

The Sky to the Left

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If he were lying in bed with his eyes closed, he would surely detect his eyeballs moving against their lids; he'd have a sense of his own breath, or his heart-beat, but Añe feels none of these. There is no warmth or direction or location. He knows only that he has been dreaming for a very long time.

In his dreams there was someone creaking the floorboards of his house, someone who could not be found. Before that he dreamed of a country lane, and before that something green and speckled. He tries to identify a sign that he is alive, but there is only that most Cartesian piece of evidence—that he is thinking—to prove he exists at all.

When the confusion finally clears and he remembers who and where he is, his thoughts disintegrate. He has no physical sensations, so the lurching sense of horror—that empty feeling in one's stomach that so resembles falling—is completely missing. His experience of grief and fear is a mild incoherence in which images flash and he is unable to reflect on them.

He has realised this; that he has awoken from a computer-controlled state of suspended animation, and things are not going well. He knows the sequence because he designed it. He recalls the faces of the project team, the diagrams, the schemas, the components. And of Truly. Above all, of her. The memory of his lover's face is both a feature of his incoherence and its cause.

He was a twenty-two-year-old neuro-technology student when it became clear to him, as to everyone else, that the Earth's atmosphere was deteriorating beyond recovery. And around that time, his professor, Dr Jambar, proposed that the whole population of the University dedicate themselves to the challenge of surviving the firestorm that Earth was expected to endure. After much study, the only answer that looked plausible was to put their lives on hold for two hundred years until the atmosphere recovered. They believed they had the resources to produce the technology, so they set about it. For five years they toiled. They built a huge dome on the campus with air locks, oxygen filters and solar cells. They refined embalming techniques to arrest the deterioration of human tissue. They built suspension pods and surgical interfaces to provide nutrients, to flush out waste, to cleanse, lubricate and gently massage human bodies that would suffer no shock, strain or pressure. And all this time Añe and Truly worked on the suspension of consciousness. Their research took them deeper and deeper into

the brain as they sought ways first of isolating and then of replicating the functions of the mind.

And while they worked, drank coffee, ate pizza and hoped for a future, they also fell in love. There were many times when Truly was showing him a diagram of something—usually some part of the unfeasibly complicated helmet which they used to control the brain—when his urge to kiss her lips overwhelmed his ability to hear what she was saying.

They were part of a small community that was meeting a crisis, and everyone felt confident in themselves; proud and hopeful. There were many love affairs and moments of joy. But when at last, the air dried out and heated up and the Earth became uninhabitable, it all soured rapidly. Everything outside died and the dome became their world. They went from research to a hurried implementation and no-one dared mention the implications of failure.

Everyone on campus was reserved a space and one by one they were each suspended. Computer models predicted a return to life-supporting conditions in less than two hundred years, so they allowed a tolerance of double that and then added a fail-safe; if the system had not detected the right conditions after five hundred years, it would automatically wake the first operator. If that person failed

to respond or did not survive the reconstitution, the system would automatically re-awaken the next

By the end of the development, Añe and Truly had become two of the most senior members of the team. Only Truly understood all the software surrounding the mind-controller, and only Añe knew every component. It was decided, therefore, that they should be last in and first out. There was no debate at the time; Truly was chosen to be woken first. Añe would be revived if her recovery failed.

So while his thinking proves his own existence; it is also evidence of the end of hers.

He has no measure of the time it takes to recover his thoughts from the grief that disintegrates them. He gauges it only by the growing frequency with which he tells himself to think clearly. The clarity dissolves over and again before he starts to settle but he pulls himself together by nurturing a grain of hope. A thought occurs to him that the revival process should not have involved a long period of pure consciousness and since something has evidently gone wrong with his revival, it is plausible that something has also gone wrong with Truly's.

Añe starts calming with the assertion that Truly's healthy working body is most likely still lying inert some three metres to his left. He waits.

With only his thoughts to judge the passing of time, he starts off by guessing how long he has waited. Hours turn into days.

His thoughts are jagged to start with, jumping from topic to topic, without focus or direction. He has conversations with himself, breaks into imaginary song, pictures the halls of the dome, his flat, the sea off Cardigan Bay. Sometimes there is nothing coherent at all, only whirring spirals and electric jagged lines.

But days turn into weeks and his thinking calms. He wonders what has gone wrong with the revival sequence and so he pictures the modules and diagrams and he steps through the stages it should have followed. For a while it is hard to keep his logic together thinking like this, but weeks turn into months and his skills develop. He becomes adept at hallucinating and finds he can write on imaginary paper then leave it to think about something else, turn back to it, and read the text like he was holding it in his hands. He is neuro-science graduate; he knows how this works.

He develops a theory about the failure of the revival. Power for maintaining the life-support functions comes from a geological sink; only an earthquake could interrupt it. But the power for the revival was to come from solar panels and they have obviously failed. So it has restored his ability to think, but not to see, feel or

hear. And now it has happened, nothing will change. He is stuck like this for all time, or until the life support systems finally malfunction.

Months graduate into years. Añe's ability to hallucinate transcends his de-animation. He nurtures the ability to concentrate so completely on a single scenario that he starts to experience it as real. He can re-visit and re-write events of his childhood; practice and master inhuman feats of sporting prowess; travel to unbelievable lands; take part in incredible adventures.

But of course, none of it touches him. Añe cannot not get depressed any more than he can be elated; his software systems control his hormonal levels so whatever the direction of his thoughts, they always remain mildly optimistic.

When the calendar reaches one hundred years, he already knows how it will end. Something else will fail; a tiny amount of lubricant will dry up; a sore will develop; the sore will progress into a tissue failure and the descent from flaw to fatal collapse will be swift. Engaged in a burgeoning catalogue of mental adventures, he expects the end at any time, but two hundred years pass. And then three.

And then something changes. A thought occurs to him that did not come from his imagination. It is a single dull tone which, once started, does not stop. For a

long time he waits, expecting another development, but nothing further happens and the noisy thought merges into the background.

Thirty years later, he hears his name.

"Añe?"

He knows the source at once. He worries it is an hallucination of his own creation, but hopes that it cannot be.

"Truly?"

He instantly recalls her face and, with the careful, clear type of mental diction that is needed to communicate via thought-software, he reaches out.

"You're alive!"

It takes some time to be able to think clearly again, and from Truly's silence it seems she too is confused by emotion.

When they recover they start by just repeating each other's names. They cannot touch on anything emotional; it blots out their ability to think. So Añe asks how come they can communicate. Her answer stuns him.

"It took me years. I taught myself to think in machine code."

Despite the evidence, Añe cannot believe this and his mental discipline falls apart. The idea of composing binary messages in your mind, then thinking them fast enough for a computer; it seems unimaginable.

"How long did it take?"

"A hundred and fifty years."

In everything that follows, in all the rest of his thoughts, he never shakes off his state of awe at that answer. While he was wasting his time reciting films, she was teaching herself to think in machine code.

"I managed to produce a NACK after about fifty years of trying. It was another twenty or so until I managed a second one. Once I had enough control to turn the baud rate down, everything got easier."

The constant noise, it turns out, was Truly's first attempt at communicating from one person to another. It was badly flawed.

"I don't dare delete it," she whispers, "I've never delete anything."

They work together again. They explore the software systems using Truly's extraordinary ability, taking tiny, laborious steps closer to control. One day Truly describes the heart of their problems.

"Power reserves are 0.3%. It could be 3%, but I'm fairly sure it isn't. It's 0.3."

They consider this in silence. They share many types of silence.

"Sometimes I wonder, Añe; do you think any other pockets of humanity survived?"

Añe has no idea, and doesn't wish to speculate, but Truly seems to think it is important.

"Maybe it is just us... maybe these thoughts, yours and mine, are all that is left of humanity?"

"Maybe."

"So either this is the last, trailing end to our species, or else perhaps it is the tiny thread of connection between life before and life after."

"Yes. Perhaps it is that."

They devise a plan. They will improve Truly's communication software to provide mental images as well as sounds.

"It's just a question of firing synaptic pulses right? We can do that."

If they can hook it up, they will be able to see the computer screens and read the data. New worlds will reveal themselves. Ultimately they might get one of the closed circuit cameras working; maybe they'll be able to see inside the hall and figure out what's wrong.

They encounter problem after problem, but Truly is indomitable. Each time Añe considers some obstacle too immense to ever overcome, she just starts chipping away at it. With an endless supply of time, her incremental successes add up and she soon re-engages his hope and enthusiasm.

After just ten years, they are projecting computer screens into their mind's eyes.

Añe is elated just to see something he did not conjure himself, but without feelings or motion, his elation is mute. They re-acquaint themselves with the controls and quickly get back into the life-support monitor.

They check the status and fall silent at the miraculous, incredible figure. 100% of all life systems are fully functional. Conditions outside the dome are perfect; a fully life-supporting atmosphere.

Their work becomes intense. They find a camera, discover the software that controls it and, once Truly has mastered the interface, fire it up.

It is a whole new type of silence that greets the image. The great hall, in which five thousand pods are spaced across the floor, glows with dim, primeval gestation. There is precious little light, but enough to show the human forms, each at a different stage in a cycle of slow, ridiculous movements designed to keep muscles and joints working without wear. The dustless atmosphere has left the floor still clean. Añe scans the rows near the command platform. The third one in is mostly hidden in shadow, but that's him; feet and arms outstretched like a phantom cyclist. He is not just thoughts. He is still there.

"There's no light," Truly notes. The obvious truth is confirmed from the sensors on the solar panels. They are contributing scarce microamps to the power cells.

Añe's thoughts dissolve at the irony. They managed to build machines that preserved life, apparently to perfection, they have lasted hundreds of years longer than they thought, and the one flaw that has them teetering on the edge of extinction is the simple solar panels. Whatever has grown on the outside of the dome has covered them.

But then it strikes him that since the flaw is so simple, the solution might also be.

"We just have to clean the windows, Truly."

There are machines. Maintenance robots with auxiliary doors that can get onto the surface of the dome to affect repairs. They just need one such robot. There are six.

The first and the second do not respond to any sort of computer command. The third has power enough to indicate that its batteries have failed. The fourth has 30% of its charge. Its batteries have, miraculously, lasted hundreds of years.

They spend months working around software incompatibilities to see through the robots' cameras. Testing their work eats painfully into the machine's power reserves, but that isn't the most frightening thought. The robots are embedded in the outer skin of the dome, protected by sliding doors. To get the robot out onto the dome where it can clear whatever is covering the solar panels will mean opening the sliding door. They probably haven't enough power to do that, but if they have, it will only work once.

Añe dismisses the notion of a dilemma.

"We have no choice."

Truly gives the command. Power immediately drops to 0.2%. The door grinds open with appalling reluctance. Once it is done, Truly notes the level of power remaining.

"0.15%. What happens when it gets to zero?"

Añe doesn't really want to consider it.

"It won't be able to suspend us—that takes power. It would lose all computing functions, the camera, everything else. We'll go back to thoughts in the darkness."

The robot has little tank tracks to move about on. It wobbles as the tracks take it forward and it lurches dangerously to one side as they direct it out of its hatch. The scene outside is astounding; there are trees close by and far off, bushes, grass and plants of every variety. Insects buzz through the air and the sky is an ardent blue with proud white clouds parading in front of it.

The grass, moss and plants slow the robot, but Añe is convinced the panel will take relatively little cleaning.

"It is tempered glass. Nothing could get roots into that—not like concrete. It'll clean."

Then Truly directs the robot to the right, to avoid a tiny bush. It turns, but tilts and stops. She backs it up and moves forward again, but it gets pushed to the side. She tries backing it up, but whatever the tracks have caught on continue to snag. The camera is pointing at the colourless ground.

It moves, shakes, then curls around and the sky arcs across the view and stops with a shudder. It settles on an image of grass to the right and sky to the left.

They say nothing.

Truly tries using the utility arm to push the machine back on its feet. When that is obviously failing she goes back to the tracks, but they offer nothing. She searches the robot's manual, tries the arm again, but eventually the batteries run flat and the signal disappears.

What follows is the longest silence.

Eventually, Añe offers a suggestion.

"If we put ourselves back into suspension, power levels will restore to 0.3%. Like that we can just wait it out. Something may happen to clear the solar panels. Something may happen."

"You really think so?"