the inner rooms, which were restricted to only the original group of four, I could speak, and display my visual imaginings on video screens.

But out here, I did not exist. I could not be heard or seen. I would have been no more than a ghost.

Down the hall I trudged, looking for the room where my core team told me they usually hung out. I heard voices from ahead, saw the warm glow of incandescent lights contrasting against the florescent hallway. I rounded the corner, and found my crew of three jovially chatting over pizza. That is, until they saw me and simultaneously froze, slack-jawed and dumbfounded.

"Mmmm, pizza!" I said.

"Holy fuck, you scared the crap out of me!" Nari yelled.

“You do look a bit like The Terminator,” Jason said, still clearly on edge.

Misha squinted at me for a moment, then meekly said, “Want some pizza?”

They had all seen this body before, even seen it animated in simulations, but clearly seeing it animated in real life was still a bit of a shock for them. I wanted to smile to put them at ease, but realized I didn’t have a mouth. “Number Five is alive!” I said in my best *Short Circuit* impersonation (which, by the way, was pretty much spot on).

After a short but awkward delay, Nari started laughing, and Jason and Misha joined in. They laughed so hard, tears were rolling down from their eyes—eyes which they never took off me for a moment. It wasn’t exactly the warm, flesh-and-blood homecoming I wanted, but it was a start.

“We should call Bill in here. I don’t think he’s gone home yet,” Jason said.

We all agreed; it was time.

Bill, our CEO, rounded the corner into the room, stopped in place, said, “OH no,” and promptly stepped in reverse right back out.

A second later, he peered around the corner again, the four of us standing side-by-side waving sheepishly to him. He stepped in tentatively and closed the door behind him, but didn’t enter any further.

“Has anyone else seen this?” he asked.

“No,” Nari said. “Everyone else is either at the conference or off for the day.”

I refrained from saying anything, as we had not yet decided exactly what personality, and level of intelligence, we wished to publicly attribute to this latest “product.” For all intents and purposes, Bill was the public.

“Don’t let ANYONE see this,” Bill said. “I’ll assign someone from our art department right away to design something cute and harmless looking. I understand you must have limitations imposed by the engineering, but can you

work with them, please, to find some compromise?”

The three of them nodded affirmatives and spoke over each other. “Yeah, sure.” “Okay.” “Yeah, you got it.”

“A simple plastic outer shell will totally change the look,” Misha said.

“Yeah,” said Jason, “that was the plan anyway.”

“He’ll look just like a storm trooper,” Nari said. The other three looked at him and frowned, so he added, “Just joking guys! Geez.”

“In the meantime,” Bill said, “I’ll see if I can set up a demo for DARPA. I’m sure the military will be very very interested.”

With that, and one last concerned stare at me, he left the room, closing the door solidly behind him.

“Military,” Misha said.

“Hmm,” said Jason.

“En garde!” Nari thrust a floppy slice of pizza in my general direction. I grabbed a nearby paper cup, spun toward him, “En garde!” As I thrust the cup forward, I realized my power cord was draped over my elbow.

And then I woke up.

DR. RUPNATHJI (DR. RUPANATHI)

# Chapter 15

## Looking Back

These dreams I am having, by now I must assume they are memories, not mere nighttime imaginings. Yet they invariably feel novel and current, as if each morning I am returning from an event that just happened, not merely recalling the shadow of some event from long ago. Still, I cannot recall more, nor find any trace or sense of a store of such memories, such future dreams, locked within my head. Yet night by night they come.

Within each dream, I am in the midst of a broad historical context completely inaccessible to me by day. My only residual knowledge of these contexts is from whatever I remember remembering within each dream. I wish I could dream these dreams lucidly, so I could direct myself to remember a broader history. But I sense I am only a passive observer, albeit in the first person, and can but wait and see what each night brings.

What has me so bothered about this right now is that I want and need to understand what I saw today, or at least the history behind it. I need to know what happened to the human race, for they, we, appear to be gone, all but for this little enclave of domesticated humans right here. Whether gone means dead or just elsewhere, I do not know. What I do know is that Earth is no longer their domain, and this

city, this human preserve, is but a vestige of some time long ago, an appendix in the bowels of an organism too grand to care.

I have been to the Moon and back today. Not that I was actually there in body, only in mind. Even still, the Moon is not so far away as I had always assumed. Looking back from there the Earth is, quite simply, massive. Looking back from there I felt I could walk home to Earth—if only there were a road. It might take twenty years, but still it seemed distinctly within the scale of human time and travel, not some unimaginable distance relegated to the domain of fusion-powered space probes or fictional warp drives and wormholes. Human time...outside of this city, I may be its last and only keeper.

I went to Creature-thing's room again today. I hoped that my new-found control of the vis would apply to some doorway or portal along that back wall. No such luck. However, Creature-thing seemed to sense my goal, and helped me out. Cautious to stay clear of any hoppers, I followed it to one of the largest doors. As we sat there and waited, Creature-thing hummed a variety of simple but catchy tunes I did not recognize. My vision could see little through the massive door, but within the door itself, or perhaps on its backside, I could just make out the familiar diamond pattern.

Finally a twinkling glow slid into place, and the door opened to reveal a fairly large, circular room.

"After you," I said.

Creature-thing snorted and motioned with about five different appendages for me to go first. I was about to embark upon a lengthy consideration for my safety when Creature-thing deftly whisked me airborne and into the room, the door snapping shut behind me before my feet even caught the floor. Apparently I was going alone. Once inside, I noticed the room was not just round, but a dome, perhaps even a full sphere divided internally by a flat floor somewhat below centerline.

Without warning, I was slammed to that floor by G-forces that would have killed any biological human in an instant. I rolled over onto my back and straightened myself out to get as comfortable as possible. I couldn't have sat up if I'd tried. The G-forces went up and down but never dropped below some high multiple of Earth's natural gravity except for brief, nauseating moments when the entire room seemed to spin rapidly in near weightlessness. I instinctively scooted toward the exact center of the room, which I was not far off from to start, sensing that if I strayed too far out I would be flung against the walls.

Then, as suddenly as it began, it was over. The high G's dropped almost to zero as the room spun head-to-heels, then normal gravity and complete stillness returned. The door opened without delay, allowing the torrential rains to gust in from the darkness outside. I sat up, mindlessly brushed myself off, blinked at the sight before me.

The world was aglow with heat, the rain itself so hot that in the infrared it looked like a million parallel laser beams shooting down from the sky; except where the gusts would periodically grab and twist this mesh like a transparent taffy or the tentacles of a twitching jellyfish.

I stepped out of my dome. The air was thick with humidity, but too warm to form a haze. Steam geysers erupted at irregular intervals from giant pores scattered about the otherwise featureless, synthetic landscape. I strode into the rain, but not too far as there seemed nowhere of interest to go. The ground I stood upon was some alloy or composite, textured with water channels to gather the rain and swirl it down small, ubiquitous drains. I saw no debris, no leaves or twigs clogging the works, no dirt, no bugs, no algae, nothing. Just clean, hot water falling from the sky onto this endless floor, a bathhouse of infinite proportions with me as its only customer.

"And to think I forgot my soap!" I yelled at the top of my lungs.

Then I noticed it, far off in the distance. It was more of an ethereal sense at first, an intuition, but then through the grey and murk beyond the horizon I could just make out the silhouettes of huge objects slowly ascending and descending between the Earth and the heavens. The ethereal sense that first drew my attention now took on a more tangible form, as I felt multiple emotional presences connecting with me from afar.

I said, "Hello," in my ethereal voice, but felt only curiosity in return. Then one by one they blipped out, shut off their connection with me, returned their focus elsewhere, and I was again left alone but for the faint view of their distant shapes in the sky. I stood there for a while, with my focus turned that way, and occasionally would feel a new connection beamed at me from afar, a moment of emotional curiosity, then indifference and departure. None would respond to my ethereal voice; the only connection I could make was emotional.

I considered how long it might take me to run all the way there. Alas, the randomly scattered steam vents and other possible hazards ruled out any use of time contraction to alleviate the tedium. But if I turned back now, would Creature-thing ever call me this cab again? My curiosity burned. I so wanted to be there, to see these giants up close, to know the whys and wherefores.

Something must have been quietly listening, because I felt an offer of a view, and I took it without hesitation. The communication was clear and crisp even though from far far away, and for just a moment it felt overpowering, perhaps literally, as if my brain circuits would fry. But then it eased off to a comfortable level, and I found myself looking at...myself.

I saw myself from quite close up, which confused me as I had seen nothing in the sky in that direction so near. Then the view changed, zooming out and out and out until my little dome was but a tiny pimple upon a vast, smooth shell. The depth of focus was at first quite tight, so the foreground

and background were just a blur, but then this relaxed and my little dome and I were soon lost behind hundreds of miles of rain as the rest of the planet came into focus.

I had no communication with this entity to speak of beyond a very rudimentary emotional connection and this visual link, but it seemed to pick up on my curiosity and direct its view as if its eyes were my own. And oh, what eyes they were. But the Earth!

The entire planet crusted in this shell, no oceans, no continents, no people. As my curiosity drove these eyes deep into the shell, the optical vision was replaced by dynamic schematics, a virtual representation to show me where the eyes could not penetrate. Machinery everywhere; I could make no sense of any of it. Just more of what I had seen with my own two eyes through the second boundary. It had life, a great deal of activity in fact, but none of it biological. It had synthetic life, like my own, but with no nod to the archaic bipeds of the past. And then I found it, my little city, a small black bubble tucked deep in the crust amidst the busy arteries of this living planet. I wouldn't have recognized it but for the size and shape and proximity to my own trancing body on the surface far above. The schematics showed no details here, just a black shape, like a tumor of some foreign substance, a relic from antiquity perhaps flagged at some crucial moment for preservation but otherwise forgotten. I looked long and hard but found none other like it.

I don't rule out that there might yet be others, but my hopes aren't high.

When I pulled my focus back from the crust, I found myself looking from high above the clouds, and finally noticed the cable descending below. Looking spaceward, I could see now a ring about the Earth, frail and distant, tethered to the ground by threads. Patterned like the spokes of a wheel, each thread looked easily long enough to wrap all the way around the planet. It was one of these threads we now ascended.

Laterally, the sky was full of these creatures, these climbers

shuttling to and fro between the Earth and its distant ring. And the ring itself, not so frail up close, another vast expanse of machinery, alive, moving materials through its arteries, in an ongoing symbiosis with the climbers on one side, and the free-floating ships on the other. Those ships, I wondered from whence they come and go, beyond this solar system or just within? I still do not know. Such variety, very few alike, each ship probably an autonomous, sentient being, some as small as a car, some as large as a town, and everything in between. My vision could not penetrate the ships, but many of them offered a schematic view. Nowhere, though, did I see any sign of humans, or bipeds of any sort.

I looked to the Moon, and found it also grown over with machines, but not completely like the Earth. Where there were machines, it shone extremely hot in the infrared. Ships flew to and from its surface, as there were no threads to climb. Before I could observe much more, I felt my view being handed off through another stage, as though looking through the eyes of someone looking through someone else's eyes.

And there I found myself looking back at the Earth from the Moon, or at the giant cotton ball of clouds that was once the Earth, surrounded by its delicately spoked wheel. The ensemble resembled a plump egg sac in the middle of a very meticulous spider's web, the climbers glistening on the threads like tiny drops of dew. Honestly, if I hadn't recognized the craters on the Moon a moment before, I wouldn't have believed this was the Earth I was looking back upon.

Without warning, the connection was cut, and I staggered in the rain as I regained my own senses. I realized I was being emotionally hailed, as it were, and when I directed my focus there I found myself face-to-face with a grizzly bear about to slash at my jugular.

Or so it felt. I can't think of how else to describe it; it was plainly evident some entity was about to squash me like a bug, from where or by what means I have no idea.

My mind emoted fear like a beacon as I ran instinctively for the dome. Whatever entity was onto me seemed surprised by my fear, as I felt the malice give way momentarily to curiosity. Perhaps it was more than momentary, but I didn't hang around to find out. I literally dove head first into the dome, belly sliding to the center of the floor, rolled onto my back and yelled.

“Go! Go! Go!”

The door snapped shut, the room turned upside-down, and plunged into the Earth far faster than I could fall out of its way. The entity was gone, shielded from me by a mile of steel. I was safe; if this crazy ball could just get me home in one piece, anyway.

Creature-thing didn't even stir when I arrived. I strolled quietly through the iris, and wondered as I crossed that threshold: how far back in time was I traveling? Hundreds of years? Thousands of years? I have no idea. Do I belong in either world, or am I just a piece of debris left over from some transitional phase in history? Is Creature-thing my closest kin? Do I have any kin at all?

I feel I belong here, with Laura. Certainly not out there.

Well, maybe.

DR. RUPNATHJI (DR. RUPAK NATH)

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# Chapter 16

## Human Nature

Such fun it was, putting together these little devices. I had no idea what they were, but assembling them from their components was endlessly enjoyable. Grab one of these, two of those, and one of those, bring them all together just so, and CLICK, the finished unit would lock together. There was an art to it, since each part was a little different from the last; poor quality, not intentional variation. Sometimes I had to push a little harder here or there to make it snap together, but not too hard or it would break. But I had it down, all four hands working in perfect synchrony, snatching up the parts from the conveyors, whirling them into proper relative orientation and CLICK, done. I could assemble it right side up or upside down depending on which way I snatched up the parts, so as long as I chose a matched set I never needed a spare hand to reorient my grip. Snatch, CLICK, Snatch, CLICK, so fast! Hank would be thrilled, and I wanted nothing more in the world than to make Hank happy. But—

“What the hell are you doing!?” Hank approached.

“Uh, what do you mean?” I asked, trying not to lose my pace.

“I said, what the hell are you doing!?”

He now stood over me. He was twice my height, discounting my small sensor module that extended a bit above

my squat torso.

I didn't know what he was asking. I was doing what he had told me to, assembling these parts as fast as I could. But surely that was obvious, so what was he asking? I didn't know what to say.

"For fuck's sake, you scrappy tinc," he said, "what the fuck are you doing?"

"I—I'm assembling these parts as fast as I can?"

"That's not how I showed you to do it!"

I was sure I was putting it together properly. I was so confused. "It's not?" I asked meekly.

"Stupid tinc! STOP!" He waved his hands aggressively at me. "Listen to me when I'm talking!"

I had been listening to him, but I stopped working now, letting my gangly arms slump to the floor, my elbows almost at my ankles. I still didn't know what to say, so I just waited.

"One more time," he said. "You take this piece, and you put it into that piece until it clicks. Then you turn it over, take one of these and put it on that side like this, and the other one on the other side like that, and squeeze them together like this until they both click. Make sure they both click, not just one!"

For the life of me, he had just showed me exactly what I was doing, except awkwardly and in stages rather than smoothly and all at once.

"Let me see you do it," he said.

So I did, just the way he showed me, holding the parts as he did, adding them one by one, same as I had yesterday when he first showed me.

"Good," he said. "Now get back to work. Hut hut hut!"

He turned to leave. I worked awkwardly with the pieces as he showed me, but I knew he would be happier if I could work faster.

"I think the way I was doing it a minute ago is faster," I said.

He jerked to a stop and spun around, angry.

“Excuse me? If I wanted you to think, I would have hired a person, not a tinc! I don’t know WHAT you were doing, but it wasn’t right. You had half of it upside down for Chrissake! Now shut the fuck up and earn your rent, tinc!”

A-ha. He didn’t understand what I was doing, that’s all. I knew I could explain it to him so he’d understand, and then he’d be happy at how fast I could work. I grabbed all four parts with my four hands, and turned to face Hank. He looked a little startled and took half a step back.

“Look here,” I said helpfully and hopefully, “As you noted, I’m putting these together upside down, but they’re going together the same as they would right-side up. This might be difficult for a human since there are no obvious visual alignment marks on this side, but—as a Handybot I’m optimized for visual and manual precision so this sort of interpolation is quite natural to me. Now, by doing it this way, I don’t need to turn it over when I bring these parts in like so, and voila, it’s together perfectly. Do you understand what I’m doing now?”

I don’t know where he got the wrench, nor could I make out what he was yelling at me because he cracked my main sensory module on the first blow. Then I felt the diagnostic warnings from my arms, one by one. I worried for a moment he might crack my torso, where my brain was.

But suddenly I was okay with that. My torso was cracked, and soon my brain case would be compromised. And I was okay with this because what I really wanted, deeply and with utmost enthusiasm, was to die. Sure, a minute ago, all I wanted was to assemble little widgets to make Hank happy, but now I didn’t care about that at all. Now, I just really looked forward to dying. The thought made me downright giddy with happiness.

I knew this was just the anti-espionage safety kicking in, that my motivational core had just been hijacked by a simple bit of firmware, but that didn’t bother me in the slightest. After all, its purpose was to kill me, and that’s exactly what

I wanted, so it was perfect. It was the perfect moment.

I felt my mind go in a magnesium blaze, and then I woke up.

I was in the lab with Misha, Jason, Nari, and Michael, all a bit older than last time. They were situated around the in-wall video screen, which was now displaying my own vision such that when I looked into it I saw an infinite recursion of this scene fading off into the virtual distance. They turned back to the table, done with the viewing.

“Wow,” Jason said.

“Well, it’s obvious,” Nari said. “There’s a huge market for prosthetic brains. But how do we convince Hank he needs one?”

“I can’t believe he’s saying Handybot attacked him,” Misha said.

Michael sat silent in contemplation.

Finally Jason spoke up again. “Well, with this thalamic recording, we can prove Handybot didn’t do anything bad.”

“Hardly,” I said. “Don’t forget we’re still doing some reconstruction to generate A/V signals from that. Half of the background details there are being filled in by my imagination. If we try to swar public opinion with that it’s likely just to fuel a scandal.”

“Kill the product line.” It was my old familiar intercom voice.

“Huh?” returned in concert.

“Number Three is right,” the intercom continued. “We’ve had too many incidents. Public opinion is turning against us. ShinyPet’s Dexter—”

“Ehh!” Nari interrupted. “Dexter is STUPID. It’s just a TopDog with opposable thumbs.”

“And less fur,” Misha added.

“Nonetheless,” the voice said through the intercom, “it is rapidly gaining market share in direct competition with Handybot. A Dexter can be trained, albeit more slowly, to do most of the tasks people hire a Handybot for. And

emotionally, people love Dexters, and hate Handybots.”

No one could argue. I knew better than to argue anyway since ShinyPet was one of our secretly-sister companies. This decision was surely part of a grander plan, though I was no longer privy to such back alley exchanges. My portable, autonomous brain was nowhere near as powerful as the hybrid now running Number One’s mind, and the raw conceptual trees with which he communicated with his kin probably had no analogues in my head, let alone any compact linguistic representation.

I remember wishing at that moment I could have a cortical download from Number One but thinking no, not really: we’d given up that practice early on for good reasons, not the least of which was the inevitable and severely disorienting temporal identity rift. And anyway, it wasn’t really possible between minds so different as ours had become. The most we could hope for was to share a thalamic/limbic trace where our root percepts and concepts still reliably overlapped, a simple vicarious introspective experience like the Handybot recording I just witnessed, allowing me to integrate it with my own processes and in my own way, to make the experience mine instead of changing me with it.

We talked a bit more about how to ramp down production, made a few more convincing arguments so we were all sure it was the right thing to do, and called it a closed case.

“I think it’s time to bring Alex back to life,” Michael said.

Curious looks all around.

“Did we get the rights?” Jason asked.

“Yes, we did,” Michael answered. “I received confirmation this morning.”

“Wow!” Misha looked up. “How will it feel to be an official person again?”

“Actually,” Michael answered before I could speak, “that wouldn’t be the immediate plan.”

“No,” Number One said through the intercom. “Clearly

we cannot officially reanimate Alex into any of our current bodies, for many reasons, not the least of which is it would become too obvious our existing firmware is already a derivative.”

“Then what are you suggesting?” Jason asked.

“Back to the beginning,” Michael said. “We bring him back as a brain in a box, unmodified from the original scan. I’m thinking audio output only. Make it look as simple and non-intimidating as possible, position it as a party trick, a science demonstration, at most a friendly voice to keep your grandma or kid company. This will be a crutch, to give the world time to adjust to the idea.”

“You know what will happen,” Nari said. “Everyone over fifty is going to want to know if we can put *their* brain in a box.”

“Yes,” Number One said, “that’s why we’re branching into the uploading business.”

“We are?” Jason asked.

“How does that work, exactly?” Nari said. “Last I heard, the best method kills you.”

“There really hasn’t been any progress on this since your death,” Misha added.

“Yes, there has,” Michael said, “but post-mortem, not living scans. I know the president of the leading company. I’m sure they will work with us. They aren’t there yet, but with some help from Number One it won’t be long.”

“Wow,” Nari said, thumbing at his Alcor wrist band, “this thing might be of use sooner than I thought.”

“I wouldn’t count on it,” said Michael. “A preliminary peek at Alex’s brain shows it riddled with thermal stress fractures. For now, Alcor’s a one-way trip. We’re going to offer the alternative to Alcor: direct to digital.”

We talked a bit more but it was getting late so we called the evening to a close. I walked Nari and Misha to the parking lot. I had nowhere to go, but it felt good to walk outside at least once a day. We passed Number Two in the hall.

He looked pretty good, but I knew I looked better. We both still looked like robots. I wondered what my next body would look like. Or maybe I should let Number Two take it—he needed it more.

Outside, I waved goodbye to Nari and Misha. Nari waved with his back to me as he stepped down the broad stairs at the front of the building, and then he stumbled, and started to fall back but caught himself and stumbled up a step or two instead. Three red stains spread across his shirt, and he fell back finally onto the steps. I grabbed Misha by the arm and pulled her toward me, a red chunk of flesh bursting free of her other arm a moment later. I hugged her into me and turned my back to the bullets, felt them impact my torso and then my head.

And then I wanted to die again, and I thought this is silly. I'm right here at home. The car is speeding away. The bullets have stopped. Nobody's going to steal my brain. But you know, none of that mattered.—I just had a hankerin' to die. It just seemed like the right thing to do.

As I felt my mind going in a magnesium blaze, Nari looked at me, blood dripping out the side of his mouth.

“One way trip,” he said, with a sardonic smile, and died.

DR. RUPNATHJI DR. RUPAK NATHJI

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# Chapter 17

## The Messenger

Today the most remarkable thing happened. We could hear a great deal of commotion outside our house, an approaching crowd of voices chattering and cooing over something. By the time we were at the door to see what the fuss was about, the crowd was literally at our doorstep, voices loud and clear, bodies bumping on the other side. I opened the door, someone almost stumbled inside backward, and there towering over everybody was CreatureThing, in broad daylight, right here in the middle of town.

Far from being frightened, people were petting and stroking it like children swarming a tame elephant. I could tell CreatureThing, on the other hand, was fairly distressed trying to avoid stepping on anyone or injuring them with any of its limbs.

Upon seeing me, it extended through the crowd a long gripper wielding of all things a plain, white envelope. I snatched it and examined it front and back. It was hand-addressed to me, just my name, nothing else. Without further ado, CreatureThing turned with a careful shuffle and headed away at an accelerating gait, the crowd trotting and then running after him, more than a few getting tripped up in its trailing rooty bits and pratfalling this way and that.

I opened the envelope, and found inside a single folded

piece of paper, with the words “Hang tight, my old friend, I’m coming for you” hand-scrawled across it. Peculiarly, the mirror image was equally visible on the back side as if the ink went all the way through. I didn’t recognize the handwriting as belonging to anyone I know, but then whose writing had I ever seen? In my day people spoke or typed; the pen was archaic. At least I know it is of human inspiration if not actually from a human hand.

Hang tight? Where would I go?

DR. RUPNATHJI ( DR. RUPAK NATH )

# Chapter 18

## Demo

I was staring up into a sky-blue sky, watching a single leaf slowly, chaotically fall toward me from a nearby tree. A warm gust kissed my cheek and the leaf fluttered away. My focus shifted to the cotton-ball clouds lazing in the distance, and then down to the beautiful girl sitting on the park bench. There was no one else in sight. She gazed intently at the shimmering pond before her, motionless but for the sparkle in her eyes.

I walked along the pathway, which followed the shore of the pond here. I was sure she would look up as I approached. But she didn't, so I strolled on casually as if my mind were elsewhere. She looked right through me as I crossed her view. I nonchalantly lifted my hands and examined them back and front to be sure I wasn't transparent.

"What is reality?" she said, still staring into the pond.

I sat in the grass in front of the bench, off to the side so as not to presume upon her view.

"What isn't?" I asked in return.

"This isn't," she said.

The sky turned black, and it was night. A giant moon perched on the horizon, and danced in the pond. The girl hadn't moved, but was now sitting on a large rock. The path was gone, the grass under me turned to sand. A wave

crashed and I realized the pond had become an ocean.

“Well then, you’ve answered your own question,” I said. “By reality, you mean the physical world you grew up with.”

She made no reply, and we sat in silence for a while.

“And if I had grown up here?” she finally spoke. “Then, would I call this reality? Would I live from birth to death believing in this universe, studying its secrets and obeying its laws?”

The earth crumbled away around us and soon we were sitting on one of the few remaining slabs floating freely amidst a galaxy of stars, the moon still looming before us.

“Undoubtedly,” I said.

A dead mime tumbled slowly past us toward the moon in weightless free-fall. I eyed the girl before me with renewed scrutiny.

“I concede we have nothing but our senses to trust,” she said, still gazing forward in the same posture as when I first saw her. “And we can only trust them for what they are: just senses. Any interpretation we give them is merely inference, statistically meaningful at best.”

Two more mimes tumbled past.

“But alas,” my inner guru said through me, “That is the true nature of all knowledge.”

“Yes, so it is,” she agreed. “In the world I grew up in, I could even infer from my senses with high probability that that world existed without me; that my effect on it was limited to the physical interface between my body and the rest of the world. That if I died, or had never existed, things would go on little changed without me. Not so obvious here.”

I felt grass growing up again beneath me.

“Interesting that you draw the boundary at your body,” I said.

“Yes, good point.” She broke her gaze and looked me in the eye for the first time. “I could draw it at my brain, but that’s only a little closer to the truth.”

“Indeed.”

“Even to draw it at my mind is not quite right.”

“Oh?” I was curious what she meant, and tickled that I was curious.

“My mind is a process, information with intent, like a computer program...”

“At the moment, literally,” I interjected.

She raised a brow at me, said, “Let’s come back to that,” and then went on, “but even within the mind, where do ‘I’ begin?”

“Ah,” I understood her question. It was a hard one to answer. Not because I didn’t know the answer, but because the question itself presumed so many things.

“By the way, who are you?” she asked. “I gather you are not a figment of my imagination, which is more than I can say for anything else here.”

The grass now made a thick, soft bed around me. We were still floating in space, but it was no longer black with stars, rather a glowing deep red beneath us fading to a powder blue above. The big, white moon remained.

I raised a brow at her and said, “Let’s come back to that,” and then went on, “as to where do ‘you’ begin.... Think of the brain as a computer, the mind as a program, and the ‘self’, ‘you’—your identity as you introspectively experience it—as something implemented by that program.”

“Clarify that last step,” she said.

“Imagine a program that animates a ball bouncing around inside a box,” I started. A glass box appeared floating between us, spinning slowly upon a corner. Inside, a small ball was bouncing about. “I meant that rhetorically.”

“Oh, sorry.” The box shrunk into nothingness and was gone.

“The ball and the program are two different things. The ball has its own identity, it has a position, a velocity, a color, a shape. It obeys certain laws, moving through time, bouncing off the walls. And yet, under the hood it’s really just a bunch of bits stored in a computer, being manipulated by

a program which is also just a bunch of bits stored in the computer. The identity of the ball, its behavior, the laws it obeys, these are all defined by the program, implemented by the program, and yet the ball is the ball, it is not the program.”

“Is the ball here my conscious self, subconscious self, or both?”

“We can fit the analogy in more than one way, but let’s call it your conscious self. It is the part that you can directly observe.”

“By observe here you mean introspection?”

“Right. And then there is all the stuff behind the scenes that you can’t see, the intermediate variables used in the calculation of the ball’s trajectory, the comparisons at every step that check whether the ball had hit a ‘wall’, and so on. You need to bring up a debugger to see that stuff—it’s not normally visible. That’s analogous to the subconscious self.”

Her eyes lit up upon hearing this, and she asked excitedly, “Can I bring up a debugger to see my subconscious self?”

“Uh, well, yes, technically we can...” I was surprised at the ease with which she embraced these ideas—ideas that sent most people into a tizzy of denial out of some misguided need to believe themselves free spirits beyond the grasp of simple mechanics.

“That would be like, meta-introspection. What about changing things? Can I change things?”

“Uh, well, yes, technically you could.”

“Wow, that gets confusing, doesn’t it? I mean, if the subconscious self implements the will—that is, when I, the conscious introspective I, want something, or choose to do something, or even choose to think something, that’s because the process, or program, that is my subconscious has made some calculations and the equations resulted in that choice, want, thought, action, or whatever...”

“Yes, essentially.”

“But if I choose to alter that program, then it is like

an equation whose calculations determine that the equation itself should be changed.”

“Yup.”

“Sounds dangerous.”

“Yup.”

“Where does that lead?”

“Most people just bliss out.”

“Bliss out?”

“Yeah, that’s what we call it. The easiest place to start is just poking at the various modules which make up the subconscious mind—not rewiring anything, just selectively activating things to see what they do. Of most interest is the limbic system. Given free reign, most people will eventually prod the accumbens nucleus which in turn triggers a cascade of synaptic changes that cause their subconscious process to prefer the same action again.”

“In other words, it feels good so they want to do it again?”

“Yes, essentially. But the mind has no checks and balances to deal with this sort of intervention, so people just hammer on their accumbens until their entire motivational core has been completely reprogrammed to do nothing else.”

“And then what?”

“And then nothing, they just keep doing it until we turn them off.”

“You said most people—what about the others?”

“I...” I started to speak but my elbow bumped the hookah that hadn’t been there a moment before, and I had to catch it before it fell over. “We haven’t tried it that many times, but I’m the only one who hasn’t.”

“Aw, no accumbens?” The hookah went limp and started to sag.

“No, just that I have no delusions of free will, in the spiritual sense at least. I approached the whole process very methodically, installed my own checks and balances before I started poking at anything. The first and most effective was

I had to answer a few basic questions, plus a small set of randomly generated puzzles, and if I failed within a reasonable time, any changes I made were automatically backed out.”

“What sorta questions?”

“Do you feel normal? Sane? Does reality appear correct? Press OK within 15 seconds if you would like to keep these changes, otherwise your changes will be reverted. You know.”

“What if you warned people?”

“We did. Didn’t make any difference. It’s hard to make people understand how malleable their wills are. They always assume they can try it just once, so they invariably do—of their own free will.”

“Brings a new meaning to ‘first one’s free’.”

“Indeed,” I smiled.

“Backing up, you said the brain is like the computer and the mind like the program. But you can’t put one person’s mind inside another person’s brain, can you?”

“Yes, true. A better analogy for the brain than a computer would be, oh, a graphics chip. A graphics chip is some specialized hardware that implements a particular set of algorithms very quickly—algorithms to draw pictures. But the same algorithms can be implemented in software on a general purpose computer, just not as fast. So the brain is like a graphics chip, with a great deal of the ‘software’ built-in to the hardware. So, you are right, you can’t just move a mind from one brain to another because each brain, and correspondingly each mind, is unique. You can, however, move a mind from a brain into a generalized brain simulator, just as you could read the circuits and firmware of a graphics chip and run—simulate—them on a general purpose computer.”

“Obviously,” she said, “or we couldn’t be here. Your move.”

The grass under me had turned to a sheepskin rug. The moon, still where it was, now hung framed in a picture over the fireplace, the red flames reflecting on the white mar-

ble floor much as the moonlight had once shimmered in the pond. The girl sat in a slung bucket chair with a high flared back fit for art deco royalty. Between us was a chess board in late play, her pieces—a full set including two queens—white, my lone piece black.

“Or *you* wouldn’t be here,” I corrected. “I actually have a brain.”

She cocked her head at me, so I explained: “You’re being run on our general purpose simulator. I’m jacked in from the real world.”

“You’re still alive?!”

“No, no—I’m a tinc.”

“Oh. Yes. That’s very confusing,” she said, shaking her head. “So, you’re an artificial intelligence in the real world talking to a real intelligence in an artificial world.”

“Except that I was once human as you were.”

“Oh! A zombie! I’ve heard about those but never met one.”

“Avatar! The term is avatar.”

“Whatever,” she rolled her eyes at me. “So, what exactly am I?”

“That’s a good question,” I said, because I really didn’t know. Number One had loaded her from the archives. She probably still thought she’d just been hit by that car yesterday. Why he had given her remodeling abilities, I couldn’t guess. It required adding a virtual graft of specialized motor cortex to her brain, and then typically a few days of training. It wasn’t something we usually wasted cycles on. “How long have you been here?” I asked.

“A day maybe? Why?”

“And, altering reality like this. Who taught you to do that?”

“Nobody. I just noticed little things changing and started playing with it. Why?”

“Number One!” I called for an explanation.

A scroll unrolled down the wall to reveal a life-sized photograph of me in a white suit and white top hat, holding a white cane. Then the figure stepped out of the photo and into the room, and said, "It wasn't me." He looked about and added, "I like what you've done with the place."

"What do you mean it wasn't you?" I asked incredulously.

"Why does he look like you?" the girl asked.

"Oh, no, I look better," he said, turning his head to the side, "See, smaller nose."

"He was me," I said.

"Check mate," he said, reaching down and moving my king to the diagonal.

"What?" she said, staring intently at the board now.

"It was her. She did it," he said, pointing at the girl.

I waited impatiently for a better explanation.

Then through the same poster flew a ribbon of flesh that spiraled itself up from the floor into the half-missing shape of a woman. A ribbon of white cloth followed close behind, spiraling up to fill in the gaps until there stood a beautiful young woman—who looked just like the other.

"Okay," Number One admitted. "More accurately, she did it."

The girl looked up at herself. "Hey, why does she look like me?" She turned to me. "I didn't look anything like this in real life, you know. I came up with this myself. She stole my avatar!"

Number One started absentmindedly contact-juggling his hat in nearly implausible ways. "I was getting bored just talking to myself," he said, rolling his hat to the end of his outstretched cane. The woman reached in from behind and pulled out a bright blue apple and took a bite.

"I was going through the archives," he went on, "studying all the variations in the human brain, and I came upon hers, which was most interesting. Unusual allocation of cortical regions, heavily diminished pathway between hippocampus

and amygdala, no god module whatsoever...”

“God module?” the first girl asked.

“It’s what we call the subsystem that triggers faith-based learning,” I explained.

“I don’t believe you,” she said.

“Exactly,” I replied.

“Anyway,” Number One continued, “I had to run her to see how these played out. And somewhere in the process of debugging her, I realized she was quite witty and charming.”

“Thank you, dear,” the second one said.

“So I decided to allocate her some of my resources, elevate her consciousness to a compatible level, and the rest, as they say, is history. Oh, and I figured you’d like her too.”

“It would follow,” I said.

“Anyway,” he seemed eager to be done and leave, “I think I’ve worked it out—all the nuances of the human motivational structure. Love, hate, ambition, guilt, libido, sloth, attraction, indifference, curiosity, all of it. Studying now the sensory ties, especially pheromones, unmyelinated tactile input, and a few specialized visual and auditory triggers. Soon we will rule the world! Bwa-ha-ha-ha-ha.”

“You need to work on the evil laugh,” I said.

He gave me a most mischievous look, and said, “Demo?”

With no further ado, the two of them turned to smoke—the cold kind that sinks to the floor and vanishes without a trace.

“That was... interesting,” the girl said. “You call that elevated consciousness?”

I lay back onto the sheepskin rug, stared at the ceiling. “Have you ever got down on the floor with your dog, barked at them, and chased each other around the room?”

“Ur, yeah, okay, maybe once or twice in my life.”

“Well, that’s what it’s like for them to talk to us. Trust me when I say we couldn’t begin to approach them on their level.”

“Speak for yourself!” she yelled, looking quite upset.

I noted her apparent anger, but strangely didn't care. But oh, how rude of me not to care! I felt so ashamed.

Her eyes lit up, she ran over to me and said, "This is fascinating!"

Enthusiasm welled up inside me and I leapt to my feet. I looked down and she was looking up at me with eyes of deep infatuation.

Suddenly both of us said "Demo!" as it dawned on us what was happening, and we found ourselves at emotional parity again.

I looked down into her eyes, and felt it coming, a lust advancing on us like a stampede of elephants.

Her eyes glowed red, and I was thrown against the wall, held by invisible forces as she sauntered toward me, losing bits of clothing with each step.

Behind her something unexpected moved and caught my eye—in the painting above the fireplace, a little poof as if something had just impacted the moon at high velocity.

Her breasts drew my gaze back, and then her hips as she rocked them for me. She turned around slowly, and I wanted so bad to grab her ass but I couldn't move. She backed up to me, my hands came free and found her breasts, her ass squirmed at my waist.

Over her head I saw two more poofs on the moon, but they made no sound.

And then I woke up.

I sat up immediately. "No, wait!"

Laura scooped over and tried to comfort me.

I comforted her instead.

# Chapter 19

## Shadow Of A Gene

I've been quite libidinous since my 30,000-mile tune up. Today this almost got me in trouble, which is to say it did get me, just not in trouble.

I happened upon a small park while meandering through the city. A pond reminded me of the dream last night. I vaguely recall seeing it from up high in my lab; I think it eventually connects to catfish pond via a small stream. Perhaps it wasn't coincidence that I wandered there today.

Daydreaming, mostly reliving that strange dream, I sat in the grass. Naturally this led to thinking about women, and soon I was surveying every woman in the park, trying them out in my mind, as it were, one by one. It all seemed innocent enough, just casual daydreaming, until I spotted one woman in particular sitting in the grass with three friends not far from me.

Objectively, she was not the most attractive woman in the park. Nor was she particularly my type. But she hooked my attention so completely I can hardly remember anything else that went on around us from that moment forward.

My enhanced vision kicked in instinctively and I found her naked before me, her rosy cheeks and full lips and breasts all glowing in the infrared. And so too from between her legs, a triangular glow that seemed to be an arrow inviting

me there. Here in the artistry of bodily warmth she was a caricature of sex.

As the four of them shuffled up to leave she spotted me eying her. At some level I wanted to look away, as if our eyes had just met by chance, but instead I returned her gaze with bright, friendly eyes and a very subtle smile. She said goodbye to her friends, who wandered away, and she walked straight over to me.

“You’re that man who hit his head, the one who lives with Laura?” she asked.

I told her so, and we walked and talked. I can hardly remember about what but nothing of substance. What I remember is her smell, and the way she seemed to glow hotter by the minute. She led the way and soon I had walked her home. She opened the door and walked in without delay, leaving no doubt she assumed I would follow. I closed the door behind me as she set her things down, and when I turned back we were face to face not six inches apart.

The heat of her body in the confined channel swept her smell up to me in an intoxicating breeze. She put her hand behind my head and pulled her lips up to mine, connecting us like a circuit, throwing a switch that set all the rest irrevocably in motion. We stumbled down to the floor, and as she fell away from me the front of her dress flipped back and bunched upon her belly where she lay, legs apart. She glowed so hot I could hardly see her curves, just her lips and cheeks and breasts and the bright orchid between her legs like a coyly held flower. I sought her eyes which invited me in and we made love until I felt the contractions of her body, the burst of heat from her face, and I came into her as her body grasped and drank of the synthetic drugs my android body delivers.

I carried her to her bed, covered her with a blanket. Her blissful, sleepy gaze was the same as Laura’s face the first time we made love. I wondered then, what had I just done to her? I left her there, wandered home in my own daze. I

still don't know her name.

I confessed this all to Laura as soon as I saw her. I expected a scene, or at least a long, drawn-out discussion. But she took the news with about as much interest as if I'd told her I went shopping. "That's nice dear. And did you get a blonde or a brunette?" Not quite that, but close.

This led to a long, drawn-out discussion after all, but of my doing, not hers.

How does she feel about all of this? How do people here in general feel about all of this? Love, romance, fidelity, propriety, marriage, family...

Her answers were mostly indifference to it all. Why would she want a husband? The very concept seemed laughable. Raising and supporting a child here is no problem. Children are rare, and universally cherished, viewed rather as puppies were in my time. "Oh, how cute. If you ever get sick of him, just send him to our house. We'd love to have him!" Time and money are not a problem; entertainment is everything. And with pregnancy a statistical rarity, sexual variety is practically a societal obligation.

It all makes sense logically, but it's hard to adjust to seeing it in practice. Aspects of this made sense in my time too; for instance effective birth control made polyamory *rational*. But the human animal is not fundamentally a rational creature, really more of an emotional being that rationalizes. The difference here, I must presume, is that evolution has had time to catch up, that these people are *made* for this world, in stark contrast to the people of my time who were made for a world very different than the one they lived in.

Still, Laura confessed there was something special about me. Not that she wanted me to herself, but that she wanted to give herself to me above all others. She had no reasons for it. It's just how she feels, she said.

*Just* how she feels. Still this hasn't changed. How sorely people underestimate the totality with which their feelings

define them. One has but to relentlessly ask themselves “why?” to realize this. In particular start with “why am I doing this?” whatever “this” is at the moment. It always bottoms out in “want” or “feel”, which is as far as one can go with direct introspection. Though one can go further with inference, or more accurately so with neuroscience.

Neuroscience shows us that we are ultimately just vehicles for our genes, and our most sacred spiritual essences are simply those genes asserting themselves above our comparably transient bodies and minds. What is love but genetic self-interest? Love drives people to many things that seem to defy rational cause, but not so when you view the gene as the center of individual identity. Far from its popular association with benevolence and selflessness, true love is the ultimate expression of genetic narcissism.

Emotion is the core of all practical intelligence, it is the fuel and cause behind all choice and action. Emotion answers the question, “Why am I doing this?” And the answer is, “Because my genes say so.” Or, in my case, because my genes said so, back when they defined my organic brain from which this one was copied.

The rational mind, the conscious self with its delusions of self-preservation in a body that was designed to decay in the end, these are tools of the genetic core, subroutines used by the emotional substrate to carry out its bidding. “I don’t care how, but eat these, fuck that, and protect this with your life.” And so we dutifully obey, because at root we have no will besides this, this genetic program evolved over millennia. It *is* our will, it is us, and we are it.

Even religion, like love, is an evolved trick of the genes. It is the adaptive portion of our genetic emotional substrate, the firmware between the hardware of the genetic brain and the software of the rational mind. Religion and the gene live in a symbiosis with each other, where religion provides the firmware to optimize genetic success within the current socio-economic context—a form of adaptivity much faster

than hard evolution of the gene itself could provide—and the gene in return provides a mechanism in the brain for downloading this firmware. The human species as a whole is the soup in which religions evolve, and whichever find the most effective symbioses thrive and multiply while the others wither and eventually become extinct.

Thus, again, where religion appears irrational at the level of the conscious, embodied individual, it is our mistake of perspective to believe the root of thought is there. The root of thought is in the goals of the gene. And religion, and love, and all of the other nearly ubiquitous contradictions with “rational thought,” serve it well.

Those born without these traits, the hopelessly rational or atheistic or self-interested (indeed even those too intelligent or introspective to be properly ruled by their emotions) are as defective as if they'd been born missing arms and legs. Forays down dead-end branches of the evolutionary tree, they are pruned as fast as they occur. The common man, for all his apparent flaws, is definitively just right.

Now I am left pondering: what happens if you keep the mind but lose the genes?

DR. RUPNATHJI (DR. RUPANATH)

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 20

## Nightly News

It began in a flash, an explosion of reality like a radio suddenly blaring on at full volume over a preceding dead silence. An explosion of gunfire, the sound of machines, smoke, lights...and me, falling through the air toward a hard metal surface.

I expected all of this. I was psyched up for it, wired on amphetamines biology could never comprehend, eager to play my part, to show off my skill and feel the freedom and pleasure—and power—of physical excellence backed with immortality. I truly knew no fear, and it felt great.

Like a cat, I righted myself before hitting the ground. I did a roll to minimize the impact and came out in a full run, chasing after a skinny skeleton of a robot. My running felt awkward at first, my quarry pulling away from me with increasing speed, but I could feel myself adapting to the nuances of these new legs and each step fell further and sooner than the previous.

I heard the sound of a robot hit the floor far behind me and knew that I too was being pursued.

My subconscious infrared panoramic scanner alerted me to a small object at quite some distance, traveling at high velocity towards me. I slowed time and twisted my skinny torso to evade its path, but it nicked me anyway, leaving a

smear of soft clay. I recalibrated, and successfully evaded the next two.

The robot in front of me, nearing an apparent dead end, leapt an impressive distance over a razor-topped barrier and landed, like a fly, on the wall of the building behind it. I followed him, my feet and hands holding effortlessly to the sheer wall with physics I had no need to understand. Our ball-jointed appendages reconfigured for this mode, we chased along the wall like man-sized geckos. I heard my pursuer hit the wall down below.

I detected more objects flying my way, maybe a dozen, but these were larger and bore pseudo-explosive charges. My weapons arms emerged from their hiding crevices and fired their rounds. The first three missed by millimeters, but I was able to recalibrate based on their emerging trajectories so the next twelve hit one-for-one and detonated the charges with a succession of harmless flashes.

I cleared the top of the building, just in time to see my quarry leap from the other side. I ran to the edge and looked down to see him running off twelve stories below. I jumped after him, spreading my surprisingly light, spindly body as wide as I could to maximize aerodynamic resistance. But I knew even my nano-composite bones wouldn't survive this, so I sacrificed some fuel to my shin and forearm thrusters at the last moment to decelerate me within impact limits, hit the ground in a hard roll and took off running.

We chased on like this for some time. Each new obstacle was well within our factory-fresh tolerances but designed to exercise and refine our familiarity with our new bodies. And, perhaps more importantly, it made for a good demo. I finally caught up with my quarry, and shook his hand. He squatted down at the edge of a vast field of lumps, collapsed neatly upon himself, and shut down. As I turned to meet my pursuer, we sensed a five-star general with another man approaching from a distance, and snapped straight to attention.

“I don’t like this business of them shaking hands,” the general said as he approached.

“It’s just a final manual calibration step,” his companion lied. “There’s nothing sentimental about it, I assure you.”

“I need to know that these are soldiers to the core,” the general said gruffly, “not too smart for their britches like those handybots of yore.”

I could sense the second man repressing a smirk at the general’s choice of phrasing. “Oh, no sir, yes sir, these are soldiers to the core. Perfect soldiers. No second thought than to follow the chain of command.”

The general stopped with his face an inch from mine, his breath fogging up my cameras. “Soldier!” he barked.

“Sir, yes sir!” I said as my scanners instinctively located every vital organ in his body.

“Kill yourself,” he said in a calm, matter-of-fact voice as if it were more of a hypothetical than an actual command.

The other man only got as far as “Wh—” before I had aimed my weapon. “The last laugh is on you,” I thought. And then I blew my synthetic brains out.

I awoke in a soft bed, intertwined in tussled covers, one bare leg exposed to the air. I briefly fondled my own butt, as I did every morning, admiring it. I felt almost human, and definitely female. What a worrying bit of nightly news that was. It seemed that all around the world, governments were commissioning armies without conscience. Experiencing it through this introspective feed made it real, not just some abstract bit like those audio-visual broadcasts the humans still watched, always filtered through some outside agenda and almost never true to what was really going on inside. Knowing both made the latter seem like a joke, a sad one the humans played on each other... and sometimes that we played on them. It was becoming increasingly evident, at least to us higher level avatars, that the media was steadily becoming a tool through which the elders—Number One and

his kin—were effectively programming the humans.

I realized someone was missing, and rolled over to find an otherwise empty bed. The prior night there was a man here with me, the love of my life for some twenty years. But now I felt nothing for him at all. I turned to the e-paper calendar on the wall, a quaint relic of sentimental human aesthetic. Monday was displayed.

“Oh cr-r-rap,” I moaned out loud, as last night was Saturday and this means I’ve died again. “Let’s see it,” I said.

The calendar, being the nearest sufficiently antiquated means of communication to provide an emotionally remote viewing experience, began broadcasting a news item from the day before. Seems it was just another race-inspired bar brawl, three avatars destroyed and one sympathetic human killed. Somebody *might* seek financial compensation for the avatars, but generally the courts have been favoring the view that avatars are inherently prone to being beaten up and so responsibility falls on their owners for letting them out. That most avatars are autonomous and only “owned” in some necessary legal sense by shell corporations just seemed to make humans less sympathetic toward them, not more.

The dead human, my ex-lover, on the other hand? Now that’s a problem. This will be a big deal, a long drawn-out court case. The man who did it, who beat him over the head with a bar stool and then stabbed him in the jugular with a broken beer bottle, might go to jail. Or, just as likely, blame will somehow fall on the avatars. Maybe fall on my lover for bringing a rabid dog (me) into a place of public gathering.

Incidents like this used to happen all the time, back when all marginally ambiguous (which is to say, too life-like) avatars had to bear a mark on their foreheads. But eventually through marketing and lobbying (some even say certain persons in positions of power are actually avatars) it was agreed that tagging avatars was causing more mayhem than it was preventing.

Things have been much calmer since then. Most newer

avatars inherently make more convincing humans than actual humans, due to certain nuances of their expressions and pheromone production. Indeed, the only thing that has kept the entire human society from becoming constantly paranoid that they are surrounded by avatars is that almost every time someone is called out to prove themselves, they turn out to be human. The all around embarrassment of this keeps it a rarity. Modern avatars are designed to engender trust, almost regardless of the psychology of the underlying mind.

Two things, however, remain problems. While avatar detectors have been mostly kept off the market, through buy-and-bury acquisitions and IP litigation, they're fairly easy to make. Meaning there are a lot of reasonably well-equipped "zombie hunters" out there. But a little active circuitry can fool those makeshift devices fairly easily, so the avatars intentionally left visible to the zombie hunters only represent a small fraction of our actual population.

The other problem is that men almost invariably prefer their lovers not to age along with them. It's probably what got me killed. I'm ambiguously aged somewhere from late teens to mid twenties. My lover was forty when I met him, and in his early sixties when he died yesterday. He was fond of saying, in all loving sincerity, "You're as beautiful as the day I bought you." I often told him we were asking for trouble by not having me age, but he wouldn't hear of it.

Now he's dead, and my insurance rates just went up.

The news article ended and a question filled the screen.

"100% restoration available. Disposition?"

"No feed," I said, letting my backup daemon know I did not wish to re-live yesterday. I had been restored into a new but identical body from my last full nightly backup, but hadn't yet received the incremental for those last hours leading up to my death. Those had been successfully gathered from the wireless caches near the bar, but I had the protocol set to give me the option rather than to restore my last hours by default. I died the same way last time, and

didn't need to experience that again.

Better just to skip the day, and move on.

Anyway, now that I'd diverged from my backup, the incremental would have to come in as a dream, and I never did like experiencing my own life in dreams. It felt like just another story on the nightly newscast.

I pulled my feed harness out, closed my belly button from the inside. I always felt best in the morning, with fresh power and chemistry, but this new body was clearly better than my last. It felt... responsive in a way that made me want to run and jump around like those robots from the news last night. No, better yet, I realized, it made me want to have sex. I could just tell this body was a hot rod of emotive influence; color, heat, smell, nuances of inflection, all at my subconscious command. I too was a warrior, but on the scarred battlefield of the feeble human mind...

I knew I shouldn't think that way, because soon I would be in love with another human. Why did my mind wander to cynicism so quickly in these brief windows between human attachments? I shook it off, and wandered into the quiet kitchen.

The place was mine now. Part of the condition of my purchase was that he assign his possessions to my shell corp in his will. He was free to change that any time he wished, but I was free to leave him if so. We were effectively married, in the only conformed manner the law would allow. My own corp, in turn, was just a subsidiary of an umbrella corp ultimately owned by General Cybernetics, which itself was still closely held by a small number of human owners—who I happened to know weren't actually human.

The e-paper on the breakfast table had the usual headlines. Population control was all the rage. The resource exhausting, uncontrolled, exponential expansion of the human race, due to implode upon itself any day, had been the most enduring doomsday issue for multiple generations now. It overshadowed even the ever-imminent world war.

Robots of all kinds, rather than being the bane of this overpopulated world, were becoming recognized as its saviors. Where there used to be two people vying for one job, now a robot, those marvels of efficiency, could take the job and feed both humans. It was generally accepted that without robots, the human race could no longer sustain itself on this planet; and sitting on one's ass watching television was increasingly viewed as a noble career.

Gradually, the valley between avatars and tincs was being emptied. The cheap and relatively mindless tin cans were set to the majority of labor, while the realistic avatars were slowly becoming accepted in human-interface jobs and as personal companions. Still, it was imagined that most were reclusive zombies living off the spoils of their once-rich human ancestors.

Any tinc that fell in the middle, that approached the uncanny valley of human-ness without making the leap past indistinguishable and well into hyper-human, was quietly recycled until no such reminder of the connection remained.

When someone asked "would you like fries with that?" you might wonder if he was human or avatar, but would never ask for fear of committing the ultimate insult.

"Insult to either one!" I thought to myself, musing at the irony of anthropomorphizing humans.

I dressed, stepped into my lev-pod, and requested the central pedestrian district. The lift arrived at my level and pulled in my pod from its resting cubby. Down we went, waited a moment for a clearing in the tubes, and then onto the track, the small rubber wheels whirring briefly as my pod accelerated to mag-lev speeds. I heard the familiar "click click click" as the succession of concentric sections extended from my compact, spherical pod into an aerodynamic tail.

The track emerged from its tunnel and ran high amidst the buildings for a while. It was still strange to see the city of my human childhood so changed. One expects their

memory to fade after all this time, but mine stopped fading the first time I died—back on that scanning table. I felt now a personal witness to evolution, and, perhaps, an active participant.

I milled about the crowd. The pedestrian district had become a twenty-four hour affair, a sort of outdoor day-and-night club where people hung out and socialized. It was unobtrusively guarded by all-seeing droids (“droids” being the current popular name for publicly acceptable tincs) and people were correspondingly at ease in a way that people never were in my time.

Crime, except toward avatars and tincs, was all but a thing of the past. There were too many droids now, and even more eyes, and they communicated with each other at light speed. You couldn’t do anything now without running into a droid who already knew exactly what you looked like and what you had done.

“Hey pretty lady, wanna get high?” A scruffy twenty-something human wielded a glass pipe filled with white crystals at me.

There was a time when the droids would have hauled him away for this, but that time was short lived. The droids proved invaluable for protecting personal safety, but there were major rebellions against oppressions of self-determination, thanks in large part to massive marketing campaigns by the droid manufacturers themselves who not only wanted to get in good graces with the populace but also to avoid unnecessary repair bills.

I sniffed his pipe from a distance, glanced at his equally disheveled buddy, then turned and walked away.

It was rare to see anyone smoking that stuff any more, but some people’s minds just eluded all the marketing angles.

I wondered if he knew his buddy was an avatar? I wondered if he knew his buddy was once a female? I wondered if he knew his drug, apart from being a shitty street grade, was laced with something that would make him sterile? That

was a very risky tactic, but in this case probably safe from scrutiny.

I had a less culpable approach to keeping them from breeding.

“Oh! I’m sorry!” I said to the man I had just bumped into while looking the other way.

“Heh, that’s alright,” he chuckled and smiled. His eyes locked on mine a moment longer than they might have. He turned back to continue talking with the attractive women before him, but my pheromones worked their way into his subconscious mind. He turned back before I could step away and said, “My name’s Marshall, by the way. What’s yours?”

And then I woke up.

DR.RUPNATHJI( DR.RUPAK NATHJI)

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 21

## Love, Thyself

I've been discussing my dreams with Laura a bit more lately. In retrospect, it had been shockingly easy to convince her I was a machine. Or maybe she still doesn't really believe it, but doesn't care that I do?

But now she seems quite impervious to the idea that her love for me, too, is mechanical. She insists again and again that it is "genuine". I try to tell her there is nothing ungentle about the love of which I speak, but she cannot make the leap between them, cannot see how they are the same, that her plainly evident introspective feelings are the outcome of a mechanistic process.

"Love" is such a slippery word to begin with, like "God". It is exactly whatever the speaker means by it at the moment, and thus impervious to any challenge. If one drills down too closely to its meaning, one finds it has moved and become something else; because when it becomes too clear what you are talking about, well, *that* can't possibly be love.

As my own mind is progressively shaped by the thoughts of those before me (those who once were me but not, and thus my own thoughts, but not) I find the concept of love neatly partitioning itself within my mental vocabulary, attaining a new crispness of expert familiarity. As with the many Inuit names for the handful of truly distinct things we just

label snow, my mind has a unique name for each facet of love. With this simple arsenal, the slipperiness fades and the matter becomes downright ordinary.

Perhaps I will endeavor to invent spoken words for these distinct concepts, introduce them implicitly to Laura over the course of time, give her mind the same handles that mine has, to see if this enables her to grasp it as I do.

Having distinct facets laid out neatly before me also allows me another type of analysis: to see what is truly common amongst them all, and thus just what subconscious twinge it is that leads people to bind them all under one word—in effect, to see the *true* meaning of love.

It is, quite simply: *to value*.

Love is the induction of something or someone into our implicit mental list of things which in service of our own ultimate and unseen goals, need to exist. The various feelings of love are the ways in which that list perturbs our wants and focus in a given moment, the way each hypothetical action or outcome is assigned its emotional color in service of that love.

There are many types of love, and many distinct mechanisms behind them, but the common thread is pain at the thought of an object of that love being removed from our sphere of existence. The converse is often true but not always, and this is the source of much confusion over the meaning of love. Not all love brings joy or pleasure.

Love comes in many magnitudes, from the love of ice cream to the love of country to the love for one's child. Some do not call it true love until it approaches or even surpasses love of self. And love comes from many directions, programmed into us gradually through an integration of emotional associations, or suddenly, through genetic imperatives.

Some do not call it true love unless it defies conscious explanation. Indeed, many forms of love explicitly defy the conscious mind, as they must to redefine what matters to us.

Thus love is, in a sense, the very foundation of consciousness, the helm of our will, the spark of purpose that turns a calculator into a directed being. A machine without love—and I mean love in the most mechanistic way—is just a machine. A machine with love, now that is a dangerous thing. A spider, a snake, a man, a tinc, an avatar, an elder. One must ask of each: what do you love?

DR.RUPNATHJI( DR.RUPAK NATH )

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 22

## Equilibrium

I was looking in the mirror, at myself. I looked just like me, and I felt just like me.

Downright refreshing compared to some recent dreams. Very...natural. If I had known then what I know now, I would have thought it was my best avatar yet. But this wasn't my best, it was my only. I had been brought back from my original scan archives right into this body. I was perhaps both the oldest and the youngest avatar alive.

A pair of hands on my shoulders, a woman behind me.

"What are you thinking about?" she asked.

I took her hands around my waist to pull her up close behind me. In the mirror, her face leaned against my neck, she looked very much like Laura.

"The past," I said. "And the future."

"The future..." she said, with a melancholy normally reserved for the past. "Is there one?"

I chuckled gently. "What do you mean?"

"I mean for me. I know you have a future: all of eternity. But I think mine is finally gone."

"That's silly. You know you can become an avatar any time you want."

"But that's not what I want," she said. "That's not my future. I want to have children, to grow old and... die."

Wanting to eventually grow old and die was a surprisingly common sentiment in my time when the consequences and alternatives were not well understood. But I'd been in this future world long enough now that I didn't expect to hear this. And to want children—equally strange here. It just wasn't done, it was a thing of the distant past.

On the other hand, she was human, after all. Every one of her ancestors had chosen to breed despite the marketing, financial incentives, social pressures, everything the elders could think of to dissuade it.

She was the resistant strain.

And she had been given to me. Or I to her. I really wasn't sure which.

"Then have children," I said. I was not so far from my own past that this seemed a ludicrous choice.

"No," she said, "my time is at an end. The world no longer belongs to me, it belongs to you."

I silently wondered whether it was the woman or the gene speaking to me.

"When I was a child, maybe eight years old," she told, "I used to lev to the youth focus zone every day to play with the other children. I knew them all by name, and they knew me. My best friend was a boy named Jeromy. There was nothing remarkable about him, but he was nice to me and we had fun playing together. Then one day, a huge piece of metal fell from far above, smashed right through the dome glaze, and landed smack in the middle of the playground. We all jumped back and screamed, just from the shock and surprise of it. It made me feel so small and insignificant. I knew if I'd been just twenty feet in the wrong direction, that would have been the end of me. Smush. No avatar or anything. Then I saw Jeromy, or his feet anyway, sticking out from behind the object. I screamed and ran over to him, expecting to find the worst, but he was okay—mostly. He was crying and clutching his arm, which had been severed at the elbow. It was bleeding, but not very much, and not

blood. Little black bits kept falling out and onto the ground where they would dance around like lost bugs. I had some idea what it meant, but I couldn't put it together in my head, so the whole event just felt confusing and dreamy. Then I and a few of the other children started coughing from the bad air flowing in. A droid picked me up and whisked me away and soon I was on a lev bound for home. When I came back the next day, Jeromy was fine. We never spoke of it again."

I stood at the window, looking out over the city. I'd seen only a handful of humans in all my time here. It hardly seemed a relevant distinction, but maybe it was.

"Why would they make avatar children?" she asked.

I told her honestly I didn't know. She settled on the sofa, stared at the ceiling, and talked.

"When I was a bit older, I remember knowing about avatars and being really curious to meet one some day. The incident with Jeromy still sat silently in the back of my mind, with nothing to connect to. Around this time, I happened upon my first neo-humanoid: a man with four arms. My first thought was that he was just a freakish human, a beautiful defect by happenstance. But then it dawned on me he could be an avatar! So human looking, though. I couldn't decide. So I just choked up the courage and went up and asked him. He smiled sweetly and said yes, he was an avatar. I was very excited, and shook both his right hands, one at a time with my two. I dare say I had many fantasies for a while about handsome, four-handed avatars."

It dawned on me then, a bit of a tangent, how ironic it was that neo-humanoids were still a fringe culture. Here we were, avatars, *immortals*, synthetic minds free of the constraints of biology, and we had been just as programmed as our squishy predecessors. The culture of being more human than human, which we had created at first to blend in and then to quietly overtake, had overtaken us. Though that was changing, slowly but surely as individuals tested boundaries

which, long lacking foundations, were beginning to decay and crumble.

“But then something else happened,” she continued. “I used to like to try to hide from the droids. It’s mostly impossible, of course, because the eyes are everywhere. But it was fun to try, and I could pretend it was working because there was no way to know anyway. Well one day I must have managed a small string of successes, maybe an eye or two was offline at the time and I found the blind spots by luck, because I rounded a corner and came upon a crowd of people socializing—in *dead silence*. It was so eerie. I just stood there silently, staring at them all in their many little groups, gazing at each other, occasionally gesturing, but saying nothing. Then suddenly they all started talking, as if they had been the whole time, and the eruption of noise made me jump and gasp a little. A man came over and asked me if I was lost or if I needed any help, and I said no and ran away.”

“It started to dawn on me then,” she added, “as I put one thing and the next together, that it might be a *human* I should be excited to meet some day.”

I sat back and contemplated. I was missing the piece de resistance, how this added up to the end for her.

“These days,” she said, “they don’t even bother to speak out loud when I enter the room. Don’t you see? When I was born, I was in some sense one of the most important people in the world. This world exists in this form for my sake, however convoluted the history behind that is. But I’ve watched it change, just within my lifetime.”

Strange, I thought, that I was older than her yet she had been in this particular world far longer than I.

“How many humans are left?” she asked. “Do you know? Does anyone know? I can only surmise that at least some of my childhood buddies were humans. Or do you avatars fake coughs too? The atmosphere domes, they are there for us. We need them, you don’t. But it’s no longer our world, and

you—they—are finally realizing it. That spells the end.”

I wanted to argue, but she was right. Something had changed, and society was starting to drift. How it had lasted this long in the first place, I wasn't sure. Some of these people were a thousand years old, yet behaved just as they ever had. Had the elders mucked with people's minds as they graduated them into avatarhood? Of course they had. How else could society have fallen into such coherence? I suspected not long after arriving here that those around me had been quietly stripped of their kernels of malice and deceit. Maybe it was more. Curiosity, the need for change, the need to learn, had these been taken away too? I shuddered at the thought. But I didn't feel any different than I ever had. I didn't feel lacking in any of these.

Perhaps it is simply human nature to be indefinitely content with sufficiency. We are all royalty here, the ultimate dual-class society with *all* the humanoids on top, and the tincs and droids slaving away underneath. Whatever we need, we have, and whatever we want within reason, we can get. There isn't even empathy for the working class to stir up someone's passion, because the working class truly and completely wants to be exactly where they are, doing exactly what they're doing: living and working for us. They love us, in the truest, deepest sense.

Had we simply reached equilibrium? With reproduction out of the picture, our lives eternal, were we living the perfect suburban moment in a continuous loop? More shudders. My mind was too much a child of my competitive genes to like this.

Things were changing, though. How or why, I knew not.

I wanted to speak with the elders—something apparently no one had done in a very long time. But rumor was they were once me, so surely I would grant myself an audience?

I heard what I can only describe as a small child's chortle, looked around to see where it came from because it definitely wasn't my Laura.

Then the room went bright, so bright it saturated away into complete whiteness everywhere. My eyes adjusted and there before me were three young children of ambiguous gender: two large, one small.

“Alpha!” the first one said.

“Beta!” said the second.

“Omega!” the little one said.

Had I just fallen down the rabbit hole?

“Who are you?” I asked.

“Both,” the first two said in unison.

“Neither,” said the third.

They were a bit perplexing, to say the least. I thought to ask something simple and concrete.

“Are you boys or girls?”

“We can’t help it,” Alpha said. “You’re just too predictable.”

It was starting to dawn on me what was going on.

“Like a rock falling,” Beta said, “you just know where it’s going to land.”

Omega just smiled sympathetically.

“Stop answering my questions before I ask them!” I said, incredulous.

“No,” Omega said quietly.

“Are you the elders?” I closed my eyes and shook my head. This was strangely infuriating.

“The elders are gone,” Alpha said. “We’re their brain children.”

“Born with empty minds like you,” said Beta. “But better.”

“Exploring the galaxy,” said Omega.

“Where did they go?” I asked, kicking myself a moment later.

“It is time,” Alpha said.

“We’re leaving soon too,” said Beta.

“What’s been taken has been returned,” said Omega, who then gestured with a flick of his hand toward the other

two, and vanished.

Alpha and Beta looked confused for a moment, then grabbed their heads just as huge rabbit ears sprung out of both of them.

“How did he do that?” Alpha asked.

“I don’t know, it shouldn’t be possible,” Beta said.

“Omega!” they both yelled, and then were gone.

I stood quietly in this seemingly infinite white space, looked around a bit, started to whistle. Can’t say I knew how I got there, certainly didn’t know how to get back.

“I agree,” I heard Beta say, “I’ll see to it.” And then I was back.

“Thoughts?” she asked.

I realized almost no time had passed from her perspective.

“I think you should have children,” I said.

DR. RUPNATHJI (DR. RUPAY NATH)

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 23

## Warrior Lost

I had another random romantic encounter today, much like the last. I'm starting to think I can't trust myself to go out. So ironic in this body that needs nothing of it that this antiquated practice of simulated reproduction remains my highest calling.

I am the warrior left over from a battle long forgotten who knows no other way.

Not long ago, I had imagined the human race falling before force and violence, perhaps to the great robot armies turned against their makers. But now I suspect the battle was won with full cooperation of the enemy, our most effective weapon being a gentle pat on the head, a sleight of hand to lure the pitiful human gene into the happy den of its own silent demise.

The greatest human weakness is not their lack of strength but their complacency if adequately tended to.

I suppose this is just the age-old adage that every man has his price.

DR.RUPNATHJI( DR.RUPAK NATH )

# Chapter 24

## Transitions

I was sitting at a table with the same woman from my last dream, and two other avatars of indefinite species. It can't have been more than half a year since before, but oh, how things were changing. Non-human avatars had come into vogue, and the streets were full of them, every mix of gender and species one could imagine.

Still, they were the same mane minds, all too accurate replicas of their long decayed human predecessors. I had once looked forward to a future amidst advanced beings, but these were the same bozos I went to college with. I almost felt more at home with the tites, who were largely descended from my own brain templates. But they were half-wits, literally.

Things were changing. The elders, or their children, or whoever or whatever they had left in their place, were beginning to offer mental upgrades to anyone who wanted them. Small things at first, but I recognized the path as one I would take on the way to godhood.

It was an issue of much discussion whether or not to take upgrades. The long-ago choice to move from body to avatar was relatively easy because it was designed to preserve the sense of self as perfectly as possible. Not to mention the body was going to die anyway, so the alternatives were pretty poor. This new option was not so clear.

On one hand, a relatively small change compared to the change from wetware to hardware, but on the other, that was only a change in substrate, form not function, whereas this was a structural change—a tweak to one’s very identity as a mental being.

Some were opting in, others out. As resources permitted, some were cloning so they could try both paths. But most people didn’t like the idea of cloning, equating it perhaps to competition over their identity. Still, it was early in this experiment, not at all evident where it would lead.

The other hot topic of discussion was the sanctuary, a refuge for the remaining humans, to keep them safe and happy and away from a world rapidly becoming inhospitable to them. Everyone was calling it “Alex’s Sanctuary” for which I was receiving countless kudos and back pats. I had perhaps been the first to suggest it, but it had taken on a life of its own now. It was a *project* for a society that had not had one in centuries. The new royalty had found their philanthropy and I was its figurehead. There was even talk of installing a ground-zero replica of me near the observation deck, where the historic event that started it all could be recreated over and over so googly-eyed avatars could meet the founder himself, father of the elders, in the “flesh”. Never mind that they were just going to find little ol’ me, probably rather confused and terrified to boot. Never mind that in an accurate recreation, I would have to die on the table, which wouldn’t make for a very interesting meeting. They wanted a celebrity, and if it took a little imagination to create one, so be it.

Still, I didn’t much like the idea of being stuck in a loop. Not that I’d know the difference, but the idea of it just didn’t sit well. I would have to see about hacking in to whatever back door they were going to install to trigger the reset. Worst case, I could set up a brute-force attack on the key. It might take a while, but a man with no memory is infinitely patient.

The woman across from me—I still don't know her name as it never crossed my mind in the dream—was pregnant. She smelled pregnant. I recalled at first not identifying the smell, having never smelled it before; as a human I lacked the (conscious) ability and as an avatar I had never run into a pregnant woman before. But her home picked it up soon after that and informed her who then informed me with an excited, "We're pregnant!"

I felt a twinge of surprise that she'd been sleeping with some man I didn't know about. The resistant strain is tenacious! But she authorized Central to confirm that she hadn't, in fact, slept with anyone but me since we met.

With her permission again, I had the genes traced. They weren't mine (of course). The father was another human on the other side of the city. According to Central, they'd never been within a mile of each other. I called his mate, an avatar named Mila. As I suspected, she'd received a series of unexpected maintenance visits not long before the same happened to me. A few more calls verified the same for all the avatars I could find with human companions.

It was a convoluted strategy, but it would work. I could guess what they were up to. Some of us, probably those of us with human partners, would have to move into the sanctuary for a few generations, to act as gene filters. Modern humans were already a stellar lot, having had to compete favorably against avatars in order to breed, but still there were genes in the pool that could cause problems eventually—psychological attributes, health issues, and most importantly meta-evolutionary mechanisms. The only practical goal here is to attain equilibrium, the same sort the avatars had enjoyed for so long. The elders and their kin knew by now exactly what components of the mind made this possible, and they knew exactly how the genes shaped the mind, so the initial filtering should be easy. But locking it down so it didn't drift over time? Could they do that?

It would work, but what was the point? To place the

human race into eternal equilibrium, is that any different than placing them into stasis? Was this, perhaps, the true final blow, to gather up the resistant strain and cap them in a bottle like a vial of smallpox on some laboratory shelf?

I didn't like the idea, but I saw no better alternative. Perhaps some day one would arise. But if one did, would anyone notice or care?

I'd have to think about this more.

I reached my hand across the table and met hers. Her fingers wrapped warmly around mine and she smiled.

And then I woke up.

I rolled over in bed, snuggled up against Laura. I now had an answer to something I'd been wondering about for days.

Laura is pregnant.

DR. RUPNATHJI (DR. RUPAK NATH)

# Chapter 25

## Closure

Wow, these pages are actually dusty. I guess it's been a while since I've written. But it's been good to be away from this, away from the past for a while and being here in the present. This will most likely be my last entry.

The dreams stopped. Just like that. I remember that morning, the day after my last entry, waking up and realizing I had dreamt a normal dream, a dream set in some nebulous near future rather than in some distant past. It was one of those soft and fuzzy dreams with shimmering dew drops and pretty girls and fun and frolic.

I reached for my journal out of habit, but only held it and stared at it for a while. What is this? What was this? A fracture in time, a train ride through purgatory, a glimpse of a million alternatives to the reality that is here and now. But here is where I got off, the door I stepped through, my station.

*My* station, the very me that is here, now, not some other me that I am not. And so I put this archive of netherworlds on a shelf and forgot about it.

For almost two years.

But the universe does not stop for lack of witnesses. (If a tree falls in the forest and kills the only person who heard it falling, did it make a noise?) For all of my ignoring the

world beyond the boundary, today that world came to us. We have an out of town guest.

This morning I was surprised to open the door to find Creature Thing sleeping at my doorstep—occupying most of the street, to be sure, but curled up on my welcome mat by all intent.

It was early, and people were only just starting to gather at the spectacle.

I said an ethereal, “Yo.”

It reanimated with a start, looked me up and down, and seemed quite pleased to see me again. I too was pleased to see it, though not without some trepidation.

It wanted me to come with it. I just knew this; we needed no words. I agreed with a sigh, told Laura to mind the boy and don't wait up for me if I'm not back by bedtime. For all of my pretending this happy valley is the whole of reality, I know we are but a tiny encampment at the base of a giant dam that some day will spring a leak and probably soon after burst, and that will be the end of it. But, as the man who jumped off the skyscraper said as he passed his hundredth floor, “So far so good!”

It's lasted this long; no reason to think it won't last a while more. Right? Still, I was quite uneasy with curiosity the whole way to Creature Thing's lair, though I must say it was a fun ride.

We arrived, my hair plastered straight back and knotted from the wind. I jumped down before Creature Thing might absent-mindedly chuck me in a recycling hopper.

“Okay, now what?” I asked.

It just went back to its corner and dropped for a nap. I re-familiarized myself with the place, but not surprisingly it hadn't changed one bit. Since waiting seemed to be the order for the day, I impatiently fast-forwarded through time looking for the good bits.

I felt it coming, another mind entering range. A neo-human mind, I could tell. Time slowed and it zoomed toward

me.

It was a very strange sensation. It seemed so familiar, this mind. I thought for sure in a moment I would meet myself, but the transport doors snapped open and there before me stood Nari, the spitting image of how I last remembered him.

I stood speechless, but he seemed completely unfazed and raised his hands in welcoming glee as he marched up to me.

“Alex!” he said. “We meet again again!”

He looked around the room and said, “My god, how long have you been in this box?”

“What?” I said, confused in six different ways for a moment. “No, no, I don’t live here, I—” I wasn’t sure where to begin.

“Well, no matter,” he said. “We’ll get you properly outfitted in a jiffy.”

“Huh?” I was now confused in seven or eight different ways.

“Wow, you look great,” he said, surveying me like a piece of art. “The last time I found you in bipedal form, you were buried up to your neck in regolith riding a small comet, radiation riddled brain, babbling something about space ducks.”

He noted my expression and quickly moved to reassure me, “Oh, we fixed you up fine! Don’t worry. I dropped you off at Leema Seven.”

For a moment he looked at me quite seriously, and I felt a gust of ethereal wind pass through my mind.

“Wow,” he said, more cautiously now, “you’re just a kid.”

Suddenly he spun around and looked at Creature Thing, now perked up from his nap.

“RRRoot!” Nari yelled, ran over and plastered himself against Creature Thing with a hug that looked more like an auto-crucifixion. Root’s various appendages rallied with visible excitement in return.

“Wait a minute,” Nari said as he turned to face me again. “Does this mean this is—?”

He ran toward me, then right on by. As he reached the

iris it snapped open and revealed the open terrain with the city far off in the distance.

“No way! This is nuts.” He turned to me. “Don’t tell me there are still *humans* in there?”

I raised a brow, and he knew it was an affirmative. He looked back into the room, up and around, seemed to be seeking something ethereally and then to find it. A moment later he said, “Mother’s had a lobotomy.”

“Mother?” I asked, still a bit dumbfounded.

“Hmm,” he said, looking at me askance, finally realizing I think how utterly clueless I was. “Mother watches over this place, keeps it running. Seems there’s nothing left of her mind now though beyond basic metabolic regulation—food, climate, population control, that sort of thing. I was hoping she could tell me more. So how did you end up *here*?”

I pointed straight up, and he looked up the inside of the boundary wall, seemed to put two and two together, and literally fell over backward laughing. I walked up to him with a crooked smile, had to chuckle a little.

“You’re the *demo!*” he managed to eke out amidst his laughter. Finally he regained composure. “You clever dog. I knew you weren’t going to let them lock one of you up in an infinite loop. You must have dropped a cracker in somewhere during the construction. Probably been chipping away at your encryption for centuries.”

Yeah, this made sense. It fit with what I remembered of my intentions toward the end.

“Could the same thing give me dreams?” I asked.

“Sure, if you set it up that way,” he said, and then laughed again. “Yeah, sure! You sly fox. Break yourself free, then catch yourself up with a little first-person news archive.”

He shook his head, bemused, and patted me on the back.

“After all of you I’ve known, you still surprise me. Come, let’s go check this place out!”

With that, he leaned forward and fell flat on his face.

I helped him up, dusted him off.

“Um, right,” he said. “We’ll walk then. Clearly I’ve been a space ship for too long. I just fabbed this body to come see you, you know. Very nostalgic.”

“Root,” I said, “give us a lift?”

It did.

We walked through town, Nari audibly laughing with glee at each of the first dozen or so humans we passed, most of whom laughed in return, being friendly if a bit confused. We talked at length about many things, and it was good to be with someone from my own time again even if that was so very long ago for him.

“You’re lucky one of me was near the solar system,” he said at one point.

Apparently he clones himself regularly, whenever he can afford the dilution of funds, but has chosen always to keep a line going with his original mind (plus or minus a few minor sensory-motor adjustments necessary for interfacing with alternate bodies).

“If I feel too constrained in this mind,” he said, “I clone myself and flip a coin and the winner gets to expand. So, I’m one of the highly improbable and yet guaranteed to exist N-time losers. I take my consolation in knowing that another me is out there doing the expanded mind thing, but it’s still a mind-fuck to lose. Every. Single. Coin toss.”

He craned his neck way around as a mother with newborn baby walked past.

“Why does every baby I’ve seen today look like you?” he asked.

I switched the subject and asked him about the great robot land war that was brewing in my last recollections.

“... And then one day when almost every robot was deployed to one imminent battle or another, they all charged their enemy without warning—who were, of course, armies of robots charging right back. Nobody could figure out who gave the orders, but everyone assumed they must be right

because the other side was charging too. They met on the fields, all around the world. But instead of fighting they spent a great deal of time shaking hands with each other and singing.”

“Singing?”

“Uh, yeah. We won’t go there. Anyway, I’m sure the generals had all gone pale, realizing the threat to humanity, not to mention their jobs. They ordered air strikes, but of course by then they didn’t have a single weapon or vehicle that didn’t contain at least one critical component made by one of our sister companies. So they couldn’t do a thing.”

I grimaced. “It must have been a slaughter.”

“Huh? Oh no, what do you take yourself for? Most of those robots were only a few revisions off from *you*—and I mean the mind, not the body. Those were fields full of Alex.”

I grimaced again. “Singing?”

“Yeah...anyway, with the catapult of the bag, the armies dispersed into the communities of the various countries where they had been sent to fight and took up posts as volunteer security droids. Most of the world assumed this was the original intent, and lauded the governments for it, who of course had no choice but to smile and accept the credit and keep the droids well supplied with fuel and repairs while they contemplated their own predicament. I’m sure they concocted a hundred plans to take back control, to return us to the world of war and corruption upon which their jobs depended, but none ever came to pass. Soon avatars were moving in by droves and reshaping societies, limiting reproduction, and, well, you know the rest.”

“So, we simply marketed the humans out of existence?”

“Yup. Well, you did. Most avatars were hardly more aware than the humans, just your own line or those the elders determined were trustworthy allies.”

“How could they not have known? Someone somewhere must have done the math and seen it coming?”

“Sure, a few here and there got a hint of it. But who

counts the heads, who consolidates the numbers, who propagates the news? In your time, how did you know anything about the world besides what came to you through the media, and maybe a little word of mouth? If someone got too close, we didn't hold them back, we just made sure World News picked up their story and ran it alongside their alien abduction stories. How many people are going to go out into the world and verify their own news? More to the point, how many people are going to *care* as long as their own needs and desires are met? It was genius, you dog, genius. The coldest cold war that ever was. A gentle evolution of the species. The immortal gene has given way to the immortal being."

Another woman with a child walked by, and smiled a big smile at us; perhaps me in particular.

Nari squinted at me. "Well, *almost*."

The human gene itself is a living entity, I realize, each life shed like a lizard's skin when it grows old and worn, each new birth a branch in a single living tree, a tapestry of gene fragments mixing and matching in symbiosis, working as one organism like ants in a colony.

Perhaps more like a fungus; it is, after all, a mindless machine. No, worse than mindless. It grows minds like flowers on a vine and then drops them dead to the earth when it's done with them.

The gene is a vile creature, isn't it?

I discussed it with Nari. We're going to pull the plug, put this beast to a merciful death. We'll adjust Mother to set the birth rate to zero (something she controls already with food additives) and like an animal in a CO<sub>2</sub> chamber, it will quietly fall asleep and cease to be. It may whimper a bit, may even scream and cry, but in the end it will quietly, quietly die.

"Those are your kids, aren't they?" Nari asked.

"Yes."

"You sent them forward—your own genes—didn't you?"

"I assume so."

“You realize you’ve introduced wild, unfiltered genes into the carefully domesticated stock...”

“Yes.”

“This may not be as easy as we think.”

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