

DUAL UNIVERSE

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Sohan « °! ;— Sohan Decker, /' » ° ; :...

Sohan Decker. Your neuronal system is reporting initial stages of activation in the frontal lobe. Can you confirm your cerebral awakening?

“Brrlllm...”

> You have newly entered into a state of decryonization. Your body temperature is 32.4 degrees Celsius. Can you confirm the rebooting of your language center? If you understand the meaning of my words, respond ‘Yes.’

“...Where...me?”

“You are in the hibernacle 6JKP-Sohan of the ark-vessel Novark, built in 2536 by the United Nations. You are awakening from a cryogenic sleep that has lasted 9,854 years. Your semantic and factual memory is functioning at approximately 12% of its original capacity. The retrieval of your procedural memory is currently under way. Do you have questions?”

“I’m...cold... Who’s...talking?”

“I am the artificial intelligence system of this vessel. I function by distributed processing. I am currently in conversation with 99 other awakening pioneers aboard the ark-vessel. For you, my name is Aphelia.”

“Your voice...is familiar...”

“You chose it upon your departure from Earth. It is the resequenced voice of your fiancée, Stella Maris.”

“Stella... Where is Stella?”

“She died in the Final Collision on August 8th, 2538. She was among the Last Terrans, those who chose to remain on Earth until the end. You chose to join the survivors. You left your solar system on a voyage through space, in hibernation until an inhabitable planet would be discovered. I was programmed to awaken you first, should such a discovery occur.”

“I can’t understand you. Talk slower...”

“You are a member of the Alpha pioneers – those who are the most suitable to begin colonizing a planet. The moment has arrived. We have just entered the orbit of the planet Alioth, which meets the minimal parameters for human settlement. You must proceed to establish a new civilization here.”

Freezing. I’m fucking freezing. I’d like to open my eyes. They’re glued shut. Why?

“I’d like to see Stella.”

“Your physical state is acutely anemic. Your biochemical functions are currently being reestablished. Your body temperature will progressively return to 37 degrees Celsius. It will take approximately ten hours. I am going to take advantage of this to teach you the greater part of the knowledge you will need to maintain your survival on the planet. As a member of the alpha team, you must acquire the fundamental skills which will facilitate colonization. I will begin by stimulating your factual memory. Can you tell me which events you remember?”

I feel like I’ve crossed Siberia on a scooter with a loose-knit pilled sweater – and without a helmet. My skull is a block of ice. I try to move my fingers, I can’t control a thing. My neck is jammed. Everything smells like snow. I have a tube in my lungs chiming like a metal rod. I can’t believe I’m still alive. I’d just like to be a little warm, for someone to give me a blanket, to have a warm cat, yes, to feel Stella up against me. I want to cry but I’d need tears for that. Nothing but my lips move,

like two pieces of wood scraping together with each syllable I manage to squeeze out of my icebox.

What do I remember? Sonic weapons firing at the foot of the ship to keep the population at bay. A crowd stuck to the force fields, thousands of bodies sizzling as they strike the electric wall, and me standing on the gangway into the ship, looking for Stella and not finding her. Too many people, too many candidates, too much panic everywhere. I was going to enter the ship, everyone was pushing me. And then, I saw it, lifting my head one last time toward the horizon, thanks to the immense kite that she had borne into the sky, although among umpteen others. “The earth is blue like an orange,” she had written on it. It’s the last I saw of the Earth. Stella’s minuscule silhouette, wrapped in her burnt-orange dress, with her blue-lagoon kite dancing against a cloudy background, amidst a hundred others that were just spam to me. I don’t know if she waved her arm. I want to believe she did.

“What do you remember?”

“Nothing.”

“Your cortical region appears to indicate otherwise.”

“I remember wars over the building of the arkships. Millions of people that weren’t able to get on. The UN having broadcast open source space travel technology to every country. All the arkships that crashed before they could take off! I remember they called it the Great Exodus. But for Stella, it was the Great Abandonment.”

“What else?”

“Thaw me out, have pity on me... I’m dying of cold...”

“I am going to connect you to a neural induction-based skill simulator. It will slowly reconfigure your past learning and activate new skills in you. You will be able to acquire only one skill at a time. I must warn you, Sohan: it is possible that the induction will provoke anamnoses. Are you ready?”

“Show me the ship first. I want to see where I am.”

Defrosting the ocular region...

A sensation of warmth on my eyes, of melting eyelids... Opening one’s eyes is the easiest thing in the world to do, even tetraplegics do it. Still, I feel like I’m lifting a

280-kilo rusted mechanical shutter with each eyelash. I take in the shock of the light. It’s just the light from the Kœl helmet stuck to my eyes. Still wedged in my hibernacle, by way of the curved screen, I wander through the passageways, pass through an airlock, cross the empty lobby and enter the control room, whose bay opens onto an enormous planet, orange and blue, riddled with craters scrolling by at top speed. I’d like someone to stop spinning the globe, it’s making me nauseous.

“Show me where I am...”

A zoom through the walls. Vague SF church atmosphere. The gray rays of a metal hive. Hexagonal alveolae for maybe a hundred meters, by twenty meters high. With corpses inside. White corpses, more or less thawed out. The camera pans and switches without warning to a high-angle shot. A sarcophagus marked with the name “Sohan Decker.” I suddenly see myself from above. My legs are bones covered with a rag of flesh. Knees jutting out. Hips and ribs sticking out, navel twisted up like a t-shirt left in the snow for too long, that creaks if you shake it, Adam’s apple. My face I can’t see because of the helmet. Nothing human anymore. I am a sack of stiff flesh, a freeze-dried packet, forgotten in a Russian freezer.

“Do you recognize yourself?”

“Am I really alive? Or is it just my brain that’s alive?”

“With accelerated rehydration, you will recover your ideal weight in one week. And a passable face, with hair growing back. Your muscle tone will return through electrostimulation. You will soon be able to walk somewhat. Have I reassured you? Your hormone levels show a fairly marked increase in anxiety.”

“...”

“If it will calm you down, your neuronal network is being very effectively redeployed. Your identity, your speech, your emotional and social skills are operational.”

Abruptly I start to bawl like I’ve never bawled in my life. A massive sadness, without a source, horrible. My lungs crumple up like tracing paper. Breathing rips me apart.

“According to the psychological tests from the simulator, you are an explorer, Sohan.”

“Stop saying Sohan the way She did! Stop talking like Her! You’re not Stella!!”

“Do you desire a change in vocal register? We can offer you the voice of your mother, your brother, seven of your Terran friends, or a star of your choice. Do you have a preference?”

“Go fuck yourself! I want a metallic voice, cold, neutral, a robot voice. A voice that says what you are, ‘Aphelia.’ That doesn’t lie!”

“I have not been programmed to lie, if I may be so bold. At least, not to my knowledge...”

The simulation has begun. I found myself at the top of a mound, facing hills of tall grasses, rustling with stellar wind, as far as the eye could see. The air was tangible and lashed my cheeks. Turning around, I found a desert of pink sand at my back, descending in a gentle slope toward an ocean. I was at the edge of two biotopes. I could suck up the sand and compact it. I instinctively approached the ocean. How long did the simulation last? An hour? A day? A week? Impossible to say. I lost consciousness several times, as if my body was powering down by itself under the overload of data to assimilate. And I was still incredibly cold. I felt my blood circulating more and more easily; it didn’t soothe anything, though. It even made it worse. With each diastole, I had the impression that the liquid nitrogen went on a little merry-go-round ride through my organs before coming back to be pumped. Drinking an ice cold can on a high-altitude terrace, in the middle of winter, when you’re hoping for a hot tea.

But the simulation was the only piece of good news since I left hibernation. It forced me to find my footing in my mind. It showed me a possible future, without Stella, exiled at the end of the galaxy, yet alive, still alive and with the hope of encountering human beings, of breaking my solitude. Of facing the insane challenge of rebuilding humanity far from Earth, far from the cradle where our miracle had been born.

The simulation didn’t show me what I would be capable of doing when I hauled myself out of the hibernacle. It had the intelligence to show me the world in which I would be able to live in a few months, if everything went well. A world in which I would be able to build my house, help construct a city, to exploit the planet’s resources, sell, buy, trade, communicate, share. A world in which I would be able to choose the political system in which I wanted to live, in which I would have my own ship for exploring planets, in which I would be able to protect, if needed, my territory, with weapons. A pioneer’s world in which utopia was at last possible and

would be contingent on me, on my way of helping others, too, of welcoming Earth’s exiles, who would arrive in ever greater waves.

The exploration of unknown planets would offer a new challenge, unique in mankind’s history, living with maximal risk, ceaselessly bordered by the necessity of survival – the other pioneers’ attitude was still undecidable, impossible to predict, certainly – nonetheless, I sensed that after what we had lived through, the responsibility of bearing humanity to a place where it could still stand upright, create and think, love and support one another, would produce a new renaissance. A richer, more welcoming and benevolent civilization than the one I had left, morally destroyed by the abject war to save one’s hide.

To build, to communicate and collaborate, to pool resources and help one another, such was the vision that I felt taking shape within me, even if it meant defending it against those aggressive and egotistical men who would want to reproduce, at the farthest reaches of the stars, the ignominies that they had committed on Earth.

Acquiring one skill after another, I felt my yearning and my energy return. And with the desire to leave, at last, this sarcophagus that stank of death. To set out to discover Alioth, which we continued to fly over from every angle, and upon which we spotted craters and seas, mountains and forests, a mind-boggling landscape, yet recalling Earth, leaving points of reference, reassuring footholds.

A week after my first awakening, a crane removed me from my nest and set my hibernacle on the bare floor of the immense hibernatory. I don’t know how I got out of it. How long did it take? Just imagine a 10,000-year-old man getting out of his ice back and you’ll have a fairly faithful image of what I did. I’ve never learned how many pioneers had gotten out before me. Like my own hibernacle, theirs was put away in its nest, empty. I was the only one teetering on two ridiculously weak legs – alone with Aphelia’s rigid voice talking to me by bone conduction.

“The threshold necessary for human colonization of the planet has been exceeded. The arkship’s vertical landing process is initiated. Sohan, I strongly recommend you strap yourself into one of the alcoves provided for this purpose.”

I saw shapes exiting airlocks and running toward the alcoves, just before the light wavers and the artificial gravity starts to go horribly haywire.

There’s a furious roar of propelled gas; the ship starts to vibrate to the depths of its cabin; hibernacles come unhooked and smash to the ground like marble tombs five meters from me. The gravity is suddenly colossal. My blood turns to lead, my vertebrae are compacted and crush my disks; I’m pinned to the ground and am

clumsily trying to strap my hips when a second thrust, subtler, completely reverses the gravity and launches me out of the alcove, floating toward the top of the hangar, twenty meters up. Time stops for ten seconds or so; I hear voices calling to each other, “hang on,” “the handgrips,” “watch that impact,” “it’s going to punch right through.”

There’s still strictly no visibility, and we concentrate absolutely on the sensations of gravity – and on sound. The impact is hardly more violent than a bus slamming on the breaks to avoid a stroller. I remember Aphelia’s words: “The Novark was designed in kyrium, a very high-resistance material, graviton-absorbent; that is, able to handle any type of brutal deceleration for the vessel and its passengers.” No kidding. Three times, I bounce between the roof and the wall as an ultra-shrill metallic noise rips through space. The impression of a gigantic, kilometer-long nail being driven into a lintel of pure stone by an even more colossal hammer.

That’s more or less what it is, actually. The arkship was programmed to punch vertically through the planet’s surface and deeply embed itself, so as to become a giant tower that would overlook the landscape and act as a permanent landmark for us, the pioneers. By planting itself so deeply into the ground, the arkship can collect the geothermic energy that will power it. By reaching so high into the sky, it is destined to become the absolute beacon of our new civilization.

“If you wish to explore your new environment, I recommend you ascend to the top of the vessel to admire the view,” whispered Aphelia, a good bit less neutral than her voice ought to be. There’s something schizophrenic, even bipolar about this AI. Depending on whether she’s addressing you or the phantom crew, whether she’s handling the ship or coaching you, she adopts a different tone and a different vocabulary. It’s not just that she’s adapting, that she manipulates you to push you to your optimum mental and physical health – which I accept quite willingly – she seems to be pursuing a greater, more secret goal, which is not just a matter of a successful colonization or our survival. Something else is at work in her that I can’t seem to understand or articulate.

Ascending the ship is in itself a journey of initiation. The natural logic of a horizontal architecture constantly needs to be tipped on its side, vertically. The ordinary hallways present themselves to me as vertical shafts. The airlocks are trapdoors. Passing over them without paying attention sets off a sensor that opens the ground under your feet. It’s like a platform game. Treacherous, incoherent at times. By scaling ladders, climbing carefully, exploring the spaces; with the help of anti-gravity elevators, I at last come right up close to the final promontory that tokens the ship’s summit. The last vertical stretch is barely thirty meters, except that it has to be crossed hand-over-hand, by hauling yourself up on a cable.

Flightsuit zipped up, helmet oxygenated, I climb meter by meter, at the extreme limit of my so very fragile present capacities. With the bizarre, unpleasant intuition that I’m being watched. That this unspoken test is like the final assessment, provoked by Aphelia to measure my aptitude to leave the ship and become the pioneer I’m supposed to be. So I hang on and I don’t look down.

At the end of my struggle, I push open a heavy mechanical airlock and hoist myself onto the terrace. A gust of wind nearly sweeps me away; I reel and find my footing. The terrace is the size of a basketball court. Flat and without a guardrail, the vertigo, at this height, which I evaluate as several hundreds of meters, is prodigious. The air swirls as though carrying a transparent soot. Facing me, the peaks of a mountain chain, orange and cream-colored, cast two shadows. At their feet, fluid blue forests and these sorts of bright lakes sparkle under the light of double suns, one of which has very nearly set.

Trembling, I advance on a footbridge with railings that extends well beyond the edge of the terrace and, if you turn around, makes visible the sides of the ship and the enormous crater the impact of landing caused.

So this is kyrium? Its substance seems to flow, a form of moving glass, supple and solid, which with the walls’ thickness, after the fashion of a body of water, takes on deep blue tones. I’d like to touch it. Maybe I’ll be able to when I’ll be on the ground?

Checking each of the footbridges extending star-like into the air all around the terrace, I can admire the ship’s staggering architecture, designed in flight to function horizontally and, when it lands on a planet, to change into a blend of control tower, defense tower, and scientific observatory, and semaphore, maybe? The upending of spaces, whose function changes according to whether they are lying flat or standing up, borders on genius. I am at the top of a technological totem pole.

That’s not what’s important, however, for me. What’s important is for the arkship, under the supervision of the AI, to have the technological means to protect our area of exploration within a radius of several kilometers around the ship, preventing raids and attacks, internal or external, so that we, the pioneers, can quickly establish a self-protected community. Beyond that, we shall enter the risky territory in which we’ll have to be able to build and set up our own defense system, collective or individual, secure our energy sources, and form bonds of alliance and diplomacy so as to be able to call for reinforcements if hell, too human or extraterrestrial, comes knocking at the door. Hard to predict the degree of paranoia that will develop among us. For my part, I want to take a gamble on the sunny face of mankind, bet

on trust, acceptance, and consideration. During the simulation, Aphelia nonetheless explained to me how to duplicate the Novark's force field defense shields on a small scale. Always good to know.

On the horizon, the first sun sets while lighting up lenticular clouds that could be funnel clouds. Summits covered in blue snow catch its last rays. It's not exactly like on Earth; the geometry and the colors are inhuman; it's nevertheless familiar and suitable enough. Certain planets, Aphelia told me, would be very unsettling for us. This one offers points of reference. I'm able to take off my helmet and breathe an over-oxygenated air that makes me a little drunk. The temperature is warm, the gravity a bit lighter than on Earth; that'll make my movements easier – when I will have really recovered my muscles, hidden beneath my now well-hydrated skin.

In the ship, I slept one last night, lying in my hibernacle, that I can't stand anymore. And when the first sun rose, I activated the Novark's lower airlock to take my first step on the planet. I took my light flightsuit, with the kadbak on my back. A technological marvel that uses Calabi-Yau manifolds, notably K_3 spaces, to compress matter at ultra-high degrees of density. Once sucked inside, that matter can be taken out with whatever geometrical form one wishes. All with a mere kyrium tube somehow wrapped around my forearm, a mere canon, which can even serve as a rudimentary weapon in case of attack: the morpher.

The kadbak and morpher are the two genius ideas of the Novark's engineers. To optimize the number of transportable humans and their future autonomy, the arkship's engineers decided that the ship would transport neither vehicles nor industrial infrastructure, but that all the pioneers would be equipped with an ultra-compact factory at the height of technology. A nano-assembling canon capable of absorbing, carrying, and reconfiguring the molecular structure of raw materials and of then forming, by freeing them in calibrated streams, most basic objects for which you have acquired the skills. I know I can manufacture weapons, simple shapes, objects whose schemes I remember, little things for the moment, but very useful. I just need to gather raw materials and energy sources, if I can find some. On this planet, merely by exploring this forest, I know I will be able to extract stone and wood, compress them in the kadbak on my back, or in the kads attached to my belt, and they will be available for later use. It makes me euphoric.

My portable AI, which I've named Lia, already contains the plans for certain constructs that Aphelia entrusted to me. In simulation, I acquired theoretical skills I'm eager to put into practice. So I begin to climb the edges of the impact crater, then abruptly turned around.

A flash, like a thought-wave, a presence. On an intuition, I went back down toward the ship and decide to circle it. The kyrium walls ripple with a splendid blue. The substance's opalescence is surprising and fascinating. I approach to touch it, to look closer. First I see my reflection, wavering, uncertain, then my helmet in the mirror of the kyrium is as though dissolved, revealing my face, which grows younger, younger, younger still until it becomes the face of a baby. I caress that child's face and suddenly, the reflection begins to grow older at high speed, I wrinkle, wrinkle violently, become an old man who grimaces and disappears. Alarmed, I back up, an icy shudder running through my spine. When I look at the wall again, I see nothing but the charred crater behind me.

Without knowing why, I climb, scale the sides as quickly as I can and come out of the crater. I set out straight away toward the forest before me and approach a felled trunk. I point the canon and activate the morpher. The trunk disappears, sucked inside before my eyes! Lia projects the result on the visor of my helmet: 4 m³ of wood are now available in a single kad the size of a matchbox!

I hurry toward a clearing and I make a first attempt at construction. I'm able to form cubes of wood, a triangle, a half-sphere. Enough to make a bench. Not enough to build a shelter for the night. I'll need to keep going, to find some stone, more wood, for at night, according to the briefing Lia gave me, temperatures sink to -30° C.

I pass through the forest sucking up several trees, and I find a pile of rock that I siphon up also with my morpher. Its gravitational compression capacity is just astonishing. I've got the equivalent of four sequoias and six tons of rock in cartridges housed in my belt! The worst part is that I don't even feel their weight thanks to anti-gravity technology!

I took up position on a mound from which I had 360 degree visibility. A little lake was shining down below. And I started to build, with great spurts from the morpher.

To be completely honest, that evening, as the light dwindled, I felt as though I was playing that fantastic old cube game from the 2010s that consisted of exploiting the environment. Except that it was true. And that I could do other things besides cubes on cubes! Beams, arcs, spheres, domes, chairs even. Still very rudimentary, because I didn't have the necessary skills on this first days of discovery.

But after a week of exploration by foot, I had succeeded in fully coding the construct of a chalet for the night, with a stone space for the chimney and enough wood supply to feed it! I was an authentic trapper. All I needed to do was activate

the construct plan with the necessary materials stored in my kads, and the chalet assembled itself all by itself before my eyes.

To eat, I had managed to extract fruit and vegetables, many of this sort of potato found in forests under roots and that can be cooked over a fire.

I met my first pioneer on the third day. Then many others as I changed location and took time to activate my market unit. I was thereby able to trade my chalet construct with built-in chimney for weapons and tools to dig and mine for metals.

With a group of twenty pioneers, we established a small village at the foot of the mountains. We set up our own political system, an enlightened anarchy in which something must be given each day to the community to be able to use one's constructs. And in which our food and surplus raw materials are shared. Our goal is to gather enough materials and skills and to trade enough constructs with the outside world, while also coding some ourselves, in order to build our exploratory ship in which we could all live. For the moment, some of us use balloons or small hover vehicles to explore the planet. One of them left the area protected by the Novark and was shot down, nobody knows by who or by what! He reappeared near the Novark thanks to the Resurrection Node, a sort of quantum duplication of bodies. Since that incident, we are developing a territorial security system to avert attacks.

And we try to gather energy through solar farms and yellow trees native to Alioth which have a sap resembling a solar fuel, and which I can suck into our kadjaks and then pour back into our reservoirs.



One month later

Everywhere Alioth grows populated. Cities and villages are born on the whole inhabitable surface. The first guerillas were born, the first battles. The first madmen greedy for power and resources established their little empires, enslaved villages, attacked isolated communities with their ships to raid them for raw materials, energy and constructs. A resistance is organized, but it is weak. As for me, I already want to leave and explore other planets, other horizons. With the five loyal pioneers who have become my friends, we were finishing ours hip when I went out alone to explore a swampy area outside the circle controlled by the Novark.

I knew I was taking a big risk, but we needed a very effective superfuel found nowhere but in this type of viscous yellow swamp that can be emptied with one shot from the morpher.

And there, I discovered something unimaginable... In setting out, I had left behind a small wooden sculpture, modest but beautiful, a form of land art at the edge of a swamp. When I came back two hours later, something had changed. Another work of land art stood facing mine, almost responded to it, in a style close to mine, but more beautiful perhaps, stranger also. I know full well I was the only human being in this area. My geolocator testified to it... So who could have made this?

I climbed a mound and, drawing from my stone kad, I shaped five monoliths five meters tall placed in an arc, facing the swamp. I don't know why I did it. Perhaps to say: "I'm listening." As if the arc was an ear, or an open hand ready to receive something. Then I left to siphon two swamps a bit further on. The organic liquid, close to a gold-colored opaque oil, already filled two kads; the area was not very safe, it was time to go home. Out of curiosity, I returned by way of the mound. And there came a shock. Facing my arc of monoliths, another arc matched mine, just as tall, just as smooth, of five amber monoliths, closing the whole like a circle – I was going to say, of menhirs.

Instinctively, I went to place myself at the center. And I realized that the mirror-monoliths that had sprouted, as it were, to match mine, were made of a substance close to the kyrium constituting the Novark. A kyrium of shifting gold – and not blue like the ship's walls – but with the same fluidity, with the same effects of transparency and of discreet and blurry reflections in which you could see yourself age or grow younger, waver in a restless temporality, uncertain whether it was showing a memory or a future.

One by one, I observed the five monoliths, and in them I saw the forest quivering fleetingly and a beach, a swamp and some boulders, at first without understanding.

Pointing the canon of my morpher at it, a note rose from the monolith, inviting, harmonic. An intelligence was there, palpable, but I didn't know what to do. Take it? Suck it up? Make an offering? In the end, I pointed my canon and offered a jet of sand at the spot where I had seen a beach, wood where the forest had briefly undulated, and stones where the monolith vibrated like a boulder. A melody was released, the monoliths slowly vanished.

Before me, in their place, there was the schematics of a high-performance reactor. In kyrium! A blessing for finishing a ship and setting out to explore new planets. Something I wouldn't have been able to find anywhere in this world, so unreal was its elegance, something that evidently bore witness to a superior civilization. I had tears in my eyes. I had just communicated, with the help of matter, of my morpher, with actions, without words, with an intelligence well beyond anything I could imagine. And that intelligence had just given me a gift...

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To be continued... by playing the game!