

THE  
RAINSEEKERS





# 1

## THE LONG ROAD OUT

Our march out to Hephaestus was long and bumpy, but when we arrived, and we set up the first tents, and Hanzila Olembe, our unofficial cook, brewed the first pots of black tea, delivering their warm bulbs to our frigid little fingers, an expectation grew among us—at least I sensed it did—as we looked at each other’s cold-flushed faces, that this would be worth it, that our long trek across these frigid Martian plains would not be for naught. We would be the first people to feel it rain on Mars.

Mama thinks I’m mad. A young woman trekking out with a bunch of strangers, half of them high more than half the time. (No, I’m not going to tell you who does what and when; useless gossip is best left to devils and AIs.) And maybe I *am* a little crazy, venturing this far from Elysium, the city I’ve called home for the last seven years, ever since I flung myself out from Earth atop a screaming rocket. Out, out, *out* has been my MO of late, the default mode of my motivational network. And maybe after this I’ll head out with some BASE jumpers into the deep again and walk, heavily suited, across some icy plain under the blue glow of Uranus. Who knows? That’s for tomorrow. For today, my goals are:

1. Helping make sure our sleeping tent (that I share with three others) is free from microtears so an unexpected cold snap or passing pocket of low-oxygenated air doesn't kill us in our sleep, and—
2. Assembling my bunk bed with Arkadia Meesang, with whom I will share this surprisingly complicated contraption (she swears she doesn't snore, but I have packed a bag full of earplugs just in case), and—
3. Helping with the preparation and dissemination of the evening meal, a stew of freeze-dried veggies and protein culture that some dozen or so generations back might have begun inside an animal but bears little resemblance to one now, and—
4. Finding time, between all of this, to have at least one person tell me their story before bed.

Number four proves surprisingly hard. And not for lack of time, but because setting up the tent, assembling the bunk, and handing out dinners to forty-six ravenous adventurers turns out to be far more exhausting than I had originally supposed. Not to mention the nine hours spent inside a cramped and malodorous buggy this morning as our caravan trekked west across Mars's equatorial plain.

But Ghleanna Watanabe, four decades older than me, seems none the worse off for the journey, and maybe even a little better for it. She leans forward and grins at me like a child awaiting handouts of candy.

Does she imagine I have hordes of eager readers hanging on my every word and, by the course, hers? I don't have the heart to tell her this is only my second gig for *Ares* magazine,

that any fanbase I *did* have wilted like a plant one forgets to water when I left Earth and spent my subsequent years (after a not-so-brief stint touring the outer Solar System) photographing Martian landscapes, which was ridiculously fun, but not exactly lucrative, and so the primary reason I've taken this gig is for the money. (Mama always says a painful truth is better than a comforting lie, and like a sadist I tell the truth more often than is convenient, to my frequent detriment. Mama, this is why I have few friends.)

Ghleanna takes a generous swig from a small aluminum flask she reveals from a concealed pocket of her coveralls and gives it to me. "Drink this," she says. "It'll warm your skinny bones."

The flask is whiskey, Islay Scotch, and better than anything you can find on Mars, even in the dockyards of Hellae Planitia, which means it's absurdly expensive, and yet here Ghleanna is offering this rarest of treasures to a near-total stranger whom she's only met just twelve hours ago. Such is the power of fading glory.

"What do you want to know?" Ghleanna says, leaning back, sparkle-eyed, her body's heat radiating like a furnace.

I've been pondering the same question for days. What to say, what to ask? When it comes to interviews, I'm as green as the newborn Martian grass. But after much thought (and drink) I came to the firm conclusion that every soul has a story worth telling. All we have to do is just shut up and listen.

"It's pretty simple," I say as the whiskey-fire simmers in my belly and a Jupiter mass's worth of gravity tries to pull my eyelids down. "Just tell me how you came to be here."

"To Hephaestus Basin?" she says.

“No,” I say. “To Mars.”

Ghleanna leans back. Stares. Smiles. Her dark eyes flash in the deep blue light of our communal tent, as if I just gave her permission to share a great secret. Perhaps I did.



2

SOLYOM'S FARM

He blasted up on a rocket out of Peshawar, my great-great-grandpap, Solyom Onnoghen. Yeah, that fella. The Nobel Prize-winning scientist. *Him*. The jeek who invented the coating they use on the orbital mirrors. The stuff that makes 'em shine like a second sun when the days are long and the angles just right. Solyom Onnoghen is my direct ancestor.

He was born in rural Nigeria and would've spent a life tilling soil on his parents' cassava farm had he not been blessed with genius. A precocious child, at eight he built a quantum laser diffraction lab in a shed behind the barn using recycled parts. A nurse from a nearby clinic recognized his brilliance and gave him a pad with net access. I like to think the universe shifted then, pivoting from shade to light like a plant turning toward the sun.

Why? Because had the nurse *not* given this precocious boy a sat-pad, the world'd be a far darker place today. And hell, we owe as much to that nurse as we do to Solyom. But no one remembers his name. History, like all troubled relationships, tends to forget the small things.

And so, sat-pad in hand, Solyom sat on his untilled ground, and instead of doing farmwork, he taught himself

how to calculate partial differential equations, how the Earth formed from billion-year-old galactic ash, how the elements were fashioned in the hearts of dying stars. The whole beast of science lay spread before him, and like a starving man at a banquet, he devoured all. Soon, as all geniuses do, Solyom began to have ideas.

The machines that plowed his fields were always snapping their axles. A poor alloy of metal, he figured, so why not fashion another? And the paint that was always flaking off the houses and barns each summer, couldn't he add aluminum to the mixture to make it more reflective and heat resistant? And the manure they used as fertilizer, couldn't he suspend the nitrogen in an aqueous solution and make its dispersal more efficient? Ideas flowed from him like seeds lofted into the wind. Some landed and sprouted. Some drifted off, lost forever.

Solyom shared his thoughts with his family, believing they would recognize the obvious utility of his ideas. But he came from a long line of farmers, hardworking folks who'd kept their cassava farm going through three governments, two juntas, and five recessions, and so anything that altered the status quo was verboten. Like ancient kings, they decreed Solyom was a lazy dreamer, too fanciful and free of discipline to be worth much.

"Stop your idling and go weed the fields!" Papa screamed, sometimes hitting the boy after a night of heavy drink.

"You been neglecting your chores!" Mama admonished. "Get off your ass and go sweep the barn!" Mama too made him fetch a switch from time to time.

His siblings treated him no kinder. While Solyom was

studying the chaotic beauty of fluid dynamics under the shade of moringa trees, his brothers pelted him with goat shit. As he walked to school studying the quantum mechanical properties of photosynthesis, his sisters mocked him alongside their giggling friends. School was worse. Teachers thought the boy too distracted and questioning, and they failed him for his lack of obeisance. Classmates thought him too difficult to understand, this aloof boy with absurd ideas who always seemed to be somewhere but where he was. Almost everyone despised him.

Solyom pretended not to notice. But he was a sensitive boy. Late at night, when the house was quiet and the family went to sleep, he'd sneak out to the moonlit fields and stare up at the shimmering stars, wishing he could leap away on a rocket and escape it all. He'd cry until his tears found salve in the shapes of atomic orbitals, the beauty of endothermic reactions, and the hyperfine transition of hydrogen nuclei.

Solyom stopped sharing his ideas with his family and instead mustered up the courage to post them on scientific forums. It was Professor Faizal Mudali, a materials science researcher, who first saw promise in Solyom's ideas. But Professor Mudali mistook the boy for an older scientist with a similar surname, and invited him to the University of Lagos to discuss their ideas in person.

Did he go? Of course the boy went! Genius brooks no choice.

For three full days Solyom didn't sleep or bathe, too worried about what Professor Mudali might say, too worried about the punishments that awaited him when he returned home. He slipped out in the night, under the cover of a new

moon, and spent all his meager savings on a ticket to Lagos. Scared and alone on a crowded bus, heading toward that shining city, the boy could not have imagined the future that awaited him.

Lord, I wish I could've been there to see the look on Professor Mudali's face when this dirt-smearing thirteen-year-old walked into his office smelling of goat shit, a boy brimming with ideas that'd make any self-respecting PhD blush. For the rest of his life, Professor Mudali boasted that he'd instantly recognized the spark of genius in the boy. But my great-grandmam, Annaliese, heard the tale from Solyom himself. Professor Mudali, Solyom told her, was skeptical, and, thinking he was the butt end of a joke, called the police and sent the boy off. It was only after Solyom snuck back into Professor Mudali's office and not only reworked a paper Professor Mudali had been finishing, but pointed out a critical flaw in his reasoning that the older man opened himself up to the possibility of the boy's genius. But that part, you see, has been carefully excised from the historical record. Everyone wants to be the hero.

Apocryphal or no, under Mudali's tutelage the floodgates of knowledge opened. Mudali arranged for Solyom to study at university under a full scholarship, and there the boy blossomed. In three furious years he wrote forty-two papers, filed six patents, and was short-listed for three scientific awards. His time at Lagos wasn't all success though. During one bitter semester, Mudali accused Solyom of plagiarizing his paper on surface friction, only to be disgraced later when it was proved that Solyom had developed his ideas years earlier in

an exploratory paper never published, but archived in the university's cloud, and that Professor Mudali had accessed the boy's archived paper *dozens* of times before publishing his own work. In other words, it was Mudali who had plagiarized Solyom, not the other way around. (The elder deflected, saying he had no memory of reading the boy's paper, and perhaps it had lain dormant in his thoughts, sprouting like seeds.)

Solyom accepted his explanation, at least publicly. But the rift between them never quite healed after that. For the rest of his life, Mudali boasted that the greatest of Solyom's ideas were initially his. But, despite the elder's rancor, Solyom never spoke ill of him. He never spoke ill of anyone, in fact, even as his renown grew, even as his family said many things that weren't true.

He saw them on the news—Mama, Papa, his siblings—interviewed by smiling reporters and hungry AIs, eager to know what type of soil, water, and sun led to this exceptional young man. Mama and Papa, in their Sunday finest, said they'd *always* been supportive of their “little star.” And his siblings, without a trace of irony, said they'd always seen greatness in their brother. They even helped him with his early experiments, they said, pride in their smiles.

Reporters sought Solyom too, finding ways to sneak onto campus. When a perspicacious few asked him if his family's statements were true—were they really as supportive as they say?—the young man merely nodded and changed the subject back to his research. The truth was, their lies made him bitter, painfully reminding him of those lonely moonlit nights, wandering alone through his family's cassava fields,

staring through bleary eyes at the stars, feeling as if his heart might break from the weight of the world. But that life was in his past, and it would do him no good to rekindle it.

Mama and Papa tried to visit their young star, but by then Solyom was too busy rocketing round the world on visiting professorships. He lived for short stints in India, China, Poland, Germany, the US. When the ESA hired him to design the mirrors on the Ptolemy planet-hunting telescope, he spent six months holed up in a lab in Bern, the same Swiss city where Einstein developed his theory of special relativity, and there he invented the most reflective substance known to man. Solyom joked it must have been something in the Alp water.

After the Ptolemy Space Telescope's resounding success, it was natural that the Mars Science League tasked him to help design the orbital mirrors. Who else could have designed a structure to survive the harsh conditions of space, heat-blasted by the sun just like the paint-baked barn of his childhood, except now it had to last for centuries? Who else could have taken what he'd done with the Ptolemy Space Telescope and made it ten thousand times bigger, without sacrificing a modicum of efficiency or strength? Those orbital mirrors are still floating above the poles, heating trapped ice, releasing water by the megaliter. To this day, two centuries on, with a few taps on a screen any geek with a finger can point the reflected sun onto the ground to within the precision of a decimeter. Do you know what kind of engineering that takes? What skill, what sharpness of mind?

The water we seek now, Ms. Salazar, the very stuff we hope to feel raining from the sky, was freed from its ancient

sleep when Solyom's mirror melted a block of ice at the pole that had lain dormant since before multicellular life began on Earth. Do you understand what kind of achievement that is? And now, never mind what god you pray to, every day on Mars is Christmas 'cause it snows so damn much from all that loosed water!

Yeah, it gets me drip-eyed when I think about it, and I'm going to make my own version of Ares' tears right here in front of you, Ms. Salazar. I've been drinking Mars's water my whole life. These very tears falling from my eyes are made of the same stuff that Solyom's mirrors melted. My great-great-grandpap is in me, you see, and he *is* me.

And he's *you* too, Ms. Salazar, bubbling through your veins right now. So make sure, before you go to bed, you thank him.

The man that little precocious farm boy grew into? Humanity's still trying to come to terms with his legacy, and it'll be a long, long time 'fore our species births another quite like him.

He only planned to spend a Terran year on Mars, leading the engineering team in the first phase of the Great Terraforming Project. But Mars is a jealous god and wouldn't give up his precious treasure so easily. The God of War conspired for Solyom to meet Nahini, a Filipino planetary geologist and concert pianist. She came up on a North American rocket to help dig the tunnels that became Onatah City.

Solyom and Nahini were fruitful and multiplied, in every sense of the word. They had four children, all girls. And as they grew up, Solyom's parents never stopped calling him. "When you coming home, Soly? When you coming to see us? We miss our boy, and we want to meet our grandkids."

But Solyom could never bring himself to travel the long months on a cramped ship and suffer the long-term effects to his body, just to return to the folks who gave him such grief as a boy. Instead, he left a standing invitation to his family, siblings and all, to fly out to Mars, at his expense, which was no small fee in those days. Solyom worked till the day he died at ninety-six from congestive heart failure, and none of his family—not one—ever came to see him.

Solyom's daughter, Annaliese, was my great-grandmam. And her daughter was Nehemiah, my grandma. And Nehemiah's daughter is Isoke, my mother. All in all, when you add them up now, Solyom has almost eighty descendants on Mars, plus a dozen or so spread 'cross the Solar System. That's quite an accomplishment for a man who, according to his wife, was so *good* a lover he'd get up in the middle of sex to go write down the solution to an equation he'd been working on. I mean, he wasn't exactly the make-you-blush type. Yet here we are, two centuries later, looking at each other like, what the actual hell?

Buddha's ass, this Scotch is good, ain't it, Ms. Salazar? I've had too much already. Though these days it helps me sleep.

I work in healthcare. Emergency room adjacent. I see death every day. It gives me insomnia bad, and when I can't sleep, I hie my old ass up to Observation Point to look out at the stars. You ever done that, Ms. Salazar? You ever seen the stars from up that ridge?

They're so beautiful, glorying over everything like angels of lore. In winter, the north orbital mirror gleams above Utopia Planitia, spreading its reflected light all over the Martian

basin. It's more beautiful than anything I ever seen, made possible by that artificial star my direct ancestor built.

Goddamn it, Ms. Salazar, we're a fraught species. We murder and kill and lie and cheat and eat babies for breakfast. But every so often, despite our immeasurable stupidity, we do beautiful things.

Sometimes I wish I could go back in time and speak to that little boy, trapped on his parents' farm. And while he stared longingly up at the stars, I'd tell him that one day he'd be living up there—*here* on Mars—helping make a new world for humanity. I'd tell him one day he'd be as famous as Hawking or Zhou or Curie, and that some two centuries later his descendants will've spread across the Solar System like seeds scattered to the wind. That in effect, Solyom never left his family's farm. He just tilled a bigger field.



# 3

## THE FORGE OF HEPHAESTUS

After weeks of unhealthy binge drinking, drug abuse, periods of depression, and self-inflicted sleep deprivation, waking up to screams from the deepest sleep I've had in months is, to put it mildly, horrifying.

The screams thrust me to wakefulness with a stab of ice to my chest. Did our tent tear? Am I going to suffocate and die? This far out from the city, how long would it take for rescue to reach us? Six hours? Sixty? It seems like every day I hear about someone killed on a walkabout, stumbling too far from a city for rescue, dying from exposure or suffocation or, more often than is healthy for a species vain enough to think that it can bring life to a dead world, stupidity.

And I'll lie with them, the perennially stupid, fated to die on this fool's errand to dance in the maybe-rain with a bunch of neo-hippies. It seemed like a grand idea when I was tucked safely in bed back in Elysium, thirty stories underground, protected by walls and abstractions fifty meters thick. But out here, bumping across his body like a louse on a man, Mars can do with us as he pleases. He is a capricious god.

But I soon come to realize that these shouts that ripped me so painfully from sleep are from *excitement*, not fear.

“All y’all! Mask up and come outside, *now!* You have to see this!” Etu Cruz’s crackling voice blasts from the com, broadcasting on the public channel to all forty-six of us.

“¿Qué es, Etu?” someone says. “¿Hay algo mal?”

“Just fucking come out and look!”

I must’ve suited up a thousand times to capture photos of Mars’s slowly morphing landscapes. But today, for some stupid reason, I’m a dust virgin. I can’t pull a fucking zipper. But my bunkmate, Arkadia Meesang, is also my safety buddy, and she ain’t gonna miss this show, whatever this is, and so she pretty much throws me into my thermals and slaps a mask on my face, making me feel so much like a bumbling child I almost cry.

Now, coveralls donned, oxygen flowing, the four of us unzip our tent and step into the pre-dawn light. Frigid air nips my cheeks, tossing me back to the countless times I stepped out of a buggy or hab onto the rim of some crater or shore of an ancient sea so I could capture the delicate way the light fell over the ancient crimson dust and the patches of blue-green lichen flecking the landscape. Christ, I thought I was the fucking Ansel Adams of Mars. But I don’t have my ancient film camera with me now.

*Too bulky*, I thought. *One more thing to worry about*, I told myself, back in Elysium, when I was prepping for this fool’s mission and popping way too many stims for my own good. *I got plenty of portable ones I can bring*. And on this frigid Martian morning, I will run outside before I remember to grab a single one of them.

Einstein said his greatest blunder was the cosmological constant. Mine will be forgetting to take a picture. Me,

Sakunja Salazar, lapsed holostar and thrice-spoiled jeeb, who, for nearly a decade, did nothing *but* take photos, will somehow, on this glorious morning sunrise, forget to take one.

And so will everyone else.

I know it's impossible to believe, that all forty-six assholes who hied themselves out onto this frigid plain, hoping to be the first humans to feel it rain on Mars—to experience rain on another planet—will forget to take a picture, that none of us had optics or pads or a single goddamn dragonfly flitting about. But it's the truth. It's as if the vast spectacle of the morning will knock us back to pre-savanna apes, and our thoughts will turn only to survival and awe.

I'll loathe myself later for this horrid mistake, drowning my shame in drugs and drink for allowing this moment to be lost to time. I'll try to console myself that forgetting was a good thing, that maybe none but us pilgrims were meant to see this glorious morning, that this precious moment was meant to be fleeting and sacred and holy and all that mystical divine celestial jazz, and not mired with something so crude as a digital recording.

But this is bullshit, an excuse I'll make to stave off the tidal waves of regret that I know will haunt me forever. For fuck's sake, this spectacle that I'm seeing now is the most beautiful thing I have or will ever see in my life, and all I will have of it later is a rapidly fading memory of the ineffable.

If I try to describe it to you, I'll fail. But try I will anyway.

On Earth, the sky is blue, and on mornings and evenings, if there is moisture in the air, the sky will turn orange. On Mars, before the Great Terraforming Project, the colors were

reversed. The noon sky was a dusty orange brown, and on mornings and evenings the sky turned a faint powder blue. But as the atmospheric gases slowly thicken and change, as we make Mars more Earth-like, the daytime sky has a faint tinge of blue. And in the mornings and evenings, a touch of orange.

But now, on this frigid Gemini morning, the sky is aflame.

From the flat northern plains down to the prickly southern mountains, a living belt of carmine rings the horizon. It's the color of blood and roses and autumn maples. And above this, the belt bleeds into a fierce band of orange, the color of young goldfish and ripe pumpkin and fresh carrots. And as the orange spreads, it fans out and up, and its flame-licks push away the darkness of night, and the sky fills with a billion purple streams the color of orchids and butterflies and eggplants and lilac.

The sky has become an enormous blossoming flower.

And at its center, mere seconds after I step outside, a blinding pistil of light crests the horizon. Is this how bees see flowers, blazing in sacred glory? This burning ball of hydrogen, one and a half times smaller than it appears from Earth, is the source of all known life. And in this moment I feel that Madre Sol is alive too, staring down at us with her single loving, burning eye, pleased at how we, her children, have minded her garden.

But as she swiftly rises, the colors fade. The stars respectfully bow and vanish in her indomitable glory. The brightest and boldest are the last to flee. But even they soon depart. The azure jewel of Royal Earth lingers for a time in holy deference, until she, too, bows and takes her leave.

Everyone stares, transfixed, hypnotized into immobility. We are motes of dust compared to Her, and yet, in a strange way, I feel Madre Sol loves us no less for our diminutive size. My heart soars with the angels, my head swells with trumpet fanfare, and were I to die in this moment, I would not be afraid.

Later, I'll try to recall this feeling and fail. And I'll attribute my mystical fancies to lack of sleep and residual adrenaline from being startled awake. But I'll never look at the sun the same way again.

The first to break the spell is Kyoko Matsua, our meteorologist and unofficial leader. "This is a fantastic sign!" xe says. "A high-humidity front's heading our way!"

The com channel explodes with excited chatter, like the flocks of grackles that chattered on mornings outside my childhood window. And when their voices wane enough for me to get a word in, I say, "Fuck! Did anyone take a picture? Please tell me someone got a pic or vid, right? . . . Right?"

Dear reader, you already know the answer.